



Southern Illinois University System  
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April 14, 2023

Members of the Board Academic Matters Committee

Ed Hightower, Chair  
Dorcas Brou  
Sara Salger  
Subhash Sharma

Dear Committee Members:

The Academic Matters Committee will meet on Thursday, April 27, 2023, at 9:00 a.m. in Ballroom B of the Student Center on the Southern Illinois University Carbondale campus with Zoom or YouTube options.

The agenda, Centers and Institutes Report and minutes from the February 9, 2023, meeting can be viewed through the Board portal system.

I look forward to seeing you at the meeting.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gireesh V. Gupchup", with a horizontal line underneath.

Gireesh V. Gupchup  
Vice President for Academic Innovation, Planning, and Partnerships

GVG/pm

Attachments

c: Ed Curtis  
J. Phil Gilbert  
Hailee O'Dell  
John Simmons  
Roger Tedrick

Dan Mahony  
Austin Lane  
James Minor  
Jerry Kruse  
Other Interested Parties

Office of the President

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## AGENDA

### MEETING OF THE SOUTHERN ILLINOIS UNIVERSITY BOARD OF TRUSTEES ACADEMIC MATTERS COMMITTEE

Thursday, April 27, 2023  
9:00 a.m.

Student Center, Ballroom B  
Southern Illinois University Carbondale, Carbondale, Illinois  
Also available via live stream video at [siusystem.edu](http://siusystem.edu) via YouTube  
and through Zoom

1. Announcements
2. Approval of Minutes of the Meeting February 9, 2023
3. Presentation: 2023 SIU System Student Distinguished Service Awards
4. Proposed Revisions to Board of Trustees Policies to Export Control Policy, [Amendment to 7 Policies of the Board N] (Board Agenda Item J)
5. Information Report: *FY2022 Centers and Institutes Report*

#### Presenters:

1. Jim Garvey, Fisheries, Aquaculture and Aquatic Sciences, SIUC
  2. Aziz Khan, MD, Simmons Cancer Institute, SIU School of Medicine
  3. John Caupert & Jackie Hayes, NCERC, SIUE
6. Other Business
  7. Adjournment

**BOARD OF TRUSTEES  
SOUTHERN ILLINOIS UNIVERSITY**

**Minutes of the Academic Matters Committee Meeting  
Thursday, February 9, 2023  
9:00am**

Ballroom B, Student Center  
Southern Illinois University Carbondale  
Carbondale, Illinois  
live stream video at [siusystem.edu](http://siusystem.edu) via YouTube and through Zoom

The Academic Matters Committee met at 9:00a.m on Thursday, February 9, 2023, in person and via Zoom. Present were: Dorcas Brou (virtual), Ed Hightower (chair), Sara Salger and Subhash Sharma. Other Board members present were: Ed Curtis, J. Phil Gilbert, Hailee O'Dell, John Simmons (virtual) and Roger Tedrick (virtual). Executive Officers present were: President Dan Mahony, Senior Vice President Duane Stucky; Vice President Gireesh Gupchup; Vice President Sheila Caldwell, Chancellor Austin Lane, SIUC; Chancellor James Minor, SIUE; and Dean and Provost Jerry Kruse, SIU School of Medicine.

**Announcements**

Dr. Gupchup introduced Jessica Madden from SIUC and Amy Wilkinson from SIUE who are the coordinators for the System-wide Illinois Tutoring Initiative (ITI) endeavor. He commended them for their good works.

Ms. Madden stated the ITI is successfully serving eight districts in their region by providing high-impact tutoring to 299 students and providing job opportunities to 115 assigned tutors for their region. She concluded by stating the state in its entirety serves eight regions, 46 districts, 99 schools, 635 assigned tutors who are tutoring 1,548 students.

Ms. Wilkinson stated student assessment data is collected quarterly. Their preliminary data suggests that recommended students who participated in tutoring have higher gains in reading and math than those students who were recommended but did not attend or receive tutoring.

In closing, Ms. Madden said the System is proud to be part of this state initiative, and they look forward to the opportunity to continue to highlight this initiative as a national model.

Trustee Hightower asked how the students are connected to tutoring to which Ms. Madden responded that the school districts select the students based on their competency scores. Most students need remediation, but they do have students in the middle who are also selected and making gains.

Trustee Hightower also asked how often the students receive tutoring to which Ms. Madden and Ms. Wilkinson responded that high-impact tutoring requires two-three hours a week over two-three days. It is a “building” tutoring program where each student is assigned the same two-three tutors.

**Approval of Minutes of the Meeting December 1, 2022**

Motion was made by Trustee Sharma to approve the minutes of the December 1, 2022, meeting. The motion was duly seconded by Trustee Salger. Madam Secretary called roll call with Hightower, Brou, Salger, and Sharma passing the motion.

**Information Report: Athletic Report**

Dr. Gupchup introduced athletic directors Tim Leonard accompanied by Deputy Athletic Director Molly Hudgins at SIUC and Deputy Athletic Director Jaci DeClue at SIUE who was attending on behalf of Interim Athletic Director Derrick Brown.

Each campus shared highlights from their respective reports and addressed questions from Trustee Hightower about Name, Image and Likeness (NIL) and the student-athlete transfer portal. President Mahony and Chancellor Minor also provided comments on the subject.

**Other Business**

None

**Adjournment**

GVG/pm

# Centers and Institutes

## Annual Reporting

Fiscal Year 2022



Southern Illinois University Carbondale  
Southern Illinois University Edwardsville



Submitted by the  
Office of Academic Innovation, Planning & Partnerships  
to the  
Southern Illinois University Board of Trustees  
April 2023



Southern Illinois University System  
ONE SYSTEM | MANY LOCATIONS | STATEWIDE IMPACT

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## INTRODUCTION

In keeping with University Guidelines, the following reports from centers and institutes at Southern Illinois University's three campuses for FY2022 are provided for the SIU Board of Trustees. It is the eighth annual report on centers and institutes that have been approved by the Illinois Board of Higher Education (IBHE) and/or established by Illinois state statute. These reports will permit better administrative oversight of valuable components of the university system, as reflected in Section 2.4 Academic Affairs: Center and Institutes (<http://siusystem.edu/about/section24.shtml>).

Each center or institute completed and submitted to the campus leadership its annual report using a template developed by the Vice President for Academic Innovation, Planning and Partnerships, in consultation with campus and medical school administration. This template was used by all centers/institutes to ensure that reporting was consistent across the system. The annual report includes information about financial and other resources (such as total funds expended during the previous fiscal year, revenues by funding source, and total positions by type of position); intellectual contributions (such as publications, presentations, books, compositions, art exhibits, patents, theses and dissertations); public service contributions (such as community projects and patient care); students trained and graduated; evidence of the center's/institute's support for the institution's mission, priorities, and strategic themes; support for the SIU Board of Trustees' strategic plans and/or statewide priorities and needs; external reputation of the center/institute (such as cited publications, invited presentations, media coverage); and evidence that the center's/institute's product or outcomes achieve stated objectives and that results from evaluations are being used to improve the center's/institute's effectiveness. This annual reporting will clarify the center's/institute's organizational effectiveness.

Initially this report was to cover only those centers and institutes that were IBHE-approved and/or Illinois State Statute-established. Because of their importance, other center-like units were asked to report, such as SIUC's Paul Simon Public Policy Institute and SIUE's Illinois Metro East Small Business Development Center and University Museum. Other centers, institutes, and units are included in this report, while still others may be considered in the future. Each campus will be assessing the criteria for this report as we move forward.

Gireesh Gupchup  
Vice President for Academic Innovation, Planning and Partnerships

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only)

1.	Reporting Institution	<u>Southern Illinois University Carbondale</u>
2.	Center/Institute	<u>Advanced Energy Institute</u>
3.	Date	<u>February 27, 2023</u>
4.	Director	<u>Ken B. Anderson</u>
4.1	Telephone	<u>618-536-5521</u>
4.2	E-mail	<u>kanderson@siu.edu</u>
5.	Year Established	<u>1974</u>
6.	Illinois State Statute (if pertinent)	<u>N/A</u>
7.	Reporting Unit	<u>Office of Vice Chancellor for Research</u>
8.	Type	Activity (Check all that apply)
	Instructional	<input type="checkbox"/>
	Research	<input checked="" type="checkbox"/>
	Public Service	<input checked="" type="checkbox"/>



## 9. Overview

### 9.1 Description

AEI is the hub for SIU advanced energy research, collaboration, education and facilities.

The center currently focuses on the following activities:

- 1) RESEARCH: maximizing proposal development and project implementation support to faculty and students across campus.
- 2) COLLABORATION: serving as a resource for the campus community and a bridge to government, industry, and other academic and research institutions, especially Illinois based organizations.
- 3) FACILITIES: Support and maintain specialized facilities; and
- 4) OUTREACH: facilitating the improvement of the public's understanding of energy, including special focus on regional energy and environmental topics.

### 9.2 Mission

Advanced Energy Institute is responsible for coordinating and facilitating energy related research and scholarship across all aspects of the SIU Carbondale campus, including promoting externally funded energy-related research, development, and deployment (RD&D) and assisting in development of energy related academic programs.

### 9.3 Objectives

- 1) Expand advanced energy education and research across campus.
- 2) Facilitate the development of an advanced energy workforce, with special focus on the changing energy production and utilization patterns of the State of Illinois, especially southern Illinois.
- 3) Support research to increase the return on investments in advanced energy.
- 4) Establish Illinois Energy Development Park as the regional test bed for advanced energy technologies.

## 10. Advisory Board

### 10.1 External Advisory Board - Membership

- John S. Mead, AEI Director Emeritus
- Kevin O'Brien, Director, Illinois Sustainable Technology Center, Illinois State Water Survey
- Norm Peterson, Director, Government Relations, Argonne National Laboratory
- Thomas A. Sarkus, Division Director, Major Projects Division, National Energy Technology Laboratory, U.S. Department of Energy
- Don Stevenson, Vice President and Managing Director, Energy Supply & Conversion, Gas Technology Institute
- John Thompson, Director, Technology and Markets, Clean Air Task Force

10.2 Number of Meetings

In This Reporting Period	1
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11. Annual Performance

11.1 Performance Measures\*

Measure	Target for Year	Results in Year
1. New faculty seed grants awarded	Up to 5	6*
2. Graduate Assistant positions	1-2	0
3. New Course Development contracts awarded	2-3	2*
3. Undergraduate Scholarships awarded	Up to 4	2
4. Student research grants awarded	Up to 5	0
5. Community outreach events	2	0**
6. Visiting researchers	0	0
7. Publications	Up to 5	0

\*Center/institute-defined measures and targets. Depending on the center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

\*\*Due to continued Covid-19 50% staffing guidelines at the start of the fiscal year

11.2 Major Accomplishments (In This Year)

- The CCRB members approved changing its name to the Advanced Energy Resource Board (AERB) at the October 27, 2021, Annual Meeting in Springfield, IL.
- RME final approval for ACERC departmental name to change to the Advanced Energy Institute (AEI), and approval of exterior signage followed.
- Energy Boost Seed Grant awards revised to incentivize researchers to seek external funding; an additional \$25K in matching funds for successful grants related to the results of the seed proposal. One recipient received external funding during this period.
- Continuation of the New Course Development Grant program; courses added in the Automotive Program and Geology/School of Earth Systems and Sustainability.
- Awarded 2 Undergraduate Energy Boost Scholarships and supported 6 continuing undergraduate recipients.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

AEI established and maintained programs as per the Energy Boost Grant proposal, and faculty, staff, students, and community members benefit from these programs as is evidenced by the scholarships, grants, and support of graduate assistantships.

11.4 Evidence of Support for Center/Institute Objectives

- AEI supported students with scholarships.
- ACERC was sensitive to faculty research objectives by offering matching funds for externally grant proposals.
- Submission of congressionally directed spending requests for efforts toward revitalizing the Illinois Energy Development Park (IEDP) project, entitled *Renewing the IEDP*.
- The IEDP site situation remains the same as in the previous fiscal years, i.e., no water supply to the site.
- The activities over the current year fostered coordination and maintenance efforts between AEI and the SIU Facilities and Energy Management. Having undergone a shift in operations in FY20, these efforts included the archival, reallocation and/or surplus of items housed in the buildings at IEDP.

11.5 Evidence of Organizational Effectiveness

Over the course of the reporting period, AEI maintained existing grants and scholarships, supported undergraduates, graduate assistants and, facilitated new faculty-based energy research programs to meet newly identified needs.

12. Institutional Assessment

12.1	Date of Last Review	March 2017
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended
12.3	Explanation	

**RESOURCES: Advanced Energy Institute**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
<b>Revenues:</b>					
State Appropriations	<b>126,150</b>	<b>117,741</b>	<b>104,998</b>	<b>225,315</b>	<b>274,541</b>
Income Funds	158,187	160,722	170,083	184,059	148,698
Grants*	2,506,543	2,709,863	2,631,930	3,003,443	3,460,940
<b>Total Revenues</b>	<b>2,790,880</b>	<b>2,988,325</b>	<b>2,907,011</b>	<b>3,412,817</b>	<b>3,884,179</b>
Salaries: Staff/Faculty	218,094	200,978	158,004	405,427	410,301
Graduate Assistant Support	60,543	16,472	70,376	59,050	104,507
Student Worker Support <i>(Sources: State and FWS Matching)</i>	5,768	2,774	7,632	8,123	6,722
Travel	6,123	0	35	218	3,839
Commodities	26,384	5,063	4,255	14,253	16,196
Equipment	2,668	189	0	388	275
Contractual Services	27,189	21,691	74,923	394,213	111,075
Automotive	1,299				
Student Research Awards and Scholarships	40,000	30,000	45,000	11,000	7,500
Awards and Grants— Property Damage Settlement			(15,937)		
Telecommunication Services	2,105	8,962	8,570	8,285	17,006
Fringe Benefits	51,019	43,000	43,658	107,413	78,638
Facilities and Administrative Costs	30,183	19,040	24,975	71,870	45,973
<b>Total Expenditures</b>	<b>471,373</b>	<b>348,169</b>	<b>421,490</b>	<b>1,080,241</b>	<b>802,027</b>
Revenue Minus Expenditures	2,319,507	2,640,156	2,485,521	2,332,576	3,082,152

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	.25	.25	0.0	.083	.083
Staff	2.25	2.25	3.3	6.300	7.800
<b>Total Staffing</b>	<b>2.50</b>	<b>2.50</b>	<b>3.3</b>	<b>6.383</b>	<b>7.883</b>

\*Note: The way the university reports this line shows the annual balance of grant funds for expenditure over a multi-year period.

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	<u>SIU Carbondale</u>
2.	Center/Institute	<u>Cannabis Science Center</u>
3.	Date	<u>March 10, 2023</u>
4.	Director	<u>Dale Buck Hales</u>
4.1	Telephone	<u>(618)453-1535</u>
4.2	E-mail	<u><a href="mailto:BUCK@SIU.EDU">BUCK@SIU.EDU</a></u>
5.	Year Established	<u>2021</u>
6.	Illinois State Statute (if pertinent)	<u>(N/A)</u>
7.	Reporting Unit	<u>Office of Vice Chancellor for Research</u>
8.	Type	Activity (check all that apply)
	Instructional	<input checked="" type="checkbox"/>
	Research	<input checked="" type="checkbox"/>
	Public Service	<input checked="" type="checkbox"/>

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The Southern Illinois Cannabis Science Center (SICSC) is the hub for SIU cannabis/hemp research, collaboration, education, and facilities development. The center currently focuses on the following activities:

- Hosting an annual symposium on hemp/cannabis
- Co-Sponsoring an annual “Hemp, Hops & Shrooms” cultural and educational festival with the city of Carbondale
- Engaging in community outreach to local farmers, processors and retail outlets
- Seeking, curating and disseminating funding opportunities for the SICSC and center affiliated faculty
- Researching agricultural best practices for all varieties of hemp—fiber, seed and flower crops
- Developing opioid addiction-mediation approaches for rural southern Illinois
- Researching cannabis medicine for prevention and treatment of cancer, epilepsy, seizure, and chemo--brain (side effect of chemotherapy)
- Analysis of economic impact of tax laws, alternative cannabinoids on the cannabis industry

### 9.2 Mission

To foster collaboration among various disciplines and industries that will advance our knowledge and understanding of hemp/cannabis for human health and sustainability in order to advance our understanding of how best to utilize hemp/cannabis for the benefit of humankind and the environment

### 9.3 Objectives

1. To formally establish a collaborative network for hemp and cannabis research.
2. To establish specific projects with defined goals.
3. To identify funding streams to support these projects.
4. To serve as a clearinghouse for hemp and cannabis related information.
5. To host symposia and outreach activities.
6. To bring into working groups individuals with a common interests in hemp / cannabis: Agricultural; Analytical; Biomedical, and Community.
7. To bring together Healthcare, Educational and Commercial interests to advance the impact of hemp / cannabis research on economic development in the southern Illinois region.

10. Advisory Board

10.1 Advisory Board - Membership

Paul Purcell, Illinois Premium Extracts, CEO and founder  
Kyle Baker, EcoBuds; CEO and founder  
Curt Jones, 40 Below Joe; CEO and founder  
Mark Peysakhovich, MBM Advantage; CEO and founder  
Lawrence Hatchett, MD; Heartland Regional Medical Group; Chief of Urology  
Lynn Anderson Lindberg, Innovation Center @ SIU; Director

10.2 Number of Meetings (In This Year) 1 in conjunction with symposia

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Grants	3	1
2. Publications	5	2
3. Presentations	10	12
4. Community outreach events	2	2
5. Undergraduate Scholarships	1	0

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

Hosted 2 symposia—1) Cannabinoids, 2) Fiber and seed crop  
Sponsored “Hemp Hops and Shrooms” cultural festival in Carbondale together with the Fermentation Science Institute  
Exceeded our expectations for Center personnel presentations, local, regional and national  
Exploratory trip to Morocco to establish institutional collaborations

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

IBHE granted Center Status with the support of the Vice Chancellor for Research, the Dean and Provost of the SIU School of Medicine, the Dean College of Agriculture, Physical and Life Sciences, the Dean of School of Law, the Director of the Center for Rural Health and Social Services and the Rehabilitation institute. These offices all support the education, public service and research mission of the Center.

11.4 Evidence of Support for Center/Institute Objectives

The SICSC is engaged in the establishment of a collaborative network for hemp/cannabis research with Midwest Natural Fibers and Tiger Fibers to develop a hemp fiber industry in southern Illinois.

The SICSC is working to establish specific projects with the defined goals to research the use of cannabis to treat opioid addiction in rural communities. Specific NIH funding streams are being identified to support these projects

The SICSC is serving as a clearinghouse for hemp and cannabis related information by publishing the Canna Dawgs newsletter using social media and the SICSC website.

The SICSC has hosted the annual SIUC hemp/cannabis symposium and engaged in outreach activities including the "Hemp, Hops & Shrooms" festival and educational field trips to hemp/cannabis growing and processing facilities.

The SICSC has brought like-minded people into working groups in various aspects of hemp/cannabis research and development: Agricultural; Analytical; Biomedical, and Community.

THE SICSC continue to bring together Healthcare, Educational and Commercial interests in the hemp / cannabis domain

11.5 Evidence of Organizational Effectiveness

The Center was recently established and is off to a strong start by meeting the objectives and satisfying the mission.

12. Institutional Assessment

12.1	Date of Last Review	<u>New center</u>
12.2	Decision at Last Review	<u>                    </u> Center/Institute in Good Standing <u>                    </u> Center/Institute Flagged for Priority Review <u>                    </u> Center/Institute Suspended
12.3	Explanation	<u>(new Center founded June 2021, this is the 1<sup>st</sup> report)</u>



**RESOURCES: Cannabis Science Center**

<b>Financial Resources</b>	<b>FY2022</b>				
Revenues	0.00				
State Appropriations	0.00				
Income Fund	0.00				
Grants & Contracts	0.00				
xxx					
xxx					
xxx					
<b>Total Revenues</b>	<b>0.00</b>				
Expenditures*	0.00				
xxx					
xxx					
xxx					
xxx					
xxx					
xxx					
<b>Total Expenditures</b>	<b>0.00</b>				
<b>Revenue Minus Expenditures</b>	<b>0.00</b>				

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>				
Faculty	0				
Staff	0				
<b>*Total Staffing</b>	<b>0</b>				

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	<u>SIU Carbondale</u>
2.	Center/Institute	<u>Center for Archaeological Investigations</u>
3.	Date	<u>3/20/2023</u>
4.	Director	<u>Dr. Mark Wagner</u>
4.1	Telephone	<u>618-453-5055</u>
4.2	E-mail	<u><a href="mailto:mjwagner@siu.edu">mjwagner@siu.edu</a></u>
5.	Year Established	<u>1978</u>
6.	Illinois State Statute (if pertinent)	<u>N/A</u>
7.	Reporting Unit	<u>College of Liberal Arts</u>
8.	Type	Activity (check all that apply)
	Instructional	<input checked="" type="checkbox"/>
	Research	<input checked="" type="checkbox"/>
	Public Service	<input checked="" type="checkbox"/>

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The Center for Archaeological Investigations (CAI) is a research unit founded in 1978 within the College of Liberal Arts. The CAI is historically linked to the SIUC Department of Anthropology in a number of ways but has always been administratively separate. The academic mission of the CAI is bolstered by our close ties to the Department of Anthropology where the CAI Director is a faculty member teaching courses in cultural resource management (CRM) and applied archaeology. CAI archaeological staff, two of whom are state supported and three who are funded through external grants, are engaged in external grant acquisition, student education, curation of archaeological collections, and field and laboratory research for state, federal, and private agencies.

### 9.2 Mission

The CAI mission includes five key areas. These are: (1) Student education. The CAI operates a large external grant-funded archaeological research program that enables us to provide experiential learning and employment opportunities for SIUC students. As part of this mission, we seek funds from grant-making agencies that enable us to provide financial support for students in applied positions as GAs, extra help, and other positions conducting field and laboratory archaeological research. (2) Curation. The CAI maintains a world-class curation facility where we curate archaeological collections for government agencies and Native American groups as well as provide SIUC students with training in archeological curation. We currently curate approximately 9,100 standard letter-size archival storage boxes of artifacts and non-cultural materials and more than 850 linear ft. of associated documentation, primarily from archaeological sites located in the Midwestern and Southwestern United States and some from Micronesia. These collection, including human remains, are curated in compliance with federal regulations 36 CFR Part 79 (Curation of Federally-Owned and Administered Archaeological Collections) and the Native American Graves Protection and Repatriation Act (NAGPRA); (3-4) to conduct archaeological and other research within an applied or cultural resource management studies (CRM) framework and publish the results of such research in peer reviewed forums. The CAI has been very successful in obtaining external grants from federal, state, and other agencies, receiving over 2.5 million dollars in external grants between 2016-2022; (5) Public outreach. To better serve the local community, CAI staff are actively involved in educational outreach throughout the region in the form of public talks, serving on local and national historic preservation boards, and leading public tours of archaeological sites. CAI Director Dr. Mark Wagner is in fact the current president of the state archaeological organization, the Illinois Archaeological Survey.

9.3 Objectives

The current primary objective of the CAI is continued expansion of our external grant program to provide additional financial and educational support for undergraduate and graduate students in the form of applied or hands-on training to help prepare students for careers as professional archaeologists with private companies and/or government agencies after graduation. The acquisition of externally funded grants to provide experiential training opportunities and financial support for students is especially critical in an era of decreasing state support for higher education. In recent years, we have expanded our external grant program by adding the Daniel Boone National Forest in Kentucky as one of our partners. We also received a National Battlefield Preservation grant from the National Park Service which will involve a remote sensing (ground penetrating radar and gradiometric) survey of a Civil War fortification (Fort Henry) in Kentucky that will raise the national profile of both the CAI and SIUC.

10. Advisory Board

10.1 Advisory Board - Membership

Our advisory board is lapsed due to retirements. We are currently in the process of reconstituting the board.

10.2 Number of Meetings (In This Year) \_\_\_\_\_

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. External grants	5	5
2. Intellectual & Professional Contributions	10	10
4. UG student support	2	5
5. Graduate student support	1	3

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

CAI accomplishments for FY22 included acquiring \$230,977 in new external grants. These grants include funding for research projects supported by the USDA Forest Service and Peabody Energy. With our continuing grants from previous years, the CAI had an annual grant total of \$858,658 for FY22. These grants allowed us to hire undergraduate and graduate students as UGAs, GAs, extra help and other positions that provided them with experiential learning opportunities beyond what they receive in the classroom. CAI faculty and staff also presented research papers at state, regional, and national meetings; authored book chapters; and wrote articles and presented lectures to the general public to increase SIUs positive image in the region. All CAI AP staff are Board Members of local and/or regional archaeological institutions. The CAIs curation facility staff are in the process of (1) rehabilitating and patriating archaeological materials to the Hopi Tribe and Navajo Nation and (2) searching old university collections that the CAI inherited from the University Museum or retired faculty members for human skeletal remains as required by under the Native American Graves Protection and Repatriation Act and co-curated a large exhibit at the University Museum.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The CAI provides support for goals regarding student success outlined in the the Imagine 2030 plan. Specifically, the CAI provides students with the opportunity to engage in research, creative activity and service learning by providing students with experiential learning opportunities through our external grant program to help prepare them for careers after graduation. The CAI also encourages mentoring at every level including mentoring of undergraduate students by graduate students, and mentoring of all students by faculty and staff. SIUC students work with CAI faculty and staff on a daily basis in a mentoring relationship as GAs, UGAs, work study, extra help, and interns to acquire skills in GIS, historical research, artifact analysis, and operation of state of the art ground penetrating radar (GPS) and gradiometric remote sensing units. The CAI Director and Interim Curator also works directly with undergraduates in conducting research as part of the SIUC REACH program.

### 11.4 Evidence of Support for Center/Institute Objectives

Please see sections 11.1, 11.2 and attached resources table that provide information on our success in meeting our center objectives, specifically the acquisition of external grants to support CAI staff as well as undergraduate and graduate students through student work, extra help, and UA and GA assistantships.

### 11.5 Evidence of Organizational Effectiveness

CAI organizational effectiveness is based on our demonstrated ability to acquire external research grants from a variety of private industry, state, and federal partners that we use to support 2.5 full-time grant funded staff as well as undergraduate and graduate students in a variety of research related positions that enhance their potential to obtain employment after graduation. CAI staff are currently working on external grant projects in five states (Illinois, Indiana, Kentucky, Missouri, and Arizona). This continued expansion of our external grant

program provides a stable footing for us to support our academic professional staff and students in an era of diminished state funding to support such positions.

12. Institutional Assessment

12.1 Date of Last Review 2015

12.2 Decision at Last Review  Center/Institute in Good Standing  
 Center/Institute Flagged for Priority Review  
 Center/Institute Suspended

12.3 Explanation (briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

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**RESOURCES: Center for Archaeological Investigations**

Financial Resources	FY2022	FY2021	FY2020	FY2019	FY2018
<b>Revenues</b>					
<b>State Appropriations</b>	\$98,895.00	\$120,642.45	\$163,946.00	\$140,233.00	\$124,242.00
<b>Starting Grant Balance</b>	\$627,680.86	\$235,195.00	\$120,651.00	\$397,699.00	\$308,026.00
<b>New Grants &amp; Contracts</b>	\$230,977.00	\$631,557.00	\$450,516.00	\$275,602.00	\$423,892.00
<b>Annual Grant Total</b>	\$858,657.86	\$866,752.00	\$571,167.00	\$673,301.00	\$731,918.00
<b>Total Revenues</b>	\$957,552.86	\$987,394.45	\$735,113.00	\$813,534.00	\$856,160.00
<b>Expenditures*</b>					
<b>Grant Funded Salaries</b>	\$226,081.97	\$199,724.36	\$207,986.00	\$462,316.00	\$161,366.00
<b>Grant Funded OTS</b>	\$40,376.00	\$39,346.78	\$127,986.00	\$90,334.00	\$162,853.00
<b>State Funded Salaries</b>	\$93,876.00	\$115,621.96	\$156,222.00	\$132,212.00	\$117,660.00
<b>State Funded OTS</b>	\$5,019.00	\$5,020.49	\$7,724.00	\$8,021.00	\$6,582.00
<b>Total Expenditures</b>	\$93,876.00	\$359,713.59	\$499,918.00	\$692,883.00	\$448,461.00
<b>Revenue Minus Expenditures</b>	\$764,781.86	\$627,680.86	\$235,195.00	\$120,651.00	\$407,699.00

Staffing (Full Time Equivalent)	FY2022	FY2021	FY2020	FY2019	FY2018
<b>Faculty</b>	0	0	0	0	0
<b>Staff (State Supported)</b>	1	1.5	1.5	2	2
<b>Staff (Grant Supported)</b>	2.5	3	3	3	3
<b>Total Staffing</b>	3.5	4.5	4.5	5	5

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	Center for Autism Spectrum Disorders (CASD)
3.	Date	March 20, 2023
4.	Director	Denise Croft
4.1	Telephone	618-453-7130
4.2	E-mail	Denisecroft@siu.edu
5.	Year Established	*2021
6.	Illinois State Statute (if pertinent)	IL Public Act 93-0395
7.	Reporting Unit	School of Psychological and Behavioral Sciences
8.	Type	Activity (check all that apply)
	Instructional	X
	Research	X
	Public Service	X

\*Note: CASD became an IBHE-approved center in 2021 (start of FY2022)

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.



## 9. Overview

### 9.1 Description

The CASD provides teaching/student-training, community service, and research opportunities in the field of autism spectrum disorders (ASD).

- Teaching: We train graduate and undergraduate students in the area of service delivery across disciplines within the College of Health and Human Services (current disciplines include speech-language pathology (SLP) from the Communication Disorders and Sciences program, applied behavior analysis (ABA) from the Behavior Analysis and Therapy program, and clinical psychology (CP) from the Clinical Psychology program. We are in the process of expanding our teaching and service delivery, as described below.
- Research: We conduct research on our services. This includes student-led projects (e.g. theses), conference presentations, and publications. It also includes grant activity. We also conduct research on our supervisory/supervisee skills.
- Community Service: We provide a multitude of services to children with ASD and their families, which include screening and diagnostic evaluations, speech-language therapy, applied behavior analysis therapy, parent trainings, school trainings, and consultations.

### 9.2 Mission

Mission Statement:

The Center for Autism Spectrum Disorders (CASD) is an interprofessional training and research center that provides high-quality services and leadership in the Southern Illinois region for individuals with autism spectrum disorder and their families. Our center focuses on Community Service, Student Training, and Research.

### 9.3 Objectives

- Provide exemplary training in empirically supported treatments and best professional practices to our student trainees
- Provide high-quality assessment and intervention to individuals with ASD and their families
- Provide needed consultation to our region to teachers, social workers, speech-language pathologists, administrators, school-psychologists, paraprofessionals, and parents/families
- Help inform state and local initiatives related to ASD
- Conduct research that spurs the field in the form of conference presentations and publications; provide research opportunities for our trainees (e.g. theses)
- Attain extramural funding
- Meet deliverables outlined by our grants
- Began inter-professional practice (IPP), an empirically supported approach to treatment, and compare it to standard care (each discipline working separately) via research and assessment practices.

10. Advisory Board

10.1 Advisory Board - Membership

(provide the name and list the membership of the center/institute advisory board. If multiple boards are used, list each.)

**CASD Advisory Board**

<b>Name</b>	<b>Title</b>	<b>Affiliation</b>
Janet R. Albers, MD	Chair, Professor, and Physician	SIU School of Medicine
Pam Altman, LCSW	Director of Clinical Services	Brehm Preparatory School
Stephanie Brown	Director	Autism Society of Southern Illinois
Terri Bryant	State Representative	Illinois House District 115
Chrissy Chancey, M.S., BCBA	Behavior Analyst	Specialized Training for Adult Rehabilitation
LaDonna Henson, M.S., CRC, LCPC	Director	SIU Evaluation and Developmental Center
Anna Little, MD	Pediatrician	Shawnee Health Service
Craig Rogers	Publisher	The Southern Illinoisan
Rocio Rosales, Ph.D., BCBA-D	Assistant Professor	Umass Lowell
Jenny Seachrist	Special Education Administrator	Effingham Community Schools
Terri West	Mother of Club '57 client	Center for Autism Spectrum Disorders

**New Advisory Board Established 1/22:**

- \* Dr. Lina Slim - SLP/BCBA, International IPP presenter
- \* Dr. Jon Hochmuth - CDC, NIOSH Behavior-Based Safety
- \* Rebecca Trammel - SLP, founder of CASD w/ Dr. Cuvo
- \* Dr. Rocio Rosales - BCBA, UMass faculty
- \* Stephanie Brown - director of autism society and parent
- \* Anna Little, MD - Shawnee Health, medical
- \* Dr. Lea Maue - Head Start / school
- \* Julie Pratt and Sherry Riedel - CEO/COO, private practice of interprofessional clinic
- \* Dr. Kelli D. - director of new nursing program at SIUC

10.2 Number of Meetings (In This Year) 1 meeting with new advisory board on 1/19/22

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11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Students trained in ASD screening, assessment, and treatment in our clinic	N/A	30
2. Graduate Assistant Positions	N/A	6
3. Screening & diagnostic evaluations for children with ASD (measured in number conducted)	100 screenings & 60 diagnostics = Total of 160	98 screenings & 53 diagnostic evaluations = Total of 151 *Multiple no-shows and cancellations
4. Therapy hours provided for children with ASD and/or their parents	380 hours	598.25 hours
5. Consultations with parents/families of children with ASD (measured in number of hours)	100	82 *this number impacted by faculty on sabbatical
6. Trainings provided to our clinicians at our clinic, school districts & personnel, and families	90	100
Attain extramural grants (measured in number attained)	N/A	2
Raise money via donations	N/A	\$25
Present our work at conferences (measured in number of presentations)	N/A	8 Presentations
Publish findings	N/A	4 Articles

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

<p>(briefly summarize center/institute’s major accomplishments for the year)</p> <ul style="list-style-type: none"> <li>• Awarded State (TAP) grant to continue services at the CASD (\$185,500)</li> <li>• Began process to contract with Licensed Clinical Psychologist for in-house diagnostics for beginning of FY23 for fall 2022.</li> <li>• BAT graduate and undergraduate students returned to complete clinical training on site</li> <li>• Increased clients receiving ABA and speech-language therapy from 3 children in Fall 2021 to 7 in Spring 2022</li> </ul>
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- Continuation of inter-professional practice (IPP) meetings between BAT and CDS students, supervisors, faculty which was started as a result of grant funding from previous FY and executed in FY 22 (\$13,160).
- Arranged for a new doctoral program on campus to join the CASD once their training has begun and their students are ready (2023): Occupational Therapy (OT)
- A partnership between CASD and Head Start was established and Tier 1 push-in classroom services were provided, as well as trainings.
- Proposal of Honor's Course at SIUC was accepted in FY22 to begin in FY23
- A director position for the CASD was proposed and accepted to start in FY23

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

(briefly provide any evidence of the center/institute's support for statewide, SIU system, or campus priorities in this year)

**IPA Goal 1. EDUCATIONAL ATTAINMENT.** – *Increase educational attainment to match the best-performing states*

According to the Center for Disease Control, the prevalence of ASD in the U.S. is 1 in 44 children (CDC, 2022). Thus, for students in the Communication Disorders and Sciences (CDS, trains students in speech-language pathology (SLP)), Behavior Analysis and Therapy (BAT, trains students in applied behavior analysis (ABA)), and Clinical Psychology (CP, trains students in CP) programs to receive cutting-edge education, they require training in how to treat/serve individuals with ASD, as they likely will be working with individuals with ASD in their future careers. All three programs have graduate students who volunteer, take practicum classes, and/or have paid assistantships at the CASD. Undergraduate students in the BAT and CDS programs are also involved in serving as volunteers and increasing their training through practicum courses. In fall 2023, the Occupational Therapy Doctoral Program will begin to join the CASD clinic.

**IP Goal 2. COLLEGE AFFORDABILITY.** – *Ensure college affordability for students, families, and taxpayers.*

ASD is one of the most common, serious developmental disabilities affecting children in the USA (CDC, 2022). Effective treatment for ASD is extensive, multifaceted, individualized, and, as a result, costly (Sharpe & Baker, 2007). This cost of raising and treating a child with ASD often places a substantial financial strain on the families. On average, the *annual* cost is over 100k **per child** age 5 and under, and over \$85k for children ages 6-17 (Candon et al., 2019). Thus, children with ASD have a high utilization of health care services, even when compared to children with other types of developmental delays (Croen et al., 2006; Mandell et al., 2006). Moreover, many schools do not provide ABA or clinical psychology services, and SLP services are limited. Thus, financing services for children with ASD is a growing concern among families, private and public insurers, and policymakers at the state and federal levels (Council for Affordable Health Insurance, 2009). The CASD provides individualized, multi-disciplinary

assessment and therapy services to children/adolescents with ASD and their families who live in the rural communities of Southern Illinois and do not have private insurance. Families receive these services at no cost to them, as the services are covered by IL's TAP grant. This much needed assistance is quite impactful to IL families. It also is impactful for IL taxpayers in general, as the better these families and children function, the fewer services they will require in the future, and the more they can focus on employment and other needs of the State. Having less future burden on our State's resources, and more parents working and paying taxes, frees more State resources for higher education. Additionally, the CASD funded 6 graduate assistantships for current students enrolled in the CDS and BAT programs, providing access to high quality programs, work and training experiences, while covering their tuition.

*IPA Goal 3. HIGH QUALITY CREDENTIALS TO MEET ECONOMIC DEMAND. – Increase the number of high-quality post-secondary credentials to meet the demands of the economy and an increasingly global society.*

Having well-trained students who are able to work with individuals with ASD helps our State. Families who have children with ASD can stay in the Southern Illinois region to receive care instead of having to drive long distances to other areas or States to receive it. By improving family functioning and the functioning of the individual with ASD, they are better able to function in their communities (pursue or sustain employment, utilize less public aid for healthcare, etc.). As noted under Goal 1, the CASD is strategically working towards expanding the number of programs involved with the Center. This will allow clients to receive an even wider array of services and more SIUC students to receive outstanding inter-disciplinary training. This better prepares our students for employment/practice in different employment sectors within Illinois and beyond.

#### 11.4 Evidence of Support for Center/Institute Objectives

(briefly provide any evidence of the center/institute's support for the unit's objectives in this year – see 9.3 above)

- Provide exemplary training in empirically supported assessment and treatment and best professional practices to our student trainees
  - Trained 30 students in such techniques/practices in FY 2022
  - Provided 685.25 supervision hours of these students' work
- Provide high-quality assessment and intervention to individuals with ASD and their families
  - Conducted 98 screenings for ASD to determine if further assessment is warranted
  - Conducted 53 diagnostic evaluations at CASD
  - Provided 598.25 individual therapy hours for clients
    - In terms of quality, nearly all therapy clients were rated by their therapists and their supervisors as having made significant progress, maintained progress, or were substantially improved over the course of their treatment (as opposed to no progress).

- Provide needed consultation in our region to teachers, other professionals and paraprofessionals, and parents/families
  - Provided 88 consultations to clients and families in the Southern Illinois Region
  - Provided 100 trainings consisting of over 170.75 hours to professionals and paraprofessionals and their trainees. Additional professions represented included physician assistants, dental hygienists, physical therapy assistants, and early childhood workers.
    - For those who completed the satisfaction questionnaires, all rated that they were Satisfied with the training provided (this was the highest ranking possible).
- Help inform State and local initiatives related to ASD
  - Provided feedback to TAP (our main funding source) regarding needs in the Southern IL area
- Conduct research that spurs the field in the form of conference presentations and publications; provide research opportunities for our trainees (e.g., theses)
  - 8 conference presentations
  - 1 Master’s Thesis presentation completed in May 2022.
  - 1 additional Master’s thesis active during FY22
- Research, Publications/Grants:
- Lesley Shawler was awarded the Supporting Promising Researchers: Grant Mentorship Initiative for 2022-2024. This initiative is dedicated to support junior faculty by receiving grant mentorship from prominent scholars in their field.
- Lesley Shawler had a manuscript published titled, “A systematic review of mands for information” in the journal *Behavioral Intervention* with colleagues from University of Maryland, Baltimore County. This manuscript is focused on the extant literature on teaching children with communication deficits how to mand (request) for information. <https://doi.org/10.1002/bin.1893>
- Lesley Shawler had a manuscript published titled, “A Competing Stimuli Intervention Package to Treat Automatically Reinforced Destructive Behavior” in the journal *Clinical Case Studies* with colleagues from Kennedy Krieger Institute. This manuscript is focused on using competing stimuli to reduce automatically maintained behavior in an adolescent with Autism and other developmental disabilities. <https://doi.org/10.1177/15346501221099218>
- Lilith Reuter-Yuill and Valerie Boyer had their IRB application for a survey of AAC assessment practices approved. The survey was disseminated on social media and to major professional groups to gather information regarding AAC practices.
- Lilith Reuter-Yuill submitted a manuscript titled “Clinical efficacy and safety of intravenous ferric carboxymaltose treatment for restless legs symptoms and low serum ferritin in children with autism spectrum disorder” to *SLEEP*. She continues collaboration on the topic of sleep for children with ASD through Seattle Children’s Hospital.

- Valerie Boyer and Lilith Reuter-Yuill are developing an AAC assessment protocol to improve precision AAC interventions for emergent communicators with ASD and DD.
- Lesley Shawler and Lilith Reuter-Yuill submitted a grant for narrowing the research-practice gap for children with ASD through a university honors course. The course competition application was awarded for Fall 22.
- Lilith Reuter-Yuill's article on RLS and PLMD was accepted into the *SLEEP* medical journal. This collaboration with Seattle Children's Hospital will continue and hopefully turn into a second publication on the use of intravenous iron to address sleep disorders in children with ASD.
- Lilith Reuter-Yuill submitted an article for publication emphasizing the importance of technological descriptions of intervention procedures to advance the science of AAC and enable practitioners to engage in evidence-based practice.
- Attain extramural funding
  - Awarded IL TAP grant (\$185,500.00) at the start of FY2022
  - Awarded Foundation Grant (\$13,160) to Dr Michelle Kibby at end of FY21 for research in FY22 on Inter-Professional Practice and funded two undergraduate assistants.
  - Applied for OAR grant (was approved to go onto second round and ultimately, did not receive funds)
  - Applied for and wrote proposals for other extramural funding
  - Awarded one month of summer funding to complete research at the CASD with caregivers of individuals with ASD. Their proposal was titled, "A Comparison of Methodologies to Promote Caregiver Treatment Generalization and Adherence for Individuals Exhibiting Challenging Behavior"

#### 11.5 Evidence of Organizational Effectiveness

(briefly provide any evidence of the center/institute's organizational effectiveness in this year)  
 Over the course of FY2022, the CASD met its mission in terms of Community Service, Student Training, and Research. We provided numerous assessment and therapy hours to children with ASD and their parents/families despite the pandemic. We provided 100 training sessions to professionals/paraprofessionals and their trainees to enhance their knowledge of ASD and how to more effectively work with children with ASD and their parents. We directly trained 30 students in service delivery so that they can perform a much-needed service for our State and beyond post-graduation (help children with ASD and their families). As part of this, we funded 6 students via graduate assistantships. We also delivered 8 conference presentations despite the pandemic and staff losses, sharing our research findings at the State and National levels. After attaining an extramural grant the previous year, we began a new, center-wide, research agenda: inter-professional practice and education (one of the goals listed on our NOI, approved in 2021). Our mission directly aligns with SIUC's goals of education, research, and community

service, helping SIUC to meet its mission/strategic plan as well. Moreover, we helped SIUC meet three IPA goals, as detailed above.

12. Institutional Assessment

12.1 Date of Last Review (list the year of the last program review)  
N/A (we became an IBHE-approved center in FY2022)

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12.2 Decision at Last Review:

Center/Institute in Good Standing

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Center/Institute Flagged for Priority Review

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Center/Institute Suspended

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12.3 Explanation Not Applicable



**RESOURCES: Center for Autism Spectrum Disorders (CASD)**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021**</b>		
<b>Revenues</b>				
State Appropriations				
Grants & Contracts *grant through TAP of IL	*185,502	161,500		
Fundraising		1,475		
<b>Total Revenues</b>	185,502	162,975		
<b>**efforts toward</b>				
<b>Expenditures*</b>				
Salaries & Wages	80,250.24	65,226		
Fringe Benefits	19,577.84	18,789		
Equipment	0	12,459		
Travel	112.00			
Supplies	5,882.29	4,355		
Contractual & Subawards	242.50	841		
Consultants (Prof. Services)	27,350	20,100		
Training & Education	2,950	-----		
Other or Misc. Costs	0	-----		
Indirect Costs	41,758.57	32,757		
Telecommunications	340.33	156		
<b>Total Expenditures</b>	178,463.77	154,692		
<b>Revenue Minus Expenditures</b>	7,036.23	8,283		

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

\*\*the CASD became an IBHE-recognized center with permanent status in July, 2021

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY 2021</b>
<b>Faculty</b> Employee (E)	E 25% E 25% E 20% E 15% E 25%	.72
<b>Staff</b> Contractor (C) Graduate Assistants (GA)	C 75% C per diem C per diem	0

Staffing (Full Time Equivalent)	FY2022	FY 2021
	6 GAs at 25%	
Total Staffing	6 Faculty Employees 3 Staff Contractors 6 Staff Graduate Assistants	.72

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Carbondale
2.	Center/Institute	Center for English as a Second Language (CESL)
3.	Date	March 24, 2023
4.	Director	William Hellriegel
4.1	Telephone	618-453-6538
4.2	E-mail	william.hellriegel@siu.edu
5.	Year Established	1966
6.	Illinois State Statute (if pertinent)	NA
7.	Reporting Unit	(College of Liberal Arts)
8.	Type	Activity (check all that apply)
	Instructional	X
	Research	
	Public Service	

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

CESL offers intensive English instruction to adults with a focus on preparation for success in university degree programs, principally at SIU. CESL is self-supporting and, in addition to classes, provides social-cultural activities, student advising, and specially designed programs for foreign partner institutions and governments.

### 9.2 Mission

The Center for English as a Second Language (CESL) serves international students enrolled in CESL or in Southern Illinois University. Our primary mission is to provide the highest quality English language program and curriculum, delivered by professionals in the field of ESL; thereby also increasing the number of students who end up pursuing degrees at SIU. Traditionally, 80% of CESL students who finish our program move on to SIU degree programs; however, that rate is now less.

### 9.3 Objectives

- \* Provide high quality English instruction for students to meet educational, professional, and/or personal goals.
- \* Foster global citizenship by helping students acquire a better understanding of both U.S. academic and social culture as well as their own and other cultures.
- \* Maintain extensive student services.
- \* Provide effective teacher training and mentoring of CESL teaching assistants.
- \* Encourage professional development in TESOL and related fields in order to contribute to and further knowledge about the field.
- \* Provide advanced linguistic, cultural and pedagogical training for international graduate assistants.
- \* Promote international awareness within the SIU community and the region.
- \* Advance the SIU reputation as an international and multicultural community.
- \* Establish and maintain relationships abroad in order to promote CESL and SIU internationally.

10. Advisory Board

10.1 Advisory Board - Membership

CESL Advisory Board. Current membership includes: William Hellriegel, CESL Director; Lilia Angel-Post, CESL Assistant Director; Kathryn Mutchnick, CESL NTT Instructor (Senior Lecturer); Colin Robinson, CESL NTT Instructor (Associate Professor of Practice); Stacie Lawley, CESL NTT Instructor (Senior Lecturer), Geoffrey Young, CESL NTT Instructor (Assistant Lecturer), and Rebecca Sullivan, CESL NTT Instructor (Assistant Lecturer).

10.2 Number of Meetings (In This Year) 4

11. Annual Performance

11.1 Performance Measures \*

Measure – Strategic Goals for 2021-22	Target for Year	Results in Year
1.	Resume f2f instruction, retain online instruction as appropriate, fully continue current collaborations with partners, and resume pricing that allows CESL to cover more of its current costs. That is, raise tuition from the 50% off discounted rate (\$1150 instead of \$2300) that we instituted in calendar year 2020 in order to retain students, who in most cases transitioned to online study and stayed with us.	Have total per term face-to-face student FTE numbers of at least 35, and establish a tuition rate for at least most CESL students, assuming a return to face-to-face instruction, of \$1800.
		Average of 15 total face-to-face student FTEs per term. Also, we did succeed in establishing the \$1800 full-time tuition rate mentioned, and we now have most students paying that. Moreover, this \$1800 rate is adequate for us to run classes, even smaller ones, and still more than cover our direct instructional costs, as well as the associated overhead costs – something that is critical given the fact that CESL is totally self-funded.

Measure – Strategic Goals for 2021-22		Target for Year	Results in Year
2.	Establish collaboration for at least one significant Teacher Training or English for Specific Purposes program, either in the students’ country or online, while maintaining our programming for our Community Engagement Program (see next strategic goal) with Kyoto University of Foreign Studies (Aug-Sept), our annual cohort of Fulbright scholars (Jan-Aug), and our Reitaku University (Japan) students (Mar-Aug).	Recruit at least 30 student FTEs per year, producing at least \$60K in income.	By the end of the 2021-22 period, plans were confirmed for Fulbright Colombia and US Embassy Nicaragua (US State Department) programs in the areas of teacher training and intensive English, totaling approximately 236 individual students studying at different times during the 2023 calendar year and earning CESL approximately \$185K in tuition and fee income. Thus, we are more than attaining our goal here, albeit a little later than originally projected and not entirely in the subject areas intended. Moreover, we have established very solid relationships with the entities mentioned, so we expect there to be much repeat business going forward.
3.	Continue with social media efforts, contacting and exploiting fully all potential sources of students, resulting in a new and ongoing	Recruit 20 students per new institutional	By the end of FY22, we had not established any

Measure – Strategic Goals for 2021-22	Target for Year	Results in Year
<p>Community Engagement Program with each of two new Japanese institutional partners. Also, attract new onsite individual intensive English students through these same efforts.</p>	<p>partner, yielding a total of \$50K in additional tuition revenue for CESL by one program running annually for each institution; and recruit 50 new onsite student terms per year (10 news students per each of our five 8-week terms), yielding \$90K in new tuition revenue.</p>	<p>new institutional relationships; however, we had continued offering our Community Engagement Program to two established institutional partners, on track to earn in early and later calendar year 2023 \$20K in in tuition income from each. We had also gained approximately 5 FTE students per term (5 CESL terms per year), earning CESL an additional \$45K for the 2022 calendar year – thus, this goal was almost attained, albeit a bit later than planned. Moreover, as we go forward, the establishment of the \$1800 full-time tuition rate, discussed elsewhere in this report, should serve to stabilize the continuation of this extra revenue.</p>
<p>4. Finish CESL’s 5-year interim accreditation process with the Commission on English Language Program Accreditation (CEA), begun in 2019.</p>	<p>Completely finish the process.</p>	<p>CESL reached a point in the 2021-22 fiscal where we had completed more than 90% of the requirements of the process.</p>

Measure – Strategic Goals for 2021-22	Target for Year	Results in Year
		<p>We have made further progress since then and until now; however, we are still not completely finished, with just a few % of the process still left to do. The process is taking so long because, as we are operating with a lean organization; thus, we cannot devote a significant amount of faculty or staff release time to the process, which is extremely labor intensive. That said, we are still almost finished and expect to have the process completed by the end of May 2023. Moreover, we are seriously considering reapplying for another 10-year period of accreditation this year, as accreditation is important for maintaining an image of legitimacy for CESL in the competitive marketplace.</p>



Measure – Strategic Goals for 2021-22		Target for Year	Results in Year
5.	Keep CESL faculty and staff groups to the smallest possible sizes consistent with efficient and effective operation.	Hire 2 new non-tenure track faculty to replace both one faculty who retired and a number of graduate student teaching assistants who, we determined, were not teaching CESL classes with adequate quality. Keep CESL administrative staff the same in number – 3 full-time staff and one graduate assistant @50% effort.	We accomplished both of these goals, hiring the two new faculty members and keeping administration the same size.

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

CESL’s four major accomplishments in 2021-22 were the following:

- \*\* We hired two excellent new faculty members, who, in their first year, made major contributions to CESL’s success, especially teaching in our innovative Community Engagement Program, increasing both its quality and its visibility.
- \*\* We established new relationships with Fulbright Colombia and with the U.S. Department of State in Nicaragua, and these relationships are already producing income through newly developed programs that are running and will produce a total of approximately \$200K in additional tuition income between Fall 2022 and the end of calendar year 2023.
- \*\* CESL’s individual on-site enrollments had bounced back significantly by mid-2022 (25-30 student FTEs per term) and are still growing as I write. They are still, admittedly, nowhere close to pre-COVID levels (40 student FTEs per 8-week term), but they are much higher than they were during the worst period in 2020 (4 student FTEs per term).
- \*\* CESL increased the number of Fulbright Long-Term English Program (LTE) scholars sponsored by the Institute of International Education (IIE) and by Laspau and studying intensive English and English for academic preparation 5-7 months in CESL each year. While the annual number of students had been 3-4 in previous years, it grew to 11 students in 2022 and will be 16 students in 2023!

I note also that in the budget information provided below, CESL incurred large losses in both FY 2021 and 2022, largely due to COVID and the consequent decrease in both face-to-face enrollments and enrollments overall. However, with the new programs described above coming online during the 2023 calendar year, we expect CESL’s operating deficit to at least greatly

diminish and perhaps disappear altogether. Indeed, it seems clear that that positive trend has already started.

I note finally that CESL has maintained its high level of service throughout all periods. Given that the Southern Illinois area is not as well-known as some other parts of the U.S, we believe we have to try to have CESL stand out in other ways. Some things we emphasize to potential students and institutional partners is that the Carbondale area has a pleasant climate, abundant and close natural settings, relative safety, a low cost of living, and a friendly community. Adding to these things our excellent and prompt service, along with our aggressive pricing, CESL is a compelling option.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

CESL's fundamental function of recruiting tertiary level students who then (80%) matriculate to SIU for full-time degree study and then succeed is central to the University's mission to internationalize and to attract as many students as possible from diverse backgrounds. Although, as mentioned, these students have decreased as a percentage of our overall enrollments in recent years, we have reason to believe they will increase again, as there is a new director at the SIUC Center for International Education who has indicated that collaboration regarding international recruitment will be key going forward.

### 11.4 Evidence of Support for Center/Institute Objectives

By employing teaching assistants, CESL has supported the CoLA Linguistics Department's efforts to give their graduate students teaching experience under the guidance of experienced CESL instructors. It has likewise also supported the Department of Curriculum and Instruction in the College of Education and Human Services. Although the number of teaching assistants employed has decreased in recent years, they always remain an option. CESL currently employs two 50%-effort SIUC graduate students.

### 11.5 Evidence of Organizational Effectiveness

We continue to maintain a rationalized CESL staff and faculty structure in order to be able to deliver valuable instruction as well as extracurricular experiences to students most efficiently and effectively, as indicated above. By retaining the most capable and energetic persons, this goal continues to be accomplished.

With the lean staff and faculty that we have, we have been able to serve approximately 150-200 separate individual students over the course of each of the past couple of years, with the different students studying for varying lengths of time; and we have done this with very positive student and institutional partner response, avoiding the commission of any significant errors. This says a lot about both the appropriateness of the size of our staff and faculty and the quality of our academic programming and associated support services.

12. Institutional Assessment

12.1 Date of Last Review January 18, 2022

12.2 Decision at Last Review  Center/Institute in Good Standing  
 Center/Institute Flagged for Priority Review  
 Center/Institute Suspended

12.3 Explanation (briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

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**RESOURCES: Center for English as a Second Language (CESL)**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations					
Student Tuition and Fees	327,555	270,020	860,585	874,564	886,200
Grants & Contracts					
Investment Income	6,500	10,000	15,000	6,000	5,678
Miscellaneous					51,175
<b>Total Revenues</b>	<b>334,055</b>	<b>280,020</b>	<b>875,585</b>	<b>880,564</b>	<b>1,088,762</b>
Expenditures*					
Salaries and Wages	412,258	385,815	576,402	622,663	704,154
Insurance Contributions	11,000	9,000	15,000	20,000	22,261
Travel	15,000	19,000	16,000	39,000	24,665
Equipment	3,000	3,000	3,000		
Commodities	2,230	23,412	34,828	74,000	83,375
Contractual Services	16,875	30,605	53,336	95,000	124,082
Other	84,000	51,500	179,706	64,650	100,962
<b>Total Expenditures</b>	<b>544,363</b>	<b>522,332</b>	<b>878,272</b>	<b>915,313</b>	<b>1,059,499</b>
<b>Revenue Minus Expenditures</b>	<b>(210,308)</b>	<b>(242,312)</b>	<b>(2,687)</b>	<b>(34,749)</b>	<b>29,263</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	5	4	4	5	6
Staff	3	3	3	4	5
<b>Total Staffing</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>9</b>	<b>11</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021- – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale						
2.	Center/Institute	Center for Fisheries, Aquaculture, and Aquatic Sciences						
3.	Date	March 10, 2023						
4.	Director	James Garvey						
4.1	Telephone	618-536-7761						
4.2	E-mail	jgarvey@siu.edu						
5.	Year Established	1950						
6.	Illinois State Statute (if pertinent)	N/A						
7.	Reporting Unit	Vice Chancellor for Research						
8.	Type	<p style="text-align: center;">Activity (check all that apply)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Instructional</td> <td style="border: 1px solid black; text-align: center; width: 30%;">X</td> </tr> <tr> <td>Research</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> <tr> <td>Public Service</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> </table>	Instructional	X	Research	X	Public Service	X
Instructional	X							
Research	X							
Public Service	X							

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

SIUC's Center for Fisheries, Aquaculture, and Aquatic Sciences (CFAAS; previously Fisheries and Illinois Aquaculture Center), the oldest research center on the SIUC campus, was created as the Cooperative Fisheries Research Laboratory under SIUC President Delyte Morris 1950 and led by the first Director, Dr. William Lewis until 1983. The center comprises research facilities shared across colleges and departments including a 100-pond outdoor aquaculture facility near Touch of Nature, a research lake, an indoor tank facility and the new Aquatic Research Laboratory and Saluki Aquarium at McLafferty Annex as well as computer and instrument laboratories, and research vessels. Current CFAAS faculty have split appointments with undergraduate and graduate-level teaching responsibilities in the College of Agricultural, Physical, and Life Sciences and research appointments in the Vice Chancellor for Research's office. Courses include Fisheries Management, Aquaculture, Marine Biology, Aquarium Science, Aquatic Toxicology, and Fish Genetics. CFAAS is one of the top ten academic fisheries programs in the US and is the largest in the Midwest.

### 9.2 Mission

The mission of the Center for Fisheries, Aquaculture and Aquatic Sciences is to perform high quality research leading to peer reviewed research and train graduate and undergraduate students in fisheries and aquaculture in a research-intensive environment. We strive to maintain a critical mass of complementary faculty and shared resources that enhance the individual faculty member's ability to acquire external funding and contribute to teaching within and beyond the classroom. We also provide outreach to Illinois' commercial aquaculture industry.

### 9.3 Objectives

- Perform high quality research funded with external grants.
- Publish research in high quality peer-reviewed journals.
- Train M.S. and Ph.D. graduate students. Student success is highest priority.
- Provide research opportunities for undergraduate students.
- Teach graduate and undergraduate courses in fisheries, aquaculture, and related fields.
- Maintain sufficient shared resources (boats, fish tanks, instrumentation etc.) to foster collaboration among faculty within the Center and across departments and colleges to make individual faculty members more productive.
- Provide service to Illinois' aquaculture industry.

## 10. Advisory Board

### 10.1 Advisory Board - Membership

N/A

10.2 Number of Meetings (In This Year)  N/A

## 11. Annual Performance

### 11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. External Grant Funding	\$1,000,000	\$ 3,555,184
2. Peer-Reviewed Publications	15	24
3. Graduate Students Enrolled	15	23
4. Graduate Students Finishing Degrees	5	6
5. Undergraduate Research Projects Supervised	5	10

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

External funding increased to a 5-year high in FY 2022, leading to 24 publications in the peer-reviewed literature.

Additional accomplishments include:

- Several CFAAS students received state and national awards for their research
- New trucks, boats, and aquaculture systems acquired with external funding
- Faculty served on several committees and directorial boards

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Consistent with the SIU Imagine 2030 Strategic Plan for SIUC “developing research and innovation”, CFAAS has maintained very high research productivity through competitive external grants, peer-reviewed publications, and graduate training at the MS and Ph.D. level. CFAAS is reaching out to Illinois’ aquaculture industry, which ranges from small farm-pond operations to larger commercial facilities through industry brokerage and fish-health screening that make the industry more profitable. Most CFAAS students become employed with private industry, academia, or government agencies throughout the US and beyond.

### 11.4 Evidence of Support for Center/Institute Objectives

- Obtained more than \$3.5 M in funding
- 24 peer-reviewed publications

- 23 graduate students enrolled
- 10 undergraduates engaged in funded research
- Teach graduate and undergraduate courses in fisheries, aquaculture, and related fields.
- CFAAS faculty continue to teach more than contractual teaching loads
- Provide service to Illinois' aquaculture industry generating more than \$2M in aquaculture economic sales and monitoring for diseases

11.5 Evidence of Organizational Effectiveness

The CFAAS continues to effectively exceed its mission goals annually. Faculty are productive bringing in \$700,000 in grant funding per FTE and generating about 5 publications per faculty member. External funding levels are increasing. A greater proportion of external funding in 2022 was for permanent, durable equipment (e.g., vehicles, boats, and analytical equipment) for the Center and SIUC.

12. Institutional Assessment

12.1	Date of Last Review	<u>2018</u>
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review) <hr/>



**RESOURCES: Center for Fisheries, Aquaculture, and Aquatic Sciences**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues:					
State Appropriations	589,367.30	624,315.44	669,049.23	487,089.28	437,674.43
Local Accounts	225,613.74	240,726.68	205,305.70	165,937.34	138,199.12
Grants & Contracts	3,555,184.88	1,728,382.86	934,260.83	987,539.83	1,085,227.05
Total Revenues	4,370,165.92	2,593,424.98	1,808,615.76	1,640,566.45	1,661,100.60
Expenditures:					
Salaries	1,622,411.67	1,366,664.98	1,360,971.03	1,068,267.32	962,160.75
Wages	20,172.47	28,034.49	18,247.26	11,192.74	17,408.97
Travel	83,777.73	52,951.44	77,649.98	70,547.58	56,003.17
Equipment	216,564.66	262,523.90	52,856.26	116,245.82	25,478.16
Commodities	507,957.26	256,673.65	226,724.25	272,155.85	134,356.87
Contractual Services	1,315,935.31	786,173.68	469,447.55	89,874.53	115,818.89
Op/Auto	69,368.86	51,668.88	35,350.21	34,773.51	49,522.48
Telephone	5,719.58	4,000.90	5,913.79	5,796.77	3,971.86
Fringe Benefits	228,935.51	152,743.18	166,986.10	150,261.94	150,423.77
Indirect	305,445.38	209,106.32	176,833.95	149,407.27	103,679.71
Other	90,180.68	108,660.76	19,446.99	15,988.32	15,271.79
Total Expenditures	4,466,469.11	3,279,202.18	2,610,427.37	1,984,511.65	1,634,096.42
Revenue Minus Expenditures	(96,303.19)	(685,777.20)	(801,811.61)	(343,945.20)	27,004.18

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	5	5	5	4	4
Staff	28.5	31.5	37	45.1	40.2
Students	6	11	4	4	2.6
Graduate Assistants	13	11	10.5	8	8.8
Total Staffing	52.5	58.5	56.5	61.1	55.6

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1. Reporting Institution	<u>Southern Illinois University School of Medicine</u>
2. Center/Institute	<u>Center for Rural Health and Social Service Development</u>
3. Date	<u>03/03/2023</u>
4. Director	<u>Jeffrey Franklin</u>
4.1 Telephone	<u>618.453.1251</u>
4.2 E-mail	<u>jfranklin@siumed.edu</u>
5. Year Established	<u>Academic Year 1991</u>
6. Illinois State Statute (if pertinent)	<u>N/A</u>
7. Reporting Unit	<u>SIU School of Medicine, Office of External Relations</u>
8. Type	Activity (check all that apply)
Instructional	<input checked="" type="checkbox"/>
Research	<input checked="" type="checkbox"/>
Public Service	<input checked="" type="checkbox"/>

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

Through a highly successful track record of both external funding and impact of projects, the *Center for Rural Health and Social Service Development* continues to position itself as a link between SIU School of Medicine resources and the central and southern Illinois region. The *CRHSSD* has a historical record of creating stable and sustained networks, programs, policies, and systems that demonstrate improvements in health outcomes and economic impact. As a result, the *CRHSSD* is able to launch new initiatives quickly, scale rapidly, and function with stability and sustainability. The *CRHSSD's* highly developed operational framework, successful grant management experience, and rural expertise, provides a structural framework that is beneficial for the SIU System, the SIU School of Medicine, and the communities served.

### 9.2 Mission

The *CRHSSD's* mission is to strengthen rural health infrastructure and to promote opportunities for enhancing health primarily in rural communities. Primary activities of the *CRHSSD* are grant and project development; research and evaluation; training and workforce development; and community engagement and outreach.

The *CRHSSD* is committed to the understanding of the Social Determinants of Health and resulting barriers and vulnerabilities that impact rural communities. The *CRHSSD* is built on a foundation of Diversity, Equity, and Inclusion, and with the utilization of a cultural competency lens to guide efforts that improve community resiliency, health outcomes, and individual health and well-being

### 9.3 Objectives

To accomplish the goal of being a resource center addressing health and social service issues that impact the lives and productivity of the citizens within the SIU School of Medicine's 88 Illinois county service region, the Center for Rural Health and Social Service Development provides leadership for health and social services development to Southern Illinois University, the southern and southeastern Illinois region, and the state of Illinois.

Primary objectives of the *CRHSSD* include:

1. Advance development of the health and social services infrastructure in southern Illinois. Coordinate and conduct program demonstrations. Develop alternative service delivery systems.
2. Develop new knowledge and practice in regional health and social services through increased scholarship and research. Support and coordinate new grant development of community projects and programs. Stimulate and conduct cooperative research.
3. Enhance funding for regional health and social service programs through external grants and contracts. Develop resources to support improvement in the delivery of community health and social service programs.

4. Participate and lead where possible in the development and implementation of public policy associated with regional health and social service programs. Develop policy alternatives and recommendations.
5. Contribute to the development of a well-prepared professional health/social service workforce for the southern Illinois region. Coordinate and conduct continuing education activities for the regional health and social service workforce.
6. Develop and enhance an effective network of community health and social service agencies for the southern and southeastern Illinois region. Act as a collaborative partner for regional development projects.

10. Advisory Board

10.1 Advisory Board - Membership

University and community volunteers guide the Center for Rural Health and Social Service Development and act in a consultative capacity on projects, activities, and overall direction. The board meets once per calendar quarter to stay acquainted with and up-to-date on all CRHSSD projects and plans, in addition to providing valuable input and leadership into development, research, service and training functions.

CRHSSD Advisory Board members in FY2019 are:

- Jean Alstat, Director of Crisis and Community Services, Centerstone of Illinois, Carbondale
- Fred Bernstein, Executive Director, Community Health and Emergency Services, Inc., Cairo
- Brian Chapman, PhD, Special Projects Director, SIU Office of the President
- Randy Dauby, CEO/Administrator, Pinckneyville Community Hospital, Pinckneyville
- Cindy Flamm, CEO, Rural Health, Inc., Anna
- Carl Flowers, PhD, Director, SIUC Rehabilitation Institute
- John Hamman, PhD, Associate Professor, SIUC Political Science
- \*\*Angie Hampton, CEO, Egyptian Public and Mental Health Department, Eldorado
- John Jackson, PhD, Visiting Professor, SIU Paul Simon Public Policy Institute
- Patsy Jensen, Executive Director, Shawnee Health Service, Carterville
- Adam Lach, Executive Director, RIDES Mass Transit District, Harrisburg
- Kathy Swafford, MD, Pediatric Physician, Anna
- Woody Thorne, Vice President of Community Affairs, Southern Illinois Healthcare, Carbondale

\*\* Chair, CRHSSD Advisory Council

10.2 Number of Meetings (In This Year)	2 (Meetings still impacted by COVID during FY22)
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11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. External Funding Generated	\$500,000	\$2,900,000
2. Grant Applications (New/Non-Compete Cont.)	3 Projects/\$250,000	4
3. Publications and Presentations	5	34
4. Continuing Education Programs	5	21
5. Community Collaborations	75	109 (23 New)
6. University Collaborations	10	3

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

**A. Program Title: SUD Rural Health Center of Excellence**

**Grant Information**

Externally Funded/Funder: Illinois Department of Human Services (IDHS)  
 Amount: \$1,186,464.00  
 Grant Period: July 1, 2021-June 30, 2022

**Program Overview**

In 2021 the CRHSSD was asked by DHS to serve as one of five Substance Use Disorder Regional Leadership Centers (RLC) in Illinois. The RLCs were created by IDHS with funds from the Substance Abuse and Mental Health Services Administration State Opioid Response II grant. Originally serving one region of the state, with SIU serving the southern Illinois region, each RLC now serves the entire state and is focused on a specialty area. The previously-named RLCs are now referred to as the SUD Centers of Excellence. The purpose of the CRHSSD SUD Rural Health Center of Excellence is to provide networks that link those seeking assistance with SUD to services in rural communities with a special focus on SUD in the criminal justice population, social equity, methamphetamine and cocaine use, housing stabilization, and workforce development.

**FY22 Accomplishments**

- Mobile MAR development in partnership with The Community Action Place and Southern Illinois Healthcare
- Development of a CRSS/CPRS Training and Apprenticeship Program
- Drug Overdose Prevention Program (Provided 25 overdose educational sessions and distributed 1,262 boxes of Narcan at SIU-C and various community events).
- Telehealth Expansion
- In partnership with the Second Circuit Judicial Court, expansion of drug court activities to eleven counties (Jefferson, Crawford, Franklin, Gallatin, Hamilton, Hardin, Lawrence, Richland, Wabash, Wayne, White).
- Expansion of Peer Recovery Support services in partnership with Take Action Today.
- Southern Illinois Opioid Response Advisory Council Facilitation.

## **B. Program Title: Rural Opioid Prescriber Training Program**

### **Grant Information**

Externally Funded/Funder: IDHS

Amount: \$184,500

Grant Period: July 1, 2021-June 30, 2022

### **Program Overview:**

Through the Rural Opioid Prescriber Training Program, trainings are developed for providers who prescribe opioids. Webinar topics vary, and all address opioid prescribing best practices. CMEs are provided through SIU School of Medicine.

### **FY22 Accomplishments:**

Nine new prescriber trainings were developed based on needs identified by the Advisory Council in previous years:

1. *Non-Opioid Analgesics*, by Chris Herndon
2. *Emergency Department Initiated Buprenorphine*, by Gail D'Onofrio, MD
3. *Adolescent Substance Abuse, Clinical Observations, and Strategies for Engagement*, by Ayame Takahashi, MD
4. *Breaching Trust: A Qualitative Study of Healthcare Experiences of People Who Use Drugs in a Rural Setting*, by Jerel Ezell
5. *Methamphetamine Use Among People Who Use Opioids*, by Justin Strickland
6. *Why Didn't I Learn This in School?! Addressing Barriers and Implementing Treatment for Opioid Use Disorder in Clinical Practice*, by Katherine Austman
7. *The Opioid Medication Assisted Treatment Program*, by Ingrid Lopez
8. *Barriers, Facilitators, and Best Practices for Buprenorphine-Naloxone Prescribing in Rural Communities*, by Chandra Speight
9. *Harm Reduction in Rural Illinois: A Pandemic Approach*, Scott Fletcher

These webinars are available on the SIU School of Medicine Center for Professional Development (CPD) website, on which providers can register for the webinar and view it as an asynchronous course.

In addition, staff assisted with the ongoing recruitment of students for the Opioid ECHO and participated in case presentations. SIU hosts the Opioid ECHO (Enhancement of Community Health Care Outcomes), a hub and spoke educational model that connects specialists in academic medical centers ("hubs") to primary care clinicians in rural and underserved communities ("spokes") via videoconferencing. The ECHO sessions involve a case-based learning approach that contains 15-minute didactic lessons and patient case presentations by clinicians at participating spoke sites.

The ECHO topics presented in FY22 were as follows:

1. Co-Occurring Anxiety Disorders and Substance Use
2. Co-Occurring Trauma / PTSD and Substance Use
3. Co-Occurring Psychosis and Substance Use
4. Co-Occurring Bipolar Disorder and Substance Use
5. Co-Occurring Depression and Substance Use
6. Co-Occurring Personality Disorder and Substance Use
7. Opioid Treatment Medication Essentials
8. Continuum of Care Needed to Effectively Treat Opioid Users
9. Psychosocial and Behavioral Considerations Relevant to Opioid Addiction

- 10. Treatment Complications of Opioid Medications
- 11. Management Strategies for the Relapsing or Aggressive Patient
- 12. Setting Up and Sustaining a PCP based MAR Service

**C. Program Title: MAR Stipend Program**

**Grant Information**

Externally Funded/Funder: IDHS  
Amount: \$615,000  
Grant Period: July 1, 2021 – June 30, 2022

**Program Overview:**

The state-wide MAR Stipend Program was designed to increase the number of practitioners providing Medication-Assisted Recovery (MAR) for people with Opioid Use Disorder (OUD).

**FY22 Accomplishments:**

Twenty-two providers were given stipends for attending a DATA-2000 waiver training hosted by the CHRSSD and then becoming “x-waivered,” allowing them to prescribe buprenorphine to treat OUD. Thirty-six providers received stipends for implementing MAR services during FY22, and six stipends were provided to health care organizations that submitted a MAR implementation plan and began providing treatment for OUD. All six health care organizations are located in medically underserved areas as determined by HRSA, and four are located in rural communities.

**D. Program Title: Rural Health, Inc. Rural Community Opioid Response Program (RCORP)**

**Grant Information:**

Externally Funded/Funder: HRSA (subaward from Rural Health, Inc.)  
Amount: \$3,000  
Grant Period: July 1, 2020 – February 28, 2022

**Program Overview:**

The RCORP program is a multi-year initiative that addresses barriers to treatment for substance use disorder, including opioid use disorder. It works toward the HHS goal of ending the opioid epidemic. Rural Health, Inc. provides services to Union, Johnson, and Massac Counties.

**FY22 Accomplishments:**

The CRHSSD supported Rural Health, Inc. through attendance at Advisory Board meetings and sharing of recourses

**E. Program Title: Arrowleaf, Inc. RCORP**

**Grant Information:**

Externally Funded/Funder: HRSA (subaward from Arrowleaf, Inc.)  
Amount: \$25,000  
Grant Period: July 1, 2021 – June 30, 2022

**Program Overview:**

See above for program overview. Arrowleaf, Inc. RCORP’s goal is to addresses barriers to treatment for substance use in Hardin and Pope Counties.

**FY22 Accomplishments:**

The CRHSSD staff completed an evaluation of the Arrowleaf, Inc. RCORP program’s opioid prevention campaign, assisted with establishment of a Medication Assisted Recovery program at Hardin County General Hospital, attended monthly Advisory Board meetings, and provided a variety of additional SUD resources when needed.

**F. Program Title: Prescription Monitoring Program**

**Grant Information:**

Externally Funded/Funder: IDHS  
Amount: \$40,125  
Grant Period: July 1, 2021 – June 30, 2022

**Program Overview:**

The CRHSSD coordinates the Illinois Delta Counties Project Prescription Monitoring Program for the IDHS PMP. The project involves coordinating PMP activities with 15 Delta Region health departments. Activities include bi-monthly Narcan distributions, provider outreach to educate on dangers of overprescribing opioids, advertising the PMPNow, and harm reduction activities.

**FY22 Accomplishments:**

In FY22 the CRHSSD worked with health departments to develop substance misuse educational material; maintained communication via telephone and email regarding IL-PMP updates and information on deliverables; facilitated signing of contracts and submission of activity plans, invoices, budgets/budget narratives, and activity reports; and held regular monthly meetings with the LHDs and DHS.

**G. Farm Family Resource Initiative**

**Grant Information:**

Externally Funded:  
State Appropriation: \$300,000  
IDOA: \$250,000  
Funding Period: Fiscal Year 22

**Program Overview:**

Thanks to funding initially secured by Senator Scott Bennett in 2019, the Southern Illinois University School of Medicine Center for Rural Health and Social Services Development (CRHSSD) is leading the effort to build a network of mental health support and other resources for Illinois farm families. The initial pilot program offered help to residents of six central Illinois counties.

The FFRI seeks to improve the health and well-being of Illinois farm owners and families by identifying farm family needs, including mental health needs; identifying available resources for farm families; creating new resources for farm families and developing a network of partners to respond farm family needs



In 2021, the Illinois General Assembly and the Illinois Department of Agriculture expanded this support statewide. The Farm Family Resource Initiative (FFRI) has grown exponentially in the past year, to include a 24/7 helpline to aid farmers with work-related issues, and outreach, education and training for rural clients and partners, as it strives to improve the mental and physical health and safety of our farm families

**FY22 Accomplishments:**

The FFRI developed and put into operation a text line **1-833-FARMSOS** and an email line [FarmFamilyResourceHelpline@mhsil.com](mailto:FarmFamilyResourceHelpline@mhsil.com).

Expanded from 6 pilot counties to **state-wide services**.

Partnered with Springfield Memorial Health and SIU Medicine Telehealth Services to offer farmers and farm families up to **6 free telecounseling sessions** for those in need of additional support

Brought Illinois' Agriculture industry-related organizations together to focus on farm family mental health issues – **Advisory Council** which meets monthly

**H. Drug Endangered Children & Family Human Trafficking (DEC) Training:**

DEC trainings are designed to teach communities how to develop a coordinated response for assistance utilizing “a multidisciplinary strategy”, with the goal of changing “the trajectory of a drug endangered child’s life through recognition of a common vision, ongoing collaboration between disciplines, and ongoing change in practices and policies, all of which increases the likelihood of better outcomes for drug endangered children”. Trainings are provided by Liesl Wingert (in partnership with the RCCU School Resource Officer, Brad Ameter). The overall goal is to create active DEC alliances that involve multidisciplinary involvement in each Illinois county.

**FY 22 Accomplishments:**

- Continuing the work of the Richland County DEC Alliance
- “Handle With Care” program in the RCCU school system as well as 2 local private schools.
- Completion of “Train the Trainer” training in July 2021.
- Provision of technical assistance and training events in several IL counties to establish local DEC alliances.
- Invitation to sit on the National DEC Advisory Board.
- Speaker at the National DEC Conference in August 2021.
- Co-Chair of the IL DEC Alliance

**I. Upward Bound Summer Program:**

Upward Bound (UB) is a program that is designed for high school students who will be considered first generation college students within their family. The UB Summer Program meets for 6 weeks during the summer, as well as 1 Saturday per school quarter, and offers a variety of core curriculum classes with academic tutoring, social and cultural development opportunities, college/career counseling, as well as educational and professional exploration opportunities and internships. There are 100

students from 7 counties involved in UB, and the program is free for the students accepted into it.

***FY 22 Accomplishments:***

- Summer Program (2021 and 2022): “Medical Career Exploration” and “Discussions in First Aid” offered in 2 locations (Olney Central College and Wabash Valley College).

**J. Take Action Today:**

A grass-roots organization that serves the addiction/recovery/homeless communities in multiple southern IL counties. This organization is centered in West Frankfort, IL.

***FY22 Accomplishments:***

- 4 Peer Recovery Specialists (funded by Recovery Corps funds) began work in September 2021.
- Regional Leadership Center funding was offered and accepted by the SIU SOM-CRHSSD to assist with the implementation and expansion of programming, with a focus on satellite offices in other counties.
- DHS-SUPR funding applied for and approved – use for expansion of services.
- Executive Director, Mike Tyson, was hired full-time.
- Services for those incarcerated in Franklin County Jail provided by Peer Specialists including post-incarceration planning and services, transportation to treatment, and weekly 12-step studies.
- Involvement with Jefferson county drug court team was initiated, discussions with other counties for the same service.
- Training development for CPRS certification was developed.
- Training development for CRSS certification in collaboration with SIU SOM – CRHSSD was developed.
- Liesl Wingert – Board Member since January 2021

**K. SACIS-CAISA (sexual assault counseling and information organization):**

SACIS-CAISA is the sexual assault counseling and information organization serving Coles, Cumberland, southern Clark, Crawford, Edwards, Jasper, Richland, Lawrence and Wabash counties with counseling, advocacy and prevention/education services.

***FY 22 Accomplishments:***

- Liesl Wingert – Board Member September 2021

**L. Administrative Office of Illinois Courts (AOIC):**

The Administrative Office of the Illinois Courts (AOIC) was created pursuant to Article VI, Section 16 of the Illinois Constitution to assist the Supreme Court with its general administrative and supervisory authority over all Illinois courts. Appointed by the Supreme Court, the Administrative Director leads the AOIC and its staff. The AOIC provides support and programming to courts statewide through its offices and divisions: Access to Justice Division, Administrative Services Division, Office of Communications,

Children and Family Division, Court Services Division, Human Resources Division, Judicial College, Judicial Education Division, Judicial Management Information Services Division, Office of Statewide Pretrial Services and Probation Services Division.

***FY 22 Accomplishments:***

- Strategic Planning – training program development
- Strategic Planning Training given to all state Field Coordinators
- Strategic Planning Training – 2 pilot sites completed (Jersey County, Clinton County)
- Narcan raining for 2<sup>nd</sup> Circuit Court staff

11.3 Evidence of Support for IBHE “A Thriving Illinois,” SIU System, and SIU Campus Strategic Planning

The Center for Rural Health and Social Service Development supports the priorities of the State of Illinois, Southern Illinois University, and the SIU School of Medicine. The CRHSSD advances Goal 4 of the Illinois Public Agenda and its call to use “educational, research and innovation assets to meet economic needs of the state and its region.” The CRHSSD’s reliance on community networks and public/private partnerships and the focus on community service directly support the priorities of the SIU Board of Trustees and SIU Carbondale. The center’s mission complements SIU’s mission and its call to “improve our communities” and the SIU goal for “collaboration with the broader community in our mutual goals of research translation, workforce education, and economic development and (to) sustain and grow SIU’s outreach and service mission.” The CRHSSD is a practical example of SIU School of Medicine’s mission area of “service to the community” and numerous medical school strategic priorities, including those dealing with workforce development, research, patient health, and engagement with the community.

11.4 Evidence of Support for Center/Institute Objectives

In FY2022, the Center for Rural Health and Social Service Development advanced its center objectives as outlined in 9.3 above. The center’s numerous, diversified community projects support its primary objective for development of the regional health and social services infrastructure. The CRHSSD had over 100 active community partnerships in the past year and received over \$2 million in extramural funding, filtering a large percentage back into the southern and southeastern Illinois region. This positively impacted the region’s economy and its health/social services infrastructure; this is evidence of support for the center’s community collaboration, research, and funding enhancement objectives. In support of its educational and workforce development objective, the CRHSSD contributes to the educational mission of the university and the medical school by providing learning experiences for student interns and graduate assistants. Students are assigned project responsibilities of substance that provide hands-on research and/or service experience while benefiting the communities in which the projects are implemented

11.5 Evidence of Organizational Effectiveness

The Center for Rural Health and Social Service Development is effective as an organization. The center’s mission and activities support the priorities of the State of Illinois, Southern Illinois University, and SIU School of Medicine as well as meet the expectations of its community partners and funding agencies. The CRHSSD has extensive partnerships and collaborations with health and social service agencies in the southern Illinois region. It has been successful in attracting external grant funding. The center’s most recent program review in 2019 found that the CRHSSD was active and respected in the region, that it had formed effective collaborations with regional groups, and that it was a strong voice for rural, southern Illinois. The Center for Rural Health and Social Service Development is well situated for future success.

12. Institutional Assessment

12.1	Date of Last Review	<b>2019</b>	
12.2	Decision at Last Review	X	Center/Institute in Good Standing
			Center/Institute Flagged for Priority Review
			Center/Institute Suspended
12.3	Explanation	<b>N/A</b>	

**RESOURCES: Center for Rural Health & Social Service Development**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	356,718	295,443	210,443	150,372	150,372
External Grants/Sub-Awards	2,809,849	2,228,938	2,513,799	2,216,506	1,692,518
Contractual/Income	88,000	137,132	1,537	30,342	4,313
Rural Health Initiative	120,000	135,501	161,600	161,600	161,600
Indirect/Overhead Return	52,000	97,575	75,848	43,590	25,794
<b>Total Revenues</b>	<b>\$3,326,567</b>	<b>\$2,894,589</b>	<b>\$2,963,227</b>	<b>\$2,602,410</b>	<b>\$2,041,207</b>
Expenditures*					
Salaries	543,358	384,122	456,835	606,031	569,350
Wages	2,063				
Fringe Benefits	104,287	14,850	56,154	117,111	154,228
Travel	10,909	1,386	29,300	20,293	29,535
Equipment	723	3,646	3,844	1,856	4,627
Commodities	33,625	31,663	31,803	23,590	17,585
Community/University Program Grants	465,000	100,251	609,791	708,111	687,921
Contractual – Other	35,640	324,000	430,000	139,331	110,761
Indirect to University	96,364	170,366	110,249	151,140	121,857
<b>Total Expenditures</b>	<b>\$1,291,969</b>	<b>\$918,636</b>	<b>\$1,727,976</b>	<b>\$1,767,463</b>	<b>\$1,710,409</b>
Revenue Minus Expenditures	\$2,034,598	\$1,975,953	\$1,235,251	\$834,947	\$330,798

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	0.00	0.00	0.00	0.00	0.00
Staff	12.00	11.00	11.00	11.00	7.80
Student Worker	1.00	0.00	0.00	1.00	
Extra Help	2.00	1.00	3.00	3.00	0.77
Graduate Assistants	2.00	3.00	2.00	5.00	2.00
Practicum/Intern Students	0.00	2.00	0.00	0.00	
<b>Total Staffing</b>	<b>17.00</b>	<b>16.00</b>	<b>16.00</b>	<b>20.00</b>	<b>11.00</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale						
2.	Center/Institute	Cooperative Wildlife Research Laboratory						
3.	Date	March 20, 2023						
4.	Director	Constantinos Tsatsoulis (Acting), OVCR						
4.1	Telephone	618-453-4551						
4.2	E-mail	tsatsoul@siu.edu						
5.	Year Established	1950						
6.	Illinois State Statute (if pertinent)	N/A						
7.	Reporting Unit	Vice Chancellor for Research						
8.	Type	<div style="text-align: center;">Activity (check all that apply)</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Instructional</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> <tr> <td>Research</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> <tr> <td>Public Service</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> </table>	Instructional	X	Research	X	Public Service	X
Instructional	X							
Research	X							
Public Service	X							

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The CWRL consists of five full time Faculty members who also have appointments ranging from 25% - 50% in the College of Agriculture, Life, and Physical Sciences (CALPS). Teaching and research focus on basic and applied wildlife ecology and natural resource management. Faculty members teach both graduate and undergraduate courses, and the lab generally has ~25 active MS and PhD students at any point in time. The CWRL shares 2 full time office staff and 3 student workers with the Fisheries unit. Resources include modern research labs, a centralized computer facility, field vehicles, and an off campus annex with laboratory, office, and storage space.

### 9.2 Mission

The CWRL has a mission of teaching, research, and service consistent with that of Southern Illinois University Carbondale. Teaching efforts focus on both graduate and undergraduate training. Faculty members also advise zoology and forestry majors, especially those with an emphasis in wildlife biology. Basic and applied research in the CWRL emphasizes the welfare of people, wildlife resources, and their environments. Research programs address regional/state needs and priorities, but also extend to international scales to serve the needs and interests of many concerned with natural resource use and its influence on the well-being of wildlife and humans.

### 9.3 Objectives

The overall goal of the CWRL is to train basic and applied wildlife researchers at the graduate and undergraduate levels. Consistent with this goal, CWRL faculty and staff work to maintain the unit's excellent record of research productivity and generating grant funds to support research and education. CWRL faculty and staff also work to maintain a cohesive, collaborative environment that fosters a very interactive group of students. The CWRL has a remarkable history of placement of graduates in career positions.

Key future objectives:

- Grow enrollment in the recently launched Professional Science Masters in Wildlife Administration and Management degree program.
- Continue to identify emerging issues in wildlife management and ecology in order to determine research areas such that the CWRL will maintain its national and international recognition.
- Maintain traditional areas of research funding through state agencies and a niche in applied wildlife research, while increasing numbers of successful large federal competitive grants and associated indirect funds.
- Adapt and develop degree programs, tracks, and specializations that will keep CWRL graduates competitive for jobs and other graduate programs.

- Maintain and upgrade shared resources (vehicles and other major equipment) to foster productive collaborations among faculty members in the CWRL and other units
- Continue to develop and expand outreach and public education programs, such as the Graduate Research Assistants Supporting Science (Grass) program to address needs in southern Illinois beyond SIU.
- Establish functional leadership to lead the lab in establishing a national and international reputation.
- Increase diversity in the faculty and student body to more accurately represent the community we serve.
- Keep external grant funding at \$1.5M or higher; continue to train 25-30 students; publish at least 20 peer reviewed papers; graduate at least 5 students; supervise at least 5 undergraduate projects.

10. Advisory Board

10.1 Advisory Board - Membership

N/A

10.2 Number of Meetings (In This Year)     N/A    

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. External Grant Funding	\$1,000,000	1,558,844
2. Peer-Reviewed Publications	15	23
3. Graduate Students Enrolled	15	25
4. Graduate Students Finishing Degrees	5	7
5. Undergraduate Research Projects Supervised	5	7

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

External funding increased to a 5-year high in FY 2022, leading to 23 publications in the peer-reviewed literature.

Additional accomplishments include:

- Dr. Boyles was invited Plenary Speaker at the European Bat Research Symposium in Turku, Finland
- Dr. Bastille-Rousseau was appointed as a Scialog fellow: Mitigating Zoonotic Threats



- Dr. Eichholz served as Chair– The Wildlife Society College and University Education Working Group
- Dr. Eichholtz was appointed to the Wildlife Committee of the Illinois Invasive Species Council
- Dr. Eichholtz was elected Co-Chair – United States Fish and Wildlife Services Upper Mississippi River Great Lakes Joint Venture Technical Committee Waterfowl Working Group
- Dr. Eichholtz was invited to give a Plenary Presentation at the 6<sup>th</sup> Pan European Duck Symposium - Coimbra, Portugal.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Consistent with the SIU Imagine 2030 Strategic Plan for SIUC “developing research and innovation”, the CWRL maintains a productive, high quality research, training, and teaching program. As outlined above, CWRL faculty members consistently receive external grant dollars, produce peer-reviewed publications, and produce undergraduate and graduate students that excel in the job market. The CWRL also enhances the mission of “public service... guided by its location in a region of small communities, farms, and mines” through research projects and outreach programs that address local issues related to game management, outdoor recreation, wildlife diseases, and nuisance wildlife species.

11.4 Evidence of Support for Center/Institute Objectives

As outlined in 11.1 and 11.2 above, the CWRL continues to meet its annual objectives of securing significant external funding, producing high quality research products such as peer-reviewed publications and books, and graduating students that are competitive in their fields. These activities provide numerous opportunities for undergraduate and graduate students in the zoology and forestry programs within CALPS.

11.5 Evidence of Organizational Effectiveness

The CWRL has been operating without a permanent Director since 2013. In addition, there continues to be a vacant faculty line within the Center. Despite these limitations, the CWRL still captures funding from the state for wildlife research management/conservation and serves as one of the major training programs for graduate students and undergraduate researchers at SIU. The CWRL has had a positive cash flow for the past 2 FYs.

12. Institutional Assessment

12.1	Date of Last Review	2018
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

**RESOURCES: Cooperative Wildlife Research Laboratory**

**FINANCIAL RESOURCES**

<b>Revenues:</b>					
State Appropriations	366,956.06	363,651.60	306,060.55	355,414.84	458,493.58
Local Accounts	81,132.80	72,479.24	75,122.18	92,553.44	76,128.29
Grants & Contracts	1,558,843.75	1,040,160.63	125,628.49	222,593.61	434,498.90
Total Revenues	2,006,932.61	1,476,291.47	506,811.22	670,561.89	969,120.77
<b>Expenditures:</b>					
Salaries	924,958.75	874,442.35	878,357.32	850,688.42	906,538.23
Wages	23,276.89	24,116.20	20,257.97	30,205.12	26,295.14
Travel	17,895.52	9,471.32	35,677.52	35,541.92	27,591.96
Equipment	32,832.27	2,791.00	42,282.44	3,325.92	1,027.99
Commodities	241,710.73	153,118.03	122,109.71	188,961.46	260,681.40
Contractual Services	56,638.31	58,627.86	74,855.92	59,597.45	58,987.69
Op/Auto	60,113.04	44,441.48	93,490.48	75,883.80	33,312.16
Telephone	29,477.29	24,058.25	9,718.31	13,081.46	2,987.60
Fringe Benefits	27,110.32	22,188.11	28,990.02	23,274.49	47,618.51
Indirect	173,430.04	153,936.60	176,373.58	155,889.78	150,297.27
Other	17,210.30	3,737.88	574.00	1,000.00	29,528.30
Total Expenditures	1,604,653.46	1,370,929.08	1,482,687.27	1,437,449.82	1,544,866.25
Revenue Minus Expenditures	402,279.15	105,362.39	(975,876.05)	(766,887.93)	(575,745.48)

Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	5	5	5	5	7
Staff	46.5	39	58	71	54.3
Students	11	12	15	21	14.5
Graduate Assistants	10.5	10	10.5	8	13.5
Total Staffing	73	66	88.5	105	89.3

**CENTERS AND INSTITUTES**

**ANNUAL REPORTING**

**Report For: July 1, 2021 – June 30, 2022**

**(IBHE Approved and/or Illinois State Statute Established Only) \***

1. Reporting Institution Southern Illinois University School of Medicine

2. Center/Institute Dale and Deborah Smith Center for Alzheimer’s Research and Treatment

3. Date 03-02-2023

4. Director Erin R. Hascup, PhD, Director

4.1 Telephone 217-545-6988

4.2 E-mail ehascup@siumed.edu

5. Year Established Academic Year 1987

6. Illinois State Statute (if pertinent) Public Act 90-0404

7. Reporting Unit Southern Illinois University School of Medicine

8. Type

	Activity
Instructional	<input checked="" type="checkbox"/>
Research	<input checked="" type="checkbox"/>
Public Service	<input checked="" type="checkbox"/>

## 9. Overview

### 9.1 Description

- The Dale and Deborah Smith Center for Alzheimer’s Research and Treatment (Smith Alzheimer’s Center) is housed within the Department of Neurology, which is part of the Neuroscience Institute (NSI), at Southern Illinois University School of Medicine (SIUSoM). This program was formerly known as the Center for Alzheimer’s Disease and Related Disorders (CADRD) at SIUSoM.
- The Center was established as a Regional Alzheimer’s Disease Assistance Center by the State of Illinois, pursuant to Public Act 90-0404. In 1986. The Center is dedicated to assisting patients and families who may be affected by Alzheimer’s disease and Parkinson’s Disease. This is accomplished through:
  1. Patient care
  2. Education, both to professionals and the community
  3. Research
  4. Service to the Community in Beyond the Medical Center Programming
- The Parkinson Disease Center (PDC) was established by the Illinois state government to address the needs of Parkinson disease patients in the region.

This report covers both the Smith Alzheimer Center and the PDC.

### 9.2 Mission

The Smith Alzheimer’s Center mission is to to integrate patient care, education, and research to better understand the biological aspects of aging, cognition, and neurodegenerative disorders allowing us to design innovative personalized care that addresses both the underlying symptoms and the disease leading to improved patient, family, and community outcomes.

This personalized approach leads to improved patient, family, and community outcomes. This is achieved by the well-trained experts providing care at the Smith Alzheimer’s Center. The Center has 2 dementia trained physicians and two dementia trained nurse practitioners. There are specific nurses assigned to dementia patients along with a designated clinical researchers team. The Smith Alzheimer’s Center also employes a Gerontologist with specific expertise in dementia. Additionally, the Smith Alzheimer’s Center has a federally funded

preclinical research team that are dedicated to helping improve dementia care and outcomes for people with dementia and their caregivers.

The Smith Alzheimer's Center has a unique programming to help those with dementia and their caregivers continue to exercise their brains and bodies to improve their healthspan. We call this our "Beyond the Medical Center" programs. Providing services outside the clinic and medical center helps in a variety of ways. The Smith Alzheimer's Center Beyond the Medical Center programs include a lower body exercise program (Stepping UP), an expressive art program (Art Express), and a multifaceted mind program using various types of activities (Minds in Motion). There is also a music program (Music and Memory), a support program (Early Stage Memory Loss Group), and a program specific to caregivers called "Dementia Caregiving 101". All these programs are available to our patients and community members. Additionally, we partner with the Springfield Art Association to offer Opening Minds through Art. However, due to lack of Springfield Art Association staff we were unable to offer this program this year. We continue this partnership and help to be able to offer this program in the upcoming fiscal year. Beyond the Medical Center not only offers activities to keep the brain and body active, it can also serve as respite for the caregivers if they chose not to participate in the programs. The Smith Alzheimer's Center Beyond the Medical Center programs help to build community for those navigating the dementia journey, whether it be the people with dementia/memory loss or the caregivers. All of these programs are evidenced based and have produced tremendous results.

### **9.3 Objectives**

As defined by the State of Illinois Public Act 90-0404, which established the SIU School of Medicine program as a Regional Alzheimer's Disease Assistance Center, the center is expected to provide the following:

1. Comprehensive diagnosis and treatment facilities and services which have (i) professional medical staff who are specially trained in the treatment of dementia which includes: geriatric medicine, neurology, psychiatry and pharmacology, and the detection, diagnosis and treatment of Alzheimer's disease and related disorders, (ii) sufficient support staff who are trained as caregivers to patients of Alzheimer's disease and related disorders, (iii) appropriate and adequate equipment necessary for diagnosis and treatment, (iv) for assuring access of patients to available services, (v) and such other support services, staff and equipment as may be required.
2. Consultation and referral services for patients and their families to ensure informed consent to treatment and to assist them in obtaining necessary assistance and support services through primary Alzheimer's providers and

various private and public agencies that may otherwise be available to provide services under this Act.

3. Research programs and facilities to assist faculty and students in discovering the cause of and the diagnosis, cure and treatment for Alzheimer's disease and related disorders;
4. Training, consultation and continuing education for caregivers, including families of those who are affected by Alzheimer's disease and related disorders;
5. Centralized data collection, processing and storage that will serve as a clearinghouse of information to assist victims and families and Alzheimer's Disease Assistance Center Resources, and to facilitate research; and
6. Programs of scientific and medical research in relation to Alzheimer's disease and related disorders that are designed and conducted in a manner that may enable such centers to qualify for Federal financial participation in the cost of such programs.

## 10. Advisory Board

### 10.1 Advisory Boards - Membership

**Smith Alzheimer's Center Administrative Advisory Board** - This board consists of fiscal and administrative leaders in the NSI and is led by the Smith Alzheimer's Center direct, Erin Hascup, PhD. This advisory board focuses on the logistics of running an Alzheimer's center that consists of clinical, research, and education/outreach pillars. Logistics includes, but is not limited to financial planning, recruitment and retention, clinical research and education/outreach operations, building and expanding our services and research, etc.

**Smith Alzheimer Center Administrative Advisory Board members in FY22 were:**

1. Kari Wolf, MD, Chair of Psychiatry, Interim Chair of Neurology, Co-Director of NSI at SIU Medicine
2. Jayant Achary, MD, Chair of Neurology and Co-Director of NSI at SIU Medicine
3. Lisa Daniels, Business/Administrative Associate of the Smith Alzheimer's Center at SIU Medicine
4. Marcella Bland, Administrative Director of the NSI at SIU Medicine

**Smith Alzheimer's Center Caregiver Advisory Board** - A new Advisory Board was started this year led by Smith Alzheimer's Center Program Coordinator Debbie Kuhns that involves Caregivers of dementia patients. The goal is to get direct feedback from caregivers about what is working, what isn't working, better

utilization of resources, panel discussions for the public, and reaching out to others in their same situation.

**Smith Alzheimer Center Caregiver Advisory Board members in FY22 were:**

5. Janet Scott, Springfield
6. Sue Monteyne, Chatham
7. Roger Steinback, Springfield
8. Nancy Seelbach, Springfield
9. Mel Kuntemeier, Glenarm
10. Margaret Millberg, Sherman
11. Judy Ground, Springfield

**Smith Alzheimer's Center Clinical Health, Analytical Neuroscience, and Community Engagement (CHANCE) Advisory Board**

**Smith Alzheimer Center CHANCE Advisory Board members in FY22 were  
(All members are part of SIU Medicine, Springfield unless otherwise noted):**

- Tom Ala, MD, Professor of Neurology, Medical Director Smith Alzheimer's Center
- Jennifer Arnold, MD, Assistant Professor of Neurology, Smith Alzheimer's Center and PDC
- Ahmad El Kouzi, MD, Assistant Professor of Neurology, Director PDC
- Mehul Trivedi, PhD, Assistant Professor of Clinical Psychiatry, Smith Alzheimer's Center
- Justin McDaniel, PhD, Associate Professor of Public Health, SIU-Carbondale, Smith Alzheimer's Center
- Amber Fifer, PharmD, ACRP-CP, Assistant Professor of Neurology, Director of Clinical Research (Neurology), Associate Director of the Center for Clinical Research, Assistant Professor of Pharmacy at SIU-Edwardsville
- Kevin Hascup, PhD, Assistant Professor of Neurology, Smith Alzheimer's Center
- Cindy Womack, DNP, FNP-BS, CNRN, Neurology, Smith Alzheimer's Center
- Andrea Perkins, FNP-BC, Neurology, Smith Alzheimer's Center and PDC
- Ann Jirmasek, MA, LPC, NCC, Clinical Gerontology Specialist, Neurology, Smith Alzheimer's Center
- Deborah Kuhns, Program Coordinator Smith Alzheimer's Center
- Sherry Barr, Program Coordinator, Smith Alzheimer's Center
- Aren Dow, Marketing Associate, Office of Marketing, Communications, and Engagement at SIU Medicine, Smith Alzheimer's Center
- Lindsey Teefey, Program Coordinator, Smith Alzheimer's Center

- Karen Lee, Program Coordinator, Smith Alzheimer's Center
- RaTasha Bradley, Program Coordinator, Smith Alzheimer's Center
- Kris Houser, Development Officer, Smith Alzheimer's Center
- Cindy Stelty, Fiscal/Business Assistant, Smith Alzheimer's Center
- Carol Forestier, Administrative Assistant, Smith Alzheimer's Center

10.2 Number of Meetings (In This Year)

The Smith Alzheimer's Center Administrative Advisory Board meets monthly (12 meetings/year).

The Smith Alzheimer's Center Caregiver Advisor Board had 6 meetings. Several of the members also sat on a panel during our annual conference to address questions from the community regarding their experiences as a primary caregiver for someone with memory loss.

The Smith Alzheimer's Center CHANCE Advisory Board meets monthly (12 meetings/year).

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## 11. Annual Performance

### 11.1 Performance Measures (Combined Smith Alzheimer's Center and PDC)\*

Measure		Target for Year	Results in Year
1.	Evaluations of new patients (Springfield site)		1,083
2.	Evaluations of new patients (Memory and Aging Network)		79
3.	Follow-up patient visits (Springfield site)		3,586
4.	Follow-up patient visits (Memory and Aging Network)		292
5.	Educational programs (Springfield providers) – Number of Programs		127
6.	Educational programs (Springfield providers) – Attendance		1815
9.	Clinical Studies (Industry sponsored and investigator initiated)– Number of studies per IRB		31
10.	Research – Number of publications & presentations		25
11.	Active research grants		6

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions such as publications, grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

Major accomplishments of the Smith Alzheimer's Center in FY22 include:

1. Patient focus continues to be on treatment of existing patients along with screening new patients at the Smith Alzheimer's Center in Springfield.
2. "Beyond the Medical Center" consists of 6 different evidence based programs which offer services for dementia patients and caregivers.

These programs are:

- a. Art Express
- b. Music and Memory
- c. Dementia Caregiving 101
- d. Stepping Up
- e. Minds in Motion
- f. Early Stage Memory Loss Support Group.

Note- Number of Participants grew in each of the programs through the year as compared to previous year

3. The Smith Alzheimer's Center partners with AGELINC, the local Area Agency on Aging, who covers 12 counties in Central Illinois. We are collaborating with them on a Dementia Friendly Community plan and have worked on several public presentations together. We have the ability to refer patients back and forth for resources that are needed for those suffering with memory loss and their caregivers.
4. This year the Smith Alzheimer's Center established a Caregiver Advisory Board. These are caregivers of patients that are past or present patients in our clinic. We meet bi-monthly and discuss topics such as what works, what is not working, marketing ideas, educational topics, resource ideas and general discussion on how they are coping. The input they have provided has been invaluable. We have added or changed a number of things based on their experiences and feedback. One example, is developing an Alzheimer Awareness card for caregivers to share.
5. The Smith Alzheimer's Center also continued its efforts with Rush University to develop and promote the Illinois Cognitive Resources Network (ICRN). The ICRN has served as an information exchange forum in order to better coordinate efforts to connect persons living with or at risk for dementia. One result is the [ilbrainhealth.org](http://ilbrainhealth.org) website which offers a variety of resources. The Center also provided several rural caregivers to be on a panel when determining what they would look for in an Alzheimer's resource website.
6. The Smith Alzheimer's Center hosts and participates as experts for the SIU Extension for Community Healthcare Outcomes (ECHO) project for Memory and Aging topics. This offers community professionals a chance for virtual education and access to the Smith Alzheimer's Center specialists, which is usually difficult for those living and practicing in rural areas. One-hour sessions occur monthly following the ECHO model which is a case-based learning activity. We use this "All Teach, All Learn" model consisting of a 30-minute didactic topic provided by SIU School of Medicine Faculty followed by a case presentation by a community healthcare professional. This gives opportunities for participants to ask questions and provide possible solutions to the case. Participants include partners from the SIU Memory and Aging network clinics, central and southern Illinois health systems, nursing home administrators, counselors and senior service organizations. Together this supports the Illinois Public Health Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning. Our ECHO will become increasingly important to health care professionals when the new Illinois law starts in 2023, which requires one hour of dementia training and continuing education credits, for license renewal. We are also working on recording training sessions on various dementia topics which we can offer as a "shopping cart" to professionals.

These are all virtual resources, making it easy for professionals to participate.

7. The Smith Alzheimer's Center has an in-house marketing associate, Aren Dow, to help bring awareness of the Smith Alzheimer's Center along with various aspects of dementia. This marketing associates sole responsibility is working with the Center. He developed the "Mind Matters" quarterly newsletter. He initiated an "Ask the Caregiver" column which has been received with enthusiasm. He also updated the Smith Alzheimer's Center website and increased ease of use. He added more topics of importance to dementia patients and anyone looking for dementia information, in general. He launched the Smith Alzheimer's Center Facebook page and posted weekly messages of importance. He also, for the first time at the Smith Alzheimer's Center, used social media to promote activities and programs. He also utilized local media to promote the Smith Alzheimer's Center and promote dementia disease information. Media hits included radio stations, blogs, and tv stations. Eleven interviews were given in the course of the year.
8. In FY22, the Smith Alzheimer's Center increased its commitment to diversity and inclusion in Beyond the Medical Center programs by hiring a Program Coordinator for Diverse Communities. The goal of this position is to develop and manage non-pharmacological intervention and prevention programs in minoritized communities. This will expand outreach in underserved and ethnically diverse communities.
9. The Smith Alzheimer's Center continues to work with the Alzheimer's Association by referring patients to their resources, especially their support groups. We have a team of SIU employees who support the walk. The Center has also used some of the Alzheimer's Association speakers for community events.
10. One of the highest achievements in academic medicine was awarded to Erin R. Hascup, PhD, as she was named the Kenneth Stark Endowed Chair in Alzheimer's Research at SIUSoM. An endowed chair represents one of the highest achievements in academic medicine, both for the person for whom the chair is named and also for the person who holds the chair. The endowment is funded with a \$1.8 million gift from the estate of Kenneth A. Stark, a Pike County native who had a long career as a farmland appraiser for the Federal Land Bank in St. Louis. Interest from the endowment has been used to support a doctoral student and several studies related to Alzheimer's disease.
11. Participation as a medical school residency rotation site for the Neurology, Internal Medicine, Psychiatry, and Family and Community Medicine departments in the center's Memory Disorder Clinic.
12. Participation in investigator initiated and industry sponsored studies, all relating to diagnosing and treating Alzheimer's disease.
13. Received federal funding from the National institutes of Health to support preclinical research.

14. Publication of several research articles published by the Smith Alzheimer's Center bench science faculty.
15. The PDC has continued to provide clinical care to patients and to sponsor an annual community education program. The PDC has been revitalized with funding being restored and with the advent of a fellowship trained movement disorder neurologist who joined our practice in FY 2020 and a new nurse practitioner specializing in Parkinson's Disease in 2021.
16. The Smith Alzheimer Center is required to report annually on its accomplishments to the Illinois Department of Public Health's Alzheimer's Disease Advisory Committee. This committee provides oversight to the Regional Alzheimer's Centers under PA 90-0404. The Smith Alzheimer Center submitted its report to IDPH for FY2020-21.

### **11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning**

The Smith Alzheimer's Center advances several priorities of the State of Illinois, Southern Illinois University, and SIU School of Medicine. As noted, the Center was established by Public Act 90-0404 as a state-designed Regional Alzheimer's Disease Assistance Center. The Smith Alzheimer Center has been successful in this role, as evidenced by its continued designation by the State of Illinois as a regional center. The Center also supports the Illinois Public Agenda's goal for use of university educational, research, and innovation assets to advance the state's and region's economy. This is evident in the Center's positive impact on patient care and research.

The Smith Alzheimer's Center also advances goals of the university and the medical school, such as those associated with community outreach, public/private partnerships, and research. The Center has been invited to participate in many local, regional, and state programs sponsored by the Alzheimer's Association, the Alzheimer's Disease Advisory Committee for the Illinois Department of Public Health, and the Illinois Cognitive Resources Network. The Center has also collaborated with researchers in other departments both in Springfield and in Carbondale, as well as those in the other two state-designated Regional Alzheimer's Disease Assistance Centers in Chicago, to assist the Illinois Department on Aging in obtaining a Community Living grant. These activities directly support the SIU Board of Trustees' priorities for community partnerships, SIU Carbondale's priority for research and innovation, and SIU School of Medicine's goals for research and professional engagement.

The Smith Alzheimer's Center physicians and other health professional staff provide essential patient care for Alzheimer's patients in the Center's Springfield clinics as well as extend their expertise as consulting physicians/professionals throughout the statewide SIU Memory and Aging Network. As a required component of their educational programs, SIU Neurology, Internal Medicine, Psychiatry, and Family and Community Medicine residents all have required rotations through the center's Memory Disorder Clinic to learn the clinical aspects of Alzheimer's disease, as do SIUSoM medical students and Physician Assistant program students. These activities support medical school and university goals for patient care and workforce development.

The Smith Alzheimer's Center conducts and supports scientific and psychosocial research which includes multi-center clinical drug studies, the brain autopsy program, neuropsychological research and preclinical research. The Smith Alzheimer's Center collaborates with numerous research partners, both within the SIU system and other IL state centers, and other partner institutes such as SIU Carbondale, Eastern Illinois University in Charleston, University of Alberta, and the University of Illinois in Champaign-Urbana. Smith Alzheimer's Center researchers lead state and federally funded research with the overall goal of determining pharmacological and non-pharmacological intervention strategies to improve patient care. This research is disseminated through attendance and participation at local, national, and international conferences, as well as, invited speaker opportunities, and published manuscripts. As an academic institution, our research faculty also provide educational opportunities and training for medical students and residents, and undergraduate/graduate students. Together this supports the Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning.

The Smith Alzheimer's Center also initiated and participates as content experts for Extension for Community Healthcare Outcomes (ECHO) project designed to improve access and care to older patients and especially those with memory issues. One-hour sessions occur monthly following the ECHO model - a case-based learning community designed to improve patient access to specialty care by moving the knowledge closer to the patient (community providers/healthcare professionals working with those cognitively impaired) rather than moving the patient closer to the specialists. We use this "All Teach, All Learn" model consisting of a brief (30 minute) didactic provided by SIU School of Medicine Faculty followed by a case presentation with opportunities for all participants to ask questions and provide consultation/advice. The session ends with a summary of recommendations and potential next steps. Each participating site has the opportunity to present a case which the entire ECHO community "staffs".

Smith Alzheimer's Center sponsors educational events throughout each year for a variety of audiences. This includes health care professionals, social service

providers, clinicians, patients, caregivers and families. These include ECHO, Beyond the Medical Center Programs, etc. We also hold an annual 2 day Memory and Aging Conference that occurred in May of 2022.

#### **11.4 Evidence of Support for Center/Institute Objectives**

The Smith Alzheimer's Center and PDC directly advanced the objectives during FY2022. As noted above, patient care, consultation, and referral services were provided in over 4,600 patient visits in the Smith Alzheimer's Center Springfield site and almost 400 additional patient visits in the Smith Alzheimer's Center Memory and Aging Network sites. In addition, the Smith Alzheimer's Center provided consultations and training to our Memory and Aging Network and other providers through the ECHO platform. These activities support the patient care objectives (Objectives 1 and 2) above. Preclinical, clinical and increasingly population health research projects were advanced in FY2022, and efforts to increase them continued in support of the research objectives (Objectives 3 and 6). There were 127 educational programs for caregivers and health care providers with attendance of 1815 in FY2022, in support of Smith Alzheimer's Center community educational objective (Objective 4). The of Smith Alzheimer's Center has also developed and maintains three databases of patient data which are used to facilitate research. This supports the centralized data collection objective (Objective 5). Collectively, these activities provide strong evidence that Smith Alzheimer's Center and Parkinson's disease center met its objectives in FY2022.

#### **11.5 Evidence of Organizational Effectiveness**

The strongest evidence of organizational effectiveness is that already presented in the preceding sections. The Center continues to be recognized as a leader in the clinical, educational, and research aspects of Alzheimer's disease in Illinois and is growing its reputation nationally and internationally. The Smith Alzheimer Center faculty and staff members actively participate in regional, state, national, and international conferences and symposia to present findings from their research, clinical and outreach programs. As discussed above, the Smith Alzheimer Center is meeting its organizational objectives.

## 12. Institutional Assessment

12.1 Date of Last Review 2019-20

12.2 Decision at Last Review

<input checked="" type="checkbox"/>	Center/Institute in Good Standing
<input type="checkbox"/>	Center/Institute Flagged for Priority Review
<input type="checkbox"/>	Center/Institute Suspended

12.3 Explanation N/A

**RESOURCES: Smith Alzheimer's Center**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	\$ 1,518,000.00	\$ 1,518,000.00	\$ 1,644,500.00	\$ 1,391,500.00	
Income Fund					
Grants & Contracts	\$ 2,249,819.59	\$ 1,677,304.36	\$ 2,360,743.73	\$ 1,950,134.61	\$ 1,043,798.23
Hospital Contract					
Certification Fees/Sponsorships					
Registration Fees					
Workshop Fees					
Transfers In-Conference Fees/IDC		\$ 414.66	\$ 433.00	\$ 1,919.68	\$ 6,415.21
Transfers In-SOM/Foundation			\$ 156.99		\$ 146,058.10
Practice Plan	\$ 62,074.20	\$ 45,312.15	\$ 37,915.20	\$ 29,762.40	\$ 26,235.45
Sales-Advertising					
<b>Total Revenues</b>	<b>\$ 3,829,893.79</b>	<b>\$ 3,241,031.17</b>	<b>\$ 4,043,748.92</b>	<b>\$ 3,373,316.69</b>	<b>\$ 1,222,506.99</b>
Expenditures					
Travel	\$ 3,430.58	\$ 1,847.73	\$ 7,308.84	\$ 19,818.46	\$ 16,031.38
Equipment	\$ 23,637.99	\$ 27,045.47	\$ 239,476.66	\$ 109,811.93	
Commodities	\$ 407,984.18	\$ 252,182.46	\$ 270,954.24	\$ 187,611.61	\$ 49,569.04
Contractual Services	\$ 513,881.44	\$ 487,710.16	\$ 600,093.20	\$ 755,859.14	\$ 587,610.62



Telecom	\$ 5,720.18	\$ 4,827.24	\$ 5,108.26	\$ 3,857.12	
Rent		\$ -	\$ -		
Fringe Benefits	\$ 158,062.04	\$ 171,909.92	\$ 212,680.52	\$ 166,985.95	\$ 58,899.53
Grants & Contracts Indirect Costs	\$ 566,995.97	\$ 458,007.62	\$ 662,648.41	\$ 448,713.32	\$ 241,979.68
Transfers Out	\$ 135,646.28				\$ 186,038.13
Salaries	\$ 1,208,523.40	\$ 890,424.29	\$ 1,103,654.45	\$ 874,520.42	\$ 246,217.47
<b>Total Expenditures</b>	<b>\$ 3,023,882.06</b>	<b>\$ 2,293,954.89</b>	<b>\$ 3,101,924.58</b>	<b>\$ 2,567,177.95</b>	<b>\$ 1,386,345.85</b>
<b>Revenue Minus Expenditures</b>	<b>\$ 806,011.73</b>	<b>\$ 947,076.28</b>	<b>\$ 941,824.34</b>	<b>\$ 806,138.74</b>	<b>\$ (163,838.86)</b>

1. State Support via Hospital Contracts refers to funds received from the State of Illinois for support of the Smith Alzheimer's Center. Changes to the state's Medicaid hospital formula reduced that funding for FY2014 and effectively eliminated it in subsequent years (through FY2018). It was restored in FY19
2. Transfers from SOM includes fund transfers from the SIU School of Medicine's reserve or general funds to support the Smith Alzheimer's Center.
3. Contractual Services are primarily funds to support the Memory and Aging Network. Supports information referrals for patients diagnosed with Alzheimer's disease at one of the network sites. Data from these patient encounters are subsequently included in the Smith Alzheimer's Center data registry for education, clinical care, and research purposes.

Staffing	FY2022	FY2021	FY2020	FY2019	FY2018
Faculty	5.29	4.29	4.29	5.29	1.00
Staff	12.69	12.24	11.79	11.92	1.00
<b>Total Staffing</b>	<b>17.98</b>	<b>16.53</b>	<b>16.08</b>	<b>17.21</b>	<b>2.00</b>

**RESOURCES: Parkinson's Disease Center**

	FY22	FY21	FY20	FY19	FY18
<b>Income</b>	\$ <b>67,874.80</b>	\$ <b>74,283.06</b>	\$ -	\$ -	\$ -
Equip	\$ -	\$ 2,434.54	\$ -	\$ -	\$ -
supplies	\$ 1,518.24	\$ 1,366.95	\$ -	\$ -	\$ -
Contractual	\$26,031.20	\$30,194.40	\$0.00	\$0.00	\$0.00
Facility Service	\$ 137.50	\$ 65.00	\$ -	\$ -	\$ -
Hospital Services	\$ 4,560.00	\$ 6,090.00	\$ -	\$ -	\$ -
Patient Care	\$ 13,117.20	\$ 2,000.00	\$ -	\$ -	\$ -
Pharmaceutical Serv	\$ 3,750.00	\$ 16,750.00	\$ -	\$ -	\$ -
Clinical Trial	\$ 390.00	\$ 120.00	\$ -	\$ -	\$ -
Travel	\$ -	\$ 456.92	\$ -	\$ -	\$ -
Central Plant	\$ -	\$ 562.50	\$ -	\$ -	\$ -
Indirect Cost	\$ 9,029.16	\$ 11,667.70	\$ -	\$ -	\$ -
<b>Total Expenses</b>	\$ <b>58,533.30</b>	\$ <b>71,708.01</b>			
<b>Margin</b>	\$ <b>9,341.50</b>	\$ <b>2,575.05</b>			

Based on the information that you have been provided for previous years against the Alzheimer's center we find that there is no information for Parkinson's for years 18,19,20 because there was no direct revenue to be received in those years. The revenue provided for FY22 are from 6 grants currently held by El Kouzi. Those grants also do not pay for any FTE which is why we did not locate any information for this either. All FTEs for both CARE and parkinson's are attributed to the 507050 account and not "pulled out".

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale						
2.	Center/Institute	Fermentation Science Institute (FSI)						
3.	Date	3/18/2022						
4.	Director	Matthew McCarroll						
4.1	Telephone	618-453-7508						
4.2	E-mail	<a href="mailto:mmccarroll@siu.edu">mmccarroll@siu.edu</a>						
5.	Year Established	2014 (approved by IBHE)						
6.	Illinois State Statute (if pertinent)	N/A						
7.	Reporting Unit	Dean (College of Agricultural, Life, and Physical Sciences) and Vice Chancellor for Research (dotted-line reporting)						
8.	Type	<p style="text-align: center;">Activity (check all that apply)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Instructional</td> <td style="border: 1px solid black; text-align: center; width: 30%;">x</td> </tr> <tr> <td>Research</td> <td style="border: 1px solid black; text-align: center;">x</td> </tr> <tr> <td>Public Service</td> <td style="border: 1px solid black; text-align: center;">x</td> </tr> </table>	Instructional	x	Research	x	Public Service	x
Instructional	x							
Research	x							
Public Service	x							

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The Fermentation Science Institute (FSI) supports fermentation related activities through support and administration of the fermentation science *academic degree program*, the operation of the *FSI Service Laboratory*, support of the Illinois Food, Entrepreneurship, Research and Manufacturing (iFERM) Hub of the Illinois Innovation Network, support of fermentation related *research*, and *outreach* to fermentation related businesses and economic development.

### 9.2 Mission

The mission of the FSI is to support the students and faculty of Southern Illinois University Carbondale to advance knowledge in the associated areas of fermentation science and to transfer this knowledge through our educational programs, research activities and outreach to the region and fermentation related industries, which includes the production and analysis of alcoholic beverages, fermented foods and cheese, and industrial fermentation (energy and pharmaceutical).

### 9.3 Objectives

*Administer and Support the Degree Program in Fermentation Science and Other Educational Activities.* The Director, faculty and staff of the FSI will support and administer the Bachelor of Science degree in fermentation science, which is housed both physically and administratively within the FSI and seek opportunities to engage with other academic areas of campus.

*Establish Professional Advisory Board.* The Director of the FSI will continue establishing further industry contacts and to identify and invite appropriate individuals to serve on the advisory board of the Institute.

*Encourage and Support Research Efforts.* The Director will continue to work with the campus community to encourage research in the general area of fermentation science and to identify and support research that builds synergies and opportunities for students, faculty and industry partners.

*Manage and Expand FSI Service Laboratory.* The Director, in coordination with staff, will oversee operations of the Service Laboratory and will expand its impact and effectiveness to the campus community and the businesses served by the laboratory by expanding its outreach base and to provide a revenue stream supporting the mission of the FSI.

*Maintain and Expand Infrastructure.* The director will oversee efforts to maintain current infrastructure supporting the educational, research and outreach mission of the FSI, as well as leading efforts and identifying opportunities to expand the capabilities of the FSI to further its mission.

*Fundraising and Promotion.* The Director will continue to work with the SIU Foundation to identify and work with prospective donors to enhance the effectiveness and impact of the programs, activities, and infrastructure of the FSI. Additionally, the Director will actively promote the FSI and its objectives on both regional and national levels.

*Public Outreach and Engagement.* The FSI will actively identify and support public outreach and engagement with the public for the purpose of supporting the objectives and mission of the FSI and SIU.

10. Advisory Board

10.1 Advisory Board - Membership

Professional Advisory Board (in progress)

Florian Kuplant – Brewmaster and Co-Owner, Urban Chestnut Brewing Company

Mark Yocum – Technical Director, North America, Anheuser Busch InBev

Paul Cobet – Anheuser Bush (retired)

Alastair Pringle – Board Examiner, Institute of Brewing and Distilling

Bradley Beam – Enology Specialist, Illinois Grape Growers and Vintner’s Association

Eric Stamp – Corporate QA Manager, MillerCoors

10.2 Number of Meetings (In This Year) 0 (informal consultations ongoing)

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Fundraising	-	**
2. Research Projects	2	1
3. Sponsored/Hosted Events	2	3
4. Carbondale Brewfest	-	1
5. FSI related Grant Proposals Submitted	2	4
6. Grant Proposals Funded	2	1
7. Testing & Services	\$30,000	\$36,527

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities. \*\*Data not currently available.

## 11.2 Major Accomplishments (In This Year)

Key targets/objectives and outcomes of the FSI include the following:

- Facilities and Infrastructure
  - Management of facilities that house the FSI in the McLafferty Annex on the Carbondale campus which include:
    - Administrative operations for the FSI
    - Teaching laboratories to support fermentation courses and the fermentation science degree program
    - Laboratories to support operation of the FSI Service Laboratory
    - Teaching classroom and tasting facility
    - Pilot brewery supporting teaching, research and outreach activities
  - Coordinated ongoing development of plans for expansion of facilities in the McLafferty Annex
    - Faye Minor Magill Kitchen
    - Malting Facility (secured through \$120,000 USDA grant)
    - Teaching Distillery (provided by \$90,000 industry donation, \$40,000 grant from USDA/Delta Regional Authority)
    - Production brewery (industrial partnership with commercial brewery)
    - Inclusion as a hub of the Illinois Innovation Network (\$2.5M project authorized by IIN and in launch phase by the Capital Development Board)
    - Obtained a \$2.7M collaborative grant (FSI, VCR and Research Park) to DCEO to the Wet Labs Program to establish the BioLaunch Facility (core labs for analytical and biotech, and business support annex)
    - Obtained \$1.1M grant from the SIU Foundation to support expansion of facilities in the iFERM Hub.
  - Established infrastructure and staffing for business operations of the FSI, including support for the academic, research, outreach, and event management activities of the institute
  - Managed change in reporting line from the Provost to the Dean of the College of Agriculture, Life, and Physical Sciences, with dotted-line reporting to the Vice Chancellor for Research.
- Programmatic
  - Hired new faculty member (Dr. Marta Albio Tapia) as an assistant professor of practice to lead the sensory science programs
  - Administered the 4-year BS degree in fermentation science
  - Developed beer formulation for Lazy Dog Restaurants Beer Club (1 of 4 brewing science programs chosen at national level)
- Research
  - Support of research activities in fermentation science
    - Analytical support for fermentation related research by campus faculty and students in the FSI Service Lab
    - Research and development support for fermentation and related industries
- Service and Outreach

- Continued to expand the FSI Service Laboratory, which is a fee-for-service 3<sup>rd</sup> party testing facility focused on analysis of alcoholic beverages
  - Renewed certifications from the Federal Tax and Trade Bureau for the analysis of beer, wine and spirits (one of only eight 3<sup>rd</sup> party testing facilities triply certified for beer, wine and spirits nationally)
  - Provided services for 36 unique clients (over 100 in total), including services helping to launch new business and products
  - Provides training and student work opportunities for students
  - Manages testing services of the Core Facility for Ecological Analysis
  - **In FY22, 3,121 analyses were performed on 2,595 submitted samples for a revenue of \$36k. The analyses performed represents an increase of 334% over FY22!**
  
- Support of regional fermentation industry and economic development
  - Supports and Collaborates with the Illinois Grape Growers and Vintners Association (IGGVA) and the Shawnee Hills Wine Association
  - Member and collaborator with the Illinois Craft Brewers Association and the Master Brewers Association of the Americas (MBAA)
  - Producing member of the Craft Maltsters Guild (Director is member of Technical Committee)
  - Outreach and professional consultation to fermentation businesses
  
- The Leadership Group of the Delta Regional Authority held their annual event reception at the Fermentation Science Institute a second year in a row.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Supporting the Illinois Public Agenda:  
 The development of and activities by the Institute support several aspects of the Illinois Public Agenda. The core mission of the Institute is squarely aligned with Goal 4 *of integration of educational, research & innovation assets*. The degree program in fermentation science also supports Goal 1 *of Educational Attainment*. Based on the local, regional and national growth of the craft brewing sector, the planned programs and activities also contribute to Goal 3 *of High-Quality Credentials to meet Economic Demand*.

Supporting the SIU Board of Trustees Strategic Plan:  
 The activities of the Institute related to program development and the initiation of new programs are well aligned with the Board of Trustees strategic themes of *promoting satisfaction and success*. The operation of the Service Laboratory, the coordination of student internship opportunities, the unique niche of the degree program and the general outreach activities of the Institute all contribute to the Board's goal of *innovating to transform our state and region*, and the goal of *building a stronger system by developing alternative sources of revenue and additional revenue centers*, as well as theme of *developing our people and our places*.



Supporting the SIU Carbondale Strategic Plan:

The development of the Fermentation Science Institute facilities in the McLafferty Annex provides students and faculty with state-of-the-art laboratories and teaching space, which support several of the primary goals of the campus strategic plan to *contribute to student success*, and to *encourage research, scholarship and creative activities*. As a new, interdisciplinary institute with interdisciplinary programs, the FSI furthers the SIU strategic plan by acting to *strengthen campus community and community relations* by bringing together faculty interest from various departments and colleges in efforts to capitalize on untapped programmatic and research opportunities. By developing novel programs with an efficient, administrative structure, the Institute also contributes to the SIU strategic plan goal of improving *finance, infrastructure and resource allocation*.

11.4 Evidence of Support for Center/Institute Objectives

*Administer and Support Degree Program in Fermentation Science and Other Educational Activities.*

*Recognition of Degree Program.* In spring of 2017 the FSI received formal program recognition by the Master Brewers Association of the Americas as one of six 4-year degree programs in North America. The program is the only recognized program in the central region of the country. The program has produced 7 graduates. Enrollment growth dampened during the pandemic, but is recovering.

*Develop Articulation Agreements.* Transfer students constitute an important part of the student body at SIU. By developing articulation agreements with select community colleges we can help to ensure that students are well prepared to succeed at SIU. In conjunction with the Articulation and Outreach Office, we have developed articulation agreements with Richland Community College and Oakton Community College and anticipate development of additional agreements in the future.

*Faculty Hires.* The FSI obtained funding for hiring an assistant professor of practice in the area of sensory science. Dr. Marta Albiol Tapia was hired and began in the August of 2022. Her appointment is 100% in the FSI supporting the mission of the FSI and is a key resource supporting the fermentation science degree program.

*General Promotion of FSI, degree program, and the iFERM Hub.* Significant effort was placed on promoting the FSI and the degree program, as well as broader activities under the auspices of the iFERM Hub. In person activities were limited during the beginning of the fiscal year due to the pandemic, but efforts have allowed a significant increase in the number of tours and activities the FSI has been able to provide, which included over 40 events and activities.

*Support of Other Academic Opportunities.* The FSI actively engages with other departments and academic programs. In a recent success, the FSI director

served as co-PI on a \$100,000 grant from the National Endowment for the Humanities to develop a new interdisciplinary minor in ancient practices, with the goal of attracting STEM students toward coursework in the humanities.

*Establish Professional Advisory Board.*

The advisory board has been filled to a nearly functional level. The topic gaps that are missing are in industrial and pharmaceutical fermentation. Discussions have started and are ongoing with several companies in these areas with the aim of building partnerships and defining roles on our advisory board.

*Encourage and Support Research Efforts*

The FSI serves a central role in bringing together fermentation related research projects on campus and with industry partners. Faculty from several departments and colleges are involved in various research projects and have developed grant proposals.

We also have an ever-increasing number of students involved in research that is facilitated by the FSI. Honors projects for students in chemistry have been facilitated in the FSI, including participation of Kevin Smith, a senior lecturer in the Department of Chemistry and Biochemistry. Additionally, students majoring in fermentation science obtain formal research credit working with faculty. In addition, the FSI supports research activities of our faculty and students in other programs.

*Manage and Expand FSI Service Laboratory.*

Efforts are ongoing to establish a network of clients. This expands the reach and impact of the FSI while also providing service for the industry. The activity provides revenue for the program and training grounds to further the educational opportunities of our students. The laboratory has maintained formal certification from the Tax and Trade Bureau of the U.S. Government for the analysis of beer, wine and spirits for nearly 5 years. During this time the service lab has experienced a significant increase in request for services. **In FY22, 3,121 analyses were performed on 2,595 submitted samples for a revenue of \$36k, and increase of over 300%.**

*Maintain and Expand Infrastructure.*

At the time the FSI was launched, physical infrastructures were not yet in place to fully support its operations. Following formal recognition of the FSI by the IBHE, initial activities focused on securing funding and overseeing design/construction for the facility that now houses the Fermentation Science Institute. During FY17 the laboratories of the FSI were completed and commissioned into operation, which enabled use of dedicated teaching facilities for the newly approved degree program. In addition, the facilities have been used to host workshops for high school students and community members. Interest in our facility has been significant and multiple tours and activities are facility each year.

A request for support to the **SIU Foundation was answered in the form of a grant for \$1.1M in June of 2022.** These funds will allow infrastructure and projects to be fast-tracked along with the \$2.5M investment that is in the launch stage by the Capital Development Board.

*Pilot Facilities.* Pilot facilities are either complete and in place or are in various stages of planning and implementation. The Director was Principal Investigator (with the Vice Chancellor for Research and the Executive Director of the SIU Research Park serving as co-leads) on an infrastructure grant that was submitted to the Illinois Innovation Network (IIN), requesting \$5.5M in funding to build out remaining infrastructure that will support facilities in the FSI, as well as other units as part of the *Illinois Food, Entrepreneurship, Research, and Marketing (iFERM) Hub*. The IIN committed to support Phase 1 of the project with an initial tranche of \$2.5M, which was appropriated and announced by Governor Pritzker in February of 2020. As of March of 2023, the process has been appropriated, funds released and the A&E team awarded (designs are nearly complete).

The current and pending facilities supported by the iFERM Hub are listed below.

*Pilot Brewery.* A ½ barrel brewery has been established and is operational. The system serves as a primary teaching and research tool for faculty and students in the fermentation science program, as well as research and collaborations with industry partners. As part of the iFERM Hub expansion, a 4 barrel brewery will be available to develop as a student-run campus brewery.

*Pilot Distillery.* The Director secured a commitment from Artisan Still Designs to donate a custom designed multi-column distillery. The value of this donation is on the order of \$90,000. A grant from the Delta Regional Authority and the USDA for \$40,000 has been awarded to assist in establishing the training distillery. This facility will differentiate the program and provide world-class training to our students, as well as outreach training and workshop opportunities. The equipment is onsite and will be put into operation as the necessary infrastructure is put in place.

*Fermented Beverage Facility.* As part of the pilot facilities equipment will be available for the production of fermented beverages, including wine, kombucha and other beverages. These new developments will allow the FSI to further strengthen synergies with the wine industry in the region.

*Cheese and Fermented Dairy Facility.* As part of the iFERM Hub expansion, facilities will be in place to produce a campus cheese program. This is an excellent opportunity for SIU and the fermentation science program, as well as supporting current and future dairy businesses in the region through R&D support and product testing.

*Malting Facilities.* The SIU Malting Facility, provided by a grant from the USDA Rural Development Program, has been installed and ready for operations. The malting facility will serve as both a training hub and a demonstration to support and spur economic development in value-added agriculture.

*Faye Minor McGill Teaching Kitchen and Sensory Laboratory.* The FSI continues to support efforts toward completion of the Fae Minor McGill Teaching Kitchen and Sensory Laboratory, which is based on the vision and bequest of the late



**RESOURCES: Fermentation Science Institute**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	213,498.02	223,861.43	198,696.37	184,712.22	142,075.58
Service Lab	36,527.12	32,997.00	37,129.36	15,484.19***	**15,640.96
Overhead Recovery (expenditure)	0.00	250.00	3,766.09	15,000.00	6,266.02
Overhead Recovery (income)	28.37	75.94			
Course Fees	1,485.00	1,020.00	1,035.00	1,380.00	1,455.00
Awards and Grants	6,700,000†††	1,140,000††	160,427.00†	53,244.47	120,427.00
<b>Total Revenues</b>	<b>6,951,538.51</b>	<b>1,398,204.37</b>	<b>401,053.82</b>	<b>269,820.88</b>	<b>285,864.56</b>
Expenditures*					
Salaries	196,508.83	217,096.43	189,475.70	153,884.72	132,854.58
Travel	1385.17	373.87	6,575.86	12,112.33*	4,690.15
Equipment	2,930.30	5,701.81	108,444.04	53,315.70	3,678.80
Commodities	8,500.64	17,357.41	25,251.67	14855.00	14,065.05
Contractual Services	6,354.02	5701.81	20,377.25	9129.94	8,477.80
Awards and Grants	0**	0	0	0	0
Telecommunications	147.14	1,091.45	734.07	613.26	962.31
Course Fees	588.46	1,459.69	276.51	1,839.16	1,075.58
<b>Total Expenditures</b>	<b>216,414.56</b>	<b>248,782.47</b>	<b>351,135.10</b>	<b>245,750.11</b>	<b>165,804.27</b>
<b>Revenue Minus Expenditures</b>	<b>6,735,123.95</b>	<b>1,049,421.90</b>	<b>49,918.72</b>	<b>24,070.77</b>	<b>120,060.29</b>

\*Includes travel related to equipment transportation.

\*\*Does not include ongoing project cost.

†Represents beginning balance from FY18 of \$120,427

††Represents beginning balance from FY18 of \$40,000

†††Represents beginning balance from FY21 of \$1,140,000

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	.38	.38	.25	.5	.25
Staff	2.5	2.5	2.5	2.5	2.5
<b>Total Staffing</b>	<b>2.88</b>	<b>2.88</b>	<b>2.75</b>	<b>3.0</b>	<b>2.75</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	Illinois Soybean Center
3.	Date	March 21, 2023
4.	Director	Jason P. Bond
4.1	Telephone	618-453-4309
4.2	E-mail	jbond@siu.edu
5.	Year Established	1997
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	College of Agricultural, Life, and Physical Sciences
8.	Type	Activity (check all that apply)
	Instructional	√
	Research	√
	Public Service	√

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

Southern Illinois University Carbondale (SIUC) has a long history of excellence in soybean research, teaching, and outreach. For over half a century, several generations of SIUC faculty have continued to build upon this excellent reputation with soybean growers and the industry to address production challenges and to find new uses for soybean. The Illinois Soybean Center (ISC) was first established in 1997 as the Center for Excellence in Soybean Research Teaching and Outreach (CESRTO) through a state appropriation. In 2008, the name was changed to the ISC. In 2005, the ISC was granted a \$500,000 endowment from the Illinois Soybean Association. The terms of this endowment allowed for SIUC to match the interest generated by the endowment for use in ISC activities. In the formative years of the ISC, activities focused on improving production techniques with various cultural practices, developing and releasing improved soybean genetics, and developing management strategies for weeds, diseases, and other production constraints. Subsequently, additional focus areas included the utilization of soybean in food and feed.

SIUC provides a unique home for the ISC as a “center without walls” to foster more significant interdisciplinary research, teaching, and outreach with investigators representing various units within the College of Agricultural, Life and Physical Sciences, the School of Medicine, and the Fisheries and Illinois Aquaculture Center. Recent interdisciplinary collaborations benefitting soybean production include research projects addressing nutrient runoff, soil and water conservation, cover crops and their integration into the production system, microbiome research with plant pathogens, using biocontrol agents to manage disease, and the use of multispectral imagery with UAVs and other systems to monitor plant health. The faculty collaborate with scientists with land grant universities in the U.S. and international institutions and research centers. During the past seven years, research programs affiliated with ISC have received support from the Illinois Soybean Association, the United Soybean Board, North Central Sustainable Agriculture Research and Education (SARE) program, the North Central Soybean Research Program, the Illinois Nutrient Research & Education Council, and from numerous corporate sponsors.

### 9.2 Mission

Development of technologies using an interdisciplinary approach to enhance soybean production in Illinois and in the North Central Region, increase soybean utilization by the global community, contribute to the base of scientific knowledge, and educate human capital.

### 9.3 Objectives

- 1) Conduct research on soybean that increases basic knowledge and contributes practical solutions to stakeholder problems.
- 2) Develop new soybean cultivars and germplasm that enhance production and value.

- 3) Facilitate technology transfer of research outcomes to growers, to the soybean industry, and to consumers.
- 4) Establish consortia with public and private organizations to enhance research, teaching and outreach for mutual benefit.
- 5) Encourage multi-disciplinary research and improve external funding opportunities.

## 10. Advisory Board

### 10.1 Advisory Board - Membership

**Board of Directors:** The Board of Directors seeks budget and facilities support for the ISC. Additionally, this group determines fund use priorities, establishes an administrative structure for the ISC and approves, and promotes events and activities associated with the ISC.

1. Associate Dean, CALPS – John Groninger
2. Director of Agricultural Sciences – Ira Altman
3. Director of Biological Sciences – Andrew Wood
4. Director of Earth Systems and Sustainability – Justin Schoof
5. Director of Human Sciences - Juliane Wallace
6. Director of Chemical and Biomolecular Sciences – Qingfeng Ge
7. School of Medicine – Buck Hales
8. Center for Fisheries, Aquaculture & Aquatic Sciences – Karolina Kwasek
9. Illinois Soybean Association – John Lumpe
10. Illinois Soybean Association – District Rep
11. Dean, CALPS – Ex Officio – Eric Brevik

**Faculty Advisory Board:** Represent faculty members from multiple colleges within SIUC to develop and propose ISC program priorities, events and activities. They also support needs of the Board of Directors.

<u>Faculty Member</u>	<u>Discipline Areas</u>
Dwight Sanders	Agribusiness Economics
Ed Heist	Animal Biotechnology
Gary Apgar	Animal Nutrition
David Lightfoot (deceased)	Biotechnology/Genomics
Dawn Null	Food and Nutrition
Kanchan Mondal	Engineering/Technology
Scott Hamilton-Brehm	Microbiology
Buck Hales	Medical Physiology
Andrew Wood	Plant Biology
Stella Kantartzi	Plant Breeding
Ahmad Fakhoury	Plant Pathology/Nematology
Karla Gage	Weed Science
Amir Sadeghpour	Soil Science

10.2 Number of Meetings (In This Year) 1



## 11. Annual Performance

### 11.1 Performance Measures \*

Measure	Previous Year	Results in Year
1. Publications	15	11
2. Public Service Activities (Field Days, Conferences, workshops, etc.)	13	12
3. National/Regional Research Projects or Working Groups	12	8
4. Graduate Students Trained (MS and PhD)	22	29
5. Undergraduate Student Workers Trained	18	16
6. Undergraduate Leadership Training (Agronomy Honor Society)	0	0
7. Undergraduate Job Placement/Graduate School	9	7
8. Graduate Students Job Placement/Graduate School	9	10
9. Grant Dollars	\$4,633,555	\$4,017,616
10. Internships	4	6

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

The Board of Directors developed and released a request for proposals and was open to all faculty. The available funding source was the interest gained from the Endowed fund and the University match. Proposals were selected for funding and represented many program areas within CALPS and the School of Medicine.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

In review of the general expectations for Centers and Institutes for the SIU System, the Illinois Soybean Center has evidence of support for these expectations set forth in table 11.1:

**Create and transfer knowledge to students and other learners –**

**Offer students and other learners’ opportunities to apply knowledge to the real world –**

Soybean researchers trained over 2,100 industry, alumni, and soybean stakeholders in the past year. Center faculty also helped place 17 undergraduate and graduate students with jobs, internships, and positions at other universities.

**Support graduate and professional students –** Faculty research grants led to the support of 29 graduate students (MS and PhD).

**Support undergraduate research activity** – Faculty research grants led to the support of 16 undergraduate student researchers.

**Enhance the university's external reputation** – Faculty were engaged with 8 National/Regional Research Projects. Faculty also contributed via publications and public service activities across the state of Illinois and secured millions in research funding.

**Engage and contribute to the welfare of the people we serve** – Faculty presented workshops presentations to over 2,100 people representing industry, alumni, and soybean stakeholders. Faculty are actively involved in recruitment, retention, and placement.

**Translate research finding to useable products and services for academia and the public** – Faculty research grants led to 11 publications in scientific journals and provided crop management recommendations via extension talks and publications.

**Maintain a minimal critical mass of faculty** – Over the last 5 years, the number of faculty involvement in soybean research has been affected by a reduction in state research funding. Several researchers have diversified their research portfolios.

#### 11.4 Evidence of Support for Center/Institute Objectives

**Conduct research on soybean that increases basic knowledge and contributes to practical solutions of stakeholder problems** - This is evident by the amount of research grant funding and the number of publications. Faculty at SIU have a great reputation among the funding agencies and review boards of professional journals.

**Develop new soybean cultivars and germplasm that enhance production and value** - SIU did not release new soybean cultivars and germplasm in this reporting cycle, but historically this has been a hallmark of the soybean research program at SIU.

**Facilitate technology transfer of research outcomes to growers, to the soybean industry, and to consumers** - This is evident by the number of publications, extension presentations, workshops, and one-on-one training sessions.

**Establish consortia with public and private organizations to enhance research, teaching and outreach for mutual benefit** - Currently, SIU soybean researchers are the Lead Investigators on 3 National United Soybean Board Projects. The Illinois Soybean Center is actively engaged with State, Regional, and National Soybean Associations in addition to Soybean Centers at The Ohio State University, Iowa State University, University of Missouri, and Purdue University.

**We encourage multi-disciplinary research and improve external funding opportunities**, as evidenced by our faculty advisory board and the amount of grant funding.

11.5 Evidence of Organizational Effectiveness

Dr. Eric Brevik began serving as the inaugural Dean of CALPS in July 2021. Many new schools and program areas are already part of the ISC. We seek even greater multidisciplinary collaborations in soybean research to benefit Illinois Soybean growers. Under Dr. Brevik's leadership, a new Board of Directors was seated, representing all new schools in CALPS and critical schools from outside the College. The Board of Directors has met and refined the 2nd annual RFP released in March. Additionally, a permanent Director will be identified once the new Associate Deans for CALPS are in place.

12. Institutional Assessment

12.1	Date of Last Review	<u>2021</u>	
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended	
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)	

**RESOURCES: Illinois Soybean Center**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	-	-	-	-	-
Income Fund	-	-	-	-	-
<b>Grants &amp; Contracts (faculty research activity)**</b>	-	-	<b>8,216,497</b>	<b>2,455,216.00</b>	<b>5,493,186.00</b>
University Match on Interest from Endowment***	25,272.49	22,936.98	21,816.86	20,542.51	82,138.29
Distribution from Endowment	25,272.49	22,936.98	21,816.86	20,542.51	20,535.29
Total Revenues****	-	-	-	-	-
Expenditures*					
Salaries	-	-	-	-	-
Fringe Benefits	-	-	-	-	-
Travel	-	-	-	-	237.14
Equipment	-	-	-	-	-
Commodities	-	-	-	-	-
Contractual Services	-	-	-	-	-
Award and Grants (Grad As. Fee)	-	-	-	-	-
Operation of Auto	-	-	-	-	-
Telecommunications	-	-	-	-	-
Total Expenditures	-	-	-	-	-
Revenue Minus Expenditures	-	-	-	-	-

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

\*\* Not direct funding to the Center. Faculty research activity associated with Center as reported by Faculty. Includes, multi-year projects that were initiated in FY 2021.

\*\*\* University Match received in 2018 includes the matches for FY14, FY15, FY16.

\*\*\*\* Total Revenues does not include Grants and Contracts, that are managed by faculty.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	-	-	-	-	-
Staff	-	-	-	-	-
Total Staffing	-	-	-	-	-

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University School of Medicine
2.	Center/Institute	SIU Neuroscience Institute
3.	Date	2/1/23
4.	Director	Kari Wolf M.D., Jayant Acharya M.D.
4.1	Telephone	217-545-7625; 217-545-7226
4.2	E-mail	<a href="mailto:kwolf48@siumed.edu">kwolf48@siumed.edu</a> ; jacharya37@siumed.edu
5.	Year Established	Academic Year 2015
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Southern Illinois University School of Medicine
8.	Type	Activity (check all that apply)
	Instructional	X
	Research	X
	Public Service	X

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The SIU Neuroscience Institute (NSI) is a state-designated, public service institute providing advanced multispecialty clinical care for patients with neurological disorders and/or mental health conditions. The NSI is a collaboration of SIU School of Medicine's physician practice organization (SIU Medicine) and Springfield Memorial Hospital (SMH), a principal affiliated teaching hospital of the medical school in Springfield. The NSI coordinates the patient care services of the school's existing Department of Neurology, Department of Psychiatry, the Division of Neurosurgery and Physical Medicine and Rehabilitation (PM&R) while collaborating with SMH's neuroscience-related outpatient and inpatient services and facilities.

The Institute's physicians, health care staff, and other professionals provide advanced, coordinated treatment to patients throughout central and southern Illinois who suffer from complex, debilitating neurological or mental disorders. While the institute's focus is primarily patient care oriented, the NSI provides opportunities and resources for neuroscience-related research, medical and community education, and community outreach. As an institute based in an academic medical center, the NSI is advancing the translation of new and emerging basic research and the application of new medical products and technologies into improved patient care.

The vision of the NSI is to be housed in a single facility on the SIU School of Medicine/ Springfield campus, unifying the outpatient clinical services, research, education and operations related to the above-noted clinical departments and divisions. Once the NSI is fully implemented, patients will have seamless availability within one site to neuroscience and spine specialists, ancillary services, case management and clinical trials, all sharing common scheduling, billing and electronic health record systems. Quality and safety measures, outcomes, patient satisfaction, cost of care, and value will be substantially improved.

### 9.2 Mission

The Neuroscience Institute (NSI) provides comprehensive care for diseases of the nervous system for small, urban and rural Illinois communities

### 9.3 Objectives

Objectives of the SIU Neuroscience Institute include:

- **Clinical Objectives:** The institute coordinates adult neurology, neurosurgery, psychiatry (including child and adolescent psychiatry), physical medicine and rehabilitation and related ancillary services. The institute develops disease-specific multidisciplinary clinics to improve diagnostic services and treatment as well as improve the patient's experience.
- **Patient Objectives:** The institute enhances the patient's experience through coordination of patient and support services, and develops shared patient scheduling and registration

processes to ease access. Outcome metrics include patient satisfaction data, patient access and clinic utilization rates.

- Quality Objectives: Quality objectives include patient satisfaction metrics; improved physician and staff recruitment, retention, and satisfaction; improved operating efficiencies; and financial sustainability through coordination among institute departments.

The SIU Neuroscience Institute is designed to produce significant clinical, patient, operational and financial benefits. The NSI is the only regional and academically-based neuroscience institute in central or southern Illinois.

## 10. Advisory Board

### 10.1 Advisory Board - Membership

The NSI Steering Committee provides advice and oversight to the institute’s leadership.

NSI Steering Committee members in FY2022 include:

- James Gilchrist, MD, Professor and Chair, Neurology, SIU School of Medicine (Executive Director June 2021-September 2021)
- Kari Wolf, MD, Associate Professor and Chair, Psychiatry, SIU School of Medicine (Executive Director September 2021- Present)
- Jayant Acharya, MD, Professor and Chair, Neurology, SIU School of Medicine (Executive Director April 2022-Present)
- Jeffrey Cozzens, MD, Professor and Division Chair, Neurosurgery, SIU School of Medicine
- Michael Neumeister, MD, Professor and Chair, Surgery, SIU School of Medicine
- John Horvat, Associate Provost for Finance and Administration, SIU School of Medicine
- Mary Stewart, Chief Operating Officer for SIU Healthcare
- Kevin England, Senior Vice President and Chief Administrative Officer, Memorial Health
- Evan Davis, Administrator, Vice President, Clinical Operations, Memorial Health
- Charles Callahan, PhD, President, Memorial Health Hospital Group and President & CEO, Springfield Memorial Hospital
- Greg Jensen, LCSW, Administrative Director, NSI, SIU School of Medicine (July 2021)
- Marcella Bland, Administrative Director, NSI/SIU School of Medicine

10.2 Number of Meetings (In This Year) 4- Steering Committee

## 11. Annual Performance

### 11.1 Performance Measures \*

Measure	Target FY23	Results in FY22
1. Patient Encounters – Visits	60,000	69,556
2. Total Patients Served – Unduplicated Count	15,900	17,456

Measure	Target FY23	Results in FY22
3. New Patients Served – Unduplicated Count	3,100	3,148
4.		
5.		

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, and public service activities.

## 11.2 Major Accomplishments (In This Year)

The SIU Neuroscience Institute continued to mature during FY2022 by successfully recruiting a Neurology Chair following retirement of previous Chair and Executive Director, continued expansion and integration of Behavioral Health services in the region, maturing the institute’s internal operational and financial framework, implementing multidisciplinary clinics that improved patient experience, furthering the research and academic missions of the NSI and continued recruitment of faculty to the NSI. These efforts have advanced the SIU Neuroscience Institute. Department specific and overall NSI accomplishments include:

### Neurology:

- In conjunction with Springfield Memorial Hospital developed and implemented the StrokeOne call program based at Decatur Memorial Hospital (DMH) to serve all Memorial affiliate hospitals. The program allows for patient triage and assignment to appropriate facility dependent on level of acuity.
- Completed recruitment of 2 FTE Advanced Practice Providers for the StrokeOne program.
- Continued to provide an ECHO (Extension for Community Healthcare Outcomes) training community-based primary care providers to treat patients with Alzheimer’s and related memory disorders
- Completed 1 Cognitive Faculty recruitment, 1 Neurocritical Care faculty recruitment
- In conjunction with Memorial Medical Center, continued to support a Level 3 Comprehensive Epilepsy Program from the National Association of Epilepsy Centers.
- Continued the Comprehensive Epilepsy Program services and capabilities; by providing advanced treatment options to our high-complexity patients requiring stereo electroencephalography (SEEG), vagal nerve stimulator and deep brain stimulation of the anterior nucleus of the thalamus, and through networking with local neurologists and vendors in the community.
- Maintained certification for Responsive Neurostimulator (RNS) system as of October 2020.
- Implanted several patients with RNS with excellent preliminary results.
- Enrolled in 2 industry lead clinical epilepsy trials.
- In conjunction with Springfield Memorial Hospital, continue to provide much of the physician support for the JCAHO credentialed Comprehensive Stroke Center.
- Continued to support a multidisciplinary clinic for patients with movement disorders.
- Completed recruitment for 1 FTE of Advanced Practice Provider to support the increase need for movement disorder program outpatient clinic.
- Continued to mature epilepsy and spine multidisciplinary clinics
- Continued the Heart/Brain multidisciplinary clinic.
- Continued to mature multidisciplinary programs in Epilepsy, Deep Brain Stimulation and Brain Tumors with additional providers, streamlined operations and community education.



- Furthered the academic mission through 84 total active studies. These include 51 investigator-initiated, 29 sponsored clinical trials and 4 animal study protocols, 47 reviewed publications, 29 abstracts, posters & presentations and 7 book chapters.
- Continued an outpatient program in Physical Medicine and Rehabilitation for musculoskeletal pain, spasticity, mild traumatic brain injury and non-operative sports medicine
- 1 Registered Nurse became credentialed as a certified Neuroscience Registered Nurse from the American Board of Neuroscience Nursing.

Psychiatry:

- Continued integrated clinics at SIU pediatrics, family medicine and Memorial Behavioral Health by increasing the number of providers, operating an open access/walk-in clinic to better address needs of people with severe and persistent mental illness, with continued services to Carbondale.
- Continued NSI Multidisciplinary Clinics to include a DBS pre-surgical evaluation clinic with psychiatric and neuropsychological assessments and epilepsy pre-surgical neuropsychological assessments.
- Continued planning for NSI Multidisciplinary Memory Disorders Clinic, now considering implementing within the SIU Federally Qualified Health Center to provide more comprehensive care including primary care, psychiatric care, neurologic care, and case management. Have been waiting for move of FQHC into their new site where geriatric psychiatry services will embed. Will continue to plan for neurology memory clinic participation as well as recruitment into CARE research studies.
- Continued collaboration with St. Mary's Hospital leadership to initiate planning for phase 2 which includes psychiatry staffing the adult and geriatric inpatient services as well as restarting ECT services in Decatur.
- Continued planning with Memorial Health and Decatur Memorial Hospital to create a strategy for the community of Decatur and surrounding areas. Services proposed to include consultative services, intensive outpatient therapy and outpatient services.
- Completed recruitment of 1 Child Psychiatry Faculty member, two Psychologists, and 1 Neuropsychologist Faculty Member.
- Continued a new practice at Jacksonville, Illinois in collaboration with Jacksonville Memorial Hospital.
- Received a HRSA grant in collaboration with Jacksonville Memorial Hospital to develop a rural psychiatry residency based at Jacksonville Memorial Hospital.
- Continued project ECHO (Extension for Community Healthcare Outcomes) designed to train community-based primary care providers to treat patients with Opioid Use Disorders (OUD) using medication assisted treatment (MAT) guidelines as well as to recognize and treat common psychiatric conditions.
- Continued worked with leaders across the criminal justice system (through a MacArthur Foundation Grant) to create a system for jail diversion (where appropriate) for people with mental illness and/or substance abuse.
- Continued a psychiatry clinic at Milliken University.
- Continued an Esketamine clinic to treat patients with refractory depression, adding to the multiple other interventional psychiatric treatment options to refractory patients. SIU is now the only location in Illinois outside of Chicago to offer Electroconvulsive Treatment

(ECT), Vagal Nerve Stimulation (VNS), Transcranial Magnetic Stimulation (TMS), and Esketamine to patients with severe and/or refractory depression.

- Dramatically increased telepsychiatry and teletherapy services across Illinois to improve access to psychiatric and therapeutic care.
- Continued clinic within a specialized school for children with autism.
- Continued to provide specialty psychiatric care for children and adults with developmental disabilities.
- Provide phone consultation clinic to rural primary care clinic.
- Furthered the academic and research mission through 18 investigator-initiated studies, 6 industry sponsored clinical trials, 6 grants, 16 peer reviewed publications and 4 book chapters as well as 26 presentations at National Meetings.
- Continued work providing testimony and guidance to State Committees and State Administrative Departments related to telehealth, mental health workforce, mental health stigma, mental health access, and health equity.
- Continued leadership in the Survivor Recovery Center to provide evidence-based psychotherapy to individuals experiencing trauma
- Received designation and funding from the State of Illinois to build the Illinois Behavioral Health Workforce Center.

#### Neurosurgery:

- Continued building Neurosurgery's Residency Program by recruiting a Resident in 2021.
- Continued collaboration with Springfield Memorial Hospital to implement and expand the Deep Brain Stimulation program at MMC, in addition to the pre-existing program at St John's Hospital.
- Continued the Comprehensive Epilepsy Program by adding new neurosurgical capabilities, including stereo electroencephalography (SEEG), incorporating the ROSA Surgical Robot and deep brain stimulation of the anterior nucleus of the thalamus and Responsive Neurostimulation.
- Continuing the Neurosurgery's Residency Program by graduating our first Resident in June 2021 and recruiting new Residents
- Furthered the academic and research mission through investigator-initiated studies, industry sponsored clinical trial, grants and peer reviewed publications
- Completed recruitment of 1 Neurosurgery faculty.

#### Neuroscience Institute (NSI):

- Continued multidisciplinary clinics for epilepsy, movement disorders, Heart/Brain and spine.
- Ended FY22 with a positive operating margin, the fourth time since the formation of the NSI in 2015.
- Continued Movement Disorders treatment program by expanding Deep Brain Stimulation surgeries.
- In conjunction with Memorial Health developed and implemented a system for regional stroke care in Decatur and other Memorial Health hospitals.
- Continued providing clinical leadership to the Springfield Memorial Hospital Pain Program through Spineworks.
- Began planning for a single building to house the entire Neuroscience Institute.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The SIU Neuroscience Institute supports priorities of the university, the medical school, and the State of Illinois. SIU Carbondale's focus statement notes that the university "strives to meet the health care needs of central and southern Illinois through appropriate health-related programs (and) services ..." and "develops partnerships with communities (and) businesses ...." The NSI addresses both of these by providing community-based patient care services in demand by the people of the region. The institute also supports SIU Carbondale's priorities for community service and collaboration, as noted in the *Pathways for Excellence: A Strategic Plan* document. The SIU Board of Trustees' strategic priorities include those to "extend the external presence and relationships of the system to aid in the development of innovative approaches to address Illinois' problems relating to education, health care ..." and to "streamline for efficiency and cost-savings to ensure financial stability, encouraging productive, mutually beneficial collaborations across system campuses and locations ...." The NSI provides innovative, streamlined approach to health care through the consolidation of clinical and research services related to diseases of the nervous system. This improves patient accessibility to services, patient care and safety, and operational efficiency and effectiveness through the consolidation of administrative positions and functions across the NSI's departments and divisions. Longstanding university priorities call for programs to contribute to workforce development, stronger health care and social welfare systems, and increased cooperation among health programs and the community. The NSI advances each of these priorities.

The NSI supports various elements of the medical school's strategic plan, particularly its priority for clinical practice, health of the population and community service. Through its individual academic divisions and departments and its combined clinical and research operations, the NSI addresses and enhances the major strategic priorities within the SIU School of Medicine, including strategies associated with: educating future physicians; attracting, progressing and retaining a diverse faculty; developing innovative teaching methods for students and residents; expanding research studies, initiatives and collaborations across the institution; providing accessible and quality health care; establishing relationships with various health care and other community entities within the region and the state; and enhancing the brand that is SIU Medicine.

The NSI also directly advances the *Illinois Public Agenda* goals for economic growth and workforce development. Economic growth is advanced through this program's ability to address patient needs related to neurological and mental health disorders in the region. This provides an important professional service, one that is in demand throughout central and southern Illinois. The institute also provides learning opportunities for medical students, physician assistant students, graduate science students, clinical residents and fellows and other allied health professions in the neurosciences. This improves the state's workforce of these important professionals while enhancing the relevance of the medical school's educational programs. The SIU Neuroscience Institute advances these complementary goals.

11.4 Evidence of Support for Center/Institute Objectives

In FY 22, the SIU Neuroscience Institute has made progress in achieving its objectives as outlined in 9.3 above. Efforts continue to mature in the areas of balancing finance and accounting operations for the Departments of Neurology, Psychiatry, PM&R and the Division of Neurosurgery based on the needs of the respective Departments and divisions. Patient quality, risk and safety was also advanced by the integration of the Neurology/Psychiatry PSES (Patient Safety Evaluation System) Committee which reviews and discusses all patient safety and quality-related incidents as documented within the Patient Incident Reporting System (SENSOR).

In an effort to improve clinical efficiencies, enhance the patient experience, and achieve cost savings through the attrition of redundancies in clinical support staff, efforts were undertaken by individual departments/divisions and collectively within the NSI as demonstrated in section 11.2 above (major accomplishments).

Lastly, the Institute’s clinical, financial, teaching and research missions continued despite the ongoing challenges with national staff shortages, and the ebb and flow of pandemic surge rates.

11.5 Evidence of Organizational Effectiveness

The SIU Neuroscience Institute is justified by the immense burdens for the patients, their families, and society associated with neurological and mental health disorders as well as the potential for developing a truly unique, high-quality, academic medical center-based neurosciences patient care program for Springfield and the region. The aim of the NSI is to facilitate more favorable patient experiences, better patient outcomes, lower costs of patient care, and enhanced value to patients and the communities of central and southern Illinois, particularly in the Springfield area. The community supports the NSI’s mission and vision for patient care. This is expected to continue as the NSI develops.

12. Institutional Assessment

12.1	Date of Last Review	<u>N/A (new institute first approved in April 2015)</u>
12.2	Decision at Last Review	<u>N/A</u> Center/Institute in Good Standing <u>          </u> Center/Institute Flagged for Priority Review <u>          </u> Center/Institute Suspended
12.3	Explanation	<u>N/A</u>

**RESOURCES: SIU Neuroscience Institute**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>	<b>FY2016</b>
Revenues							
State Appropriations	0	0	0	0	0	0	0
Income Fund	0	0	0	0	0	0	0
Grants & Contracts	0	0	0	0	0	0	0
Patient Care Revenues	10,463,589	11,070,774	8,679,930	8,862,475	6,371,042	6,156,008	6,465,387
Non-Patient Care Revenues <sup>1</sup>	1,795,183	1,828,848	1,335,741	1,017,762	839,266	833,601	721,894
Ancillary Revenue <sup>1</sup>	1,097,272	0	0	0	604,410	484,453	436,988
Accumulated Balance <sup>2</sup>		0	0	0	0	0	0
Total Revenues	12,258,772	12,899,622	10,015,671	9,880,240	7,814,718	7,869,682	7,851,407
	Expenditures <sup>3</sup>						
Department Overhead	2,083,696	2,056,149	1,549,796	1,221,411	1,148,631	1,219,579	1,218,574
Space Costs	1,022,167	1,067,582	863,013	873,753	1,173,353	1,022,811	946,305
Malpractice Insurance	353,050	237,658	638,359	834,940	691,615	615,455	604,616
Other Direct Expenses	195,584	961,084	974,991	1,034,325	226,755	135,541	122,920
Academic Support Expenses	1,253,997	927,310	926,702	930,661	872,767	853,583	904,495
Provider Compensation	4,303,287	3,297,744	2,895,102	2,826,743	2,724,408	2,643,180	2,592,356
SIU MED Overhead	929,825	1,009,755	977,626	978,601	998,485	1,008,793	1,048,736
Ancillary Expenses	1,082,463	801,247	932,131	541,549	504,579	370,740	413,405
Total Expenditures	8,134,095	10,358,529	9,757,723	9,241,983	8,340,593	7,869,682	7,851,407

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>	<b>FY2016</b>
Revenue Minus Expenditures	1,079,702	2,541,093	257,948	638,257	(525,875)	(395,620)	(227,138)

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

1. Non-Patient Care Revenues are defined as income derived from affiliated hospital agreements and community outreach contracts. Ancillary Revenue is income derived from operations that support and enhance the overall patient care experience such as imaging, labs, rehabilitation, and other special procedures.
2. No accumulated balance is forwarded from year to year. Each year is managed and any deficit or surplus does not accrue to the NSI but are managed through SIU's practice plan, SIU Healthcare.
3. Department Overhead expenses include primarily salary expenses for staff directly involved in supporting patient care activities, such as front desk reception staff, call center, nursing and medical assistant, medical records, etc. Provider Compensation is physician compensation from patient service. SIU Medicine Overhead expenditures include costs of support services provided by SIU Medicine including support for information technology, credentialing and managed care, patient business services, and quality, risk and safety programs.

<b>Staffing (Full Time Equivalent)</b>		<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>	<b>FY2016</b>
Faculty	40	51	39	36	37	26	30.3
Staff	89	107	96	81	74	65	79.6
<b>Total Staffing</b>	<b>129</b>	<b>158</b>	<b>135</b>	<b>117</b>	<b>111</b>	<b>110</b>	<b>109.9</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	Office of Innovation & Economic Development/Research Park (includes IL Small Business Development Center and Center for Innovation)
3.	Date	March 31, 2023
4.	Director	Lynn Andersen Lindberg, Executive Director
4.1	Telephone	618.453.6754
4.2	E-mail	<a href="mailto:LINDBERG@SIU.EDU">LINDBERG@SIU.EDU</a>
5.	Year Established	(1986 Innovation & Economic Development; 2001 Research Park)
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	OIED reports to the Office of the Chancellor; Research Park is a 501(c)(3) university-related organization
8.	Type	Activity (check all that apply)
	Instructional	X
	Research	X
	Public Service	X

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The Office of Innovation and Economic Development (OIED) is an umbrella organization for business and economic development activities within the University. This currently includes the Illinois Small Business Development Center at SIU, Center for Innovation, Illinois Procurement Technical Assistance Center at SIU, Business Incubator Programs, Illinois Manufacturing Excellence Center, Office of Workforce Innovation and Research, Illinois Nurse Aide Testing program, Extended Reality Development Academy, Small Business Navigator Program, SBA Growth Accelerator and SBA SBIR Catalyst programs, Center for Delta Studies, Saluki Ventures student business incubator, Saluki Innovation Lab, and the University Innovation Fellows.

The SIU Research Park, a separate, 501(c)(3), university-related organization, is also directed through this office.

The Illinois Manufacturing Excellence Center (IMEC) is an Illinois non-profit corporation with four higher education partners within the State of Illinois. SIU Carbondale is one of those partners. At present, seven IMEC staff are SIU employees.

### 9.2 Mission

OIED & SIU Research Park Mission: To establish and support an environment to foster innovation, commercialize University discoveries, and advance entrepreneurship and economic development within SIU and throughout the region.

IMEC's Core Purpose: to foster long-term economic and workforce competitiveness and its Mission is committed to driving growth through enterprise excellence.

### 9.3 Objectives

- \* Create an entrepreneurial culture on campus, encompassing both spatial opportunities and programmatic activities
- \* Integrate activities within the SIU Research Park with the campus community, ranging from increased traffic, the Saluki Ventures student business incubator, student learning labs, and technology entrepreneurship
- \* Optimize business and economic development services for the broader community
- \* Become an economic development leader in Southern Illinois and create a regional focus on collaboration among University researchers, regional businesses, and the community



10. Advisory Board

10.1 Advisory Board - Membership

<p><b>SIU Research Park Board of Directors</b> Gary Williams, Board Chair (Manager, City of Carbondale) Curtis Baird, Vice Chair (CEO Sure-Response) Teresa Katubig, Secretary (CEO, HireLevel, Inc.) John Dosier, Treasurer (President, First Southern Bank) Duane Stucky (Senior Vice President and Board Treasurer, SIU) Austin Lane (Chancellor, SIU Carbondale) Meera Komarraju (Provost and Vice Chancellor, SIU Carbondale) Costas Tsatsoulis (Vice Chancellor for Research, SIU Carbondale) Rex Budde (CEO, Southern Illinois Healthcare) Curt Jones (Founder, 40 Below Joe) Angela Povolish (Partner, FMGR Law Firm) Donald Gulley (CEO, Southern Illinois Power Cooperative)</p> <p><b>SBDC Advisory Board</b> Darren Berger, Business Development Specialist, First Southern Bank Bryan Black, Owner, VMC Shane Carsrud, Assistant Market Executive, Banterra Bank David Cook, Owner, Allied Automotive Tom Harness, Owner, Harness Digital Marketing Chris Howton, Senior Vice President/SBA Specialist, People’s Bank Curt Jones, Founder, 40 Below Joe Rick Linton, Economic Development Director, West Frankfort Economic Development Chris Martin, Economic Development Director, Chester Economic Development Lee Messersmith, Owner Cycle 1 Cycling Studio Amy Mills, Owner, 17 th Street BBQ Steven Mitchell, Economic Development Director, City of Carbondale Harriet Mize, Director, Carterville Chamber Jennifer Olson, Business Development, City of Marion Robyn Laur Russell, Executive Director, Champion Community Investments Nic Skovgaard, Owner, AlterEgo Marketing Eric Bridges, IL DCEO, Small Business Development Center Program Darryl Thomas, IL DCEO, Procurement Technical Assistance Center Program</p>
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10.2 Number of Meetings (In This Year) Research Park – 3; SBDC - 1

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Total clients (SBDC & PTAC)		434
2. Total business counseling hours (SBDC & PTAC)		1793
3. Jobs created – technical assistance verified (SBDC & PTAC)		20
4. Jobs retained – technical assistance verified (SBDC & PTAC)		15
5. Business start-ups verified (SBDC)		11
6. Loans secured for clients verified (SBDC)		\$1,863,000
7. Amount of equity secured for clients verified (SBDC)		\$851,630
8. Companies assisted (IMEC)		1867
9. New and retained sales per project (IMEC)		1,357,032
10. Cost savings per project (IMEC)		73,969
11. Jobs created and retained (IMEC)		4,471
12. Aggregate impact (IMEC)		480,633,397
13. Number of training events (SBDC & PTAC)		12
14. Number of training participants (SBDC & PTAC)		134

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

<ul style="list-style-type: none"> <li>* Maintained incubator tenancy at nearly 100%</li> <li>* Continued to offer online, hybrid, and in-person business advising and training programs to emerging and expanding small businesses</li> <li>* Collaborated with Southern Illinois Healthcare and other organizations to create SI Now, a Southern Illinois Success Initiative focused on making Southern Illinois a great place to live, work, and do business</li> <li>* Worked with the Eurma C. Hayes Center in Carbondale to develop a Community Technology Center for residents and others needing Broadband access</li> <li>* Collaborated with Greater Egypt Regional Planning &amp; Development Commission and other Southern Illinois organizations to offer small business navigator assistance to businesses affected by the COVID-19 pandemic</li> <li>* Completed third year of operations of the PTAC, offering assistance in local, state, and federal government contracting opportunities including an event with SIU Carbondale and SIU Edwardsville procurement offices</li> <li>* Worked with Regions Bank and the SIU Foundation to offer a \$10K business plan competition to emerging small businesses in the area</li> <li>* Began a new partnership with IDPH to develop and deliver support for the new Illinois Community Healthcare Worker registry and exam credentials</li> <li>* Managed a variety of activities, funded by the US Small Business Administration; that bring together SIU Carbondale, Murray State University, and the University of</li> </ul>
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Tennessee Martin to focus on improving SBIR/STTR awards in these rural academic communities

- \* Supported four new University Innovation Fellows and linked them with existing Fellows remaining on campus from the prior year's cohort
- \* Worked closely with the Illinois Innovation Network on a variety of projects and activities including the STEAM event at the Illinois State Fair
- \* Served as co-project leader on the iFERM Hub, a \$13M+ food, entrepreneurship, research, and manufacturing facility and program
- \* Continued to offer proctored online tests to all applicants of Illinois' CNA exam certification
- \* Administered more than 15,000 certification exams across Illinois for certified nurse assistants
- \* Generated nearly \$1 million in testing revenue for Nurse Aide Testing and Direct Support Personnel certification
- \* Continued to sell online training and registration to Direct Support Person project in conjunction with the IDHS
- \* Worked on specialized research projects with the Southern Illinois Airport, the Illinois Innovation Network iFERM Hub, and SI Now
- \* Served as the business development interface with the SIU System Office of Technology Management and Industry Relations
- \* Provided assistance to the Jackson County high school CEO program, promoting retention of youth entrepreneurs, through a variety of workshops and in-person activities
- \* Partnered with various organizations in Jackson County to develop a plan for Broadband access for the entire county
- \* Submitted a variety of collaborative proposals with the Illinois Innovation Network to improve the workforce opportunities and skills in Southern Illinois and beyond
- \* Continued collaborative relationships with other economic development agencies including local governments, chambers of commerce, regional planning agencies, educational institutions, and healthcare organizations

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Goal 4 of the Illinois Public Agenda is to better integrate Illinois' educational, research, and innovation assets to meet economic needs of the state and its regions. OIED supports this goal, and it is evident through entrepreneurial training, innovation education, its business interface with technology management, and the creation of an overall culture of entrepreneurship and innovation on campus and in the region. Removing barriers to entrepreneurship and innovation are at the heart of what OIED does day in and day out.

Ms. Lynn Andersen Lindberg worked closely with the SIU System Office on a team addressing community engagement. The group was charged with identifying ways that the three campuses can pool resources to address the needs of the larger service region. In addition, she helped create a team to develop and administer an economic/public impact study for the SIU System and individual campuses that will take place in FY2023.

OIED continues to be part of the team that drives innovation and entrepreneurship on campus, as recognized by the Carnegie Foundation designation as a Community Engagement Institution. The Association of Public and Land-grant Universities has also designated SIU as an innovation and Economic Prosperity campus Both designations demonstrate evidence of the University's goal of enhancing our value to and our collaboration with the broader community in our mutual goals of research translation, workforce education, and economic development. Ms. Lynn Andersen Lindberg serves as the co-delegate to the APLU for this activity.

SIU plays a prominent role in the vitality and stewardship of the economy and culture of our region by: maintaining the positive symbiosis with the community and region; maintaining the positive relationship through time, energy, and resources; and serving as leaders and resource providers as appropriate. The unit is actively involved in activities that positively impact pillars of the SIU Carbondale strategic plan, especially in the pillars of Branding & Partnership and Research & Innovation. OIED continues to play an important role in business, economic, and community development throughout the region.

#### 11.4 Evidence of Support for Center/Institute Objectives

The Office of Innovation and Economic Development and "The Center" are one in the same. Examples of support for objectives enumerated above follow.

- Create an entrepreneurial culture on campus—The Saluki Ventures student incubator program was expanded to include student organizations that focus on entrepreneurship and provide services to businesses; the University Innovation Fellows program was expanded and began offering innovation and entrepreneurship workshops in addition to their individual projects for campus; and the Saluki Entrepreneur Corps expanded its activities to include online workshops and podcasts.
- Integrate activities within the SIU Research Park with the campus community—Innova\*Ship, followed by the Catalyst program, offered technology entrepreneurship to faculty, staff, students, and community researchers and scientists interested in starting or expanding their technology-based businesses at SIU Carbondale, Murray State University, and University of Tennessee Martin.
- Optimize economic development services for the broader community—offered procurement assistance services to regional businesses interested in government contracting; continued to customize business advising and workshops.

- Continue to be an economic development leader in Southern Illinois—started or completed in-depth research projects with the Southern Illinois Airport, SI Now, and BioLaunch; brought together University researchers, regional businesses, and other organizations to support the development of the iFERM Hub, a part of the Illinois Innovation Network and BioLaunch, a laboratory and business support program to support the iFERM Hub.

11.5 Evidence of Organizational Effectiveness

Despite another year of insufficient staffing and funding, the remaining staff have continued to provide high quality, impactful services throughout the campus and region, including developing and administering new programs and working with the SIU System and the 13 public universities through the Illinois Innovation Network. Staff continue to serve on various boards, committees, and working groups and provide leadership in many of these activities. The organizational effectiveness of OIED (IL SBDC and Center for Innovation) and the Research Park are built upon the foundation of providing services and resources that are needed and have impact. These successes are evidenced through the metrics provided above.

12. Institutional Assessment

12.1	Date of Last Review	None	
12.2	Decision at Last Review	<input type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended	
12.3	Explanation		

**RESOURCES: Office of Innovation & Economic Development**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	\$282,029	\$276,499	\$379,370	\$386,651	\$327,874
Income Fund	239,941	205,473	196,470	91,197	7,608
Grants & Contracts	2,499,400	2,450,392	2,282,524	1,495,095	1,609,976
SBDC Generated Income	0	0	700	2,333	926
Other Course Revenue	129,741	95,500	117,250	0	0
<b>Total Revenues</b>	<b>\$3,151,111</b>	<b>\$3,028,297</b>	<b>\$2,976,314</b>	<b>\$1,975,276</b>	<b>\$1,946,384</b>
Expenditures					
Salaries/Wages & Benefits	\$2,047,285	\$2,007,142	\$2,133,956	\$1,704,085	\$1,697,231
Building Maintenance	27,270	15,043	24,898	13,465	26,735
Internal Roof Loan	0	0	0	0	12,026
Contractual	390,101	382,451	345,452	104,112	125,979
Supplies & Commodities	19,258	14,315	31,643	10,968	18,880
Miscellaneous	591,765	593,296	597,251	158,813	177,839
<b>Total Expenditures</b>	<b>\$3,075,679</b>	<b>\$2,997,204</b>	<b>\$3,133,200</b>	<b>\$1,991,443</b>	<b>\$2,058,690</b>
<b>Revenue Minus Expenditures</b>	<b>\$75,432</b>	<b>\$30,093</b>	<b>\$-156,886</b>	<b>\$-16,167</b>	<b>\$-112,306</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	0	0	0	0	0
Staff	18	21	21	22	18
<b>Total Staffing</b>	<b>18</b>	<b>21</b>	<b>21</b>	<b>22</b>	<b>18</b>

**RESOURCES: SIU Research Park**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
<b>Revenues</b>					
State Appropriations	\$0	\$0	\$0	\$0	\$0
Income Fund	0	0	0	0	0
Grants & Contracts	253,291	202,549	255,295	252,036	204,218
Budget Allocation from SIU	94,702	82,518	98,556	99,233	123,766
Interest Income	9,108	1,746	1,815	1,139	734
Award Income	153,183	56,817	40,000	0	0
<b>Total Revenues</b>	<b>\$510,284</b>	<b>\$343,630</b>	<b>\$395,702</b>	<b>\$352,406</b>	<b>\$328,718</b>
<b>Expenditures</b>					
Budget Expended at SIU	\$94,702	\$82,518	\$98,556	\$99,233	\$123,766
Management and General	101,241	262,429	255,456	246,984	251,948
Depreciation	118,367	13,525	12,046	12,046	13,503
<b>Total Expenditures</b>	<b>\$314,310</b>	<b>\$358,472</b>	<b>\$366,058</b>	<b>\$358,263</b>	<b>\$389,217</b>
<b>Revenue Minus Expenditures</b>	<b>\$195,974</b>	<b>-\$14,842</b>	<b>\$29,644</b>	<b>-\$5,855</b>	<b>-\$60,499</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	0	0	0	0	0
Staff	1	1	1	1	1
<b>Total Staffing</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale						
2.	Center/Institute	Paul Simon Public Policy Institute						
3.	Date	03/20/2023						
4.	Director	John T. Shaw						
4.1	Telephone	618-453-4003						
4.2	E-mail	john.shaw@siu.edu						
5.	Year Established	Approved 1996, opened 1997						
6.	Illinois State Statute (if pertinent)	N/A						
7.	Reporting Unit	Office of the Chancellor						
8.	Type	<p style="text-align: center;">Activity (check all that apply)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 2px;">Instructional</td> <td style="border: 1px solid black; text-align: center; width: 30%; padding: 2px;">X</td> </tr> <tr> <td style="padding: 2px;">Research</td> <td style="border: 1px solid black; text-align: center; padding: 2px;">X</td> </tr> <tr> <td style="padding: 2px;">Public Service</td> <td style="border: 1px solid black; text-align: center; padding: 2px;">X</td> </tr> </table>	Instructional	X	Research	X	Public Service	X
Instructional	X							
Research	X							
Public Service	X							

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.



## 9. Overview

### 9.1 Description

The Paul Simon Public Policy Institute was opened in January 1997 to fulfill the following overarching objective summarized in the New and Expanded Program Request (NEPR) approved by the Illinois Board of Higher Education at the Institute's founding in 1996.

"The guiding principle of the Institute will be the premise that rational scholarly analysis contributes to the making of more effective and more efficient public policy and contributes to elevating the level of public discourse in this country "(NEPR, 1996, 2).

### 9.2 Mission

The Institute's mission statement is as follows:

The Paul Simon Public Policy Institute acts on significant and controversial issues impacting the region, the state, the nation, and the world. The Institute is committed to developing and working to implement approaches that bring concrete, positive results in tackling some of the most difficult challenges in the public policy arena.

The Institute focuses its efforts on fostering:

\*Ethical conduct in government.

\*Opportunity and fair treatment for citizens in America and throughout the world.

\*Promoting responsible citizenship for all Americans- but particularly for young Americans.

### 9.3 Objectives

The Institute executes its mission by working on a variety of specific annual objectives. Those include:

- Working on our "Better Politics, Smarter Government" Agenda, which includes the following areas: Town Hall Meetings Initiative, Renewing Illinois Summit for Illinois university students, and Restoring American Statesmanship.
- Analyzing public policy through academic papers and publishing The Simon Review.
- Providing and supervising paid internships and other learning opportunities for university students.
- Hosting lectures and conferences with noted leaders in public policy, journalism, and other fields.

10. Advisory Board

10.1 Advisory Board - Membership

The Board of Counselors are:  
 Reilly Bowler (Simon family)  
 Nancy Chen (member at-large)  
 Ross Glickman (State Democratic Party appointment)  
 Austin Lane (*ex officio* member, SIU Chancellor)  
 Bill Norwood (member at-large)  
 Vicki Otten (member at-large)  
 Howard Peters (member at-large)  
 Matt Kupec (*ex officio* member, Vice Chancellor for Development & Alumni Relations)  
 Martin Simon (Simon family) - Chair of the Board  
 Lucy Sloan (member at-large)  
 John Trasviña (member at-large)  
 Lance Trover (State Republican Party appointment)  
 Paula Wolff (member at-large)  
 David Yepsen (previous past director)  
 Vacant (member at-large)  
 Vacant (member at-large)

10.2 Number of Meetings (In This Year) 1 meeting per year

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. The Simon Review (Published Papers)	3-4	2
2. Public Events (in-person)	6	1
3. Public Events (virtual)	24	33
4. Internships Filled	8	6
5. Graduate Fellowships funded/filled	2	0

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

We held over 30 virtual events in a wide variety of topics that were free and open to the public. These events included Understanding Our New World, Meet the Mayor, Illinois Authors and one Congressional Conversation.

We published two academic Simon Review papers covering the presidential and senatorial elections of 2020 and the St. Louis case of the death of Michael Brown which helped touch off the Black Lives Matter Movement.

We placed five interns in Springfield for the spring 2022 legislative session, plus has one intern serving in the Jackson County States Attorney's Office.

We completed the search for the Institute's associate director position in June 2022. The position had been vacant since January 2022.

Awarded the Jeanne Hurley Simon Memorial Scholarship, Barbara Brown Memorial Scholarship, Edwin D. Phillips Memorial Scholarship, Mike Lawrence Scholarship, and David Yepsen Director's Scholarship to SIU Students.

The Director, John T. Shaw; University Professor, Dr. Linda Baker; Visiting Professor, Dr. John S. Jackson; are frequently called on by local, state, and national media, both print and electronic, to comment on, and analyze a broad range of governmental, political, and public policy issues. In each of these cases, their affiliation with the Institute is prominently displayed.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The Paul Simon Public Policy Institute does not typically generate credit hours by offering formal classroom instruction, although this year our director taught a three-credit hour class on American Statesmanship in spring 2022. Our Visiting Professor, John S. Jackson, taught two "Learning in Retirement" courses through the SIU Scheduling and Conference Services office.

Virtually all facets of the Institute's mission and activities support Goals 1-4 of the Illinois Public Agenda either directly or indirectly. Our guiding principle is "the premise that rational scholarly analysis contributes to the making of more effective and more efficient public policy and contributes to elevating the level of public discourse in this country." We focus on public policy and encourage university students, faculty, and staff to be more engaged in the political discussion and analysis of public policy. We have organized and sponsored conferences on college affordability, the funding of K-12 education, the necessity of workforce development and the healthcare system in Illinois.

We also seek to engage and teach the mass media and K-12 teachers and students in that conversation. We value and emphasize the importance of public service. We especially seek to encourage university students to enter careers in public service and through our paid internships we get them invaluable on-the-job training. Many of our former interns are now pursuing productive careers in local, state, and national government jobs, as well as a variety of non-profit organizations.

We have launched three initiatives in our "Better Politics, Smarter Government" theme. Our Renewing Illinois summit initiative was launched with a conference in March 2019. We had to cancel our spring 2021 conference due to the pandemic. We hosted a conference in September 2022 outlining the theme of "One Illinois: Nobel Aspiration or Impossible Dream." We invited speakers to discuss statesmanship in Illinois and the United States.

Our published papers focus on significant issues of public policy and politics. The papers are used and cited across the state, nation, and globe. We constantly stress the need for higher

education and university-based research to make Illinois more competitive in an increasingly interdependent global economy.

11.4 Evidence of Support for Center/Institute Objectives

We continue to see donors supporting the Institute’s mission and objectives as we are remembered in donations throughout the year, annual giving gifts and planned estate gifts.

We continue to see attendance turnouts at our events. These audiences include students, faculty, and staff from SIU, area K-12 students and teachers, interested citizens and a range of media outlets. We ask our audience to complete surveys to continually tweak and adjust for future events.

Our *Simon Review* papers are widely downloaded. Through the Open SIU service at Morris Library, there have been thousands of downloads of these papers by users from across the nation and throughout the world since the series was started in 2004.

11.5 Evidence of Organizational Effectiveness

We continue to successfully place SIU undergraduate students in the state capitol in a variety of offices as interns during the spring legislative session. These interns are supervised by Dr. Linda Baker, and she teaches a colloquium course for the interns through the political science department.

Dr. Linda Baker taught a health policy course to fourth year SIU School of Medicine students in spring 2022.

We also continue to place Demuzio interns in local government offices in Southern Illinois. These interns are supervised by Dr. John Jackson.

12. Institutional Assessment

12.1	Date of Last Review	FY21
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended
12.3	Explanation	N/A

**RESOURCES: Paul Simon Public Policy Institute**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>
Revenues				
State Appropriations	378,775	385,327	417,094	384,451
Income Fund				
Grants & Contracts				
<b>Total Revenues</b>	<b>378,775</b>	<b>385,327</b>	<b>417,094</b>	<b>384,451</b>
Expenditures*				
Salaries-Staff/Faculty	344,098	376,803	383,876	355,661
Travel				369
Commodities		249	1091	1996
Contractual Services	108	2037	8627	9446
Telecommunications		644	3094	2421
<b>Total Expenditures</b>	<b>344,206</b>	<b>379,733</b>	<b>396,688</b>	<b>369,893</b>
<b>Revenue Minus Expenditures</b>	<b>34,569</b>	<b>5,594</b>	<b>20,406</b>	<b>14,558</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>
Faculty	.77	.77	1	1
Staff	3	4	4	2.75
<b>Total Staffing</b>	<b>3.77</b>	<b>4.77</b>	<b>5</b>	<b>3.75</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University School of Medicine
2.	Center/Institute	Simmons Cancer Institute at SIU
3.	Date	February 14 <sup>th</sup> , 2023
4.	Director	Aziz Khan, MD
4.1	Telephone	217-545-7969
4.2	E-mail	<a href="mailto:akhan@siumed.edu">akhan@siumed.edu</a>
5.	Year Established	Academic Year 2000
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Southern Illinois University School of Medicine
8.	Type	Activity (check all that apply)
	Instructional	X
	Research	X
	Public Service	X

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The Simmons Cancer Institute at SIU (SCI) is a multi-disciplinary cancer center based in Springfield, IL to serve the population of central and southern Illinois. SCI provides access to state-of-the-art treatment and promising new clinical trials to the residents of central and downstate Illinois. The Institute works collaboratively with local hospitals and other community providers in the region to share technology, broaden research, and raise treatment standards and expands the region's ability to attract research and programmatic funding that builds the infrastructure necessary for sophisticated research programs and excellent patient care. In addition to this, the Institute augments medical student, resident, fellow and graduate student training in cancer/oncology, and provides patient and physician education across the region.

SCI features a comprehensive approach to patient care organized around organ site care teams (such as that addressing colorectal cancer) which are designed to enhance effective, efficient treatment of the whole person and not just the disease. Modeled on best practices promoted by the National Cancer Institute, these care teams include physicians, nurses, psychologists, navigators, pharmacists and other specialists, such as pathologists and radiation oncologists, who work together to provide high-quality patient care and complementary therapies to address the patient's needs.

SCI provides a variety of cancer screenings working in partnership with other health care professionals and organizations. As an ongoing effort to raise awareness and prevention, SCI maintains a strong outreach and referral program, including patient education and health screenings in the community. Physicians and scientists perform cancer related discovery research, applied research and, increasingly, population health research. Cancer clinical trials are available at SCI through the National Community Oncology Research Program, pharmaceutical sponsors and the medical school's physicians' personal research.

The Simmons Cancer Institute is housed in a 63,000 square foot facility on the Springfield clinical campus at SIU that was funded in part through state-appropriated capital funds. This facility features an infusion center, nearly three dozen exam rooms, minor procedure facilities, the nationally accredited breast center through the National Accreditation Program for Breast Centers (NAPBC), nationally accredited oncology services through the Quality Oncology Practice Initiative (QOPI), retail pharmacy, as well as x-ray, ECG, and laboratory services.

### 9.2 Mission

To serve the people of central and southern Illinois by addressing their present and future cancer care needs through medical education, biomedical research, patient care, and community service.

### 9.3 Objectives

<b>Objective Number</b>	<b>Objective Description</b>
1	To markedly reduce the burden of cancer on patients, their families, and the community by using innovative strategies developed from collaborations with researchers and health care workers.

2	To advance knowledge about cancer awareness, prevention, early detection, care and treatment.
3	To provide preventative screenings to promote early detection and treatment.
4	To enhance a population science program in rural areas to assist with cancer prevention.
5	To provide the latest cutting-edge treatment and research that translates new scientific findings into therapies (i.e., bench-to-bedside) so as to improve care to patients regardless of their ability to pay.
6	To develop highly functioning Cancer Care Teams for all major cancers that employ a multidisciplinary approach to comprehensive patient care of the highest quality, and “cutting edge” treatments. Within each working group, establish a mature and relevant translational research program.
7	To develop strategies for pursuing available funding streams from the federal and state governments as well as opportunities for philanthropic donations.
8	To advance our hematology-oncology fellowship program to help address the national shortage of hematology–oncology physicians with a focus of local recruitment and retention.
9	To provide oral cancer treatment therapies through our retail pharmacy to assist with patient treatment and provide convenience for care.
10	To develop a Melanoma Center, complete with new clinic space, as well as collaborative efforts with dermatology, plastic surgery, surgical oncology, and medical oncology. Efforts include recruitment of a discovery scientist with a concentration in melanoma or immunology related research.

10. Advisory Board

10.1 Advisory Board - Membership

<p><u>SCI Steering Committee</u>: provides recommendations to the SCI Executive Director on matters concerning the goals and performance of the institute in accordance with its mission. FY2022 members were:</p> <ul style="list-style-type: none"> <li>• Aziz Khan, MD, Executive Director, Simmons Cancer Institute</li> <li>• Jerry Kruse, MD/MSPH, Dean and Provost, SIU School of Medicine; and CEO SIU Medicine</li> <li>• John Flack, MD, Professor and Chair, Internal Medicine, SIU School of Medicine</li> <li>• Michael Neumeister MD, Professor and Chair, Surgery, SIU School of Medicine</li> <li>• Laurent Brard, MD, Professor, Obstetrics and Gynecology, SIU School of Medicine</li> <li>• Don Torry, Associate Dean of Research, SIU School of Medicine</li> <li>• Charles Callahan, MD, President and CEO, Springfield Memorial Health</li> </ul>
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- Kevin England, Senior VP and Chief Administrative Officer, Springfield Memorial Health
- John Horvat, Associate Provost of Finance and Administration, SIU School of Medicine
- Mary Stewart, Interim Director SCI and COO SIU Medicine
- Amanda Hutton, Health Administrator III, Simmons Cancer Institute
- Mary Haley-Emery, Nurse Administrator, Simmons Cancer Institute

SCI Management Committee: established to oversee the strategy and direction of the institute. This committee reviews the SCI’s clinical, charitable, educational, research, and community service activities. In FY2022, the members were:

- Mary Stewart, Interim Director SCI and COO SIU Medicine
- Amanda Hutton, Health Administrator III, Simmons Cancer Institute
- Lori Barker, Senior Business Manager, Simmons Cancer Institute
- Aziz Khan, MD, Executive Director, Simmons Cancer Institute
- Mary Haley-Emery, Nurse Administrator, Simmons Cancer Institute
- Kathy Robinson, Director of Clinical Research, Simmons Cancer Institute
- Kissindra Moore, Administrative Aide, Simmons Cancer Institute

11.2 Number of Meetings (In This Year)      SCI Steering Committee – four (4) meetings in FY2022 (meetings are held quarterly)

SCI Management Committee – twenty-four (24) meetings in FY2022 (meetings are held semi-monthly)

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Total Patients Served by SCI – Total Patients Seen	23,000	20,584
2. Total New Patients Served by SCI – Total New Patients Seen	400	395
3. Total Infusion Patients Treated by SCI	7300	6,744
4. Clinical Trial Studies – Open Studies (NCORP Studies and SCI Clinical Trials)	125	137
5. Clinical Trial Participation – NCORP studies and SCI Clinical Trials)	164	187
6. Cancer-Related Research – Funded Discovery Science and Translational Projects and Non-Clinical Trial IRB regulated Studies.	20	5
7. Published Articles – Number	50	28
8. Patient/Community Education Programs – Attendees	2,508	**
9. Outreach Programs/Screenings – Attendees	2606	**

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, and public service activities.

\*\* Due to COVID, many of our outreach and community programs were canceled.

# Due to COVID many labs were not able to generate data for grant submission and funding was less prevalent due to cancelled or delayed fundraising

### 11.2 Major Accomplishments (In This Year)

In FY2022, major accomplishments of the Simmons Cancer Institute included the following:

- SCI's retail pharmacy is doing very well. We hired an additional Pharmacy Supervisor in May, 2022 and have increased the number of prescriptions being filled.
- Hematology/Oncology Fellowship held its first graduation since the program began in 2019. SCI successfully recruited 2 additional fellows again in FY2022. The number of fellows being trained at SCI remains at 6.
- SCI held its fifth annual combined Summer Internship Presentation and Donor Appreciation event. Donors who contribute to Denim & Diamonds fund the paid summer internship for five college undergraduate students who are interested in cancer research. In FY22 four of the students were from the Springfield area and one was from Carbondale. Each intern gave a 15minute presentation of their research project. The event was attended by faculty, researchers, intern mentors, family members and donors.
- The Side by Side exercise program was held virtually for cancer patients, survivors and caregivers. Side by Side is a grant funded exercise program that is offered regardless of where treatment is being received.
- SCI continued to participate in Mammogram Monday's outreach services that include Springfield, Lincoln, Taylorville and Hillsboro locations. Six hospitals participate in Mammogram Mondays.
- Dr. Fawwad Zaidi joined the Division of Hematology/Oncology at SCI in July 2022.
- SCI began to again offer cancer screenings post pandemic.
- SCI experienced a large increase in patient referrals.
- We were able to hire clinical staff during a time of critical staff shortages nationwide.

These accomplishments were in addition to ongoing patient care, research, educational, and outreach efforts performed by SCI in FY2022.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The Simmons Cancer Institute directly supports key priorities of the State of Illinois, Southern Illinois University, and SIU School of Medicine, particularly those associated with community service as expressed through patient care and outreach, workforce development, collaboration with community partners, and research and scholarship. SCI's educational and research activities support the Illinois Public Agenda goal calling for educational, research, and innovation assets to be used in advancing the economic needs of the state and region. The institute's grant funded research and resident education programs are examples. Southern Illinois University system priorities, as outlined by the SIU Board of Trustees, include the call for innovation, the addressing of health care needs in the region, and the formation of partnerships with public and private entities to increase the university's outreach into the community. SCI's patient care, clinical trials, and community education and screening programs advance these priorities. SIU Carbondale's strategic plan calls for research, scholarly and creative activities that benefit the community. SCI's basic and applied research programs and its emerging work in population health science research directly support these priorities. SIU School of Medicine's strategic plan calls for clinical practice, workforce development, research, and professional engagement. SCI's clinical practice, research, and community engagement activities support the school's priorities as well.

### 11.4 Evidence of Support for Center/Institute Objectives

In FY2022, the Simmons Cancer Institute advanced its primary objectives of becoming the premier comprehensive cancer center for rural Illinois; enhancing research regarding the causes and treatments of cancer; and partnering with other health care, community, and educational

organizations to reduce the burden of cancer on patients, their families, and the community. Significant achievements in this program year include the following:

- Provided high-quality direct patient care to cancer patients.
- SCI awarded six (5) Summer Internships to local college students to work with research mentors.
- Two (2) Team Science Grants Awarded.
- Partnered with the SIU Office of Population Science and Policy to further oncology-based population research. Two faculty hired with funds to work directly in cancer related fields. We hold monthly meetings to further develop population based grants and programs in cancer.
- Continued partnerships and relationships with local communities to promote health fairs, cancer screenings, and disease management to address high-risk populations in central and southern Illinois.
- In 2022 Clinical Trials office continues to expanded services to include multi-center clinical trial management.

11.5 Evidence of Organizational Effectiveness

The Simmons Cancer Institute is effective as an organization. As noted in the university’s most recent program review, the institute has established excellent patient care, research, and community outreach programs which support the priorities of the state, university, and medical school. The SCI has expanded grant funding and maintained its state support during difficult economic times. This is evidence of its ability to attract key resources and demonstrates support for the institute by key constituencies. The SCI is meeting its organizational objectives and the expectations of the community, university, and state; it is positioned to prosper in the future.

12. Institutional Assessment

12.1	Date of Last Review	2018 – Self Study
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended
12.3	Explanation	N/A

**RESOURCES: Simmons Cancer Institute at SIU**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>
Revenues						
State Appropriations <sup>1</sup>	2,017,860	1,987,845	1,973,519	\$1,955,817	1,965,919	2,110,528
Income Fund	0	0	0	0	0	0
Grants & Contracts	0	27,527	26,169	26,551	24,192	13,822
Grants & Contracts-Other <sup>2</sup>	353,675	199,670	248,675	294,457	295,427	247,977
<b>Total Revenues</b>	<b>2,371,535</b>	<b>2,212,042</b>	<b>2,248,363</b>	<b>2,276,825</b>	<b>2,285,538</b>	<b>2,372,327</b>
Expenditures						
Salaries <sup>3</sup>	1,218,060	1,263,717	1,377,990	\$1,314,119	1,555,044	1,651,033
Travel	0	0	473	2,292	1,004	2,773
Equipment	22,705	53,818	49,782	73,527	23,658	15,881
Commodities	5,713	4,519	8,100	14,853	12,730	76,098
Contractual Services <sup>4</sup>	2217,119	222,594	224,506	329,325	354,289	365,055
Telecommunications	28,127	35,106	30,364	23,473	23,863	32,643
Other <sup>5</sup>	17,983	2,864	15,503	16,270	21,573	20,670
<b>Total Expenditures</b>	<b>1,509,707</b>	<b>1,582,618</b>	<b>1,706,718</b>	<b>\$1,773,859</b>	<b>1,992,161</b>	<b>2,164,153</b>
Revenue Minus Expenditures	861,828	629,424	541,645	\$502,966	293,937	208,174

1. State Appropriations include program operating fund first appropriated by the State of Illinois in FY2002 as well as the impact of state budget changes and internal reallocations since that time.
2. Grants and Contracts-Other includes revenue from SIU Foundation grant to SIU School of Medicine for SCI.
3. Contractual Services includes medical services provided to clinical trials patients, external consultant fees, and bond repayment.
4. Other includes indirect costs from clinical trial expenses.

<b>Staffing (Full Time Equivalent)<sup>1</sup></b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>
Faculty	3.44	4.32	4.076	4.3825	5.025	8.09
Staff <sup>2</sup>	44.6	60.25	55	55	50	11.53
<b>Total Staffing</b>	<b>48.04</b>	<b>64.57</b>	<b>59.076</b>	<b>59.3825</b>	<b>55.025</b>	<b>19.62</b>

- 1 Staffing (FTE) includes FTEs of those faculty and staff receiving direct salary support from SCI.
- 2 Includes 501/504 BPs

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	STEM Education Research Center
3.	Date	March 13, 2023
4.	Director	Harvey Henson
4.1	Telephone	618-453-4214
4.2	E-mail	<a href="mailto:henson@siu.edu">henson@siu.edu</a>
5.	Year Established	2019 (September 10, 2019)
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Office of the Vice Chancellor for Research (as of 03/01/2021)
8.	Type	Activity (check all that apply)
	Instructional	
	Research	X
	Public Service	X

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The STEM Education Research Center (SERC) at Southern Illinois University at Carbondale (SIU) is a research and public service unit of Science, Technology, Engineering, and Mathematics (STEM). SERC obtained temporary status on July 1, 2014 and was granted permanent status on September 10, 2019 by the Illinois Board of Higher Education. SERC is a diverse community of faculty, staff, educators, and industry partners working together to prepare the next generation of STEM educators, researchers and professionals. SERC addresses critical issues in STEM education at local, state and national levels through multidisciplinary and integrative strategies in research, education and service. SERC builds regional and state-wide collaborations with other institutions to strategically advance STEM literacy and learning. SERC creates new programs and develops external funding initiatives to support STEM education research and service, to provide professional development for PreK-12 educators, and to improve students' preparation and competency in STEM.

### 9.2 Mission

The STEM Education Research Center seeks to advance STEM literacy at local, state, and national levels through interdisciplinary and integrative strategies in research, teaching, and service and to collaboratively prepare the next generation of STEM educators, researchers, and professionals.

### 9.3 Objectives

1. Develop STEM education and research programs at SIU and support existing programs by obtaining grant and contract funding.
2. Provide professional development, curriculum development, workshops and support for K-12 teachers and administrators.
3. Research and facilitate strategies of teaching aligned to the Next Generation Science Standards and Common Core State Standards for improved student and public literacy.
4. Build partnerships with local, state and national stakeholders to advance STEM teaching, learning and research.
5. Build partnerships to improve and implement the Illinois Science Assessment and other state assessments.
6. Collaborate with the SIU community to provide students excellent preparation for advanced programs and professions in STEM.

10. Advisory Board

10.1 Advisory Board – Membership

<p><b>Internal Board of Advisors</b>  Lingguo Bu, Professor, Math Education, School of Education  Sue Rimmer, Professor Emerita, School of Earth Systems and Sustainability  Bruce DeRuntz, Professor, School of Applied Engineering and Technology  Justin McDaniel, Associate Professor, School of Human Sciences</p> <p><b>External Board of Advisors</b>  Chris Walls, Director, The Science Center, Carbondale, Illinois  Chris Midden, Science Teacher, Unity Point School, Carbondale, Illinois  Daniel Booth, Superintendent, Carbondale Community HS District 165, Carbondale, Illinois  Tina Carpenter, CEO, Boys and Girls Club, Carbondale, Illinois</p>
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10.2 Number of Meetings (In This Year) 1

11. Annual Performance

11.1 Performance Measures \*

Measure		Target for Year	Results in Year
1.	Submit external grant and contract proposals	Submit 3-4 proposals	Exceeded target; 13 proposals were submitted, 7 were funded, 1 is still pending, and 2 prior grants continued
2.	External Funding	\$1,000,000 in funding	Exceeded target funding with \$2,841,104 in FY22
3.	Professional conference presentations by staff and faculty	5 national presentations and 5 regional presentations	Exceeded; 10 national conference presentations 5 regional and local conference presentations
4.	Publications in peer-reviewed journals by staff and faculty	3-4 articles	Exceeded target; 9 published articles; 1 book; 2 book chapters
5.	Coordinate new and existing outreach activities	Add 1 new program	Completed; inaugural AMO implemented fall 2021
6.	Create professional development opportunities for K-12 educators	Expand existing programs to impact 100 additional teachers	Completed; Item development for the Illinois Science Assessment (ISA) project

Measure		Target for Year	Results in Year
			included approximately 125 teachers, and hand scoring the ISA involved 200 teachers
7.	Obtain physical space for the STEM Education Research Center	Submit request to Provost and Space Committee	Space Allocation Request submitted February 25, 2021; resubmitted May 10, 2022; Decision tabled until completion of academic reorganization and new Deans hired; Pulliam Hall second floor space requested
8.	External and Internal Advisory Boards	Replace board members and meet more frequently	Lost one member on each board; Internal board met this year

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

## 11.2 Major Accomplishments (In FY 2022)

The STEM Education Research Center (SERC) submitted 13 grant and contract proposals in FY 2022. Seven proposals were funded for \$13,587,593, 1 is still pending, and 2 prior grants continued. Dr. Henson is Principal Investigator (PI) on 8 proposals of which 5 were funded and 1 is pending. Henson serves as Co-PI on 1 funded proposal and evaluator on 1 funded proposal. One of the collaborative proposals, *Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists*, was awarded \$1,333,365 for the NSF STEM scholarships (S-STEM) program. The new program will recruit transfer students and provide 80 scholarships of up to \$10,000/yr. Multiple S-STEM proposals were submitted by faculty who participated in NSF S-STEM grant writing workshops presented by SERC faculty in partnership with the Office of Vice Chancellor of Research and the Office of Sponsored Projects Administration. Other S-STEM proposals are planned for resubmission.

In March 17-18, 2022 the SERC co-sponsored and hosted the 44th annual Illinois Junior Science and Humanities Symposium (IJSHS) for high school students to present research at SIU and compete for an invite to the National competition. This was the first post-COVID regional event. Qualified participants included 5 Illinois high schools; 29 students (9 presenters, 20 guests), and 10 teachers and parents. Two of our regional finalists placed at the National symposium. One placed third in the poster session for the Mathematics and Computer Science section. The other placed second in the oral presentation for Engineering & Technology. The IJSHS program promotes STEM research among 9-12 grade students across Illinois (excluding Cook County which has a separate symposium) and introduces STEM academic programs and career opportunities with support. Support and scholarships are provided by the Army, Navy and Air



Force in partnership with the National Science Teaching Association, and SIU scholarships are awarded by the College of Agricultural, Life and Physical Sciences.

The SERC was awarded a \$6,033,245 contract for FY 2023 and FY 2024 with the Illinois State Board of Education to develop, implement, score, and report the Illinois Science Assessment (ISA). Each spring the ISA tests science learning for approximately 425,000 students across Illinois in grades 5, 8, and 11.

The SERC faculty and students, in partnership with SIU alumnus Mr. Henry Ong and the Scholastic Trust Singapore, LLC, developed the American Mathematics Olympiad (AMO) for students in grades 2-11. Hundreds of math problems were developed and the inaugural AMO competition was implemented in Oct-Nov of 2021 on a global scale. The AMO competition included 20,000 students from 34 countries including the U.S., and 1,132 students competed from local schools. For AMO 2021 U.S. participants received 90 gold awards; 91 silver awards; 232 bronze awards; and 144 honorable mentions. Two Carbondale high school students placed 24<sup>th</sup> and 25<sup>th</sup> in the 9<sup>th</sup> grade global competition.

The SERC, School of Education and Touch of Nature Outdoor Education Center (TNOEC) were invited to partner with the CLEAN SoIL (Clean Southern Illinois) initiative, a non-profit organization with the goal to eliminate litter in southern Illinois through education, community action, and aggressive marketing. The founders of CLEAN SoIL are Dr. Glenn Poshard, a former U.S. Congressman and past President of SIU, and Les Winkler, Southern Illinoisan Outdoors writer. CLEAN Soil provided a graduate assistantship to SIU, and SERC staff and faculty worked with SOE Dean Cecil Smith and pre-service teacher candidates to develop new curriculum, learning resources, and a website (<https://stemedresearch.siu.edu/clean-soil/>).

Dr. Lingguo Bu increased development of STEM 3D designs for math and STEM education in the 3D Printing Lab supported by SERC. A total of 270 designs are available online for educators at <https://www.thingiverse.com/lgbu/designs>.

The STEM Education Research Center participated in The Great ShakeOut and promoted earthquake awareness and safety to students on campus, local schools, and southern Illinois residents in Oct 2021. The SERC team directed by Harvey Henson continued the earthquake awareness and preparedness program and was featured in 2 radio interviews.

“The Great American Shakeout: Preparing Southern Illinois for the earthquake threat”  
WJPF Morning Newswatch, October 20, 2021, <https://www.wjpf.com/episode/newsradio-wjpf-interview-with-harvey-henson-october-20-2021/>

“February is Earthquake Awareness Month in the Central U.S.”  
WJPF Morning Newswatch, February 9, 2022, <https://www.wjpf.com/episode/newsradio-wjpf-interview-with-harvey-henson-february-9-2022/>

11.3 Evidence of Support for IBHE “A Thriving Illinois,” SIU System, and SIU Campus Strategic Planning

**Support for SIU Campus Priorities**

*“SIU embraces a unique tradition of access and opportunity, inclusive excellence, innovation in research and creativity, and outstanding teaching focused on nurturing student success. As a nationally ranked public research university and regional economic catalyst, we create and exchange knowledge to shape future leaders, improve our communities, and transform lives.”*  
(source: <https://imagine2030.siu.edu/mission-statement.php>)

SIU led by Chancellor Austin Lane has a new strategic plan, **Imagine 2030** (<https://imagine2030.siu.edu/>), which includes *five strategic pillars* to guide the SIU campus community and our partners in identifying areas to prioritize in planning and funding. These five themes are:

**Student Success and Engagement:** *What does student success mean to us, and how can we improve our metrics for success and engagement among the student body?*

**Diversity, Equity and Inclusion:** *How can we become a more inclusive and welcoming institution that values and respects individual differences?*

**Branding and Partnerships:** *How can we elevate awareness and regard for the SIU Carbondale brand, and build strong partnerships with other organizations in the region, state, and nation?*

**Research and Innovation:** *Where can we be even better in our research capabilities, and on what new innovations will SIU Carbondale lead the way?*

**Sustainability:** *In what ways can SIU Carbondale build on its legacy of sustainability and position itself as a leading voice for sustainability in institutions of higher learning?*

The SERC goals are aligned to the objectives and key initiatives outlined as part of these five strategies of the new SIU strategic plan, **Imagine 2030** (<https://imagine2030.siu.edu/>). The following priorities are most aligned with the STEM Education Research Center (SERC) mission and goals as described in the following outcomes and contributions.

**Student Success and Engagement:** Universities are increasingly expected to provide students with additional (co-curricular) experiences and opportunities that help them develop skills to better prepare for their chosen careers. These professional development and supplemental learning experiences are important to students’ success and are precisely aligned to the SIU Mission and new strategic plan as well as the SERC goals outlined above. During FY 2022 the SERC provided financial support and work experiences in STEM research, service, outreach, and education for 7 undergraduate student workers, 7 undergraduate volunteers, and 6 graduate students within the Center.

Faculty and staff collaborated to obtain external contracts and grants (*see Performance Measures 1 & 2 in section 11.1, and Objective 1. in section 11.4*) that provided undergraduate student scholarships and support through research and professional development projects such as the NSF S-STEM program. SERC colleagues continued to seek additional external funding for other STEM scholarships and internships in academic units collaborating with SERC. These grant-funded opportunities provided professional development, hands-on learning, and career readiness, and essential financial support for first-generation and disadvantaged students. Support from SERC programs and projects

increased recruitment, retention, graduation, and career success of STEM students across four colleges at SIU.

**Research and Innovation:** During FY 2022, the SERC successfully obtained significant external funding of \$13,587,593 for STEM education service, training, and research. The SERC used these grants and contracts and also invested the indirect cost recovery funds to advance the research mission, pay for the Center's operational costs, and provide service at SIU, Illinois schools, and other community partners. Specifically, SERC overhead indirect cost recovery funds from these grants and contracts were used to support student recruitment, retention, and degree completion and to provide faculty, staff and students funding for research supplies, equipment, and travel.

The SERC consulted with SIU faculty and instructors to improve their teaching, purchased instructional materials and resources, and provided instructional support for science content and methods courses for pre-service teachers. Summer internships and undergraduate research experiences provided undergraduates opportunities to gain work experience while in college. The SERC aims to develop a SIU Faculty Associates (or perhaps a Faculty Fellowship) program for faculty professional development to enable faculty release time for collaborating on grants/contract proposal development or improving undergraduate education at SIU by developing and testing innovative approaches to instruction, which could improve student retention.

**Diversity, Equity and Inclusion:** The SERC is a collaboration of faculty, staff, and students working together to strategically advance STEM learning for all students and peoples. Therefore, our collaboration is diverse, equitable and inclusive. SERC intentionally seeks to recruit diverse talent and to especially include individuals from underserved groups. Our staffing includes minorities, women, and persons with disabilities at each level of operation. We seek the same commitment to diversity in the leadership of our partnerships and collaborations.

The SERC successfully supported and collaborated with faculty on grant applications which promote interdisciplinary research projects targeting underrepresented groups. We seek partnerships with private, state, and federal agencies and funding opportunities with high priority to increase diverse participation and to promote inclusion and equity. The SERC faculty and staff were PI or Co-PI on multiple contract and grant proposals, several of which were funded (see section 11.4). The SERC serves as partner and mentor for STEM faculty seeking proposal funding from the NSF and other federal, state and private agencies, and thereby increases competitiveness of proposals submitted. SERC presented and published research in collaboration with faculty, staff and students, and the Center networked faculty with local education agencies, youth organizations, community partners and the general public for opportunities of service and community engagement. SERC support, training, and mentoring of diverse graduate and undergraduate students was noteworthy in FY 2022.

**Branding and Partnerships:** The SERC continued to develop new and existing partnerships between campus leaders and programs, external funding agencies, and key alumni. We successfully established strong connections with strategic partners in the region, state, nation, and internationally to increase student recruitment and success at SIU and to provide support for University and SERC goals.

For example, SERC partnered with the SIU Center for International Education (CIE), the SIU Foundation, and SIU alumnus Mr. Henry Ong, President of the Scholastic Trust Singapore,

LLC (STS), to create the STEM Olympiad Initiative. The partnership with STS will build STEM competitions in the U.S. and across 35 countries around the globe to increase student learning and engagement in STEM. Mr. Ong and STS granted \$110,000 in FY 2021 and \$30,000 in FY 2022 to the SERC to build and implement the first American Mathematics Olympiad (AMO) in Oct-Nov 2021 which included 20,000 global competitors in grades 2-12. Approximately 1,132 students in Illinois participated in the inaugural AMO and 413 of them won medals (90 gold, 91 silver and 232 bronze) and 144 received honorable mention. STS has pledged a large donation to SIU in support of a new international scholars program. Through this new partnership SIU is being promoted to students, parents, teachers, and leaders regionally and globally, and revenue generated from this new partnership is supporting regional students and schools as well as generating new scholarships for international students to enroll at SIU.

The SERC continues to serve as an outreach provider to PreK-12 schools and a partner to teachers and administrators. Through the Illinois Science Assessment (ISA) partnership with the Illinois State Board of Education (ISBE) over 400 teachers statewide were supported professionally and financially in FY 2022. Faculty and staff collaborating in the SERC continued to develop partnerships with local education agencies and community organizations. In addition to creating and coordinating outreach programs to the regional community, the Center provided teacher professional development through an assortment of workshops and meetings, and facilitated equipment loans through the Educational Resource Area. Our undergraduate student ambassadors and graduate students supervised by faculty and staff also participated in these service activities and helped conduct outreach in the community during new student recruitment events, campus visits and tours, off-campus showcases, conferences, and STEM nights at schools. The SERC long term goals are to expand the educational loaner program for regional educators and to increase the educational materials currently available through the Educational Resource Area. However, SERC will need support, space and facilities to accomplish this.

**Sustainability:** In FY 2022 the SERC helped advance the university sustainability goal by establishing an interdisciplinary team of scientists, educators, and administrators to develop an earth science and sustainability education and scholarship program. The team submitted an S-STEM grant proposal, *Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists*, which after two attempts was funded by the NSF for \$1.33M (see <https://news.siu.edu/2022/08/082422-SIU-research-team-wins-1.33M-NSF-grant-to-train-sustainability-focused-geoscientists.php>). This new program will recruit transfer students and provide 80 scholarships up to \$10,000 per year. The leadership team members are Dr. Ruopu Li (PI), Dr. Harvey Henson (SERC Interim Director), Dr. Leslie Durham, and Dr. Justin Schoof (Director) who are faculty in the School of Earth Systems & Sustainability and Wendell Williams, Associate Vice Chancellor for Enrollment Management.

CLEAN SoIL is a non-profit organization striving to eliminate litter in southern Illinois through education, community action, and aggressive marketing. CLEAN SoIL founders Dr. Glenn Poshard, a past President of SIU and former U.S. Congressman, and Les Winkler, Southern Illinoisan Outdoors writer, invited SIU to join their mission to clean up southern Illinois. The SERC, School of Education (SOE) and Touch of Nature Outdoor Education Center (TNOEC) joined efforts to answer the call. Dr. Henson was invited to serve on the board of directors as the Education Committee Chair. CLEAN Soil is providing support to SIU

in the form of a graduate assistantship to help with the education goals. Henson supervises the graduate student and the curriculum development team. SERC staff and faculty are working with Dean Cecil Smith, faculty, and preservice teacher candidates in the SOE to develop new curriculum, learning resources, and a website (<https://stemedresearch.siu.edu/clean-soil/>).

### **Support for IBHE “A Thriving Illinois” Strategic Plan Goals and Core Principals**

#### **Students are our priority.**

The SERC is directly addressing the STEM workforce pipeline in Illinois by providing instructional supports to improve student outcomes at the PreK-12, undergraduate, and graduate student levels. As stated earlier, the SERC has established partnerships with numerous PreK-12 teachers and administrators in public schools, and collaborations with STEM faculty and staff on the SIU campus are highly successful, funded, and productive. Additionally, SERC has created other regional, state, national, and international projects/programs to increase STEM education and literacy. Through these partnerships and collaborations the SERC continues to improve academic preparation and increase motivation in STEM so that Illinois students successfully transition from high school to higher education, and into STEM careers.

The Illinois Science Assessment (ISA) partnership mentioned earlier is an essential assessment program conducted by the Illinois State Board of Education (ISBE) and required by the federal government to determine science learning among every Illinois student in grades 5, 8, and 11. The SIU SERC is the principal ISBE partner to accomplish this task with support through a large multi-year contract since March 2017. This partnership has fulfilled student assessment goals and provided students, parents, educators, the ISBE, and the federal government with impressive results and a large scale assessment aligned to the Illinois Learning Standards for Science based upon the Next Generation Science Standards (NGSS). The SIU assessment team of experts has built an equitable and inclusive large-scale, summative assessment that promotes increased STEM teaching and learning.

The SERC provides student work, scholarships, waivers, and graduate assistantships to support students’ academic success. For example, *Pathways to STEM Leadership*, created by PI Dr. Bruce DeRuntz and Co-PI Dr. Harvey Henson continued building STEM leaders in FY 2022. This scholarship program is funded by the NSF S-STEM program to support academically talented, low income, and underrepresented students majoring in STEM. The scholarship satisfies the students’ unmet financial need up to \$10,000 per year. Student participation in the leadership program is diverse compared to the overall university population. Student success measures for the STEM leadership program are much greater with a 96% graduation rate and a 94% STEM career placement record. The *Pathways to STEM Leadership* training and co-curricular learning are creating next generation critical leaders in STEM.

#### **Equity drives our system.**

As a service unit, SERC is committed to creating partnerships and programs which provide support and opportunity, such as scholarships, co-curricular experiences, internships, graduate assistantships, student work, teacher fellowships, independent contractor work, and tuition waivers, for diverse learners and educators. The SERC understands the

tremendous financial challenges students, parents, teachers, and administrators face to participate and to accomplish academic and scholarly success. This is especially challenging among underserved students of color, first-generation college students, low-income students, adult learners, rural students, veterans, and others. The SERC collaborators and researchers are working hard to obtain support funding through external grant and contract awards and through regional community partners.

The SERC interim director Harvey Henson is a Co-PI on a NSF S-STEM grant and the lead on other grants currently funded or pending approval (*see section 11.4*). These grants provide millions of dollars to support student scholarships, PreK-12 teacher fellowships, waivers and supplemental salary, and academic program improvements across the region and state. Additionally, the new partnership with STS in Singapore is providing STEM engagement, scholastic equity, and scholarship opportunities for students and families globally.

### **Higher education is a public good that enriches life.**

The SERC provides services to the community, supports and participates in multiple events and activities on and off campus, strives to enhance student learning and success, and generates innovation and new knowledge through research. The Center provides financial support to the Regional and State Science Fair, the Science in the South regional teacher conference, the Teen Science Café, the Illinois Junior Science and Humanities Symposium, student scholarships and tuition waivers, teacher supplemental salary, undergraduate and graduate student research support, and much more each year. The SERC faculty, staff and students use their expertise to contribute richly to the community, our schools, and civic partners.

As noted earlier, the SERC, School of Education (SOE) and Touch of Nature Outdoor Education Center (TNOEC) joined efforts to support the CLEAN SoIL (Clean Southern Illinois) initiative. CLEAN SoIL is a non-profit organization striving to eliminate litter in southern Illinois through education, community action, and aggressive marketing. CLEAN SoIL founders are Dr. Glenn Poshard, past President of SIU and former U.S. Congressman, and Les Winkler, Southern Illinoisan Outdoors writer. CLEAN Soil is providing support to SIU in the form of a graduate assistantship. SERC staff and faculty are working with Dean Cecil Smith, faculty, and pre-service teacher candidates in the SOE to develop new curriculum, learning resources, and a website (<https://stemedresearch.siu.edu/clean-soil/>). Dr. Henson serves on the board as the Education Committee Chair, supervises graduate students, and leads the curriculum development team.

The SERC supports evidence-based, hands-on education and professional development for in-service and future science and math teachers in partnership with the School of Education (SOE) and College of Agricultural, Life, and Physical Sciences (CALPS) at SIU. Beyond the SOE and CALPS, SERC faculty and staff are collaborating with faculty across SIU. Collaboration expanded in FY 2022 to include the College of Health and Human Sciences, College of Engineering, and the Center for International Education (CIE). Additional collaborations are planned and underway with colleagues in other STEM schools and colleges that will increase diversity of student enrollment and build opportunities to foster a more qualified workforce of STEM educators and professionals in Illinois and beyond.

**Our diverse institutions work in concert.**

Again in FY 2022, the ISA project with the Illinois State Board of Education was administered by SERC to recruit, train, and employ as independent contractors nearly 400 STEM educators and professionals from across Illinois schools. Education and STEM experts from 7 higher education institutions including, Lewis University, University of Illinois Chicago, Illinois State University, Southern Illinois University Edwardsville, McKendry University, University of Illinois Champaign-Urbana, and Southern Illinois University Carbondale worked together on the ISA during FY 2021 and FY 2022 to develop large-scale science assessment items.

The SERC continued exploring and developing partnerships to promote student success in STEM and submitted proposals to increase funding for new research and discoveries which stimulate and strengthen local, region and state economies. SIU SERC collaborated with SIUE and 8 other universities and community colleges in Illinois to expand a FLIP classroom teaching model for STEM learning.

A significant amount of new revenue was obtained by STEM faculty and staff at SIU. Collaboration across the SIU campus and others has been highly successful in acquiring competitive external funding for research, service, and educational program development (see section 11.4). These funds provided support for faculty, staff and students to work collaboratively to accomplish the goals of the SERC, SIU and the state of Illinois.

11.4 Evidence of Support for Center/Institute Objectives

**Objective 1.** *Develop STEM education and research programs at SIU and support existing programs by obtaining grant and contract funding.*

The SERC faculty and staff collaborated to obtain external funding to advance STEM education and research at SIU. Center faculty and staff served as principal investigator (PI) or Co-PI on 13 grant proposals submitted in FY 2022. Seven of these proposals totaling \$13,587,593 were awarded and will be implemented as noted below.

**Grant Proposals Submitted During FY 2022 and Funded**

1. *“Einstein's Incredible Universe: A Media Project Engaging Girls in Astrophysics during the 2024 Total Solar Eclipse”*  
*PI: Harvey Henson Co-PI: Robert Baer Agency: Cosmic Pictures Distribution, LLC - NSF AISL Subaward Dates: 01/01/23 - 9/30/24 (\$268,008)*
2. *“Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists”*  
*PI: Ruopu Li Co-PIs: Harvey Henson, Leslie Durham, Justin Schoof & Wendell Williams Agency: NSF S-STEM Dates: 1/01/23 - 12/31/27 (\$1,333,365)*
3. *“Illinois Junior Science and Humanities Symposium”*  
*PI: Harvey Henson Co-PIs: Duane Lickteig & Angela Box Agency: National Science Teaching Association Dates: 10/01/22 - 06/30/23 (\$17,665)*

4. *"Illinois Science Assessment Partnership – Item Development & Scoring"*  
*PI: Harvey Henson Agency: ISBE Dates: 07/01/22 - 09/30/23 (\$6,033,245)*
5. *"American Mathematics Olympiad (AMO) Program and Item Development"*  
*PI: Harvey Henson (SIU Foundation)*  
*Agency: Scholastic Trust Singapore (Donation) Dates: 07/01/21 - 06/30/22 (\$30,000)*
6. *"Special Education Behavior Assessment Training Project"*  
*PI: Harvey Henson Co-PIs: Daniel Brown, Deborah Bruns, Louise Yoho, Justin McDaniel, & Peter Nelson*  
*Agency: Illinois State Board of Education Dates: 6/08/22 - 6/30/24 (\$5,841,527)*
7. *"Reducing, Interrupting, & Preventing Violence in Rural Illinois Delta Region: Phase 1"*  
*PI: Tammy Kochel Co-PIs: Justin McDaniel, Harvey Henson, Sarah Buila, Paul Brinker & Matthew West*  
*Agency: Carbondale City Council Dates: 4/01/22 - 8/15/22 (\$64,391)*

**Grant Proposals Submitted During FY 2022 and Pending**

1. *"Solar STEAM Eclipse Initiative"*  
*PI: Harvey Henson Co-Is: Robert Baer, Justin McDaniel, Corrine Brevik, Blair Allen & Michelle Nichols Agency: NASA (Invited) Dates: 4/01/23 - 12/31/25 (\$3,987,178)*

**Grant Proposals Submitted During FY 2022 and Not Funded**

1. *"Collaborative Research: Developing STEM Education Reform Leaders through a Multidisciplinary and Cross-Institutional Community of Transformation"*  
*PI: Henson, Harvey Co-PIs: Kevin Smith, Lori Armstrong, Senetta Bancroft, Mark Byrd*  
*Agency: NSF IUSE Dates: 5/16/2023 – 5/15/2027 (\$380,647)*
2. *"BCSER: Rural Veteran Personality and the Interference Preservation Hypothesis"*  
*PI: Justin McDaniel Co-PIs: Harvey Henson & Yvonne Hunter-Johnson*  
*Agency: NSF Dates: 11/14/22 - 11/13/25 (\$264,441)*
3. *"Rural Illinois Naval Pipeline"*  
*PI: Justin McDaniel Co-PIs: Harvey Henson, David Gilbert, Sean Quisenberry & Paul Frazier*  
*Agency: Department of Defense (Office Naval Research) Dates: 3/1/23 - 2/29/24 (\$100,000)*
4. *"KIDS Coaching and Training Project - 23-586SBE-FINAN-B-31264"*  
*PI: Harvey Henson Co-PIs: Stacy Thompson, Justin McDaniel & Daniel Brown*  
*Agency: Illinois State Board of Education Dates: 9/1/22 - 6/30/25 (\$2,597,102)*
5. *"High Impact Tutoring for Non-Public Schools"*  
*PI: Henson, Harvey Co-PIs: Justin McDaniel & Daniel Brown*  
*Agency: Illinois State Board of Education Dates: 2/01/22 - 6/30/23 (\$21,991,780)*



### **Grant Proposals (Funded) Continuing During FY 2022**

1. *"Illinois Junior Science and Humanities Symposium"*  
PI: Harvey Henson Co-PIs: Duane Lickteig & Angela Box  
Agency: National Science Teaching Association Dates: 10/01/21 - 07/30/22 (\$14,110)
2. *"Pathways to STEM Leadership Careers"*  
PI: Bruce DeRuntz Co-PIs: Harvey Henson, Julie Dunston & Justin McDaniels  
Agency: NSF Scholarships in STEM Dates: 09/15/16 - 08/31/21 (\$999,994)

In addition to the direct external support for the funded programs listed above, these contracts and grants generated indirect cost recovery funds for the university and the SERC. These funds were used for the Center operational costs and to support STEM faculty, staff, students and other programs.

For example, Harvey Henson, the SERC interim director, served as the lead PI for the *Illinois Junior Science and Humanities Symposium* (IJSHS) and SERC provided matching funds and other staff provided in-kind effort for this program. The SERC also provided a teacher cash award and assisted with travel to the National competition. The IJSHS program is a tri-service – U.S. Army, Navy, and Air Force – sponsored STEM competition coordinated through the National Science Teaching Association to promote original STEM research and learning at the high school level, recognize outstanding student achievement, and award student scholarships. The SERC also assisted with recruitment, organization, and judging for the symposium.

The *Pathways to STEM Leadership* project, funded by the National Science Foundation (NSF), is researching and expanding the Leadership Development Program directed by Dr. Bruce DeRuntz by providing scholarships to low-income, underserved STEM majors. This highly effective program includes STEM faculty and scholars from multiple programs across SIU and is focused on developing STEM leaders using peer mentoring and co-curricular activities. The SERC employs some of these students and support is given to sponsor student leadership team projects. A multiyear, multi-institutional collaborative proposal with lead PI Dr. Bruce DeRuntz to research implementation of an expanded leadership development curriculum was developed and submitted to NSF. However, the proposal was not funded and a future collaboration is being considered.

The SERC staff recruited qualified students and partners to judge the *Illinois Junior Academy of Science Region 8 Science Fair* on the SIU campus. SERC provides small funds for multiple recognition awards to student projects that exemplify STEM innovation or creativity to encourage interest in STEM. The SERC staff also participated in *Expanding Your Horizons* conference, which provides hands-on enrichment for girls in grades five through nine.

Faculty collaborators were provided conference travel assistance, student wafes, and research support and through contributions to their respective departments and academic programs. For example, 3D printers and materials were purchased for research, teaching, outreach, and service in the mathematics education program.

Pre-service STEM education students served as student ambassadors alongside SERC staff at multiple SIU *Open House*, *SIU Day*, and other new student recruitment events. SERC provided training, meals and SIU polo shirts for these ambassadors. SERC provided pre-service teachers enhanced STEM education experience in science and math methods courses by purchasing equipment and materials, presenting STEM research and results, inviting guest speakers, and

supporting graduate student presentations such as CLEAN SoIL, *Project Wild*, Digital Sandbox and 3D mapping.

Graduate and undergraduate students were included in teacher professional development workshops, participated in STEM research, and received important exposure through new programs, such as the *Illinois Science Assessment Partnership*. SERC was awarded a \$13 million, five-year contract with the Illinois State Board of Education (ISBE) in 2018 to develop the ISA collaboration, which expanded in FY 2022 to include state-wide assessment item development with experts from 6 other universities besides SIU Carbondale. Pre-service teachers and graduate students were involved in project planning and development as part of a network of nearly 400 teacher partners and leaders working with the ISBE collaboration.

**Objective 2.** *Provide professional development, curriculum development, workshops and support for K-12 teachers and administrators.*

In FY 2022 teachers and higher education researchers and experts from across Illinois formed 4 large cohorts of nearly 200 educators to assist in the development of the Illinois Science Assessment (ISA) mentioned earlier. This important project provided opportunities for teachers to develop professionally, build relationships, increase content knowledge, increase standards expertise, share teaching experiences, evaluate their current teaching methods using the Illinois Learning Standards in Science, and earn extra income as independent contractors working with the SERC and ISBE.

Beyond professional development, the ISA partnership provided professional buy-in where teachers helped shape the large-scale summative science assessment process. Professional development occurred for the teachers who ensured that sound measurement and psychometric practices were followed in the development of ISA test items. They learned about acceptable rates of item difficulty and item discrimination. Item developers learned characteristics of good item development and importance of alignment to NGSS content standards during the ISA partnership. Workshops on ISA item development were hosted by the SERC, ISBE, and the National Science Teaching Association (NSTA).

*Science in the South* is a professional development conference for educators from across Illinois to build teaching skills, expand content knowledge, and network with other teachers to exchange ideas on teaching STEM. *Science in the South* offers a variety of relevant, informative and challenging workshops led by peers, STEM faculty, administrators, scientists, and other experts. Average attendance is around 200 participants. SERC staff served on the *Science in the South* steering committee to organize and host the conference on the SIU campus at Touch of Nature Outdoor Education Center in April 2022.

**Objective 3.** *Research and facilitate strategies of teaching aligned to the Next Generation Science Standards and Common Core State Standards for improved student and public literacy.*

Multiple grant and contract funded projects were created/developed by SERC to guide teachers in developing an understanding of the Next Generation Science Standards (NGSS) and Common Core State Standards. The SERC provided resources and opportunities to improve understanding and alignment of teaching to the standards. SERC faculty developed research-based learning experiences for grant programs, assisted teachers in developing standards based lessons and assessments, and instructed and mentored participants in action research development, writing, and presentation.

For example, SERC staff developed training sessions for educators participating as hand-scorers as part of the ongoing ISA Partnership. The workshops are informed by teacher feedback from SERC developed surveys, participant performance data and gaps in NGSS content and Science and Engineering practices such as *Engaging in Argument from Evidence, Analyzing and Interpreting Data, Constructing Explanations, Developing and Using Models and Obtaining, Evaluating, and Communicating Information*. In particular, the staff modeled the Scientific Explanation Framework model and relevant disciplinary core ideas. Teacher understanding of NGSS content improved as a result of participation in the ISA Partnership.

During FY 2022 several SERC graduate students partnered with SERC faculty and affiliates to publish research articles in highly reputed journals, such as *Journal of Teaching and Teacher Education*. Research focused on STEM teacher development during pre-service preparation, specifically exploring the development of pre-service elementary teachers' conceptual understanding of scientific literacy. Research was also conducted by SERC faculty and graduate students to investigate the *Effect of Scoring the Illinois Science Assessment on K-12 Science Teachers' Instructional Design*. Data collected from ISA scoring participants helped determine the effect of their experience on K-12 teacher science presentation and engagement in the classroom. Research outcomes were presented at national and regional conferences. SERC staff are currently planning a seminal study of select participants of the ISA to get more data which will lead to development of teacher experiences to address instructional design as it relates to student achievement and teacher knowledge and pedagogy.

**Objective 4.** *Build partnerships with local, state and national stakeholders to advance STEM teaching, learning and research.*

The earthquake awareness and preparedness partnership with Scott Hodgson at the University of Oklahoma, the Central United States Earthquake Consortium (CUSEC), the Illinois Emergency Management Agency (IEMA), and the Great ShakeOut continued in FY 2022. Led by Interim Director Henson, SERC researchers and earthquake experts provided community outreach and education regarding natural disaster mitigation and readiness to schools and communities in the Midwest. Henson was interviewed on radio news programs and conducted outreach discussing the earthquake threat. The Drop, Cover, and Hold drill was explained and practiced with students, teachers, and faculty. An informational kiosk was created for the Alabama Emergency Management Agency to conduct outreach and educate the public about the earthquake threat to the Midwest. Additional portable kiosks are planned for other states.

As discussed previously (*see sections 11.2 and 11.3 and Objective 5*), the SERC is the principal partner with the Illinois State Board of Education (ISBE) for the Illinois Science Assessment, and developed subaward proposals with STEM faculty from seven Illinois universities. In addition, the National Science Teaching Association (NSTA) served with SERC again to review assessment items and to help provide workshops, training, and other professional development for teachers. The SERC continued to develop partnerships with the Regional Offices of Education (ROE) and school districts in the SIU service area and beyond. These partnerships have opened up pathways to service and were used to acquire grants and target professional development through workshops and STEM education programs discussed in other areas of this report.

Dr. Henson worked with two colleagues from Austin Peay State University, Philip Short and John McConnell, to edit and successfully publish a book, *Age of Inference: Cultivating a Scientific Mindset*.

Philip Short, Harvey Henson, and John R. McConnell (Eds.) (2022). *Age of Inference: Cultivating a Scientific Mindset*. Information Age Publishing, Inc., Charlotte, NC, 470pp.

The authors served together for over three years on a Joint Commission, *STEM Education in the Future*, sponsored by NASA and the Association of Teacher Educators. The purpose of the Commission was to explore and frame issues related to STEM education and to partner with educators to affect positive change in STEM learning. The Commission produced presentations, white papers, blogs, podcasts, interviews, and reports; and commissioners hosted national and international conference symposia and workshops for educators. This book is a compilation of the Commission outcomes, including best practices, research, advocacy and policy, professional development, educator preparation, and related topics in STEM education as presented by over 50 authors. Henson authored or co-authored chapters in the book.

**Objective 5.** *Build partnerships to improve and implement the Illinois Science Assessment and other state assessments.*

The SERC continued the fifth year of the *Illinois Science Assessment Partnership*, an intergovernmental agreement (IGA) and contract with the Illinois State Board of Education (ISBE) to develop, implement, score, and report the Illinois Science Assessment (ISA). SERC coordinated the large scale program, which included higher education faculty, researchers, and experts from seven universities, over 400 K-12 educators, numerous school districts, and regional offices of education from across the state, to develop the ISA items and test bank aligned to the Illinois Learning Standards in Science based upon the NGSS. A partnership with the National Science Teaching Association (NSTA) was established by SIU to support the project, train our teacher partners, and ensure standards alignment. The ISA project created a network for teachers to access STEM resources and receive professional development related to assessment. Teachers working with the SERC on the ISA gained confidence, knowledge and buy-in with regard to assessment and standards, and they learned about available services and as they were engaged by SERC faculty and staff.

The ISA is an online science learning assessment of 425,000 5<sup>th</sup>, 8<sup>th</sup> and 11<sup>th</sup> grade students in Illinois public schools. Some test questions provide opportunity for students to write extended responses to questions. SERC staff recruited, managed, and evaluated the ISA hand-scoring process which required qualified raters. Recruitment included hosting information sessions and leading presentations at teacher conferences/institutes including the Mount Vernon Conference, ROE 30 Teacher Institute, Science in the South at SIU, Northern Illinois Science Educators, Illinois Science Teachers Association, and the NSTA Annual Conference. Other recruitment efforts included state-wide dissemination via ROEs, ISBE workshops, direct invites, and attending regional public school administrator meetings across the state. Through these efforts, the SERC gathered more than 400 teachers, administrators, and STEM professionals from all over the state to join in this endeavor.

Our research results show, that curriculum, instruction and assessment are integrally related, as teachers involved in the test development, scoring, or evaluation process are aligning their instruction to NGSS. The expectation is that student learning will increase by the experiences teachers bring back to the classroom from participation in this and other SERC programs. The ISBE reports students' assessment scores are improving as well. The work and collaboration between the SERC, the ISBE and hundreds of educators on the Illinois Science Assessment (ISA)

increased the validity and reliability of the state science assessment and will help improve student learning and teaching for years to come.

**Objective 6.** *Collaborate with the SIU community to provide students excellent preparation for advanced programs and professions in STEM.*

The SERC has been successful in obtaining a wide range of contracts and grants to support its activities (see section 11.4). As discussed previously, these funds provided support for undergraduate and graduate students in their preparation for careers in STEM and education. Support ranged from undergraduate scholarships, student waivers, and graduate assistantships. SERC faculty and staff served on thesis and dissertation committees. The SERC also provided student mentoring to students, and student organizations including the STEM Education Ambassadors, Education Living and Learning Community, Saluki Science Ambassadors, Science Living and Learning Community, and Leadership Development Program. The SERC partnerships continued to assist and improve students' academic preparation and increase motivation in STEM so that Illinois students successfully prepare for STEM careers.

In addition to the financial support, several undergraduate and graduate students at SIU and at seven other universities were mentored by faculty and involved in the *Illinois Science Assessment Partnership* and ISA activities as described in prior sections of this report. This experience was particularly valuable to preservice teachers and students interested in education careers. Several graduate students learned research skills related to assessment practices, data management and analysis, psychometric tasks applied in the ISA, and other skills used in general assessment and STEM education research.

SERC in partnership with the Office of Vice Chancellor of Research and the Office of Sponsored Projects Administration sponsored and led workshops for faculty interested in the NSF Scholarships for STEM (S-STEM) program. Participants gained skills and built partnerships to develop grant proposals to apply for scholarships to support STEM students at SIU. Four S-STEM proposals were developed by STEM faculty and submitted to the NSF. However, none of the proposals were selected for funding. Faculty teams were encouraged and supported to revise and resubmit their proposals. Three of the teams did so and 1 proposal was awarded funding. The S-STEM grant, *Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists*, was co-written by an interdisciplinary team, including Interim Director Dr. Harvey Henson, and funded for \$1.33M by the NSF (see <https://news.siu.edu/2022/08/082422-SIU-research-team-wins-1.33M-NSF-grant-to-train-sustainability-focused-geoscientists.php>). The other leadership team members are Wendell Williams, Associate Vice Chancellor for Enrollment Management, and School of Earth Systems & Sustainability faculty Dr. Ruopu Li (PI), Dr. Leslie Durham, and Dr. Justin Schoof, Director. Similar grant proposal preparation workshops are being considered based upon this success.

Another successful NSF-funded S-STEM program, *Pathways to STEM Leadership*, was created by PI Bruce DeRuntz and Co-PI Henson. DeRuntz started this remarkable leadership development program (LDP) in 2007 with a few engineering majors, and with additional NSF funding DeRuntz and Henson expanded the program to all STEM majors. The LDP continues to develop and graduate STEM leaders with a 96% graduation rate and an overall 94% STEM career placement record. Program outcomes, findings, and experiences were shared with other faculty researchers and presented as papers and posters at national conferences in Engineering and STEM education during FY 2022.

SERC staff and graduates students continued the Saluki Teen Science Café, an informal education outreach and research effort to target regional teens. We partnered with the National Teen Science Café network, an outreach and research effort to make STEM fields, topics, and professionals approachable, palatable, and interesting to regional teens. The Saluki STEM/Science Café is designed to be an informal, out-of-school gathering that affords teens a free, enjoyable way to engage in conversations and activities with STEM local experts that explore topics in STEM and application fields that interest them and affect their lives. As well as offer leadership roles and skills. Designed to be an in-person experience, the Saluki Teen Science Café was initiated during the Covid-19 shutdown, so all meetings were hosted online via Zoom. Beginning in October 2020 and to present the SERC team hosted several online Saluki Teen Science Cafés. Teen Science Café organizers include one SERC staff, a faculty member, a STEM graduate student, and a PhD student in Curriculum and Instruction. Teens were informed of the meetings via email distributed through school administrators, teachers, Facebook, and word of mouth. Meetings average 10 attendees from area schools including Carbondale, Mount Vernon, Herrin and Pinckneyville high schools. Café presenters have included mostly SIUC faculty, but regional experts and community college faculty.

The SERC partnered with STEM and education faculty to help improve students' educational success. The SERC purchased resources, helped create innovative materials, and offered ancillary support to STEM courses and instructors. Working with colleague Dr. Lingguo Bu, materials were supplied to create STEM-Art and 3D designs for math and STEM education in the 3D Printing Lab. Dr. Bu has developed and released over 270 designs as of FY 2022 (see <https://www.thingiverse.com/lgbu/designs>).

In FY 2022 SERC collaborations continued among faculty and staff in science education, math education, engineering, quantitative methods, geography, geology, anthropology, and health and human services among other programs. However, plans to expand and enhance STEM research and education to include faculty and students from the Arts are taking shape as we prepare for the next Total Solar Eclipse event in April 2024.

SERC has served public school teachers and provided access to the dynamic resources, vast expertise, and dedicated personnel at SIU. The SERC aims to be a hub of support and innovation for the STEM community at SIU, and to serve other campus educators, student organizations, and students when they need answers in the changing landscape of learning in today's academic environment. The objective is to provide a central point of contact for common issues such as school visits, outreach materials, and coordinating volunteers. SERC seeks to enable sharing of resources, learning materials, equipment, or personnel, and to initiate, facilitate and foster research partnerships among STEM stakeholders, educators, faculty and students.

As SERC staffing increases, we will expand engagement and partnership with registered student organizations (RSOs) and leverage the RSO's to become force multipliers in STEM education and outreach. The SERC plans to increase communication to STEM programs across campus, increase sponsorship of events where STEM programs and professions can be celebrated and promoted such as sporting, media and arts events, and take STEM education and engagement into the residential learning communities (LLCs) on campus.

## 11.5 Evidence of Organizational Effectiveness

SERC is a research and service unit at SIU and was highly effective at achieving organizational, university and IBHE goals (section 9.3 Objectives and section 11.3) in each area this year as discussed in the previous section (11.4).

### **Service and Outreach Activities**

See examples of professional and community service described in sections 11.2, 11.3, and 11.4.

### **Involvement in Instruction**

Although SERC is not directly responsible for academic instruction or program administration, SERC participated indirectly in academic instruction, service, and program development in several ways. The SERC fostered faculty collaboration to research and improve STEM education through innovative grants and contracts. For example Dr. Bruce DeRuntz and Interim Director Dr. Harvey Henson, served as Co-PIs for the *Pathways to STEM Leadership* grant and continued to use nearly \$1M in funding from the NSF S-STEM undergraduate scholarship program to support students' success in STEM and professional development in leadership.

Moreover, faculty who collaborated within the SERC developed innovative formal and informal education and outreach programs, led academic programs or departments, directed STEM programs, and taught undergraduate and graduate courses in STEM and STEM education. The SERC continues to provide degree-related work and meaningful service experiences in STEM for undergraduate and graduate students and mentors students to continue making contributions to teaching, research, and service. Six graduate students and 7 undergraduate students were employed directly in SERC through external grant and contract funding. These students were supervised by SERC project faculty/staff and mentored or advised by STEM faculty. Students gained valuable co-curricular experience in STEM education and research, acquired professional and academic skills, and received financial support.

### **Staffing Updates**

Staffing for SERC increased by 5 FTE to 11.50 FTE during FY 2022. Three additional full-time staff, 1 extra help office support staff, and 2 additional graduate assistants were hired in FY 2022 using external contract and grant funds. Mr. Daniel Brown was added as a Researcher III in October 2021 to assist with proposal writing, project management, and administration of the SERC. Mr. Brown has extensive leadership and project management experience including 11 years with the Illinois State Board of Education, military service during the Gulf War, and many years of teaching and administration with public schools. Mr. Brown was immediately impactful and co-wrote three large contract proposals (see Objective 1, section 11.1) requesting \$30,802,030 in funding. One of the projects, *Special Education Behavior Assessment Training Project*, was awarded \$5,841,527 for FY 2023 & FY 2024 by the Illinois State Board of Education.

Dr. Amanda Weidhuner was hired as Researcher II in February 2022 to assist with coordination of the Illinois Science Assessment (ISA) project. Dr. Weidhuner completed her PhD in Agricultural Sciences from SIU in December 2021. She has impressive academic and professional experience in Agricultural and Soil Science, peer-reviewed research, teaching, and

student mentoring. Dr. Weidhuner is also expanding SERC student programs, developing STEM outreach, and writing proposals.

Dr. Jose Martinez Herrera was hired as a Researcher I in May 2022. Dr. Herrera just completed his dissertation and will graduate from SIU in May 2023. Dr. Herrera has assisted with item development on the ISA project. He partnered with the Illinois State Board of Education to develop/lead the bi-lingual team which translates the state science assessment into Spanish, and Dr. Herrera leads a team of educators to evaluate student responses written in Spanish. Dr. Herrera is also assisting with the SERC webpage and social media content.

**Grant and Contract Applications and Research**

STEM Center revenue available through grants and contracts increased significantly in FY 2022 and combined with continuing projects totaled \$2,841,104. The FY 2022 goal for grant and contract proposal submissions was exceeded by 10. Center faculty and staff served as principal investigator (PI) or Co-PI on 13 grant and contract proposals submitted in FY 2022, and 7 of these proposals were funded for a total of \$13,587,593.

Research conducted as part of external contract and grant funding was disseminated broadly to other scholars and practitioners. Dissemination and sharing of research and teaching outcomes at conferences and professional meetings is essential and expected among SERC colleagues, staff, and students. The SERC continued to support faculty, staff, and students to accomplish this goal. Only peer-reviewed presentations, peer-reviewed publications, books, chapters, and invited presentations produced by faculty and staff employed or contracted in the SERC are listed in the table below. Dissemination activity of other collaborative faculty and staff who may receive support from the SERC are not included in this report.

*STEM Education Research Center Dissemination Activities*

Year	# Peer-Reviewed Publications and Creative Works	# Peer-Reviewed Presentations	FTE Research Faculty & Staff
FY 2022	12	15	2.50
FY 2021	8	11	2.25
FY 2020	10	11	1.75
FY 2019	8	18	1.75
FY 2018	8	20	3.25
FY 2017	9	13	2.25
FY 2016	5	17	0.25
FY 2015	11	9	0.25

12. Institutional Assessment

12.1 Date of Last Review 09/10/2019 (see 12.3 Explanation)

12.2 Decision at Last Review \_\_\_\_\_ Center/Institute in Good Standing  
 \_\_\_\_\_ Center/Institute Flagged for Priority Review  
 \_\_\_\_\_ Center/Institute Suspended



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12.3 Explanation

New unit permanent status was granted by IBHE on 09/10/2019. The next review will occur during 2027-2028. A self-study report was completed May, 2018 while the center was on temporary status.

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**RESOURCES: STEM Education Research Center**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021*</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>	<b>FY2016</b>
Revenues							
State Appropriations	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Income Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grants & Contracts (less Indirect Costs)	\$2,841,104	\$1,422,455	\$2,443,299	\$1,700,957	\$1,183,580	\$253,457	\$0
Other Internal Salary/Startup	\$0	\$0	\$0	\$0	\$0	\$11,397	\$11,397
Indirect Cost Recovery	\$42,657	\$26,258	\$24,047	\$35,187	\$42,650	\$20,346	\$0
<b>Total Revenues</b>	<b>\$2,883,761</b>	<b>\$1,448,713</b>	<b>\$2,467,346</b>	<b>\$1,736,144</b>	<b>\$1,226,230</b>	<b>\$292,561</b>	<b>\$11,397</b>
Expenditures*							
Faculty & Staff Salary	\$355,347	\$284,302	\$308,117	\$300,311	\$242,436	\$107,810	\$11,397
GA support & Student Worker	\$164,077	\$116,342	\$126,682	\$122,991	\$66,956	\$58,360	\$0
Supplies, Services, Equip	\$2,321,217	\$1,029,925	\$2,020,317	\$1,304,021	\$891,207	\$99,560	\$0
Travel	\$16,873	\$1,640	\$18,650	\$6,500	\$9,000	\$0	\$0
<b>Total Expenditures</b>	<b>\$2,857,514</b>	<b>\$1,432,210</b>	<b>\$2,473,766</b>	<b>\$1,733,823</b>	<b>\$1,209,599</b>	<b>\$265,730</b>	<b>\$11,397</b>
Revenue Minus Expenditures	\$26,247	\$16,503	(\$6,420)	\$2,321	\$16,631	\$19,470	\$0

Expenditures are categorized in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Additional rows added as necessary. \* Corrections were made to financial revenues and expenditures reported for FY 2021.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY 2021**</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>	<b>FY2016</b>
Faculty	1.5	1.5	.75	0.5	0.5	0.5	0.25
Staff	4.75	2.0	1.75	1.75	1.75	1.75	0
Graduate Assistants	3.5	2.0	2.0	2.0	2.0	2.0	0
Student Workers	1.75	1.0	1.0	1.0	0.75	0.25	0
<b>Total Staffing</b>	<b>11.5</b>	<b>6.5</b>	<b>5.50</b>	<b>5.25</b>	<b>5.0</b>	<b>4.5</b>	<b>0.25</b>

\*\* Corrections were made to FTE reported for FY 2021.

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	SIU Carbondale						
2.	Center/Institute	Touch of Nature Outdoor Education Center						
3.	Date	March 20, 2023						
4.	Director	Brian Croft						
4.1	Telephone	618-453-3942						
4.2	E-mail	bcroft@siu.edu						
5.	Year Established	Land acquired 1949. First programs in 1952.						
6.	Illinois State Statute (if pertinent)	N/A						
7.	Reporting Unit	Student Affairs						
8.	Type	<div style="text-align: center;">Activity (check all that apply)</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Instructional</td> <td style="border: 1px solid black; text-align: center; width: 30%;">X</td> </tr> <tr> <td>Research</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> <tr> <td>Public Service</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> </table>	Instructional	X	Research	X	Public Service	X
Instructional	X							
Research	X							
Public Service	X							

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

Touch of Nature is an outdoor education center providing outdoor learning opportunities to the University and the community since 1952. The Center is almost 3400 acres and provides facilities ranging from rustic cabins to an 18-room hotel. Dining halls, meeting spaces, hiking trails, biking trails, beaches, archery range, sports fields, etc., are all included. Program offerings include Leadership Development and Trainings, Recreation Therapy camps and programs, Veteran programs, Environmental Education Programs and Trainings, and general Hospitality Services.

The Center also supports and participates in Outdoor Recreation, Recreation Therapy, Forestry, Wildlife Biology, Agricultural Sciences, and Architecture academic programs and research.

### 9.2 Mission

The mission of Touch of Nature Outdoor Education Center is to enhance the lives of all people through outdoor experiences.

### 9.3 Objectives

#### Values:

- Experiential Learning
- Environmental Stewardship
- Health and Wellness
- Equity/Inclusion/Diversity

## 10. Advisory Board

### 10.1 Advisory Board - Membership

N/A

10.2 Number of Meetings (In This Year)     N/A

## 11. Annual Performance

### 11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Program Participation	18,000	18497
2.		
3.		
4.		
5.		

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

<ul style="list-style-type: none"> <li>• Staffing and Organizational Structure Change</li> <li>• Strategic Plan update including Mission and Values</li> </ul>
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### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

<ul style="list-style-type: none"> <li>• Increase in Outdoor Education Programming to local schools</li> <li>• Continued Growth in Dawg Days Freshman Orientation Programs</li> </ul>
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### 11.4 Evidence of Support for Center/Institute Objectives

<ul style="list-style-type: none"> <li>• Dawg Days donations - receive over \$20,000 per year from departments on the main campus to support the Dawg Days New Student Program</li> <li>• Multi-use Trail project – this project has received over \$400,000 in grants and donations to date</li> <li>• SIU Credit Union – Donates \$15,000 per year to support SIU student focused programs at the Center</li> <li>• River Radio – Donates over \$53,000 per year in radio advertising to the Center to support all Community Programs and Camp Little Giant</li> <li>• Donors/volunteers – The Center receives 1000s of volunteer hours per year to support Forest Management projects, trail building, program support, a community event support</li> </ul>
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11.5 Evidence of Organizational Effectiveness

Combined two existing programs (Underway Adventures and Environmental Education) into one program (Outdoor Education). Refined curriculum and aligned with state standards.

Created a Campus Outdoor Program Coordinator, Hospitality Program Assistant Position, as well as a Program Director of Logistics to oversee specific areas.

Increased the number of weeks offered and number of campers attending summer camps.

12. Institutional Assessment

12.1	Date of Last Review	<u>2020/2021</u>
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended
12.3	Explanation	<u>NA</u>

**RESOURCES: Touch of Nature Outdoor Education Center**

<b>Financial Resources</b>	<b>FY 2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>
Revenues						
State Appropriations	386,000	483,319.03	512,026.65			
Income Fund	410,796	286,772.14	406,054.46	967,738.88	856,531.58	861,241.79
Grants & Contracts						
xxx						
xxx						
xxx						
<b>Total Revenues</b>						
Expenditures*						
Salaries	\$674,397	\$619,952.78	\$814,244.19	\$803,672.45	\$653,778.37	\$477,910.59
Wages	\$7,826	\$1,041.76	\$30,870.49	\$62,751.84	\$64,569.92	\$52,157.13
Travel	0	\$0.00	\$847.31	\$55.00	\$291.35	\$457.24
Equipment	\$19,475	\$41,491.51	\$24,217.74	\$291.56	-\$5,850.00	\$46,721.41
Commodities	\$100,260	\$66,920.35	\$130,609.94	\$100,801.91	\$84,360.94	\$60,879.59
Contractual Services	\$209,990	\$154,355.15	\$235,121.65	\$224,564.99	\$316,080.56	\$220,288.87
Operation of Auto	\$20,029	\$18,818.57	\$35,639.19	\$42,388.36	\$35,027.28	\$18,221.93
Telecommunications	\$15,148	\$30,458.68	\$14,548.54	\$16,526.18	\$15,573.72	\$95,498.95
Employer Contributions	\$13,006	\$16,159.58	\$11,640.85	\$11,941.64	\$8,036.04	\$7,752.36
General Administration	\$20,331	12,106.16	\$5,887.53		2910.00	2957.00
Refunds			\$1,250.00			
Awards and Grants	\$990	187.32		1105.98	328.50	683.28
Office Expense	\$1,172					
<b>Total Expenditures</b>	<b>\$1,095,125</b>	<b>961,679.18</b>	<b>\$1,304,737.43</b>	<b>1,264,099.91</b>	<b>1,172,196.68</b>	<b>983,528.35</b>
<b>Revenue Minus Expenditures</b>	<b>-298,329</b>	<b>-191,588.01</b>	<b>-386,656.32</b>	<b>-296,361.03</b>	<b>-315,635.10</b>	<b>-122,286.56</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>	<b>FY2017</b>
Faculty	2@25%	2 @ 25%	2 @ 25%			
Staff	2@75 11@100%	11 @ 100% 2 @ 75%	12 @ 100% 2 @ 75%	13	13	9
<b>Total Staffing</b>						

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	WSIU Public Broadcasting
3.	Date	March 15, 2023
4.	Director	Fred Martino
4.1	Telephone	618-453-6181
4.2	E-mail	<a href="mailto:fred.martino@wsiu.org">fred.martino@wsiu.org</a>
5.	Year Established	Academic Year established as recognized by the SIU President, - 1958
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Office of the Chancellor
8.	Type	Activity (check all that apply)
	Instructional	X
	Research	
	Public Service	X

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.



## 9. Overview

### 9.1 Description

Licensed to the Board of Trustees of Southern Illinois University, WSIU Public Broadcasting is an integral partner to the College of Mass Communication & Media Arts on the Carbondale campus. Since 1958, WSIU has provided trusted programming and services that inspire personal growth, community engagement, and a love for learning in people of all ages.

The WSIU stations serve nearly five million people across seven states and beyond through five digital television stations, three radio stations, a website, local production units, social media channels, and an education and community outreach department. Additional services include the Southern Illinois Radio Information Service (SIRIS), operated by WSIU Radio, which helps over 1,000 individuals who are blind or whose physical condition prevents them from reading stay connected to the world. WSIU also offers professional development in the broadcast industry to hundreds of students each year.

### 9.2 Mission

WSIU Public Broadcasting exists to improve the quality of life of the people we serve. Through programs, services, and outreach, WSIU partners with other community organizations to promote positive change, and to support the academic and public service missions of Southern Illinois University Carbondale.

### 9.3 Objectives

Provides experiential learning opportunities for students at Southern Illinois University in a wide variety of areas including broadcast, journalism, digital media, community engagement, marketing, and promotions. WSIU provides free over-the-air educational broadcast service to the region with a specific focus on universal access, particularly in rural areas.

## 10. Advisory Board

### 10.1 Advisory Board - Membership

WSIU is served by a Friends Board with a primary objective of advocating on behalf of the stations. While the group may provide advice from time to time, we do not refer to them as an advisory board which has a specific definition under grant guidelines with the Corporation for Public Broadcasting.

10.2 Number of Meetings (In This Year) 6

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. SIRIS (Southern IL Reading Info. Serv.) Subscribers	1,000	1,400
2. Community Partnership Organizations	100	100
3. Family Day Attendance at Cedarhurst Mt. Vernon	150	450
4. Indie Lens Pop Up Attendees	200	155
5. Individual Outreach contacts	1,000	3,540

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

<p>*Launched unprecedented WSIU primary election coverage (16 televised WSIU programs from April through June, 2022)</p> <p>*For the first time, provided live streaming of WSIU's television schedule</p> <p>*Began planning and production to launch a weekly version of "In Focus" and the new weekly program "Eye on Education"</p> <p>*Started work on a single news-focused website, offering a wide variety of regional, national, and world news</p> <p>*Worked with the Southern Illinois University Carbondale Journalism department to host three German college students as part of the RIAS Journalism Exchange program</p> <p>*WSIU arranged time for our German visitors to work with students at Southern Illinois University Carbondale, expanding international education</p> <p>*Helped to secure a RIAS fellowship (three weeks in Germany) for SIU student</p> <p>*Expanded educational outreach to area high schools with the goal of recruiting interns who can gain valuable editorial and technical training</p>
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11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

<p>Student Success: WSIU Radio and Television offered students experiential learning opportunities in all aspects of the media industry. WSIU worked with over 34 university and community volunteers who contributed 2,730 hours of service. Diversity and Inclusiveness: Held documentary cinema screenings and facilitated discussions at the public library to promote awareness of community issues. Community Relations: WSIU maintained a network of strategic community partners to promote education, outreach, and inclusiveness in our communities.</p>
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11.4 Evidence of Support for Center/Institute Objectives

<p>WSIU worked with students from throughout the university, including the SIU College of Mass Communication and Media Arts and the College of Liberal Arts to provide hands on, experiential learning through multiple broadcast productions throughout the fiscal year. These included daily</p>
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radio newscasts and various video projects, full-length audio programming, the Lincoln Academy's hour-long PBS special, the Illinois Lawmakers series, and CapitolView. WSIU Radio, in cooperation with the SIU University Press, and students in the SIU Creative Writing program provided the weekly Blanket Fort Radio podcast that serialized readings of University Press books. The series involves upwards of 20 students and an equal number of community volunteers.

WSIU Radio continued to provide service to over 1,400 subscribers to SIRIS (Southern Illinois Reading Information Service) for the blind and visually impaired. Maintained and operated five full-power television transmitters and three full-power radio transmitters servicing approximately 5-million people in seven states with free over-the-air educational media including local news and information, a full schedule of children's television, and documentary content. WSIU continued to pursue virtual versions of our regular programming like CapitolView via the Zoom platform. Student participation in program producing was reduced due to the pandemic, but student employees and volunteers played significant roles in content production to augment professional staff in our public service mission both on campus and through remote work opportunities.

WSIU continued working with the Carbondale Public Library to host virtual film screenings and discussions on social issues that impact our viewers and listeners; served as a platform for local voices that reflect our region's unique personality; historical legacy, values, and diversity of opinion through episodes of our Illinois Stories, In Focus, and the CapitolView series; facilitated educational opportunities for children at local libraries.

WSIU-TV provided production support for the SIU Foundation's annual Day of Giving for University scholarships and programs. The event featured on-camera appearances by representatives from over 20 colleges, institutes, and other University agencies. Students in the SIUC Department of Radio-Television, and Digital Media operated cameras and other technical equipment for the daylong event.

11.5 Evidence of Organizational Effectiveness

WSIU serves nearly five million people stretching across a seven-state region on a variety of platforms including multiple digital television channels and radio stations, interactive web platforms, social media and mobile applications. WSIU operates with approximately 33% fewer full-time staff than it operated with 20 years ago (down from 50 to 33). WSIU generates \$2.5 million in outside grant funding and more than \$1.4 million in local community support to compliment \$784,447 in University operating cash support.

12. Institutional Assessment

12.1	Date of Last Review	2013-2014
12.2	Decision at Last Review	X
		Center/Institute in Good Standing
		Center/Institute Flagged for Priority Review
		Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

**RESOURCES: WSIU Public Broadcasting**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	784,447	690,292	764,306	827,203	836,348
Operating Grant – CPB	2,242,801	2,534,849	3,118,965	2,539,961	1,137,167
Operating Grant – State of IL	276,690	254,045	245,705	171,010	164,710
Project Grants	21,353	159,943	43,355	52,329	21,569
Membership Income	816,373	878,336	875,819	823,292	442,140
Underwriting Income	546,137	429,774	422,404	390,542	432,628
Production Income	33,396	3,429	5,408	42,379	39,142
Tower Income	63,700	62,267	115,260	95,810	59,206
Royalties (EBS, PBS)	76,629	103,502	0	0	0
Federal Work Study	8,403	7,892	10,932	18,161	26,423
Direct University Support	432,574	313,521	436,399	450,333	441,662
Indirect/In-Kind SIU Support	1,212,146	1,136,524	1,040,528	1,008,996	995,377
Other Indirect Support	20,735	13,901	39,996	49,716	40,401
Building & Equip SIU Support	0	0	0	41,747	0
Investment Income	17,093	33,761	1,999	4,952	7,770
State Benefit Payments	1,281,168	1,789,142	685,074	708,015	1,511,307
Miscellaneous Income	0	0	0	2,701	3,616
FCC Repack Funding	88,398	205,769	1,961,710	10,957	0
<b>Total Revenues</b>	<b>7,922,043</b>	<b>8,616,947</b>	<b>9,767,860</b>	<b>7,238,104</b>	<b>6,159,466</b>
Expenditures*					
Programming & Production	3,617,319	3,779,875	3,247,965	2,957,047	3,043,989
Broadcasting & Engineering	1,916,685	2,131,353	1,998,224	1,638,450	1,198,769
Program Info & Promotion	155,285	174,093	206,545	403,992	317,718
Fundraising & Membership	485,991	522,980	548,936	314,786	337,165
Underwriting & Grant	582,463	609,248	381,188	144,420	150,313
Management & General	969,448	1,098,556	1,053,794	1,015,643	1,079,059
Loss-Disposal of Equipment	0	257,937	0	0	0
<b>Total Expenditures</b>	<b>7,727,191</b>	<b>8,574,042</b>	<b>7,436,652</b>	<b>6,474,338</b>	<b>6,127,013</b>
<b>Revenue Minus Expenditures</b>	<b>194,852</b>	<b>42,905</b>	<b>2,331,208</b>	<b>763,766</b>	<b>32,453</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty-Full Time	1.40	1.40	1.40	1.50	1.50
Staff-Full Time	33.55	32.03	25.60	22.00	22.00
Student Employees-FTE	3.26	8.88	14.69	15.71	11.33
<b>Total Staffing-FTE</b>	<b>38.21</b>	<b>42.31</b>	<b>41.69</b>	<b>39.21</b>	<b>34.83</b>
Student Employees Number/Yr	31	29	40	56	55

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	Center for Predictive Analytics
3.	Date	February 18, 2023
4.	Director	Carolyn Butts-Wilmsmeyer
4.1	Telephone	618-650-2682
4.2	E-mail	<a href="mailto:cbuttsw@siue.edu">cbuttsw@siue.edu</a>
5.	Year Established	April 30, 2020 (received permanent approval from IBHE) 2018 (established through Chancellor’s Innovation Proposal)
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Graduate Studies and Research
8.	Type	Activity (check all that apply)
	Instructional	
	Research	X
	Public Service	

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The Center for Predictive Analytics was founded in response to a growing need for data science expertise across all sectors. The Center fosters relationships with faculty and external partners across a broad range of disciplines to support the application and development of state of the art mathematical, statistical, computational, and machine learning techniques to meet complex data challenges and train the next generation of data scientists through hands-on experience.

### 9.2 Mission

The Center for Predictive Analytics is dedicated to the development and novel application of innovative data analysis solutions that enable our industry, government and academic partners to utilize their data to its fullest potential while also providing real-world training opportunities to the next generation of data scientists.

### 9.3 Objectives

1. Foster multidisciplinary and multi-institutional collaborations that promote data science and data-driven research through externally and internally funded projects.
2. Create the computational infrastructure and access to computational expertise necessary for the successful pursuit of external funding opportunities by SIUE faculty.
3. Support student retention and academic success through predictive modeling and the development of intervention strategies.
4. Provide real-world experiences and mentorship to students through externally funded research partnerships.
5. Promote the ethical use of predictive analytics on campus and in the St. Louis region.
6. Bring together academic researchers, educators, and industry experts to share ideas through regional workshops, seminars, and conferences.
7. Develop partnerships with local businesses and government agencies to produce high impact community engagement products.

10. Advisory Board

10.1 Advisory Board - Membership

<p><u>Internal Members</u>  Greg Budzban, Professor Emeritus, Department of Mathematics and Statistics  Igor Crk, Chair and Associate Professor, Department of Computer Science  Andy Neath, Professor, Department of Mathematics and Statistics  Jon Pettibone, Professor, Department of Psychology  Jerry Weinberg, Associate Provost for Research and Dean of the Graduate School,  Professor of Computer Science</p> <p><u>External Members</u>  Alex Burkhart, Director of Marketing, America’s Central Port  Patty Hagen, President and Founding Executive Director, T-REX Innovation Center  Chris Rigdon, Research Statistician, DuPont  Paul Sorenson, Director, Regional Data Alliance</p>
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10.2 Number of Meetings (In This Year) 1

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Develop grant proposals as PI and/or collaborator with SIUE or external partners	3	8
2. Active projects underway supported by grants and contracts	4	8
3. Submit peer-reviewed articles for publication	2	4
4. Collaboration across campus through the Faculty Fellows and Faculty Affiliates program.	2 fellows/affiliates	5 fellows/affiliates
5. Assist other SIUE academic and administrative units with student retention and student success projects.	1 project	1 project
6. Assist other SIUE academic units and administrative units with projects related to data analysis and data visualization (e.g. COVID-19 dashboard maintenance, program evaluations, etc.).	2 projects	7 projects
7. Train students in data science through experiential learning opportunities.	1 grad, 3 undergrad	4 grad, 8 undergrad

Measure		Target for Year	Results in Year
8.	Promote the ethical use of data science within the SIUE Campus community through workshops, seminars, etc.	3 workshops 45 participants	11 workshops 407 participants
9.	Promote the ethical use of data science within the region through the development of continuing education courses in data science for the public.	5 courses	5 courses
10.	Disseminate Center for Predictive Analytics activities through press releases.	3	3
11.	Presentations at conferences or other scholarly venues.	2	5

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

The Center for Predictive Analytics (C-PAN) focused its efforts in FY22 in three areas: research in and continued pursuit of external support for research in data science, support of faculty research at SIUE, and growth of Center staff to better support these initiatives. Looking first at research in data science pursued by the Center, C-PAN addressed this goal in a variety of ways. First, the Center submitted grant proposals and contracts in which Center personnel were listed as either PI or Co-PI. These submissions totaled \$8,516,535 in submissions, with C-PAN personnel leading \$2,248,607 in these submissions. This is in addition to \$1,849,634 in active projects, many of which are multi-year. C-PAN staff also supported large projects on SIUE's campus, totaling approximately \$2,000,000 in Center-supported projects, by performing federally or state mandated program reviews.

As can be seen by the submission and award figures above, as C-PAN has matured, it has amassed a sizeable research portfolio relative to its full-time staff. This created the opportunity to expand the Center's staff and also enabled the Center to better support submissions of other units. As an example, C-PAN was in a position to support proposals aimed at addressing challenges in Diversity, Equity, and Inclusion as a collaborating unit. These project submissions ranged from large NSF proposals undertaken by the SIUE Office of Equity, Diversity, and Inclusion, to contracts sponsored by the Illinois Innovation Network working in conjunction with the Illinois Department of Commerce and Economic Opportunity. In further support of the SIUE campus during FY22, C-PAN expanded its staff by hiring 3 faculty fellows and 2 affiliates. In addition to conducting research in data science or data-intensive areas, these 5 individuals also helped to provide services to the SIUE campus such as: mentorship of students in experiential research learning environments, hosting of workshops based on their respective disciplines' needs, and data consultation. Together with the Director, the faculty fellows and affiliates worked together to host a total of 11 workshops and serve 407 participants. These workshops were open to all faculty, staff, and graduate students at SIUE.

Although the pursuit of external funding and the support of faculty research were the areas of greatest focus in FY22, all Center efforts are conducted with the intention of providing excellent training opportunities to our students. In the area of student training, C-PAN continued two of



its flagship student training programs in FY22. These two programs are the Data Science Interns (DSI) program and the Experiential Learning In Applied Statistics (ELIAS) fellowship program. The DSI program is open to undergraduate and graduate students with an interest in receiving hands-on, experiential training in data science. The program is structured so that students work first on small projects of interest to them, learning how to access, assemble, analyze, and interpret large datasets. Following this experience, students are then incorporated into teams that work on external projects. New to this program in FY22, because of the greater diversity in Center staff offered through the hiring of faculty affiliates and faculty fellows, students were able to work on a greater diversity of data science projects than in the past. The ability to work in both data science and understand the needs of other disciplines in which data science is being employed is essential to the training of well-prepared graduates; this central tenet of the training provided by C-PAN to students is directly in-line with recent publications released by the National Academies of Science, Engineering, and Medicine.<sup>1</sup> The ELIAS fellowship program offers similar training to students, except that it focuses upon the merger of training in the life sciences and applied statistics/introductory data science. The ELIAS fellows are recruited from underrepresented groups within data science and the agricultural and life sciences (e.g. underrepresented racial minorities, women, and transfer students). They are then mentored in research and supported for a guaranteed two years through their fellowship. To date, the program has a 100% retention and placement rate among student fellows.

C-PAN was also directly involved in large, campuswide data projects in FY22. These projects can generally be classified into one of two categories: continued COVID-19 response, and student retention and success. The COVID-19 work undertaken by the Center included devising testing protocols, automating random testing, automating the merger of SHIELD testing data with self-reporting data to ensure proper response recommendations, and continued maintenance of the COVID-19 interactive dashboard. This included incorporating administrative updates as necessary, as well as providing an accurate summary to help administrators make decisions and return to “normal” campus operations safely. Although the COVID-19 pandemic has thankfully moved to an endemic state and the dashboard has been archived in FY23, a copy of the dashboard can be found at:

<https://www.siue.edu/about/announcements/coronavirus/reporting-confirmed-cases/archived-dashboard.shtml>

The student success and retention project undertaken by C-PAN in FY22 was primarily focused on enrollment. Prior to undertaking this study, it was noted that there were some disparities between the representation of various racial groups in SIUE’s student body versus what might be expected given the demographics of the surrounding region. The purpose of this study was to ensure that there were no hurdles that were inequitably impacting enrollment at SIUE. Furthermore, this study also took the opportunity to examine which variables influenced enrollment overall, and whether there were support mechanisms that could be implemented that would serve the students enrolling at SIUE. Ultimately, this study had a very positive outcome, indicating that all major barriers that may be leading to inequitable college attainment had been addressed at this time. Furthermore, the study also identified variables that could be used to help support enrollment, college attainment, and student success across all populations.

<sup>1</sup> National Academies of Sciences, Engineering, and Medicine. *Data science for undergraduates: Opportunities and options*. National Academies Press, 2018.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

*(1) Support for SIUE Campus Priorities*

- a. Prepared and Committed Students: The Center, through experiential learning and applied analysis, provides real-world data science experiences for undergraduate and graduate students. These students come from all departments at SIUE, and collaborative discussions with other units on campus are underway to identify potential mechanisms to help support student research.
- b. Innovative High-Quality Programs: The Center partners with ESRA and other administrative units on campus to identify student needs across campus and devise creative solutions for needed student support. The Center also works with SIUE faculty and staff to provide data science resources, including training resources and information that helps to promote data ethics and data literacy at SIUE and beyond. In an ever-progressing digital world, it is our intention that access to training and these educational resources will enable our faculty to help prepare students for the digital landscape of their future careers. Students also have the opportunity to gain work experience while in college, and they can receive credit for this work through a number of mechanisms.
- c. Dedicated Faculty and Staff: The Center collaborates with faculty from all units on campus, including in the areas of grant development and scholarly support. This Center helps to support interdisciplinary research projects, including those with “Big Data” or data science components. The availability of C-PAN’s resources to our faculty helps to increase the competitiveness of research proposals submitted by faculty at SIUE by demonstrating to funding agencies that faculty have access to the necessary facilities and personnel to complete proposed work in data science.
- d. Outreach and Partnerships: The Center has established partnerships with multiple academic institutions, industry partners, and government partners in Illinois and the St. Louis Metropolitan region. These partnerships are centered around the goal of providing real-world data science experiences for our students at SIUE and collaborating institutions, as well as supporting data literacy and knowledge through non-credit educational offerings.
- e. Physical and Financial Stability: In its first three years of operation (FY20, FY21, and FY22), C-PAN has successfully obtained \$2,005,694 in grants and contracts and has supported a large number of faculty and students in their scholarly endeavors. Grants provide indirect cost recovery for SIUE and the Center. Furthermore, centralized access to data science and statistical consulting support on campus reduces support services costs to academic departments, as well as to faculty and their research students.

*(2) Support for IBHE State Goals*

- a. Increase Educational Attainment: This Center is directly working to address educational attainment discrepancies among underserved populations, including minorities, women, and students from impoverished backgrounds, among others. In identifying

critical time points for intervention and by mining data to understand what interventions are most likely to lead to success, it is the goal of C-PAN and our partners at SIUE to provide the support infrastructure needed to assist students of all backgrounds in attaining their educational aspirations.

- b. **Improve College Affordability:** Although C-PAN is a relatively new research center, efforts are already underway to devise financial support mechanisms to improve college affordability for our students. The first of these efforts is the fellowship stipend offered through the ELIAS fellowship program at SIUE. Each student involved in the program is provided with a stipend in the amount of \$7,250 per year for two years, thereby enabling them to dedicate more time to their research and their studies instead of having to worry about finding a part-time job to pay for college expenses. Thanks to the generosity of the sponsor, we were able to negotiate an increase to \$10,400 per year starting in FY23. We are also partnering with the Office of Enrollment Management to identify mechanisms for supporting student success by identifying and addressing unmet need.
- c. **Strengthen Workforce Development:** The model employed by C-PAN is that the Center acquires research projects, and then train students in different data science techniques based on the available research projects and the interests of the students. One of the greatest critiques of data science education is that classroom exercises, while formational and important, are also too simplistic for complete preparation of our data scientists for the real-world. Classroom examples are often “scrubbed”, meaning that the datasets used are too idealistic for what is commonly encountered in the real-world. The Center strives to immerse our students fully, providing them with access not only to the analytical techniques often employed during data analysis, but also the tools needed to prepare data for analysis and to mitigate potential sources of error.
- d. **Link Research and Innovation to Economic Growth:** The availability of C-PAN facilities and personnel increases SIUE’s competitiveness for federal and contractual funding in applied research and educational proposals. Selection for funding for these proposals creates potential for innovations, which in turn creates potential for commercialization. Furthermore, and perhaps more importantly, Illinois and the St. Louis bi-state region have historically been technology hubs in the nation, and appear to be advancing in that arena. To support that continued growth, it is vital that the emerging workforce be trained in the area of data science, which C-PAN strives to do through experiential learning opportunities for its own students and through access to data science resources for the greater SIUE community.

#### 11.4 Evidence of Support for Center/Institute Objectives

##### *Broad Objective 1: Pursuit of Multidisciplinary and Multi-Institutional Funded Projects*

A primary objective of C-PAN is to facilitate interdisciplinary grant and contractual applications. Data science is a need in all disciplines, and we use our expertise to assist all faculty and students across a broad range of projects. In FY22, we partnered with 14 departments/units at SIUE, as well as multiple external partners, for submission of \$8,516,535 in external proposals and contracts. This does not include collaborations in which C-PAN served as key personnel on proposals.

<b>Program Area/Sponsor</b>	<b>Partnering Units/Institutions</b>	<b>Amount</b>
Illinois REALTORS Association	SIUE Department of Public Administration and Policy Analysis, Department of Economics and Finance	\$11,270
NSF Research Traineeship Program (NRT)	SIUE Department of Biology, Department of Chemistry, Department of Environmental Science, Department of Geography and GIS, Office of Online Services and Educational Outreach, Office of the Vice Chancellor for Equity, Diversity, and Inclusion	\$1,999,607
NIH REAP	SIUE Department of Chemistry, Department of Applied Health	\$422,415
NSF INCLUDES Alliance	SIUE Office of the Vice Chancellor for Equity, Diversity, and Inclusion, Department of Chemistry, STEM Center, GeoMARC, Department of Construction; Southwestern Illinois College	\$3,275,431
Illinois Department of Commerce and Economic Opportunity (DCEO) and the Illinois Innovation Network (IIN)	SIUE Successful Communities Collaborative, IRIS Center	\$50,000
Illinois Department of Human Services (IDHS)	SIUE School of Pharmacy	\$30,000
Illinois Department of Public Health (IDPH)	SIUE School of Pharmacy	\$249,000
NIH R01	SIUE Department of Electrical and Computer Engineering; Washington University in St. Louis	\$2,478,812
<b>External Total</b>		<b>\$8,516,535</b>

*Broad Objective 2: Create Infrastructure and Access to Expertise*

Since C-PAN's establishment and formal recognition as a center by the IBHE in FY20, the Center has progressively moved from submission and acquisition of external funding to capacity building. In FY22, C-PAN continued its expansion of operational capacity through the hiring of additional Center staff. In addition to continuing its Faculty Fellows program, C-PAN also expanded the program by directly writing fellows into grant applications, and then bringing those fellows on as staff for the academic year(s) in which those grants are being administered. Additionally, a second program, called the Faculty Affiliates, was initiated. The Faculty Affiliates program is structured such that faculty engaging in this manner dedicate more of their time to working on internal consulting and projects, as opposed to externally funded products. Both

avenues, however, have provided increased staffing support at the Center that enabled the Center to be of increased service to the campus community and scholarly activities across campus. The Fellows and Affiliates were also involved in presenting workshops that were offered freely to the campus community. Likewise, due to the infrastructure and access to expertise that has continued to grow at the Center, C-PAN was able to continue to be of service to administrators as they navigated questions pertaining to student retention, student success, and the COVID-19 pandemic.

*Broad Objective 3: Student Retention and Success*

In FY22, C-PAN worked with ESRA to aggregate, format, mine, and model data pertaining to enrollment. Prior to undertaking this study, it was noted that disparities existed between the representation of various racial groups in SIUE's student body versus what might be expected given the demographics of the State of Illinois. The first step of this analysis was to hone in on the demographic representation within the St. Louis Metropolitan area, as this is an area that SIUE directly serves, to ensure that glaring disparities in student representation did not exist. Following this initial step, a more detailed study that examined whether there were any hurdles at the campus-level that were inequitably impacting enrollment at SIUE. This study also examined whether support mechanisms could be implemented that would better serve the students enrolling at SIUE. Overall, this study had a very positive outcome, indicating that all major barriers within SIUE's control that could potentially lead to inequitable college attainment have been addressed at this time. Furthermore, the study also identified variables that could be used to help support enrollment, college attainment, and student success across all populations.

*Broad Objective 4: Real-World Experiences and Mentorship for Students*

Previous studies conducted by the Center indicated that mentorship and feeling of belonging can have drastic positive impacts on student success. This knowledge guides all student training experiences offered by the Center. Students gained experience working with real-world datasets and in generating reports for collaborators, which helped them learn how to communicate complex data science findings. All students were paired with at least one mentor to help guide them with research, but to also help support their educational careers through the formation of a trusting mentor-mentee relationship in which students could ask a variety of educational and career questions. During FY22, the Center continued its immersive training of students through the Experiential Learning In Applied Statistics (ELIAS) fellowship program, the Data Science Interns (DSI) program, and through opportunistic grant opportunities. The third mechanism listed is a new approach, but the Center has had substantial success with this mentorship mechanism and will be continuing this approach as an option in the future. Briefly, as grants and contracts allow, a Faculty Fellow and an undergraduate research fellow are written into the grant. In taking on the Fellow position, the assigned faculty agrees not only to conduct the research involved with the project, but also to mentor a student as part of this process. This has opened the door for real-world training and mentorship to a greater number of students, as projects are often multidisciplinary and Faculty Fellows are able to recruit from disciplines outside of those that are traditionally involved with data science. This has a secondary impact of allowing these students to work within a multidisciplinary team and enabling them to learn a combination of skills within their own discipline and within data science.

11.5 Evidence of Organizational Effectiveness

**Organizational Effectiveness in Achieving Predetermined Goals**  
As shown in Section 11.1, we met or exceeded all targets for our 11 metrics. Since C-PAN’s inception, the Center has shifted from the establishment of physical infrastructure (year 1 – FY20) to operational infrastructure (FY21 and continuing in FY22). Through this progression of physical infrastructure to operational infrastructure, our metrics have often changed to reflect expansion in capacity. The operationalization, activities, and infrastructure built to date are reflective of the expressed desires of SIUE’s faculty, and C-PAN serves as a centralized data science resource that meets the needs of a large portion of the campus community.

**Research & Grant Applications**  
In FY22, C-PAN boasted \$8,516,535 in submissions and \$2,005,694 in active grants and contracts. Many of these are multi-year, with much of the expenditures expected in FY23 and FY24. However, in just FY23, C-PAN managed the spending of \$169,172 in grant activity, and also received an additional \$29,003.50 in staff support through collaborative grant activities. This is approximately double the expenditures in research activity in FY20 and represents a significant return on investment of our state appropriation dollars (received from SIUE). Below is a list of C-PAN presentations and publications in FY22.

Year	# Scholarly Publications	# Scholarly Presentations	FTE Research Faculty
FY22	4	5 (4 professional, 1 public)	1.25

12. Institutional Assessment

12.1 Date of Last Review NA – Center Established in FY20

12.2 Decision at Last Review \_\_\_\_\_ Center/Institute in Good Standing  
\_\_\_\_\_ Center/Institute Flagged for Priority Review  
\_\_\_\_\_ Center/Institute Suspended

12.3 Explanation (Center established in FY20. Has not yet undergone formal review.)  
\_\_\_\_\_

**RESOURCES: Center for Predictive Analytics (C-PAN)**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
<b>Revenues</b>					
State Appropriations	100,000.00	125,000.00	154,168.00	0	0
Income Fund	0	0	0	0	0
Grants & Contracts	198,175.50	86,069.31	26,500.00	0	0
Salary Transfer	1,349.95	2,400.00	0	0	0
Non-Recurring Funds	0	0	0	0	0
ICR	11,841.17	11,944.15	0 Transferred in FY21	0	0
<b>Total Revenues</b>	<b>311,366.62</b>	<b>225,413.46</b>	<b>180,668.00</b>	<b>0</b>	<b>0</b>
<b>Expenditures*</b>					
Salaries	143,880.67	127,695.79	105,953.31	0	0
Student Wages	4,547.25	728.00	0	0	0
Travel	540.05	0	0	0	0
Equipment	1,108.00	1,561.28	28,275.07	0	0
Commodities	8,352.44	706.38	954.88	0	0
Contractual Services	74,898.35	39,808.75	0	0	0
Awards	29,000.00	29,000.00	0	0	0
Scholarships	0	0	0	0	0
Telecommunications	0	0	275.00	0	0
F&A	27,896.09	9,655.00	3,975.00	0	0
Benefits	10,985.00	943.72	4,725.93	0	0
Participant Support	94.77	410.00	0	0	0
Non-Mandatory Transfers	0	0	23,000.00	0	0
<b>Total Expenditures</b>	<b>301,303.07</b>	<b>210,508.92</b>	<b>167,159.19</b>	<b>0</b>	<b>0</b>
<b>Revenue Minus Expenditures</b>	<b>10,063.55</b>	<b>14,904.54</b>	<b>11,186.81</b>	<b>0</b>	<b>0</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	1	1	1	0	0
Staff	0.25	0.1	0	0	0
Graduate Students	6	0.5	0.25	0	0
<b>Total Staffing</b>	<b>7.20</b>	<b>1.85</b>	<b>1.25</b>	<b>0</b>	<b>0</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	Center for STEM Research, Education, & Outreach
3.	Date	March 14, 2023
4.	Director	Sharon Locke
4.1	Telephone	618-650-3452
4.2	E-mail	slocke@siue.edu
5.	Year Established	2012 (received temporary approval from IBHE); September 19, 2017 (received permanent approval from IBHE)
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Graduate Studies and Research
8.	Type	Activity (check all that apply)
	Instructional	X
	Research	X
	Public Service	X

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.



## 9. Overview

### 9.1 Description

The STEM Center provides centralized leadership and support for STEM education activities and research. The Center brings together practitioners and researchers from a broad range of disciplines to achieve its goals of improving STEM (science, technology, engineering, and mathematics) understanding and achievement in K-12 and higher education and increasing STEM literacy in communities.

### 9.2 Mission

The STEM Center at SIUE is dedicated to building a community of researchers and educators who together innovate ways to engage students and the public in STEM.

### 9.3 Objectives

1. Build and support interdisciplinary teams of SIUE faculty to conduct STEM education projects and seek and secure external and internal funding.
2. Provide access to equipment, facilities, and expertise from STEM education research to SIUE faculty and students and the broader community.
3. Facilitate and promote innovations in SIUE undergraduate and graduate STEM teaching.
4. Enhance teaching and learning of STEM for pre-service and in-service teachers.
5. Develop, enhance, coordinate, and promote new and existing STEM-related outreach in the southern Illinois region to enhance STEM literacy.
6. Develop and maintain a comprehensive STEM resource and equipment center for in-service and pre-service teachers, SIUE faculty, and other local stakeholders.

## 10. Advisory Board

### 10.1 Advisory Board - Membership during FY 2022

#### Internal Advisory Group:

Desiree Tyus, Director, Collinsville Upward Bound Math & Science  
Chris Gordon, Associate Dean & Professor, School of Engineering  
Lynn Bartels, Professor, Department of Psychology & Faculty Development Director  
Kelly Jo Karnes, Director, Kimmel Student Involvement Center  
Jessica Krim, Department Chair and Associate Professor, SEHHB  
Terri Poirier, Professor, School of Pharmacy  
Chaya Gopalan, Professor, Applied Health and Nursing  
Barb Nwacha, Professor, Department of Art and Design  
Bill Retzlaff, Associate Dean and Distinguished Research Professor, CAS

#### External Advisory Group:

Susan Czerwinski, Dean of Career Programs, Lewis and Clark Community College

Harvey Henson, Director, Southern Illinois University Carbondale, STEM Center  
 Andrew Reinking, Superintendent of Madison CUSD 12  
 Stephanie Spann, Structural Engineer, David Mason and Associates  
 Kathy Wilson, Executive Director, Boys and Girls Club  
 Pat Szpila, Science Teacher, Collinsville High School

10.2 Number of Meetings (In This Year) One (internal)

11. Annual Performance

11.1 Performance Measures<sup>1</sup>

Measure			Target for Year	Results in Year
1.	Research	Develop grant proposals as PI/collaborator with SIUE units or external partners ( <i>Sec 11.4</i> )	6	8
2.		Submit peer-reviewed articles for publication	4	5
3.		Present findings at conferences	20	28
4.	Instruction	Provide teaching expertise to SIUE units	6 credit hours	29 credit hours
5.		Issue RFP and award Faculty Fellow(s) in undergraduate education	1	program paused
6.	Public Service	Promote use of STEM Resource Center lending library	790 direct impact	1,064 direct impact; 8,760 indirect impact
7.		Offer educator professional development	5 programs	4 programs; 77 teachers
8.		Develop new community partnerships	2 new partnerships	2 new partnerships
9.		Coordinate STEM community outreach activities	25 outreach events	84 outreach events; 6,239 direct impact
10.		Disseminate STEM Center activities/achievements through press releases/social media	15 press releases	10 press releases; weekly social media posts

<sup>1</sup> Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

## 11.2 Major Accomplishments (In This Year)

### **ACTIVE GRANTS - \$4,564,883**

The STEM Center managed six federal grants in FY2022, achieving multiple goals for improving STEM education in the region.

#### **Environmental Health Investigators (funded by National Institute of General Medical Sciences) & Youth-Led Citizen Science (funded by National Science Foundation)**

In cooperation with area middle and high schools, STEM Center staff implemented the Environmental Health Investigators program, part of the \$1.3 million NIH-funded Science Education Partnership Award project (SEPA), and the Youth-Led Citizen Science program (Y-CITYSCI), part of a \$1.0 million NSF-funded project. These programs used engaging student-centered, data-driven activities developed by the STEM Center to help students gain experience with their environment and environmental health.

Through these projects, the STEM Center, in collaboration with the SIUE Departments of Environmental Sciences and Applied Health, continues to implement student programming that connects area youth with exposure sciences. Through Y-CITYSCI and Environmental Health Investigators, STEM Center faculty and staff developed and provided innovative, relevant programming that helps youth explore technologies and concepts leading to a greater understanding of their environments.

#### **At the Confluence: Supporting Critical Transitions for Graduate Students in Sustainable Watersheds Research (funded by National Science Foundation)**

The STEM Center, partnering with SIUE Departments of Biology, Chemistry, Civil Engineering, and Environmental Sciences, received a National Science Foundation S-STEM award for \$1,500,000. The award supports scholarship funds for low-income graduate students pursuing their master's degree at SIUE and with an interest in watershed sciences. The S-STEM award also supports co-curricular activities for the students accepted into the program intended to increase their capacity as students at SIUE and emerging scholars. Further, the research team is offering professional development opportunities for SIUE faculty to support research-informed best practices in mentorship and graduate education.

#### **GP-EXTRA: Personal Relevance, Global Significance: Building Geoscience Education and Career Pathways (funded by National Science Foundation)**

The geoscience disciplines have strong employment growth and offer rewarding careers, but overall geosciences is one of the least diverse STEM disciplines. Through a \$432,038 grant from the National Science Foundation, the STEM Center is leading a project that raises SIUE student awareness and preparation for graduate school and/or employment in the geosciences. The STEM Center and faculty in Geography and Environmental Sciences are offering intensive research and field experiences for a cohort of 21 science-interested undergraduates. In May 2022, the grant funded a group of six SIUE GEOPaths students and two faculty to travel to San Miguel, El Salvador, where they were hosted by the Universidad Gerardo Barrios. The group learned about volcanic and landslide hazard mitigation and prevention in local communities, surface water quality, and agricultural production.

### **Safe and Inclusive Field Schools (funded by National Science Foundation)**

The STEM Center continued to operate a \$300,000 NSF Improving Undergraduate STEM Education award to investigate practices that promote student safety and inclusivity among archaeological research. This award supported STEM Center faculty to collaborate with researchers from Mississippi State University and University of Arkansas to research steps that field directors take to prevent and reduce sexual harassment and assault at field schools, as well as student perceptions of these steps. In FY22, the research team presented their findings through nine conference presentations and one publication in the journal *Advances in Archaeological Practice*. The team's research was featured in Science Magazine in 2020.

### **Inclusive Excellence 3 (funded by Howard Hughes Medical Institute)**

The STEM Center assumed leadership for the Howard Hughes Medical Institute's (HHMI) Phase 1 grant for Inclusive Science Education on March 1, 2022. This \$30,000 grant has supported a cohort of nine undergraduate STEM Student Ambassadors to develop faculty and staff-mentored action projects to improve introductory STEM courses, which can be a barrier to student success and advancement. The grant has provided funding for pilot activities that are the foundation for a follow-on proposal for a Phase 2 project submitted in FY23.

### **Introducing High School Students to Field-Based Careers in STEM (funded by Meridian Society)**

In collaboration with the SIUE Departments of Anthropology and Environmental Sciences and Geography, the STEM Center received \$2,845 in funding to conduct a week-long, summer learning experience in field-based sciences for Collinsville High School students enrolled with the Upward Bound Math & Science program. The program, led by three female scientists, introduced local youth who have been historically marginalized in the sciences to: field-based learning and locally relevant science; field-based technologies relevant to future employment; and college majors, research opportunities, and regional career possibilities. Students learned archaeological field methods at an archaeological site and used drones to document landscapes and investigate stream dynamics. The program culminated in a career panel featuring regional professionals. In sum, this program empowered students to see the significance of research in this region and potential for field-based STEM careers, while connecting them to the relevance of the history and place of their community.

## **EDUCATION and COMMUNITY ENGAGEMENT**

### **Science and Engineering Research Challenge (STEM Center Initiative)**

The STEM Center hosted the Science and Engineering Research Challenge in March 2022. Our Science and Engineering Research Challenge attracts hundreds of students from throughout southwestern Illinois. Participation was again virtual, and we offered opportunities and awards for students in addition to a chance to compete in the Illinois Junior Academy of Science (IJAS), the Regeneron International Science and Engineering Fair (ISEF), and the Regeneron MASTERS. The STEM Center's plan and implementation for a virtual fair, developed for the pandemic, was the basis for a published article: Wilson, C. P. (2022). Planning Virtual Science Fairs. *Science Scope*, 45(3), 20-26.

**Robotics Competition**

In December 2021, the STEM Center hosted the in-person qualifier for FIRST LEGO League (FLL) Robotics teams in southern Illinois. This event, open to all registered FLL teams in Illinois, brought in 52 middle school youth and adults from around the state. Later in the spring, the STEM Center hosted the FIRST LEGO League Junior Robotics Expo for elementary aged robotics teams in the area. Fifty parents and students attended.

**SIUE Staff Fellow - Focused Interest Community**

For FY22, SIUE STEM Center Program Coordinator Wonnacott-Stanley became the staff fellow for the Math and Science Focused Interest Community. The STEM Center hosted this group of students, mainly declared Biology and Chemistry majors, several times over the year with activities ranging from dissecting owl pellets to examining fossils and bones in the STEM Center's collection. Students were able to familiarize themselves with the STEM Resource Center, exploring materials available for studying and learning as well as discovering how quiet and convenient the SRC is for studying during the day. The highlight of having these students visit frequently was the ability to share scholarships and opportunities as we were made aware of them.

**NASA Cougar Cool-Down**

The STEM Center partnered with NASA Glenn Education Center to provide 23 students at Madison Middle School with the opportunity to conduct a NASA Engineering Challenge. Students talked to mission experts about the Artemis mission and were challenged to develop a new way to insulate the fuel tank on the rocket to help keep as much liquid oxygen in the tank as possible. Students formed teams and experimented with foam, fabrics, and paper products to reduce heat loss on a model of the fuel tank. They created presentations of their research and submitted it to NASA Engineers. This program was very engaging for students, so the STEM Center staff offered it to an after-school science club in Mitchell. Students in this group were able to speak live to two engineers involved in the Artemis rocket design, specifically the fuel tank. They were able to ask questions about the engineers' degrees, day-to-day jobs, and what they were interested in when they were in middle school. It was a great way to connect our students to real scientists working on space missions!

**Library Program**

The STEM Center partnered with the SIUE Office of Online Education and Outreach to offer a new summer public program on astronomy, biology, and geology at ten regional libraries. The program reached 155 learners.

**Lending Library Online Inventory**

STEM Center staff expanded and improved the Center's online inventory database to increase access to the collection. All lending reservations are now handled online as opposed to users only having access to our resources by coming in person or calling. The online system makes the lending process faster and more accessible to our users. We continually provide maintenance to our physical materials and online items to keep them up to date. We have added and removed several items in our inventory database to make sure materials are relevant to what teachers and students need. We have added items to the inventory including Makey Makey engineering tools, energy stick circuit demonstrations, and Specdrums visible light musical instruments.

### 11.3 Evidence of Support for IBHE “A Thriving Illinois,” SIU System, and SIU Campus Strategic Planning

#### (I.) Support for SIU System Priorities (2021-2026 Strategic Plan)

##### **Goal Theme 1: Academic Innovation and Student Success**

The center provides work and internship experiences in STEM for undergraduate and graduate students, and in collaboration with academic departments provides undergraduate scholarships through the NSF Noyce programs. Financial support through scholarships and internships increases the likelihood of retention and graduation of STEM students. Funded programs in environmental citizen science (ITEST Y-CITYSCI) and pollution (Environmental Health Investigators) connect graduate students with real-world opportunities for research and analysis. The Center’s GEOPATHS program provides undergraduate research experiences, internships, professional skills training, and mentorship for undergraduates who identify as underrepresented in the geosciences. Undergraduate research is one of the predictors for retention and success for students who are underrepresented in STEM.

##### **Goal Theme 2: Anti-Racism, Diversity, Equity and Inclusion**

The Center plays an important on-campus role in providing opportunities for those traditionally underrepresented in STEM fields. In November 2021, we partnered with the Black Faculty and Staff Association on a STEM Open House, where we shared resources and described opportunities at the STEM Center for Black faculty, staff, and students. STEM Center faculty and staff also gave three presentations on how to promote and encourage diversity in STEM fields at the 2021 SIUE Diversity Day conference. The STEM Center faculty and staff regularly participate in professional development to ensure a welcoming and safe space for SIUE students, community members, program participants, and partners. The STEM Center is listed as a Safe Zone on campus, with four faculty/staff members having completed the Safe Zone training and registered as university allies. Additionally, two faculty/staff members have completed the Green Zone training. STEM Center outreach programs primarily support students and teachers of majority low-income and racial minority districts, with the goal of increasing access to STEM education and cultivating a diverse technical workforce in southwestern Illinois.

##### **Goal Theme 3: Community Impact**

The Center is a leading outreach organization on campus. In addition to youth programs, we provide teacher professional development and equipment loans through the Resource Center. In FY22, we partnered with a diverse group of community organizations for K-12 and public engagement: regional libraries, Army ROTC, Bethalto 8, Boy Scouts of America, Boys and Girls Clubs of Bethalto, Early Explorations Preschool, Edwardsville District 7, Fairmont City Christian Activity Center, FIRST Robotics, Girl Scouts of Southern Illinois, Good Dirt Composting Collective, Granite City 9 District, Heartland Conservancy, Highland 5 District, Madison School District, Upward Bound Math and Science Collinsville, and Watershed Nature Center. The STEM Center also partners with local governments to create internships for SIUE students in environmental education and sustainability.

**Goal Theme 4: Research, Creative Activity and Partnerships**

The STEM Center leads interdisciplinary and transdisciplinary grant proposal teams on campus and with external partners each year, often serving as a mentor for early-career faculty members. Center-led grants are frequently national in scope and serve to connect SIUE faculty with other research institutions. External research partners in FY22 included Colorado State University, Illinois State University, Mississippi State University, Southern Illinois University Carbondale, University of Arkansas, and The University of Texas-El Paso. The STEM Center faculty is nationally recognized for the quality of scholarship through frequent participation on national grant review panels and leadership positions in regional, national, and international professional societies.

**Goal Theme 5: Faculty and Staff**

The STEM Center collaborates with and supports faculty members on grant applications and promotes interdisciplinary research projects, which are a priority for federal funding agencies. The Center serves as a partner for broader impacts work required for National Science Foundation proposals, increasing competitiveness of proposals submitted by science and engineering faculty. The Center also presents and publishes research in collaboration with faculty and connects faculty with opportunities for community engagement with schools, youth organizations, and the general public.

**Goal Theme 6: Infrastructure**

The STEM Center has a high return on investment from grant funding relative to state support of its faculty and staff. Grants provide indirect cost recovery for SIUE departments and the center. Fee-based programs partially support a center staff member, who in turn provides instructional support services to SIUE faculty and students. Central coordination for STEM equipment and supply loans reduces costs to academic departments.

(II) Support for IBHE “A Thriving Illinois” Goals

**Increase postsecondary credential and degree attainment to develop the talent that drives Illinois’s economy.**

The GEOPATHS program is increasing undergraduates’ awareness of geoscience career pathways and providing training to create a more highly skilled geoscience workforce. The HHMI program is reducing barriers to advancement in STEM degree programs by improving the student experience in introductory STEM courses.

**Close the equity gaps for students who have been left behind by the higher education system.**

The STEM Center is directly addressing the STEM workforce pipeline in Illinois by providing support to faculty and direct support to students to improve student outcomes and reduce equity gaps at the K-12, undergraduate, and graduate levels. We help improve academic preparation and increase interest in STEM so that Illinois students successfully transition from high school to higher education, and into careers.

**Improve affordability, increasing access, and managing costs.**

Center programs provide scholarships, internships, and graduate assistantships through grant awards and partnerships with communities. The NSF-funded Watershed Scholars program, a partnership with several academic units, is providing \$20,000 graduate scholarships for up to 10

master's students each year in biology, chemistry, civil engineering, environmental sciences, or geography.

11.4 Evidence of Support for Center/Institute Objectives

**IBHE Objective 1: Build and support interdisciplinary teams of SIUE faculty to conduct STEM education projects and seek and secure external and internal funding.**

The STEM Center faculty team uses their extensive grant experience to lead and strengthen SIUE grant applications and pursue a range of research project types and topics. We prioritize collaboration with other units and often mentor new SIUE PIs to write competitive proposals. These efforts have led to substantial indirect cost recovery to the institution and to the academic units. Additionally, faculty members in academic departments receive summer salary from grants and use their returned indirect cost funds for professional development.

In FY22 we led, co-led or contributed to eight proposal submissions requesting \$5.8 million. Faculty members who partnered on STEM Center proposals for FY22 are based in the departments of Anthropology, Environmental Sciences, History, and Teaching & Learning.

	<b>Internal Proposals</b>	<b>Title</b>	<b>\$ 7,645</b>
	Meridian Society (Colaninno)	Introducing High School Students to Field-Based Careers in STEM	\$2,845
	Meridian Society (Stanley)	Girls Discover Forensic Science Series	\$4,800
	<b>External Proposals</b>	<b>Program/Title</b>	<b>\$ 5,779,779</b>
	National Science Foundation (PI Colaninno)	INCLUDES (subaward from Ecological Society of America)	\$512,471
	National Science Foundation (PI Bracey; co-PIs Locke, Stephen)	DRK12: Teaching Robotics Using Culturally Responsive Pedagogy	\$1,587,274
	National Science Foundation (PI Locke)	IUSE: A Course Scaffold for Integrating Science and Culture	\$299,967
	National Science Foundation (PI Locke)	INCLUDES (subaward from University of Cincinnati)	\$100,000
	Nature Preserve Foundation (PI Locke)	Environmental Education Graduate Internship	\$4,633
	National Science Foundation (Locke, Bracey, Colaninno)	St. Louis Addressing Real-world Challenges (ARCH) Alliance	\$3,275,434



**IBHE Objective 2: Provide access to equipment, facilities, and expertise for STEM education research, and IBHE Objective 6: Develop and maintain a comprehensive STEM resource and equipment center.**

In FY22, the STEM Center's Resource Center provided materials loans and consulting services that impacted approximately 9,000 STEM educators, researchers, and students. The improved and expanded STEM Center inventory website provides area preK-12 teachers with online access to a wide variety of classroom resources and STEM activities. SIUE faculty utilize the Center's equipment and classroom space for university courses and research. The resources of the STEM Center provide a variety of ways to engage with STEM, expanding the reach of STEM teaching and learning in both formal and informal educational settings and increasing STEM literacy in southern Illinois and beyond.

**IBHE Objective 3: Facilitate and promote innovations in SIUE undergraduate and graduate STEM teaching.**

The STEM Center is leading an Inclusive Excellence program that has the primary goal to improve student achievement and completion for introductory STEM courses. Introductory STEM courses often serve as barriers to student advancement in STEM majors and may result in students switching out of STEM. The Center is working with an interdisciplinary team of faculty and STEM Student Ambassadors to study and redesign the introductory STEM experience at SIUE.

The STEM Center leads the National Science Foundation funded SIUE GEOPATHS project, which is supporting 21 SIUE undergraduates who identify as underrepresented in STEM to participate in faculty-mentored research, field excursions to the Western U.S. and El Salvador, career seminars, professional skills training, and conferences. GEOPATHS support for these activities is the equivalent of \$10,000 per student.

The STEM Center co-leads the NSF-funded IFLIP project (PI Chaya Gopalan, Applied Health and Nursing). This project is developing and studying implementation of flipped teaching in multiple STEM courses across campus in order to increase use of student-directed learning in STEM instruction. STEM Center faculty contributed to two submitted articles and one conference presentation in FY22.

The Center's ongoing Faculty Fellows Program has enabled improvements in undergraduate education at SIUE by testing innovative approaches to instruction. STEM Center Research Fellow Dr. Kathleen Vongsathorn, assistant professor in the Department of History, served as co-principal investigator on a STEM Center proposal (PI Locke) submitted to the National Science Foundation's Improving Undergraduate STEM Education program in January 2022.

With internal funding from SIUE in FY21, the STEM Center, in collaboration with the College of Arts and Sciences and School of Engineering, researched how SIUE can better support STEM graduate students. In FY22, the team received \$1,500,000 in funding from the National Science Foundation to support graduate students through scholarships. These scholarships support low-income graduate students to pursue their degree in a STEM field and research related to watershed sciences. The grant also supports professional development for SIUE

faculty to more holistically mentor graduate students, particularly those from minoritized groups, to find success in STEM.

**IBHE Objective 4: Enhance teaching and learning of STEM for pre-service and in-service teachers.**

The STEM Center continues to contribute resources and classroom space to Science 241a and Science 241b, courses titled Foundations of Science, which teach STEM topics to pre-service teachers. STEM Center instructor Colin Wilson continued to serve as an instructor for Science 241b and was involved in planning the future of the course with other instructors. The STEM Center also provides lesson plans and materials to pre-service teachers for use in their coursework at SIUE, and, through the Noyce Scholars and Noyce Interns program, encourages and supports all students considering careers as STEM teachers.

The STEM Center provides in-service teachers with opportunities for professional development. In June 2022, STEM Center staff held a two-day workshop for a group of 15 middle school teachers as part of the NIH-funded SEPA project. Teachers learned how to implement *Environmental PhotoVoice*, a student-centered environmental health science curriculum developed as part of the project. Participating teachers received copies of this curriculum, as well as PurpleAir monitors, high-tech sensors that monitor air-quality and share the collected data through an interactive website ([map.purpleair.com](http://map.purpleair.com)). STEM Center graduate students helped install the PurpleAir monitors at schools throughout the Metro East. The real-time air quality data can be used by teachers in their classrooms. These teachers are using their PurpleAir monitors to engage students in exposure sciences and to develop new curricula based on the data.

**IBHE Objective 5: Develop, enhance, coordinate, and promote new and existing STEM-related outreach in the southern Illinois region to enhance STEM literacy.**

We are a regional leader in STEM programming, partnering with more than 55 school districts and dozens of other organizations to reach students through lessons and activities. We provide outreach customized to the needs and interests of community partners. STEM Center outreach activities are aligned with Next Generation Science Standards and connected to district textbooks and curriculum goals. This ensures that the materials are relevant and complementary to what outreach participants are learning in their schools. We advertise learning opportunities through flyers, social media posts, and emails to STEM educators, parents, and administrators, prioritizing schools and communities with a high proportion of low-income families.

11.5 Evidence of Organizational Effectiveness

**Organizational effectiveness in achieving predetermined goals (see Section 11.1, Performance Measures)**

**Research:**

**The STEM Center *exceeded* targets for the three research performance measures: proposal submissions, peer-reviewed publication submissions, and conference presentations.**

In FY22, Center faculty and staff gave 28 scholarly presentations at conferences and submitted five publications in order to enhance the regional and national reputation of the SIU system (Table, next page). The Center submitted 8 external proposals requesting \$5.78 million. STEM Center FY22 revenue from existing grants and contracts was \$983,476, which is 75% of total Center revenue.

Year	# Publications, Published*	# Publications, Submitted	# Scholarly Presentations	FTE Research Faculty
FY22	5	5	28	3.1
FY21	-	6	25	3.2
FY20	-	7	8	3.2
FY19	-	6	11	3.2
FY18	-	10	8	2.7

\*Published articles were not tracked in FY18-22 BOT reports.

**Instruction:**

**The STEM Center *exceeded* the target for credit-bearing courses taught.** Center faculty and staff taught 29 credits for undergraduate and graduate courses in the Departments of Environmental Sciences and Geography. Twenty-three of these credits were taught by Locke and Colaninno as effort outside their normal responsibilities and represent contributed time by the STEM Center to the College of Arts and Sciences.

The STEM Center Faculty Fellow program was paused in FY22.

**Public Service:**

**The STEM Center *exceeded* targets for the STEM Resource Center lending library, community outreach events, and dissemination to the public.**

The Center outreach staff delivered 84 outreach events, resulting in 6,239 contacts in the community, more than tripling its community impact. The STEM Resource Center and its lending library had over 1,000 in-person visits, exceeding the target of 790. We attribute the strong number to improved outreach to SIUE students and to educators in the community. We also transformed public dissemination by strengthening our social media presence. Although the number of traditional press releases decreased, social media impact remained strong.

**The STEM Center *met* the target for new community partnerships.**

The Center developed a partnership with the Girl Scouts to deliver multiple outreach sessions in southern Illinois and formed a new partnership with FIRST robotics to host a qualifier competition on campus.



**RESOURCES: SIUE Center for STEM Research, Education, and Outreach**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	293,717	289,048	283,275	283,642	212,239
Course Specific Fees	3,675	1,725	3,975	4,775	4,775
Salary Transfer	475	1,425	1,957	12,128	0
Non-Recurring Funds	400	400	28,483	90,000	0
Activities Income	20,659	300	30,872	45,833	44,664
Grants & Contracts	921,632	951,996	1,229,674	674,371	928,636
ICR	61,844	92,210	156,526	75,281	140,886
Foundation	4,605	0	0	300	1,120
<b>Total Revenues</b>	<b>1,307,010</b>	<b>1,337,103</b>	<b>1,734,761</b>	<b>1,186,330</b>	<b>1,332,320</b>
Expenditures <sup>1</sup>					
Salaries	581,554	635,901	527,316	492,476	367,509
Grant Collaborators	14,554	46,333	67,557	43,751	74,451
Faculty Fellow	0	0	0	0	4,899
Graduate Assistant	136,702	153,719	115,435	46,723	31,867
Student Interns	0	0	0	0	(59,665)
Student Wages	18,563	15,220	13,643	12,637	12,501
Travel	26,688	1,528	11,141	21,251	9,788
Equipment	7,515	15,651	40,994	6,936	(1,749)
Commodities	32,895	13,346	12,239	19,744	8,563
Contractual Services	194,682	134,705	145,802	164,319	4,500
Awards	5,850	3,175	511	21,150	(344,172)
Scholarships	0	57,500	69,200	115,000	152,510
Automotive	0	0	278	720	2,398
Telecommunications	5,000	5,002	4,353	4,747	4,311
Benefits	92,421	117,054	93,949	73,353	92,992
Participant Support	158,247	55,062	77,286	77,088	882,832
Nonmandatory Transfers	58,109	110,540	83,930	170,422	4,409
<b>Total Expenditures</b>	<b>1,332,780</b>	<b>1,364,735</b>	<b>1,263,633</b>	<b>1,270,315</b>	<b>1,247,945</b>
<b>Revenue Minus Expenditures</b>	<b>(25,770)</b>	<b>(27,631)</b>	<b>47,1128</b>	<b>(83,985)</b>	<b>84,375</b>

<sup>1</sup> The cyclical nature of grants means that grant revenue recorded in a given fiscal year has expenditures in subsequent years. This leads to a pattern of surplus followed by deficit in the reporting system. For example, in FY2020 the Center received a large three-year federal grant as revenue, and had project-associated expenditures in FY 2021 and 2022.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Tenured/Tenure Track Faculty	1	1	1	1	1
Research Faculty	3.1	3.2	3.2	3.2	1.7
Non-Tenure Track Faculty	0.8	1	1	1	1
Staff	3.2	4	4	3	2
<b>Total Staffing</b>	<b>8.1</b>	<b>9.2</b>	<b>9.2</b>	<b>8.2</b>	<b>5.7</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	SIUE East St. Louis Center
3.	Date	March 14, 2023
4.	Director	Timothy Staples, EdD
4.1	Telephone	618-482-8326
4.2	E-mail	tstaple@siue.edu
5.	Year Established	(1966)
6.	Illinois State Statute (if pertinent)	(if created by Illinois state statute, list the specific statute by number and title; otherwise, list N/A)
7.	Reporting Unit	Office of the Provost and Vice Chancellor for Academics
8.	Type	Activity (check all that apply)
	Instructional	x
	Research	
	Public Service	x

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

**The SIUE East St. Louis Center** has provided support and services to youth, adults and families in the St. Clair and Madison Counties for more than 50 years. The support and services are implemented through Center-base programs such as Head Start/Early Head Start, the SIUE 5 High School TRIO/Upward Bound programs, a Veterans TRIO/Upward Bound, Project Success (a DCFS Program), Library Services, High School Leadership Program, and the Performing Arts. Additionally, the SIUE Charter High School, which is managed by the School of Education, Health and Human Behavior, is housed at the Center. Additionally, The Center partners with the Illinois Community College Board to provide learning services, and resources for the community.

### 9.2 Mission

The SIUE East St. Louis Center is dedicated to improving the lives of families and individuals - from pre-school through adult. The program and services are designed to offer opportunities to achieve and expand access to general education, higher education, and career advancement.

### 9.3 Objectives

Through program and services, the SIUE East St. Louis Center:

- Provides educational classes for student from pre-school age to adult.
- Assist high school in college preparation.
- Coordinate and implement adult training and certification programs which support workforce development.
- Collaborate with the Illinois Community College Board and its member institutions to provide support and provide post-secondary education and training opportunities.
- Provide library and technology support services for general members of the community.

Provide workshops and seminars for the community which promote physical, mental and financial well-being.

## 10. Advisory Board

### 10.1 Advisory Board - Membership

The plans for the Advisory Board structure are being presented to the Provost and Vice Chancellor for Academic Affairs, to present to the Chancellor for guidance and approval

10.2 Number of Meetings (In This Year) 0

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
Maintain compliance for existing grants	100%	Due to COVID-19, several grant requirements were suspended or adjusted by the issuing agencies. All grants are in good standing
Increase the number of students being served	Accomplish maximum enrollment for all High School Upward Bound TRIO and Veterans Upward Bound TRIO.	Enrollment has begun to recover from the COVID-19 impact. 2 of the 4 programs have met the required enrollment number.
Increase grants awarded to SIUE East St. Louis Center	Re-apply for the Competitive Federal Head Start/Early Head Start Grant	SIUE received the 5-Year Federal Head Start/Early Head Start Grant
Increase SIUE East St. Louis Center presence as a leader in the East St. Louis community	Increase involvement in community coalitions	The Center has provided support and engaged in collaboration with the East St. Louis Historical Society, the Katherine Dunham Museum, and the House of Miles Foundation and Museum. Additionally, the Center has increase workshops and trainings for members of the community.

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.



## 11.2 Major Accomplishments (FY 22)

### **Building Futures**

- **Stable Housing:** One of the biggest challenges faced by foster care youth is finding stable housing. With the help of several community initiatives throughout the metro-east area and integration services from SIUE BUILDING FUTURES, we are able to help our youth find the services that they need for housing.

### **Head Start/Early Head Start**

- SIUE Head Start staff was selected to participate in first virtual UCLA Health Care Institute's "Staff and Organizational Wellness - Building a Healthier Workplace Through a Coordinated and Strategic Approach" Training Program.
- It was with excitement that after two years of virtual conferences due to the pandemic, SIUE Head Start staff and parents attended the Annual National Head Start (NHSA) Conference in Baltimore, MD. Attendees participated in various communities of practice sessions that focused on parents; health and wellness; education and child development among others.
- Jackie Joyner Kersee Head Start Center families participated in a financial literacy graduation. The (literacy) program focused on building a better financial future, beginning with understanding the basics of personal finances, types of financial institutions, opening and maintaining a Bank Account and understanding money. Upon graduation, each family received cash to establish a Great Start account for their children, the parent received a cash stipend, and a personal banker for as long needed. Each financial literacy program last for a 10-week period.
- All Head Start/Early Head Start centers were provided with toys for each enrolled child. Toys were courtesy of local Toys for Tots Drive (s)!

### **Collinsville Upward Bound Programs**

- Renewal of Upward Bound Grant Award for an additional five years (2022-2027)
- 17 Collinsville HS graduates
- 10 graduates are first years at SIUE
- 14 enrolled in college by fall semester after high school graduation
- 2 graduates named Illinois State Scholars
- Taylor Foote' Class of 2023 was nominated and chosen to attend the Council for Opportunity in Education National Student Leadership Congress in Washington, DC
- 50% of participants recognized on Fall 2022 First Semester Honor's Roll list (GPA 3.4+)
- UBSA Student Ambassadors donated food to fill a Thanksgiving Box for a Collinsville School District family, and donated toys to Boys and Girls Club of St. Louis for Christmas.

### **Veterans Upward Bound**

- Developed portable computer lab to take services to disadvantaged veterans who cannot travel to East St. Louis
- Established on-site services at three organizations serving homeless veterans
- Established relationship with Veterans Community Project in St. Louis to provide service to mutual clients

### **Library/Learning Resource Center**

- Creation of new community partnerships and the renewal of previous community partnerships post-pandemic
  - Metro East Diaper Bank
  - Carrollton Bank (added virtual component)
  - U of I Extension (added virtual component)
  - PCs for People
  - Alzheimer’s Association
  - SIHF Healthcare
  - East St. Louis Historical Society
- Increased online presence with increased followers on Facebook and Instagram and increased programming (e.g. themed Bilingual Storytime, Black History Month Storycorp, Women’s History Month American Masters PBS stories)

**Upward Bound East St. Louis Based**

- Nine of our students received full ride scholarships to Tennessee State University
- Upward Bound 3<sup>rd</sup> Annual Blood Drive and Vails Brother’s Food Truck. 21 blood donations with our goal being 15 which we exceeded. We had more people than we could serve due to limited space on blood drive bus.
- New 5-year Grant-EC is now East St. Louis and Charter School and MLC is Madison/Lovejoy/Cahokia

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The programmatic engagement and services in FY21-22 aimed to fulfill the mission of Southern Illinois University Edwardsville. That aim is to provide “educational opportunities that teach the values of wellness of mind, body and spirit.” Additionally, “foster personal and professional development, and provides opportunities for cultural and social interaction.”

11.4 Evidence of Support for Center/Institute Objectives

All programs submit an extended annual report, as well as information from staff evaluations.

11.5 Evidence of Organizational Effectiveness

All programs submit reports to granting agencies.

12. Institutional Assessment

12.1	Date of Last Review	<u>2021</u>	_____
12.2	Decision at Last Review	<input checked="" type="checkbox"/> _____	Center/Institute in Good Standing
		<input type="checkbox"/> _____	Center/Institute Flagged for Priority Review
		<input type="checkbox"/> _____	Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)	
		_____	

The committee rates the East St. Louis Center as **satisfactory**. The center shows particular strengths in providing resources to the communities it serves and collaborating with a number of external organizations. The committee also commends the dedication and level of care shared by the center's leadership. Nevertheless, the committee also identifies some areas for growth related to transparency, consistency, and collaboration, as well as high turnover that the center has experienced in recent years. The committee believes that addressing these issues through an advisory board and strategic plan would help maximize the services that the center provides.

**RESOURCES: SIUE East St. Louis Center**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	762,138.00	1,252,054.00	740,715.00	827,844.00	732,043.00
Income Fund	274,506.81	437,366.29	693,895.78	767,558.00	334,742.64
Grants & Contracts					
Head Start/Early Program	9,612,820.74	10,624,298.30	11,873,959.77	11,538,375.00	12,060,570.00
Project Success/East St. Louis	-	16,887.50	159,528.52	150,435.00	201,233.80
Upward Bound (BEM)	370,801.00	124,041.00	358,262.00	328,858.00	328,858.00
Upward Bound (EC)	686,293.00	354,197.00	663,085.00	623,347.00	608,663.00
Upward Bound Math and Science Center	263,655.00	305,171.00	279,162.00	264,141.00	256,250.00
UB Math and Science-Cahokia & Madison	297,601.00	297,601.00	287,537.00	275,155.00	263,938.00
UB-ESTL High School Academy	268,357.00	380,824.00	287,537.00	275,155.00	263,939.00
Veterans Upward Bound	267,450.00	427,207.00	287,537.00	275,155.00	263,938.00
Child & Adult Food Care Program	225,958.34	107,666.16	303,290.34	560,329.00	562,977.50
Support	-	-	-	-	-
	3,750.37	1,334.50	-	12,131.00	16,393.94
		-	-	22,270.94	22,521.00
					2,200.00
Building Futures	183,976.00	150,080.05	119,385.00	123,634.91	224,799.82
Kindergarten Readiness Camp		-	-	36,156.12	56,000.00
ICCB	674,903.96	609,866.56	674,903.96	844,963.00	872,703.00
ICCB Contruction Project		902,000.00			
Post-Secondary Completion Strategies Program					
Preschool for All		-	-	299,999.98	264,045.00
ESL STEM & Energy Constellation		-	-	366.00	49,011.00
<b>Total Revenues</b>	<b>13,892,211.22</b>	<b>15,990,594.36</b>	<b>16,728,798.37</b>	<b>17,225,873.95</b>	<b>17,384,826.70</b>
Expenditures*					
Misc**	273,779.50	804,609.19	44,272.25	60,004.50	65,443.61
Salaries	6,295,359.49	4,525,980.50	7,396,047.34	7,156,983.31	7,020,501.33
Fringes	2,768,809.18	421,609.79	3,740,996.14	3,781,576.20	3,728,702.03

Travel	37,171.24	4,794.28	20,372.60	41,379.32	30,759.13
Equipment	169,132.76	908,962.79	44,868.70	92,508.94	512,478.85
Commodities	271,139.66	189,033.16	230,330.62	187,769.83	350,053.60
Contractual Services	2,049,261.77	3,008,565.00	791,291.86	1,469,427.62	2,639,064.63
Operation of Auto	37,648.83	84,935.24	1,901,112.69	2,019,620.37	83,973.90
Telecommunication	297,537.39	193,467.57	71,634.60	66,984.72	230,558.52
Indirect Cost	901,278.61	1,016,737.05	523,250.96	886,551.71	1,434,446.53
Total Expenditures	13,101,118.43	11,158,694.57	14,764,177.76	15,762,806.52	16,095,982.13
Revenue Minus Expenditures	791,092.79	4,831,899.79	1,964,620.61	1,463,067.43	1,288,844.57

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

\* Expenditures include stipends (TRIO); repair to Cahokia parking lot; and transfer funds to cover the Head Start fringe rate change that was not budgeted on grant.

Staffing (Full Time Equivalent)	FY2022	FY2021	FY2020	FY2019	FY2018
Faculty (summer teaching for TRIO programs)					
Staff					
Total Staffing	0	0	0	0	0

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	Environmental Resources Training Center
3.	Date	1-11-23
4.	Director	Matthew R. Maas
	4.1 Telephone	618-650-2214
	4.2 E-mail	mmaas@siue.edu
5.	Year Established	1967
6.	Illinois State Statute (if pertinent)	Ill. Rev. Stat., Ch. 144, Sec 691, et seq
7.	Reporting Unit	School of Engineering
8.	Type	Activity (check all that apply)
	Instructional	
	Research	
	Public Service	X

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The ERTC is the state of Illinois' training center for water treatment technology. The ERTC educates pre-service students enrolled in the one-year Water Quality Control Operations Program, who wish to enter the water industry. The ERTC also provides continuing education at the center and throughout the state for working operators, who are required to obtain continuing education units or wish to advance their professional certifications. Additionally, the ERTC provides services for IEPA via an interagency agreement, which includes coordination of water and wastewater certification review committees, certification testing management, training of cross connection control device inspectors, and management of the cross connection control program.

### 9.2 Mission

The ERTC Mission is to provide quality education in water treatment technology to the people of the state of Illinois. ERTC conveys knowledge and skills to drinking water supply operators to ensure that the citizens of Illinois receive safe and reliable drinking water. ERTC also conveys knowledge and skills to water reclamation plant operators to ensure that the effluent water is of the highest quality and will not degrade our nation's water sources.

### 9.3 Objectives

Provide a comprehensive one-year training program with the Water Quality Control Operations Program for pre-service students.

Provide continuing education and certification exam preparation for in-service students.

Ensure the availability of continuing education to all operators throughout Illinois and Missouri.

Produce up-to-date training for the water quality industry.

Deliver online/virtual courses to disseminate the knowledge and skills needed in the water treatment industry to operators and the public.

Continue to provide statewide training for the mandated Cross Connection Control Device Inspector (CCCDI) program. By Illinois statute, ERTC is the only institution that can provide the required training for CCCDI (Title 35, Subpart F, Chapter II, Part 653.802 para. F, sub para. 2.) (Nov. 1, 1985)

10. Advisory Board

10.1 Advisory Board - Membership

1. Dr. Jianpeng Zhou  
Professor of Environmental Engineering, School of Engineering, SIUE
  2. Dr. Zhi-Qing Lin  
Professor of Environmental Sciences, College of Arts and Sciences, SIUE
  3. Edward Matecki\*  
Assistant Director (Retired), Facilities Management, SIUE
  4. Martin Reynolds  
Public Works Director (Retired), Roxana, IL
  5. Tim Albers  
Water Utility Operations Manager, HMG Engineers Inc.
  6. Patti Schaake\*\*  
Chief Operator (Retired), Edwardsville, IL
  7. Penny Pinkstaff  
Public Works Director, Lebanon, IL
  8. Becca Coyle  
Plant Manager, Metropolitan Sewer District, St. Louis, MO
  9. John Leezy  
Wastewater Collections Supervisor, City of Wentzville, MO
- \*Ed Matecki has retired and will be replaced by the Assistant Facilities Director (Donte Harris) pending SIUE board approval.  
\*\*Patti Schaake has also asked to be removed from the Advisory Board after moving to Florida. The Advisory Board will submit a replacement nominee to the Governor.

10.2 Number of Meetings (In This Year) \_\_\_\_\_ 1 (June 30, 2022)



11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Maintain enrollment in one-year program between 20-30 students.	20-30	16
2. Maintain a pass rate of greater than A80% on the state certification exams.	80%	84%
3. Maintain excellent job placement for graduates.	80%	88%

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

The COVID pandemic continued to affect ERTC operations in FY22. The ERTC was able to hold the Class of 2021 graduation at the MUC on July 23, 2021 and held a graduation the following day for the Class of 2020. The initial graduation for the Class of 2020 was canceled, so this was an opportunity to allow past students to have the graduation experience.

The ERTC was able to continue in-person offerings, but class sizes were limited due to masking and social distancing restrictions throughout the Fall Semester of 2021. The testing/vaccine mandate also impacted enrollment because some unvaccinated registrants were not willing to adhere to weekly testing requirements.

As of April 4, 2022, the masking requirement was lifted, which allowed more flexibility for class sizes, venues, and formats.

The initial enrollment for the 2021-2022 class was 21 students (class size was maxed at 21 due to social distancing requirements). Three students dropped out of the program due to financial concerns or concerns with the COVID mandates. After the Fall semester, two students dropped out. The ERTC graduated 16 students for the fiscal year.

Revenue remained strong for FY22. Revenues minus expenditures for the fiscal year ended at \$48,517. This marked a net revenue increase of \$2,994 year-over year. The rebound from January 2021 to present has replenished the ERTC 4-account to pre-pandemic levels.

Both new and additional course offerings were implemented by the ERTC in FY22. Due to the demand caused by the new Wastewater Operator continuing education requirements, the ERTC hosted an additional wastewater short school offering in Edwardsville in August 2021. In March 2022, the ERTC added another wastewater short school at a previously unused location. The ERTC collaborated with the Peoria Sanitary District and held a short school in Peoria, IL. The plan is to continue this offering each year, along with the Edwardsville and Rockford locations. New course offerings included a virtual Class K (Industrial Wastewater) Certification Exam preparation course and a virtual Utility Management Course offering.

Kim Bateman retired from the Director of Cross Connection position at the end of October 2021. He held the position for 29 years and took a wealth of knowledge with him.

The easing of pandemic restrictions throughout the area allowed for more promotional activities this fiscal year. The ERTC formed a new collaboration with the Specials School District in Missouri. As part of the Career Pathways Showcase, the ERTC attended three events (Eureka High School, North Tech High School, and South Tech High School) to speak with students interested in a career stemming from a vocational/trade school. The ERTC also attended Bunker Hill's Career Day. In February, the ERTC hosted an evening session of training for a local Boy Scout trip with an attendance of about 50.

The final year of the 2018 ERTC/IEPA Interagency Agreement yielded some equipment upgrades. The drinking water SCADA computer was replaced with an updated model and software was modified to the specs of the new computer. A new badge printer was purchased for the creation of CCCDI and operator cards.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

The ERTC has an interagency agreement with the Illinois Environmental Protection Agency (IEPA). In this agreement, the ERTC runs the Cross Connection Control Device Inspector program and the water/wastewater certification exam committee programs. Additionally, the ERTC is responsible for the grading of all Illinois certification exams in water, wastewater, and cross connection control. This agreement also provides funding for general ERTC operations, which includes salaries and equipment upgrades. In September 2021, the ERTC-IEPA interagency agreement closed for the period of October 2018-September 2021. The new interagency agreement for the period of October 2021-September 2024 was executed on 11/5/21. This agreement included funding in the amount of \$ 1,144,806 over the three-year period.

The ERTC is the IEPA designated training center for water treatment technology (drinking water and wastewater) in the state of Illinois.

The ERTC also provides support to the Illinois Pollution Control Board and the Illinois Department of Public Health on wastewater and cross connection regulations.

The ERTC supports, presents, and assists in the development of the annual conferences for the Illinois Water Environmental Association (IWEA), Illinois Potable Water Systems Operators Association (IPWSOA), Illinois Rural Water Association (IRWA), and the Illinois Association of Water Pollution Control Operators (IAWPCO). Additionally, in November, the ERTC assisted IRWA with some rural location training in East Peoria and Woodhull.

The ERTC Director of Wastewater Operations is the official Operator-In-Charge (OIC) for the SIUE wastewater treatment plant. The OIC is an IEPA required position of responsibility.

The Director of the ERTC is an Advisory Board Member on SIUE's Climate and Sustainability Advisory Board.

The ERTC hosted its third annual Water Symposium in May 2022. It was a virtual event and attended by 147.

The ERTC had several collaborations with main campus throughout the fiscal year. We collaborated with the Department of Biological Sciences on a project that tested for biophages in wastewater. The ERTC provided a tour and assisted with wastewater data collection for a team of professors and students from SIUE and Washington University. They participated in IWEA's Intelligent Water Systems Student Challenge and won second place at the IWPC conference in April 2022. We collaborated with Independent Studies to provide a semester long internship to a student. It proved to be very positive for the ERTC, as the student was able to revamp our Lockout/Tagout program in the Pilot Plant and assist with hazardous waste identification/removal. We hosted a training session during the APA Conference at SIUE for facilities management groups throughout the area. We also hosted two sessions of training for high school students during the School of Engineering's Summer Camp program in June.

The ERTC utilized funds from the interagency agreement for a hardware and software upgrade of the wind turbine. It was put back into service and then the ERTC passed responsibility of it on to Facilities Management.

#### 11.4 Evidence of Support for Center/Institute Objectives

The ERTC has enjoyed the full support of the Dean of the School of Engineering for the last seventeen years.

The ERTC continues to work with Job Centers in Illinois and Missouri as a WIOA approved program. On July 7, ERTC staff visited eleven job centers in central/southern Illinois to promote the ERTC's one-year program. Current agreements exist with Madison County (IL), St. Clair County (IL), Macoupin County (IL), SLATE in the City of St. Louis (MO), and St. Charles County (MO). A partnership is currently developing with Marion County (IL) for an incoming (Class of 2023) student.

The IEPA has supported the ERTC financially by providing operating funds for over 40 years. During this fiscal year, we had an interagency agreement close (October 2018-September 2021) and the next interagency agreement approved (October 2021-September 2024).

The Metropolitan Sewer District (MSD) of St. Louis hires ERTC graduates almost exclusively when recruiting new plant operators. MSD has continued their scholarship program for minority and female students enrolled in the one-year Water Quality Control Operations Program. Currently, two scholarships are offered each year and we are currently discussing expanding to three scholarships.

American Water Works in both Illinois and Missouri have begun to show serious interest in our program. Meetings have been conducted with Missouri Human Resources personnel and the Director of Diversity and Inclusion in Illinois. We have established a pipeline from ERTC to American Water for the employment of our students. Additionally, discussions are being made on creating scholarship opportunities like those that currently exist with MSD.

The ERTC continued our partnership with the Edwardsville Fire Department by making our auditorium and confined space training apparatus available for their training purposes.

Curry & Associates established the Patrick Curry Memorial Award scholarship in 1983.

The Sylvanus Jackson Memorial Award scholarship was established by IWEA in 1994.

The Anthony J LaRocca Memorial Award scholarship was established by John LaRocca in 2013.

Additional scholarships from water and wastewater organizations include:

IAWPCO Scholastic Award (2 students)

MISKA Scholastic Award (3 students)

SCWPOA Scholastic Award (2 students)

#### 11.5 Evidence of Organizational Effectiveness

The ERTC graduated 16 students in FY22 (up one student from FY21). A lack of promotional events due to the pandemic almost certainly affected enrollment. Additionally, some prospective students expressed fears of interruption of the hands-on program if another outbreak were to occur. Others disagreed with the COVID policy and dropped out of the program. Two students were lost between the Fall and Spring semesters. One student decided to pursue a four-year degree at SIU Carbondale. The other student suffered from homesickness and returned to Chicago.

The ERTC one-year program continues to provide a high-quality training in water treatment technology to future water and wastewater professionals. Pass rates for the drinking water certification (69%) and wastewater certification (81%) in Illinois remain high. Pass rates in Missouri were exceptional with a 93% pass rate in drinking water certification and a 100% pass rate in wastewater certification. Though the Illinois drinking water certification pass rate did not meet our internal target, it did meet the external credential attainment target set forth by Madison County WIOA funding (66%).

The Illinois Environmental Protection Agency and Missouri Department of Natural Resources continue to recognize the ERTC as a premier training center for water technology in the Midwest. Both regulators continue to offer simultaneous education and experience credit for the one-year program. They have also been very accommodating in hosting special testing sessions for our students.

Job placement statistics continue to be strong with 88% of students finding jobs within six months of program completion (14 of 16). The result continues to meet the Madison County WIOA target of 74%. Two students were offered full-time employment before the internship period began (Staunton and Elmhurst).

The ERTC continued to provide educational opportunities for new and continuing employees in the wastewater treatment and drinking water supply industry across Illinois, Missouri, and the nation. From July 2021 through June 2022, the ERTC trained 1,168 students and awarded 37,715 continuing education and classroom clock hours. This showed over a 100% increase in the number of students served when compared to the previous pandemic-affected fiscal year (551 students → 1,168 students). The increase in hours awarded was more modest at 9.4% (34,481 hours → 37,715 hours). A large number of operators attended our short 2 hour workshops, which explains why the % increase in students doesn't yield a similar % increase in hours.

12. Institutional Assessment

12.1	Date of Last Review	<u>2020</u>	
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended	
12.3	Explanation	Both the Dean of Engineering and the Director of the ERTC agreed with the recommendations made in the internal review report. The Center Review recommendations included: securing additional funding, a stronger connection with industry/academia for research, investments in marketing for program expansion, more online offerings, lab certification and potential contracting, new technology/equipment for students, social media presence, and the pursuit of additional student loan options. A Program & Center Review Meeting was held via Zoom on October 29, 2020 to discuss the recommendations.	

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**RESOURCES: Environmental Resources Training Center**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations					
One-Year Program	96,268	139,696	147,292	146,909	232,206
Grants & Contracts	163,343	275,396	505,881	304,504	278,694
CCCDI Training/Symposium	84,065	73,410	80,215	111,745	100,505
CCCDI Certification	83,902	94,913	59,530	82,825	65,960
Night Classes	32,300	10,555	22,095	37,080	29,575
Workshops	163,155	103,822	65,250	88,950	82,500
Correspondence Courses	12,705	4,950	N/A	N/A	N/A
<b>Total Revenues</b>	<b>635,738</b>	<b>702,742</b>	<b>880,263</b>	<b>772,013</b>	<b>789,440</b>
Expenditures*					
Full Time Salaries	420,550	457,276	477,687	432,788	490,469
Adj. Staff & Student Workers	33,928	48,773	24,289	41,480	46,556
Telecom/Communications	6,141	6,230	6,491	6,514	6,561
Commodities	33,987	33,695	46,328	79,914	70,456
Equipment	28,789	22,176	13,033	30,797	9,847
Contract Services	38,600	63,463	91,117	48,570	78,116
Permanent Improvement	0	0	242,000	N/A	N/A
Computer	0	0	0	0	0
Travel	24,701	18,941	24,930	22,212	31,798
Marketing	0	0	0	0	0
Refunds	525	8,665	1,275	N/A	N/A
<b>Total Expenditures</b>	<b>587,221</b>	<b>659,219</b>	<b>927,150</b>	<b>662,275</b>	<b>733,803</b>
<b>Revenue Minus Expenditures</b>	<b>48,517</b>	<b>45,523</b>	<b>(46,887)</b>	<b>109,738</b>	<b>55,637</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	0	0	0	0	0
Staff	7	7	7	7	7
<b>Total Staffing</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	GeoSpatial Mapping, Applications, and Research Center (GeoMARC)
3.	Date	March 9, 2023
4.	Director	Randall S. Pearson
4.1	Telephone	618-650-2278
4.2	E-mail	<a href="mailto:rapears@siue.edu">rapears@siue.edu</a>
5.	Year Established	July 1, 2021
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Graduate Studies and Research
8.	Type	Activity (check all that apply)
	Instructional	
	Research	X
	Public Service	

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

GeoMARC (formerly LASA) was created in 2021 to foster multidisciplinary and multi-institutional collaborations that develop and promote the use of advanced geospatial technologies to conduct, lead, and influence research and innovative solutions to meet the needs of both private industry and the public sector. GeoMARC capitalizes on the specialties of its multi-disciplinary staff that encompass a wide range of geospatial expertise that includes remote sensing and digital image processing, machine learning, computer modeling, transportation network analysis, geographic information systems (GIS), and solution automation to address both cultural and environmental issue facing this world.

GeoMARC is evolving into a geospatial “think tank” that operates similar to a teaching hospital. Similar, in that GeoMARC provides technological and intellectual support to local and regional communities by engaging in geospatially related projects, educating the next generation’s workforce, and providing solutions to geographic problems through applied research and development. Although GeoMARC has grown to 6 full-time employees, students are the center of everything we do.

### 9.2 Mission

GeoMARC mission is to provide the university, the community, industry, and governmental agencies with access to innovative geospatial analytics/solutions for addressing spatially related problems.

### 9.3 Objectives

1. Foster partnerships with other universities, government agencies, and industry.
2. Pursue external funding.
3. Provide real-world experience and mentorship to undergraduate and graduate students through externally funded research partnerships.
4. Support Student Retention.
5. Bring together academic researchers, educators, and industry experts to share ideas through regional workshops, seminars and conferences.
6. Promote the ethical uses of geospatial technologies.
7. Create and foster multidisciplinary collaborations across SIUE and the SIU system.
8. Develop partnerships with local businesses and government agencies to produce high impact community engagement projects.



10. Advisory Board

10.1 Advisory Board - Membership

<u>Internal Members</u>	
Dr. Jerry Weinberg	----- Associate Provost and Dean, Graduate School
Dr. Cem Karacal	-----Dean, School of Engineering
Dr. Earleen Patterson	-----Associate Vice Chancellor for Student Opportunity, Equity, Diversity, and Inclusion
Dr. Carrie Butts-Wilmsmeyer	---- Director, SIUE Center for Predictive Analysis
Dr. Jim Hanlon	----- Associate Professor, SIUE Dept. of Geography
Dr. Didi Martinez	----- Associate Professor, SIUE Dept. of Geography
Dan Chase	----- Director, SIUE Information Technology Services
<u>External Members</u>	
Aaron Young	----- Sustainability Planning Manager at East-West Gateway
Brent Guttman	-----Illinois IDNR, Office of Mines and Minerals
Bill Miener	----- Director of Information Systems and Services, Edwardsville Community Unit1 District 7 Schools
Justin Donathan	----- Research & Partnership Manager – Technology Entrepreneur Center / T-REX
Dean Budzow	-----Geography Professor at Lincoln Land Community College

10.2 Number of Meetings (In This Year) 1

## 11. Annual Performance

### 11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Develop grant proposals as PI and/or collaborator with SIUE or external partners	9	16
2. Active projects underway supported by grants and contracts	6	11
3. Research collaborations with other universities.	5	11
4. Research collaboration with other SIUE programs/units.	5	9
5. Research collaboration with industry partners and other government agencies.	5	11
6. Conference, industry, and invited presentations	3	6
7. Train students in geospatial analysis through experiential learning opportunities.	4 graduates 4 undergrads	10 graduates 8 undergrads
8. Exposure of underrepresented students to Geospatial Technologies careers through guest lectures.	2 guest lectures	6 guest lectures (25 students per class)
9. Engagement in Community-based projects.	3	3
10. Final reports/presentations and research publications	5	6

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (FY22)

The GeoSpatial Mapping, Applications, and Research Center (GeoMARC) focused its efforts in FY22 in three areas: (1) pursuit and maintenance of partnerships/relationships that led to external funding related to geospatial research and development, (2) the expansion and support of relationships within the SIUE system related to geospatial technologies, and (3) an expansion of GeoMARC's role in supporting the underserved population's impact on the St. Louis geospatial ecosystem.

1. In FY22, GeoMARC continued to foster its long-term relationship with the Illinois Department of Natural Resources. Along with significant improvements to GeoMARC's web-based mapping of all mined out areas in Illinois, GeoMARC took the opportunity to modernize its approach to ground-based mine subsidence surveying by integrating the latest geospatial mapping and database technologies, including the exploration of Intrametric Synthetic Aperture Radar and the use of temporal sequencing of LIDAR. These updates provided evidence of GeoMARC's commitment to IDNR's long term mapping strategies and helped procure two additional contracts with IDNR totaling \$1.28 million

over three years. Equally important, was the development of a significant relationship with DoD's National Geospatial-Intelligence Agency (NGA) located just across the river in St. Louis, Missouri. In FY22, GeoMARC signed a three-year agreement with NGA for the production of 1:50K scale topographic maps used by the US military for potential movement of ground troops. GeoMARC (SIUE) was one of only three universities chosen to participate in this student-driven mapping program. In year one of this contract (\$198,000) GeoMARC students successfully produced 66 topographic maps of Cuba and Russia for the NGA. Additionally, GeoMARC was instrumental in helping SIUE procure a 5-year Cooperative Research and Development Agreement with the NGA for mapping global food security issues related to climate change. Lastly, GeoMARC's recent collaboration with AMEREN Electric led to the formation of a potential long-term relationship with the Energy Power Research Institute (EPRI) located in Washington DC. In FY22 GeoMARC worked closely with AMEREN Electric and EPRI to develop drone-based analytics along energy company rights-of-ways for assessing environmental sustainability and environmental diversity. This relationship evolved into a \$133,000 R&D contract with a follow-on contract now being developed. In all, during FY22 GeoMARC procured external funding from 12 grants/contracts totaling \$2.27 million over the next three years. Ultimately, it is through these external funding sources and contracts that students gain the real-world experiences needed to succeed outside the university system.

2. GeoMARC also gave significant attention to the continued development of relationships with programs and units within SIUE. GeoMARC's collaborative relationships with C-PAN, BLI, Chemistry, Biology, Environmental Science, Geography, Engineering, the SOAR program, facilities management, and the Office of Educational Outreach have continued to grow. GeoMARC is on grants with, or is supporting in some way, development activities with each of these units. Of particular note is the support that GeoMARC gives to the Geography Department and to geospatial technologies across campus. With this said, GeoMARC personnel administers all geospatial software across campus. This is a significant undertaking and involves the management of individual software licensing for faculty and students from all departments and programs across campus. GeoMARC personnel also manage the hardware and software for the Geography Department's GIS lab and teach critical advanced geospatial courses for the program (for a the major and the minor). GeoMARC has developed and is maintaining a broad footprint across campus with respect to geospatial technologies.
3. Finally, in FY22 GeoMARC played a uniquely supportive role in helping broaden the diversity in the local area workforce with respect to underserved populations. The geospatial industry has historically been white and male oriented. Industry and government agencies have taken notice and are actively recruiting minorities in the geospatial field. With this in mind, GeoMARC has taken an active role in attempting to diversify its student workforce. In FY22, GeoMARC funded a total of 18 students to work on its external grants and contracts, with 10 of them being from underserved and underrepresented populations, including students of color, women, and students from impoverished backgrounds. Additionally, GeoMARC personnel gave guest lectures on geospatial careers to the SOAR's FAME and GAME classes at SIUE. The majority of these students were totally unaware of the potential career paths they might have with the incorporation of geospatial technologies into their studies. As a result, two students from these lectures reached out to GeoMARC and were brought on as student workers for Spring 2022, with one ultimately receiving a security clearance to work at NGA.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

*(1) Support for SIUE Campus Priorities*

- a. **Prepared and Committed Students:** Through the “teaching hospital approach” mentioned in section described in 9.1, GeoMARC trained 18 students (FY22) through experiential learning tied to funded projects from NGA, Bayer CropScience, Illinois Department of Natural Resources, and the Illinois State Library. Students get practical experience solving real world problems with technology. These students were funded through internships, student work, and graduate assistantships. It is these types of experience that help prepare students technically, mentally, and socially to be part of a team to solve problems. GeoMARC is committed to helping prepare students to be the best they can be.
- b. **Innovative High-Quality Programs:** GeoMARC plays a significant role across campus in helping support high-quality programs. GeoMARC personnel administers all geospatial software across campus to both faculty and staff (Engineering, Biology, Environmental Sciences, STEM, C-PAN, etc.). Additionally, GeoMARC supports the Department of Geography through teaching advanced geospatial courses (Python Programming, Remote Sensing and Digital Image Processing, and Cell-based GIS) and through the management and maintenance of all hardware and software in its GIS laboratory. This lab is used to teach over a dozen geospatial courses that support a variety of programs across campus as well as the Departments' GIS minor.
- c. **Dedicated Faculty and Staff:** GeoMARC supports teaching and research across campus with its expertise in applied geospatial analysis. GeoMARC staff routinely support faculty and students from various disciplines in the gathering and cleaning of geospatial data and giving advice on the advanced uses of geospatial tools. GeoMARC also makes itself available to faculty across campus to brainstorm on ideas regarding new uses of the latest advancements of geospatial technology.
- d. **Outreach and Partnerships:** GeoMARC has a strong track record of outreach with its connection to T-REX in St. Louis, its support of local area high school classes on the integration of GIS into their curriculums, and the support of the Edwardsville School District #7 for modeling and adjusting school boundaries and bus transportation related to differential growth. In fact, GeoMARC routinely tracks in-migration, out-migration, and within district student migration for the local school district to help forecast the need for boundary adjustments.
- e. **Physical and Financial Stability:** In its first year as a Center, GeoMARC procured funding totaling over \$2.3 million in grants and contracts and supported numerous students and faculty in their research efforts. The income from these grants and contracts provides indirect cost recovery for SIUE and GeoMARC and provides funding for student workers and graduate students.
- f.

*(2) Support for IBHE State Goals*

- a. **Increase Educational Attainment:** One of the key issues facing the geospatial workforce is the low number of underserved students with geospatial skill sets. GeoMARC is actively working to help address the issues related to Diversity, Equity, and Inclusion in the geospatial industry. As mentioned in the narrative on major accomplishments,

GeoMARC is continuing to play a significant role in helping broaden the diversity in the local area workforce with respect to the underserved population. In FY22, GeoMARC funded a total of 18 students to work on its numerous grants and contracts, with over 50% being from underserved populations, including students of color, women, and students from impoverished backgrounds. Additionally, GeoMARC personnel gave guest lectures on geospatial careers to the SOAR's FAME and GAME classes at SIUE (75 underserved male and female freshman) on potential geospatial career paths (job market, types of jobs, educational requirements, salaries). Knowing that there are other avenues to a successful career can be the catalyst for success.

- b. Improve College Affordability:** GeoMARC's external funding provides a wealth of opportunities for students through paid internships, student work, and graduate assistantships. In FY 22, GeoMARC's spent \$82,675.52 on its student workforce. This funding was critical to the students who are always worried about student loans and college affordability.
- c. Strengthen Workforce Development:** C-PAN and GeoMARC are working with Illinois State University on a USDA grant (Crossing the Digital Divide) that is taking geospatial technology to the workforce through workshops and virtual education modules. The virtual modules are at the beginner, intermediate, and advanced level on the use of geospatial technologies in agriculture. These modules are designed to demystify and to help educate and develop a more informed workforce in rural Illinois with respect to this rapidly evolving technology. The ultimate goal for these virtual modules is the creation of geospatial badges that keep up with (and address) this changing technology.
- d. Link Research and Innovation to Economic Growth:** There is a major regional push to develop the St. Louis metropolitan area into one of the top geospatial hubs in the nation. In fact, when one considers the significant presence of NGA, Scott Airforce Base, Bayer CropScience, Enterprise Leasing, and Climate Corp in the area, it is already in the top five metropolitan areas in the nation with respect to geospatial industries. As this geospatial ecosystem continues to evolve, it is critical for the Illinois side of the MSA to have a balanced role in the area workforce, in geospatial innovation, and growth of geospatial industries. GeoMARC, through its many partnerships in St. Louis, its supply of well qualified students, and its geospatial research collaboration with other academic units within SIUE will help keep this balance in check.

#### 11.4 Evidence of Support for Center/Institute Objectives

##### 1. Foster partnerships with other universities, government agencies, and industry.

In FY22 GeoMARC continued to foster partnerships and research relationships with a number of government agencies, other universities, and commercial companies. In total, during FY22 GeoMARC collaborated with 6 different governmental agencies (local, state, and federal), 11 different university/non-profit groups, and 5 different commercial companies.

##### Examples of research and collaboration with government agencies included:

- Illinois Department of Natural Resources - Mapping and surveying underground mine subsidence across Illinois. (Externally funded)
- DoD's National Geospatial-Intelligence Agency – Production of 1:50K topographic and ground navigation maps for movement of US and NATO troops. (Externally funded)

- Illinois State Library – Development of a Website for calculating library district populations across Illinois which drives funding support for each district. (Externally funded)

Examples of research relationships with universities and non-profit organizations included:

- UIC, UIUC, Northwestern – Machine Learning Algorithm for mapping grasslands and wetlands across Illinois (Externally funded)
- St. Louis University – Missouri View Program (Externally funded)
- UMSL, East-West Gateway – Research into mapping urban heat islands and assessing their impact on low-income communities in St. Louis.
- Illinois State University (with C-PAN)– Co-developing workshops and instructional videos on the use of geospatial technologies in rural areas of Illinois. (Externally funded)

Examples of research and collaboration with private industry included:

- Bayer CropScience – Mapping the proximity of milkweed habitat to various biotech crops in support of the decline population of Monarch Butterflies. (Externally funded)
- PivotBio – Assessment of imaging technology for mapping nitrogen differences in various crops. (Externally funded)
- Energy Research Institute and AMEREN Electric – Assessing proper management of utility rights-of-way for best environmental management practices. (Externally funded)
- Illinois Corn Marketing Board – Assessing the impact of Wind Farms on land use across Illinois

**2. Pursue external funding.**

In FY22, GeoMARC (in conjunction with its many collaborative partners) solicited external research and development funding through 16 proposals that totaled \$7,918,619. The table below details these proposals, the funding entity, the collaborators, and the proposal amount.

<b>Program Area/Sponsor</b>	<b>Partnering Units/Institutions</b>	<b>Amount</b>
St. Clair Co. SWCD	GeoMARC	\$12,500.00
Illinois State Library System	GeoMARC	\$65,000.00
USDA	GeoMARC, Univ of Illinois Champaign-Urbana, University of Illinois Chicago, Northwestern	\$20,000.00
Collegiate School of Medicine & Bioscience	GeoMARC	\$5,000.00
Reaching Across Illinois Library System	GeoMARC	\$12,772.74
USDA	C-PAN, GeoMARC, ISU	\$500,000.00
Illinois Department of Natural Resources	GeoMARC	\$684,794.01
Illinois Department of Natural Resources	GeoMARC	\$597,257.43

Bayer CropScience	GeoMARC	\$18,600.00
NGA	GeoMARC	\$198,725.94
Pivot Bio	GeoMARC	\$22,500.00
Electric Power Research Institute (EPRI)	GeoMARC	\$133,721.26
USDA	Collaborative Research: HDR DSC: Illinois Soybean Association, Iowa State University, University of Iowa, GeoMARC	\$200,000.00
NSF (NRT)	NRT-AI: A Teaching Hospital Model for Graduate Student Training in Big Data for the Agricultural, Life, and Environmental Sciences	\$1,999,607.27
DOE	Collaborative Research: EPRI, GeoMARC	\$172,709.70
NSF INCLUDES Alliance	Collaborative Research: SIUE Office of the Vice Chancellor for Equity, Diversity, and Inclusion, Department of Chemistry, STEM Center, GeoMARC, Department of Construction; Southwestern Illinois College	\$3,275,431
<b>External Total</b>		<b>\$7,918,619.00</b>

**3. Provide real-world experience and mentorship to undergraduate and graduate students through externally funded research partnerships.**

Through funding from the various projects detailed in objectives #1 and #2, GeoMARC (during FY22) funded 18 students through student work, graduate assistantships, and internships. Students were mentored by GeoMARC staff on all aspects of these projects including research design, project implementation, and final product delivery. This experiential learning is the center of GeoMARC's mission with the result being a well-prepared workforce with advanced geospatial skills and real-world experience.

**4. Support Student Retention.**

GeoMARC's external funding allows students to not only get involved in real-world projects, but to receive financial support for their efforts. The numerous students working at GeoMARC learn how to socialize and work together in a high-level work environment. They learn how to rely on each other, they study together, they socialize outside of work, and ultimately form lasting relationships. This student community that GeoMARC is creating is an evolving model that is already paying significant dividends on student retention.

**5. Bring together academic researchers, educators, and industry experts to share ideas through regional workshops, seminars and conferences.**

As one can tell from the table in Objective #2, GeoMARC was quite active in working with government and private industry with 10 of its 16 proposals being solo solicitations. While GeoMARC was certainly active in cross-disciplinary discussions and collaborations defined in

this objective; it was less active in the proposals related to these collaborative efforts. However, GeoMARC will certainly play a better role with this objective going forward.

**6. Promote the ethical uses of geospatial technologies.**

One significant issue with evolving geospatial technologies is with their ethical use. Like many technologies, geospatial analysis can be used unethically to produce “desired results”. Often, clients will have an idea of what they want the outcome of a project to be prior to any analysis being performed. GeoMARC has never been, and will never be, persuaded to work toward the desired outcome. That would be dangerous and horribly unethical. In our world, data speaks for itself. With this said, it is extremely important for students to see this process in action. At GeoMARC, they get to see how we deal with industry and government agencies with respect to our ethical use of these powerful technologies. We hold firm on project design, data integrity, protocol procedures, and analysis and results. GeoMARC’s student workers, graduate students, and interns get a first-hand look at this process and will certainly take these important ethical-use concepts with them into the workforce.

**7. Create and foster multidisciplinary collaborations across SIUE and the SIU system.**

In FY22 GeoMARC was very active in collaborations across various units in the SIU system. GeoMARC collaborated with C-PAN, BLI, Geography, Environmental Sciences, Chemistry, Engineering, and Facilities Management. There are several very positive aspects of this multidisciplinary collaboration: sharing of ideas and resources, building a formidable team when applying for external funding, and the co-mingling of students that are working on joint projects. GeoMARC routinely works closely with C-PAN, BLI, Environmental Science, and Chemistry on Environmentally related research. Not only do faculty and staff gain from this, but students also gain exposure to other modes of thinking, learn to use different technologies, and gain insight from other students.

**8. Develop partnerships with local businesses and government agencies to produce high impact community engagement projects.**

GeoMARC is committed to supporting local businesses and government agencies in community engagement projects. One of GeoMARC long standing efforts is working with Edwardsville School District #7 in modelling student population migration (in migration, out migration, and within district migration) to help understand the need for school boundary adjustments over time. Additionally, GeoMARC developed and now supports geospatial education at Edwardsville High School. Through this program, GeoMARC has exposed geospatial technologies to over 400 local area high school students over the last 10 years. Finally, GeoMARC has a long-standing relationship with the East St. Louis Board of Elections. In FY22, GeoMARC took on a community project in East St. Louis to show various redistricting scenarios in relationship to new legislation. GeoMARC presented the results to a virtual meeting of town officials in January of 2022.

11.5 Evidence of Organizational Effectiveness

**Organizational Effectiveness in Achieving Predetermined Goals**

As shown in Section 11.1, GeoMARC met or exceeded all targets for its 10 metrics. Granted, this was GeoMARC’s first year and it was difficult to truly determine (without prior data as a Center)



a valuable measure for many of the metrics described. Nonetheless, in its first year GeoMARC made significant progress in strengthening its current relationships (and cultivating new relationships) with governmental agencies, other universities, and private industry. It will be these long-term financial and research relationships that will help stabilize revenue streams over time, allowing for more accurate long-term planning (which affects student funding, student retention, faculty research, and support to the university). This strategy of becoming the “go to” research arm of various agencies and private companies is something that GeoMARC will continue to foster going forward.

**Research & Grant Applications**

In FY22, GeoMARC had \$7,918,619 in grant/contract submissions and \$2,270,000 in active grants and contracts. Several of these contracts are multi-year, with much of the expenditures expected in FY23 and FY24. While GeoMARC procured much of this funding independently (without other collaborators), it is expected that GeoMARC will look at the prospect of increasing its collaborative efforts with other researchers and Centers to help increase the potential of grant acceptance for all. Yet time will tell if collaborative research efforts yield a similar return on investment as solo solicitation efforts. Ultimately GeoMARC will need to find that balance that allows it to most adequately fulfill all its goals and objectives.

With this being GeoMARC’s first active year as a Center, we were more focused on building a substantial research revenue base, with Scholarly Publications and Presentations taking a bit of a back seat. This should change going forward. Also, several of our top funding agencies for FY22 (NGA, Bayer, and PivotBio) had NDAs restricting what could be published.

Below are the Scholarly Publications, Presentations, and Number of Research Faculty for FY22.

Year	# Scholarly Publications	# Scholarly Presentations	FTE Research Faculty
FY22	1	3	1

12. Institutional Assessment

- 12.1 Date of Last Review NA – GeoMARC Established July1, 2021
- 
- 12.2 Decision at Last Review \_\_\_\_\_ Center/Institute in Good Standing  
 \_\_\_\_\_ Center/Institute Flagged for Priority Review  
 \_\_\_\_\_ Center/Institute Suspended
- 12.3 Explanation (Center established in FY20. Has not yet undergone formal review.)

**RESOURCES: GeoSpatial Mapping, Applications, and Research Center (GeoMARC)**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
<b>Revenues</b>					
State Appropriations	233,867.00	0	0	0	0
Grants & Contracts	541,397.08	0	0	0	0
Nonmandatory Transfers In	32,953.64	0	0	0	0
<b>Total Revenues</b>	<b>808,217.72</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Expenditures*</b>					
Salaries	483,673.04	0	0	0	0
Student Wages	34,224.89	0	0	0	0
Graduate Assistants	48,450.63	0	0	0	0
Fringe Benefits	63,624.34	0	0	0	0
F&A	126,427.58	0	0	0	0
Contractual Services	3,388.20	0	0	0	0
Equipment	35,394.89	0	0	0	0
Telecommunications	2,004.32	0	0	0	0
University Transportation	11,912.44	0	0	0	0
Commodities	2,664.79	0	0	0	0
<b>Total Expenditures</b>	<b>811,765.12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Revenue Minus Expenditures</b>	<b>(3,547.40)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	1.0	0	0	0	0
Staff	5.0	0	0	0	0
Graduate Students	3.8	0	0	0	0
<b>Total Staffing</b>	<b>9.8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	<u>Southern Illinois University Edwardsville</u>
2.	Center/Institute	<u>IL SBDC for the Metro East at SIUE</u>
3.	Date	<u>3-14-23</u>
4.	Director	<u>Giovanna May</u>
4.1	Telephone	<u>618.650.2929</u>
4.2	E-mail	<u><a href="mailto:gdimagg@siue.edu">gdimagg@siue.edu</a></u>
5.	Year Established	<u>1984</u>
6.	Illinois State Statute (if pertinent)	<u>N/A</u>
7.	Reporting Unit	<u>School of Business</u>
8.	Type	Activity (check all that apply)
	Instructional	<input type="checkbox"/>
	Research	<input type="checkbox"/>
	Public Service	<input checked="" type="checkbox"/>

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

9. Overview

9.1 Description

The Illinois Metro East SBDC at SIUE operates 2 offices (SIUE–Edwardsville Campus and East St. Louis Higher Education Campus) and an International Trade Center to assist entrepreneurs and small business owners in the designated 9 county region of Southwest Illinois.

9.2 Mission

To Provide Professional Guidance for Business Growth. The Illinois SBDC for the Metro East at SIUE assists entrepreneurs and companies in defining their path to success. The SBDC positively impacts the Metro East Illinois region by strengthening the business community, creating and retaining new jobs, and encouraging new investment. Furthermore, the SBDC enhances Metro East Illinois economic interests, providing one-stop assistance to individuals by means of advising, research, and advocacy for new ventures and existing small businesses.

The IL SBDC-ITC prepares companies for long-term international success through its export readiness and expansion programs

9.3 Objectives

- Deliver effective and relevant services that address client needs and contribute to business growth and job creation.
- Develop long-term relationships with clients that have significant opportunities to grow and create jobs in Illinois.
- Utilize partnerships to advocate for small businesses and promote an entrepreneurial culture.
- Support the goals and objectives of both the SIUE School of Business and the University at large.

10. Advisory Board

10.1 Advisory Board - Membership

SBDC-Established January 2019  
*Last meeting held November 7, 2022. Next scheduled for March 14, 2023*

ITC- Southwest IL Trade and Investment Council  
 In lieu of having its own advisory board, the International Trade Center is a founding member and co-leads the Southwestern Illinois Trade and Investment Council (SWILTIC), which supports and provides direction for the ITC. The SWILTIC is the first of its kind in Illinois. The Council’s board meets regularly four times a year. *Next scheduled for April 27, 2023*

<http://swillinoistrade.org/Council>  
<https://www.siue.edu/business/itc/about/sw-ill-trade-investment-council.shtml>

10.2	Number of Meetings (FY22)	SBDC - 3 meetings		ITC- 4 meetings
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11. Annual Performance FY22

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Number of Jobs Created (SBDC)	25	57
2. Number of Business Starts (SBDC)	9	10
3. Number of Clients Advised (SBDC)	425	486
4. Number of Clients Advised (ITC)	55	57
5. Client Exports (ITC)	\$20,000,000.00	\$24,601,231

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, and public service activities.

11.2 Major Accomplishments (FY22)

<p><b>SBDC:</b>            Advised 486 Clients and helped them secure over \$ 2.57 Million in Debt Funding through more than 2,993 hours of contact.</p> <p>Efforts implemented to augment SBDC services through CARES Act and Illinois Navigator funding received.</p> <p>SIUE Meridian Society Award received to support business in the Metro East. Business and Community Highlight videos created/promoted and individualized mentoring sessions to be scheduled.</p> <p>Engaged with the Latino Roundtable and Hispanic community through Health Fair and Mexican Consulate.</p> <p>Supported Belleville, Edwardsville, Collinsville/Triad, Monroe/Randolph County, Riverbend and Fayette County High School CEO Programs</p> <p>Cohosted Annual Veteran Reboot (American Legion Collinsville)</p> <p>Hosted 8<sup>th</sup> Annual Metro East Startup Challenge promoting Entrepreneurship and Innovation in St. Louis Region</p> <p>Cohosted (as Small Business Week of SW IL) Small Business event with full day of virtual presentations.</p> <p>Hosted or participated in numerous COVID-19 Small Business Relief Funding or other business-related, topic-based Workshops and Webinars from July 2021 to June 2022.</p> <p>Conducted and/or Hosted 43 Workshops/Training Sessions with approximately 617 attendees</p> <p>Published 18 Success Stories celebrating our local Entrepreneurs and Small Business Owners.</p> <p><b>ITC:</b></p>
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- Hosted 7 Virtual Trade Roundtables via Zoom, exclusively for small businesses located in southern Illinois: <https://bit.ly/3mstZBD>
- Hosted the FIRST **Virtual Southern Illinois Trade Mission to South America**. Held September 15<sup>th</sup>- November 18<sup>th</sup> 2021. The mission gave small businesses the opportunity to connect “NOW” with potential foreign partners and stay ahead of their competitors, despite the ongoing pandemic. Virtual stops included Peru, Colombia and Chile. <https://bit.ly/3FrZF4u>
- Co-sponsored two Virtual International Trade Expo 2021 shows with AmCham Colombia, in partnership with the Illinois Office in Mexico
- Launched a newly redesigned website: [www.siu.edu/itc](http://www.siu.edu/itc) which offers a wealth of export resources. Access to directories, export guides, listings of upcoming webinars, domestic and international trade shows, current grant opportunities available and more!
- Completed Phase I of **“Southern Illinois Exports”**: *Connecting the Region with the World*, a platform/ electronic listing of businesses (less than 500 employees), sorted by industry, to facilitate the promotion of their products or services domestically and globally. All ITC clients were the first to receive an invitation to register.
- The ITC renewed its partnership with Universidad de Lima (UL) - following an agreement / memorandum of understanding signed in December 2019 - and SERCOTEC (Servicio de Cooperación Técnica), a division of Chile’s Ministry of Economy and Development, to explore the organization of virtual, inbound and outbound trade missions in partnership with the Southwest Illinois Trade and Investment Council.
- The ITC also continued working with the American Chamber of Commerce in Peru (AmCham Peru) to promote their visit to SW Illinois by a Peruvian delegation led by AmCham, originally scheduled for August- 2020 that then was postponed to fall 2022 due to the COVID pandemic. Virtual connections continued being scheduled throughout 2022 with the Supply Committee of AmCham Peru with the hope of their trip confirmation to SW IL happening soon.
- Sponsored/Co-sponsored six programs with very positive feedback. Over 150 business representatives from the bi-state region participated.
- Sponsored 8 businesses with their participation in virtual and in-person trade missions and shows in Canada, Europe and Latin America. These clients were also assisted with research work performed by the ITC.
- Continued providing specialized assistance regarding Latin America.
- Continued expanding the ITC’s access to online marketing databases of potential clients as well as industry and country statistics.
- With the support of CARES funding, the ITC was able to build a stronger and more cohesive network of assistance; first, by identifying small businesses in the southern region that were navigating the stress caused by COVID-19; and second, by offering them immediate insight and guidance in key areas:

- Technology continued to be regularly used to connect clients with partners and trade organizations from the U.S. and across the world to share emerging good practices and resources such as market information, providing immediate and relevant support to small businesses affected by COVID-19.

Two main areas continued being offered to small businesses from the southern region:

1. Virtual Advising: provided through partnerships with domestic and international consulting firms. All virtual sessions were held via Zoom (ITC has a licensed account through SIUE).
2. One-on-one Advising Sessions (In-person and virtual)

- MBA course “Competing in Emerging Markets,” was held online during the spring 2022 semester, with 37 students from various locations across the U.S. participating. An ITC client presented the students with an international business challenge: to provide his small business with a much-needed export plan and research data for Colombia, Chile and Peru. At the end of the semester, the client received detailed international marketing plans for the top two countries, which included an analysis of the client's product potential, barriers and entry strategies for the selected markets.

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

Provided business advising and/or support to many SIUE students (Clients, Students, Alumni and Entrepreneurship Club) in FY2022; organized efforts to foster and promote innovation and entrepreneurship on campus; and strengthened SIU system to the community through coordinated outreach efforts, social media campaigns, and community partnerships. For example, collaborating with various departments to offer students the opportunity to work with small business clients and gain real world experience in Marketing, Art/Design, Engineering and Web Design.

### 11.4 Evidence of Support for Center/Institute Objectives

As stated above – 388 SBDC client contacts, over \$24M in ITC client exports; 33 SBDC training sessions.  
Starting a Small Business Workshop is offered monthly, at no cost to attendees.  
Center supports SIUE Entrepreneurship Club & The Other 40 Competition. Spoke to various classes throughout Fall 2021 and Spring 2022 including Mass Comm and Nutrition.  
Recommend clients to participate in class projects for Mass Comm and MGMT 475/476.  
Promoted SIUE’s vision of Entrepreneurship and Innovation within the communities we serve.

11.5 Evidence of Organizational Effectiveness

During FY22, the SBDC and ITC met or exceeded the goals set in a majority of its performance measures and achieved 78% or greater in 18 of 22 total measures.

12. Institutional Assessment

12.1	Date of Last Review	Financial Review 2017   Performance Review 8/30/18  Center Review 2020	
12.2	Decision at Last Review	X	Center/Institute in Good Standing
			Center/Institute Flagged for Priority Review
			Center/Institute Suspended
12.3	Explanation	2018 SBA and DCEO Reviews 8/30/18	
		Financial Review 2017	
		IBHE 2020	



**RESOURCES: IL SBDC for the Metro East at SIUE**

<b>Financial Resources</b>	<b>CY2022</b>	<b>CY2021</b>	<b>CY2020</b>	<b>CY2019</b>	<b>CY2018</b>
Revenues					
State Appropriations	124,992	125,710	123,866	124,388	157,523
Income Fund	1,756	3,032	1,061	15,016	12,315
Grants & Contracts	445,207	505,715	385,000	185,000	180,000
<b>Total Revenues</b>	<b>571,955</b>	<b>634,457</b>	<b>509,957</b>	<b>324,404</b>	<b>349,838</b>
Expenditures*					
Salaries/Fringes	258,786	268,526	255,922	256,460	277,062
Commodities	14,349	6,048	5,420	4,460	2,824
Contractual	152,938	223,118	64,293	42,982	28,042
Travel	10,395	6,118	1,594	15,555	15,403
Consultants/Indep. Contractors	32,879	55,913	37,005	0	0
Equipment	0	0	0	0	155
Telephone/Other	4,256	3,618	3,853	4,432	4,569
<b>Total Expenditures</b>	<b>473,603</b>	<b>563,341</b>	<b>368,087</b>	<b>323,889</b>	<b>328,055</b>
Revenue Minus Expenditures	98,352	71,116	141,870	515	21,783

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

**\*\*CY 2022 includes an additional \$179,190 in CARES Act funding received for COVID-19 relief efforts. Assistance includes Cybersecurity/IT, Human Resources, Web-Design, Marketing/Social Media, Accounting as well as support for African American and Latino entrepreneurs and small business owners.**

**Illinois Navigator is also included in the budget above for technical assistance with State Grants..**

**Not included in the above Revenue is a Meridian Society Award in the amount of \$4,000.**

<b>Staffing (Full Time Equivalent)</b>	<b>FY22</b>	<b>FY21</b>	<b>FY20</b>	<b>FY19</b>	<b>FY18</b>
Faculty	0	0	0	0	0
Staff	3	3	3	3	3
<b>Total Staffing</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Edwardsville				
2.	Center/Institute	IRIS Center for the Digital Humanities and Social Sciences				
3.	Date	15 March 2023				
4.	Director	Jessica DeSpain, Kristine Hildebrandt, co-directors				
4.1	Telephone	618-650-2667				
4.2	E-mail	<a href="mailto:jdespai@siue.edu">jdespai@siue.edu</a> , <a href="mailto:khildeb@siue.edu">khildeb@siue.edu</a> , <a href="mailto:iris@siue.edu">iris@siue.edu</a>				
5.	Year Established	November 11, 2020				
6.	Illinois State Statute (if pertinent)	N/A				
7.	Reporting Unit	College of Arts and Sciences				
8.	Type	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 5px;">Activity (check all that apply)</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;">x</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;">x</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;">x</td> </tr> </table>	Activity (check all that apply)	x	x	x
Activity (check all that apply)						
x						
x						
x						
	Instructional					
	Research					
	Public Service					

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The IRIS Center aims to facilitate cross-disciplinary and collaborative projects that involve innovative uses of technology in the humanities and social sciences and support these projects via access to physical facilities, equipment, and human resources. The Center works to foster active mentorship and collaboration between faculty and students at undergraduate and graduate levels, encourage the development of curricular innovation that makes significant use of digital applications and resources, and promote digital endeavors that intersect with community initiatives and organizations.

### 9.2 Mission

The Interdisciplinary Research and Informatics Scholarship (IRIS) Center at Southern Illinois University Edwardsville (SIUE) is an interdisciplinary facility designed to support scholarship in the humanities and social sciences that applies digital content as a primary methodology.

### 9.3 Objectives

- Facilitate cross-disciplinary and collaborative projects that involve innovative uses of technology in the humanities and social sciences.
- Support these projects via access to physical facilities, equipment, and human resources.
- Foster active mentorship and collaboration between faculty and students at undergraduate and graduate levels.
- Encourage the development of curricular innovation that makes significant use of digital applications and resources.
- Promote digital endeavors that intersect with community initiatives and organizations.

## 10. Advisory Board

### 10.1 Advisory Board - Membership

#### **Internal Advisory Board Members**

Stacey Brown  
Lora Del Rio  
Greg Fields  
Jessica Harris  
Lydia Jackson  
Sharon Locke  
Jeff Manuel  
Mark Poepfel  
Howard Rambsy II  
Bill Retzlaff

Johanna Schmitz  
 Connie Frey-Spurlock  
 Socratis Tornaritis  
 Cory Willmott

**External Advisory Board Members**

Jen Cline  
 Jacob Del Rio  
 Harriet Green  
 Robbie Hart  
 Katherine Knowles  
 Kristen Lillvis  
 Matt Meacham  
 Lauren Mudge  
 Ben Ostermeier

10.2 Number of Meetings (In This Year) 1 per board

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Submit grant proposals to federal/private foundation funding sources	4	14
2. Submit products for publication	6	8
3. Present research at conferences	8-10	13
4. Conduct workshops directed at campus community	6	7
5. Conduct professional development workshop for local teachers	1	1
6. Hold an open house	1	1
7. Develop two initiatives in partnership with community organizations	2	3
8. Recruit additional students to the minor	2	3

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

11.2 Major Accomplishments (In This Year)

This year marked a shift in the Center’s focus toward supporting the development of more equitable access and infrastructure for digital literacy and tools both at SIUE and in the St. Louis region. We were awarded a Social Sciences Research Council—NEH Sustaining Humanities Infrastructure Program grant to fund 20 African American students working as interns in the IRIS Center. The Community-Oriented Digital Engagement Scholars program (CODES) launched in Fall 2022, and most of FY 22 was spent planning for the arrival of the 25 first-year students who would arrive on campus and take courses in the program.

CODES is a collaboration with Lewis and Clark Community College, funded by two awards from the National Endowment for the Humanities (NEH). The program is an alternative general education pathway for underserved students in all fields and majors who want to use their coursework to work alongside community organizations to study and address the world's most pressing problems. This specialized program is designed to help students apply their learning early in settings that promote career readiness; students take a set of core courses together in their cohort emphasizing interdisciplinary research, digital citizenship, and critical problem-solving. All of our work in planning for RISE-DH and CODES helped prepare for the significant expansion of IRIS's student offerings in FY23.

In addition to this work the Center submitted fourteen grant proposal (more than doubling last year's total), five of which were awarded. With nine scholarly submissions and thirteen national conference presentation, IRIS's affiliated faculty are establishing the Center's national reputation.

IRIS has continued to support faculty research, collaborating with affiliated faculty through our monthly Morning Bytes workshop series, grant-writing assistance, web development, project management, and consultation. We launched our first faculty fellow program in Spring 2022, offering two promising early-career faculty the opportunity to focus on their digital research throughout FY23. Dr. Howard Rambsy and Margaret Smith continued their work on the Mellon-funded Black Literature Network alongside a team of researchers at Kansas University. The NEH-funded Recovery Hub for American Women Writers, a multi-institutional project dedicated to using digital humanities tools and methodologies to recover the work of American women writers continued cultivating digital projects across the country under the leadership of Jessica DeSpain and Margaret Smith.

The IRIS Center has also worked to become a leader in digital humanities infrastructure and pedagogy in our region. Through a partnership with Lindenwood University funded by the National Endowment for the Humanities, Margaret Smith hosted workshops with area scholars and high school educators to expand access to DH pedagogy across the metro St. Louis region by developing curricular and infrastructural resources.

### 11.3 Evidence of Support for IBHE "A Thriving Illinois," SIU System, and SIU Campus Strategic Planning

#### **IBHE Goals**

The digital humanities pedagogies and research opportunities offered to students through the IRIS Center support **Goal 1** ("Increase educational attainment to match best-performing states") and **Goal 4** ("Better integrate Illinois' educational, research, and innovation assets to meet the economic needs of the state and its regions"). Through the minor, and through internship and research partnerships both on-campus and in the community, IRIS has provided access to expanded opportunities for adult learners and pathways for students to increase marketable skill sets. IRIS has also worked with area organizations, for example with Madison County organizations, with Lewis and Clark Community College, and with the Mannie Jackson Center for the Humanities, to develop sustainable resource pools and incentives for students that train them to be positive agents of change in our region.

### **System and University Goals**

For **System Goal 1** (Academic innovation and student success), **University Goal 4** (student-centered and supportive campus community), and **University Goal 2** (innovative high quality programs to engage and retain students), The IRIS Center provides interdisciplinary and experiential components that empower our students to address real-world challenges. IRIS engaged in high impact practices including facilitating internships and provided opportunities for DH experience through compensation (through URCA or Student Employment) or credit-earning initiatives, including the minor.

For **System Goal 2** (Anti-racism, diversity, equity, and inclusion), **System Goal 3** (EDI infrastructure and organization), and **University Goal 1** (optimized enrollment of diverse and prepared students), the many programs run in partnership with IRIS are explorations of diverse cultural heritage, including Black Literature Online, the Schaefer Edoid Project, and Douglass at the Literary Crossroads. In addition, innovative programming for students like CODES is designed to increase access to twenty-first century technology skills for under-resourced learners and support the University's recruitment, retention, and success efforts.

For **System Goal 5** (Successful and diverse faculty and staff) and **University Goal 3** (dedicated faculty and staff), IRIS partners with faculty who represent a diverse spectrum of experiences and knowledge. Hiring committees across campus often schedule tours of IRIS for their candidates as a selling point for the University.

For **System Goal 6** (Sustainable infrastructure) and **University Goal 6** (physical and financial sustainability), IRIS provides training to faculty and students on innovative technologies. Additionally, IRIS partners with the office of Information Technology Services at SIUE to provide digital project hosting and computational maintenance. IRIS is also invested in technology sustainability by developing project work plans that include long-term needs and data management and is engaged in a collaboration with Lovejoy Library to consider the data repository needs of digital projects.

#### 11.4 Evidence of Support for Center/Institute Objectives

The Center **“facilitated cross-disciplinary and collaborative projects that involve innovative uses of technology in the humanities and social sciences.”** The following represent a sample of the ongoing research projects and collaborations in IRIS during FY22:

- Cory Willmott worked with the IRIS Center on several scholarly projects including *China Middle Kingdom*, “Mapping Anishinaabe Regalia,” and “SIUE Museum Exhibits.”
- IRIS supported several of Howard Ramsby’s projects, including the Mellon-funded Black Literature Network, the African American Poetry Tracker, and Frederick Douglass at the Literary Crossroads
- DeSpain and Smith facilitated workshops and talks on project management, digital pedagogies, and open peer review at the Society for the Study of American Women Writers Conference in Baltimore, MD

- DeSpain, Smith, and Hildebrandt conjointly presented five talks at the Digital Humanities Summer Institute Conference, demonstrating the Center’s contributions to the field.

IRIS **“supported projects via access to physical facilities, equipment, and human resources.”**

- Students working on the Schaefer Edoid Archive worked in the IRIS Center, making use of scanners and IRIS computers to digitize archival materials.
- IRIS provided instances of WordPress, Omeka, and Scalar to faculty and students so that they could work on research and community engagement projects.
- IRIS continued to hold regular coffee hours and office hours to provide consultation and assistance on grant-writing, project development, and technical questions.
- IRIS launched the Center’s first faculty fellowship program, accepting five applications and choosing two faculty for year-long support.
- IRIS held monthly “Morning Bytes” workshops on technical tools and methods for SIUE faculty and students

The Center **“fostered active mentorship and collaboration between faculty and students at undergraduate and graduate levels,”** including:

- Five students worked on the Schaefer Edoid project under Hildebrandt’s direction, scanning, learning about data management, and adding items to the archive.
- Three students held internships with the IRIS team involving the creation of video, archives, and social media plans.

Center faculty also developed and **“encouraged the development of curricular innovation that makes significant use of digital applications and resources.”** The DHSS minor added four students and continues to recruit and expand.

- DeSpain and Smith collaborated with faculty from the Honors program to submit a successful proposal to the American Association of Colleges and Universities ePortfolio initiative with plans to pilot the use of ePortfolios in the CODES program.
- DeSpain, Smith, and Frey-Spurlock held three SIUE faculty development workshops about community-based pedagogies, digital pedagogies, and problem-based curricular innovations as a part of their work for CODES.
- Hildebrandt incorporated digital platforms such as Scalar and Wikipedia editing into her undergraduate and graduate teaching.

In addition, the Center **“promoted digital endeavors that intersect with community initiatives and organizations,”** including:

- “Improving Digital Humanities Pedagogy in St. Louis,” workshop co-led by Jeremy Carnes (Lindenwood), Margaret Smith, and Tara Vansell (Lindenwood)
- Highland Historical Society
- Madison County at the Migratory Crossroads

11.5 Evidence of Organizational Effectiveness

The IRIS Center has succeeded in meeting or exceeding all of its internal measures for success. As the measures show, community engaged scholarship continues to be a core strength and commitment of the center with six community partnerships, several of which have received funding at the local, state, and national levels.

Sustainable infrastructure is a key concern in the digital humanities; as archivists and analysts of historical and cultural data, the Center has a priority to ensure that the projects we support are curated and maintained with longevity in mind. The IRIS faculty bring the same concerns to the Center's organizational management and infrastructure. We have had sporadic access to administrative assistance and still manage to maintain budgetary and auditing records for the center. At any given time, the Center is engaged in up to thirty faculty projects, which does not include the work of day-to-day Center operations. We have a project management framework, including file management, communication, and workflow systems to support the organization of this workload.

We continue to pay for more of Dr. Smith's salary than proposed in our original IBHE budget. The Center was formerly staffed by one project manager and one web developer prior to the hiring of Dr. Margaret Smith. In order to continue to support the Center's current workload and develop more innovative digital project, the Center hopes to hire a web developer in the coming five years.

12. Institutional Assessment

12.1	Date of Last Review	_____
12.2	Decision at Last Review	_____ Center/Institute in Good Standing _____ Center/Institute Flagged for Priority Review _____ Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review) _____



**RESOURCES: IRIS Center for the Digital Humanities and Social Sciences**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
<b>Revenues</b>					
State Appropriations	250	250			
Income Fund	33,540	18,028			
Foundation	32,460	10,120			
Salary Transfer (summer salary for DeSpain and Hildebrandt supported by graduate school)	18,390	15,659			
<b>Grants and Contracts</b>					
Support of Anthro project	0	600			
Support of SOAR Project	0	3,793			
Douglass Grant-NEH	6,212	2,490			
Recovery Hub for American Women Writers-NEH	20,579	45,967			
Community-Oriented Digital Engagement Scholars (CODES)-NEH	31,842				
<b>Total Revenues</b>	<b>143,273</b>	<b>96,817</b>			
<b>Expenditures*</b>					
Salaries	92,587	59,846			
Student Wages	5,135	4,468			
Office Supplies	250	250			
Benefits	6,283	7,056			
MEDICARE BILLING	1,213				
xxx	0				
<b>Total Expenditures</b>	<b>37,805</b>	<b>71,260</b>			
<b>Revenue Minus Expenditures</b>	<b>12,742.58</b>	<b>25,557</b>			

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty	.5*	.5			
Research Faculty	1	1			
Staff	.1				
<b>Total Staffing</b>	<b>1.6</b>	<b>1.6</b>			

\*DeSpain and Hildebrandt each devote the equivalent of 25% time to the center throughout the year to the Center and are compensated with one course buyout per semester and a month of summer salary. An administrative assistant works for 5 hours per week on Center-related administrative duties.

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1, 2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Edwardsville						
2.	Center/Institute	National Corn-to-Ethanol Research Center (NCERC at SIUE)						
3.	Date	March 11, 2023						
4.	Director	John Caupert						
4.1	Telephone	618-659-6737 ext. 226						
4.2	E-mail	<a href="mailto:jcaupert@ethanolresearch.com">jcaupert@ethanolresearch.com</a>						
5.	Year Established	Money Appropriated in 1997, Ground Breaking 2001, Opening October 2003.						
6.	Illinois State Statute (if pertinent)	Southern Illinois University Management Act, Public Act 095-099						
7.	Reporting Unit	The Graduate School						
8.	Type	<div style="text-align: center;">Activity (check all that apply)</div> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Instructional</td> <td style="text-align: center; padding: 2px;">x</td> </tr> <tr> <td style="padding: 2px;">Research</td> <td style="text-align: center; padding: 2px;">x</td> </tr> <tr> <td style="padding: 2px;">Public Service</td> <td style="text-align: center; padding: 2px;">x</td> </tr> </table>	Instructional	x	Research	x	Public Service	x
Instructional	x							
Research	x							
Public Service	x							

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The NCERC at SIUE is a nationally recognized research center dedicated to the development and commercialization of biofuels, specialty chemicals and other renewable compounds. The Center's fully functional dry grind pilot plant and laboratories are equipped with advanced biofuels capabilities including corn fractionation, pretreatment, and a fermentation suite with 5, 30, 150 and 1500L scale-up. Clients and collaborators benefit from the ability to take their process from the lab to intermediate scale to pilot scale, all in the convenience of one state-of-the-art facility. The Center's engineers, operators, and scientific analysts also provide a range of educational and training opportunities, including internships, courses, workshops, and corporate training programs.

### 9.2 Mission

- **Advocacy:** To advocate, educate, and motivate consumers and elected officials on the benefits of biofuels
- **Commercialization:** To facilitate the commercialization of new technologies and products to stimulate the bioeconomy
- **Research:** To utilize our relationships with government, industry, academia and trade to conduct contractual and grant-funded research
- **Education:** To develop and provide the hands-on training to prepare the bioeconomy workforce of tomorrow.

### 9.3 Objectives

- Educate and inform consumers and policy makers on biofuels benefits and policy needs
- Assist industry, trade, and academic research partners in commercialization of new products and technologies.
- Lead and collaborate on research projects designed to increase efficiency, develop new products, or otherwise investigate bio-based products and materials
- Provide hands-on learning opportunities, training, and education to students, displaced workers, and industry employees

## 10. Advisory Board

### 10.1 Advisory Board - Membership

#### **13 Member Governor Appointed Ethanol Research Advisory Board:**

1. President of Southern Illinois University who shall be Chairman;
2. Director of Commerce and Economic Opportunity;
3. Director of Agriculture;
4. President of the Illinois Corn Growers Association;
5. President of the National Corn Growers Association;
6. President of the Renewable Fuels Association;
7. Dean of the College of Agricultural, Consumer, and Environmental Science, University of Illinois at Champaign-Urbana;

8. Dean, College of Agricultural, Life and Physical Sciences at SIUC
9. Six at-large members appointed by the Governor representing the ethanol industry, growers, suppliers, and universities.

The Advisory Board shall meet at least annually or at the call of the Chairman. At any time, a majority of the Advisory Board may petition the Chairman for a meeting of the Board. Seven members of the Advisory Board shall constitute a quorum.

10.2 Number of Meetings (In This Year)

The Advisory Board shall meet at least annually or at the call of the Chairman. At any time, a majority of the Advisory Board may petition the Chairman for a meeting of the Board.

There were two NCERC Advisory Board and Stakeholders Meetings: October 19, 2021 and March 29, 2022.

11. Annual Performance

11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Presentations	15	10
2. Publications	2	0
3. Grant Awards and Contracts	12	10
4. Outreach	15	12
5. Policy/Legislative Advocacy	10	10

11.2 Major Accomplishments (In This Year)

- Jackie Hayes, as Director of Business Development and Client Relations reestablished an NCERC pipeline of contractual clients, as well as re-established NCERC's prominence in grant awards.
- Major contract demonstration work resumed in the pilot plant and demonstration plant, as the threat from COVID began to be less significant.
- There were no layoffs of full-time personnel.
- Workforce Training was it's strongest in 15 years, with NCERC having multiple Interns, four Research Fellows and a Post Doc.
- \$1.9M Expansion to Research Capabilities
- Released first ever NCERC Workforce Training & Education Report
- Illinois Program Connecting Farmers to Mental Health Resources Hosts Press Conference at NCERC
- ALAKA'I (Aloha Life-Science Academy; Knowledge Advancing Industry) - Proposal in partnership with University of Hawaii, Hilo
- NCERC's Dr. Jie Dong to Contribute on \$1.6M DOE Funded Project

### 11.3 Evidence of Support for State, SIU System, and SIU Campus Priorities

#### **State Priorities**

State law requires the NCERC to: form collaborative research teams; to provide training and services to the ethanol industry; to coordinate industry research needs by pursuing external funding sources; to provide hands-on training for the biofuels workforce; to serve as an independent, third-party validator; to advocate for renewable energy; to provide consultation services; and, to develop demonstration projects. With more than 80 technologies now in the commercial marketplace, NCERC has provided valuable services to the biorenewables industry, students, government agencies, and society as a whole.

#### **SIU System Priorities**

Through its partnerships with SIUC researchers, NCERC creates research opportunities for faculty and students across the SIU system.

#### **SIUE Campus Priorities**

NCERC continues to support SIUE's core mission of undergraduate education by providing educational opportunities to countless SIUE student workers, graduate students, and interns. The NCERC has developed two new undergraduate "focus areas" within the Integrative Studies baccalaureate program at SIUE. In addition, NCERC has a robust Job Shadow Program, employees numerous Student Workers, has created a well-defined Internship Program, is utilizing Graduate Assistants and Research Assistants on all grant funded work, and has hired a Post Doc specializing in Techno Economic Analysis.

### 11.4 Evidence of Support for Center/Institute Objectives

The NCERC achieves its objectives through its mission of ACRE: Advocacy, Commercialization, Research, and Education. As the legislative, educational, and industry-focused service and activities demonstrate, NCERC worked hard to fulfill its reputation as a private/public partnership success story in FY22. Below is a summary of activities of the Executive Director, John Caupert and those of the Director of Business Development and Client Relations, Jackie Hayes.

#### **John Caupert**

##### **Legislative Outreach**

- Congressman Davis Agriculture Advisory Committee
  - NCERC Director John Caupert serves on the Agriculture Advisory Committee of U.S. Congressman Rodney Davis (IL-13), serving as the biofuels industry advisor.
- Congressman Bost Agriculture Advisory Committee
  - NCERC Director John Caupert serves on the Agriculture Advisory Committee of U.S. Congressman Mike Bost (IL-12), serving as the biofuels industry advisor.

##### **Committees**

Director John Caupert serves on the following committees and boards:

- Agriculture Advisory Council – 12<sup>th</sup> Congressional District of Illinois
- Agriculture Advisory Council – 13<sup>th</sup> Congressional District of Illinois
- Alternate Fuels Commission – Governor Appointee

- American Coalition for Ethanol (ACE)
- BIO
  - Communications Committee
  - Federal Government Relations Committee
  - State Government Relations Committee
  - Biobased Products Working Group
  - Biofuels Working Group
- BioSTL Coalition
- Governor’s Proclamation – Manufacturing and Job Creation
- Growth Energy
  - Team Leader of Biofuels Congressional Fly-Ins
- Illinois Corn Growers Association
- Illinois Farm Bureau
- Illinois Policy Action Network
- International Fuel Ethanol Workshop
  - Strategic Planning Committee
- National Corn Growers Association
- Renewable Fuels Association
- Southern Illinois University Edwardsville – Staff Senate
- Southern Illinois University – College of Agricultural Sciences
  - Executive Leadership Board
- St. Louis Regional Chamber
  - Illinois Public Affairs Committee; Energy and Environment Committee
- St. Louis Agribusiness Club – Congressional Tour Committee
- United States Secretary of Defense – Patriotic Employer
- United States Senate – Rural Summit, Illinois Representative of Senator Dick Durbin

**Jackie Hayes**

Alternative Fuels & Chemicals Coalition

American Coalition for Ethanol

BioMADE

- 4S Committee

BIO

Growth Energy

Illinois Alliance for Clean Transportation

- Green Drives Edwardsville Planning Committee

Renewable Fuels Association

- Technical Committee
- Environmental, Health & Safety Committee

St. Louis Agribusiness Club

- Congressional Tour Committee

St. Louis Business Journal’s “40 Under 40” Award, Class of 2022

St. Louis Girls on the Run Young Friends Group

SIUE’s Meridian Society

SIUE Staff Senate

Young Professionals Network (YPN) of the Renewable Fuels Association, Chairperson

Young Friends Committee of Danforth Science Center, Co-Chair

**Conferences, Meetings, Visits**

**July 2021:**

NCGA Ethanol Action Team Meeting  
New Orleans, LA  
July 12

Fuel Ethanol Workshop  
Des Moines, IA  
July 13 - 15

RFA July Board Meeting  
St. Louis, MO  
July 20 - 21

**August 2021:**

Ag Policy Forum 2021  
Springfield, IL  
August 17

American Coalition for Ethanol Annual Conference  
Minneapolis, MN  
August 18 - 20

Legislators to Laboratories  
NCERC Facility  
August 24

Farm Progress Show 2021  
Decatur, IL  
August 31 - September 2

**September 2021:**

Michigan Corn Board Meeting  
Virtual  
September 8

Midwest Ag Confluence Meeting  
Virtual  
September 13

Waterloo High School Career Tech Education Discussion  
Waterloo, IL  
September 17

Growth Energy Virtual Fly-In  
Virtual  
September 22

NHRA Midwest Nationals  
Madison, IL  
September 24 - 26

Legislators to Laboratories  
NCERC Facility  
September 27

Renewable Fuels Association Annual Meeting  
Des Moines, IA  
September 28 - 30

**October 2021:**

Edwardsville High School Apprenticeship Discussion  
NCERC Facility  
October 6

BioSTL Vision 2021  
St. Louis, MO  
October 7

St. Louis Agribusiness Club Infrastructure Discussion  
Virtual  
October 7

St. Louis Agribusiness Club Meeting  
Eckert's Farm - Belleville, IL  
October 12

Ranken Technical College Job Fair  
St. Louis  
October 14

NCERC Annual Stakeholders Meeting  
NCERC Facility  
October 19

SIUE Corporate Engagement Committee Meeting  
Virtual  
October 20

BioMADE 4S Committee Meeting  
Virtual  
October 21

Distillers Grains Technology Council 2021 Annual Meeting  
Louisville, KY  
October 25 - 26

ABLC 2021



San Francisco, CA  
October 27 - 29

**November 2021:**

BioMADE Annual Meeting  
Virtual  
November 1 - 3

STEMSTL 2021 Annual Gathering  
St. Louis, MO  
November 5

Jerseyville Community High School Tour  
NCERC Facility  
November 9

AFCC 2021 Conference  
Washington, DC  
November 14 - 16

Washington DC Visits with Federal Agency Staff, Trade Organizations, and  
Congressional Members  
Washington, DC  
November 16 - 18

STL CAPS Engineering and Advanced Manufacturing Tour of NCERC  
NCERC Facility  
November 30

**December 2021:**

Business Development Trip to Meet with NCERC Clients/Collaborators  
San Francisco, CA  
December 5 - 8

Meeting & Tour at Solano College  
Vacaville, CA  
December 8

Farm Bill Listening Session  
NCERC Facility  
December 13

Danforth Center Lunch & Learn  
Virtual  
December 14

RFA's Young Professionals Network Year-End Meeting  
Virtual  
December 15

**January 2022:**

SIUE Corporate Engagement Committee Meeting  
Virtual  
January 24

**February 2022:**

St. Louis Agribusiness Club Meeting  
February 8  
St. Louis MO

Growth Energy's Executive Leadership Conference  
February 9 - 11  
Miami, FL

Renewable Fuels Association's National Ethanol Conference  
February 21 - 23  
New Orleans, LA

St. Louis Gateway Clean Cities Board Meeting  
February 24  
Virtual

**March 2022:**

SIUE Lifelong Learners Presentation  
March 2  
NCERC Facility

St. Louis Agribusiness Club Meeting  
March 8  
St. Louis, MO

Meeting with Donald Danforth Plant Science Center  
March 10  
NCERC Facility

Advanced Bioeconomy Leadership Conference (ABLC)  
March 16 - 18  
Washington, DC

NCERC Stakeholder + Advisory Board Meeting  
March 29  
NCERC Facility

Meridian Society Networking Event  
March 30  
SIUE Campus

**April 2022:**

No Foolin' - a 39N Networking Event

April 1

Helix Center - St. Louis, MO

SIUE Lifelong Learning Event

April 6

NCERC Facility

RFA - PSM Process Determination Webinar

April 13

Virtual

YPN Webinar - Supply Chains

April 13

Virtual

One Day, One SIUE

April 21

SIUE Campus

**May 2022:**

Meridian Society Derby Day

Edwardsville, IL

May 3

SIUE Staff Senate Meeting

SIUE Campus

May 5

Lallemand Biofuels Academy

Des Moines, IA

May 9 - 12

Distillers Grains Technology Council Conference

Omaha, NE

May 10 - 12

FFRI Press Conference

NCERC Facility

May 12

RFA New Employee Tour

NCERC Facility

May 13

Danforth Center Young Friends Meeting

Virtual

May 17

Great Rivers and Routes Tour Group  
NCERC Facility  
May 18

RFA's Young Professionals Network March Webinar  
Virtual  
May 25

**June 2022:**  
SIUE Staff Senate Meeting  
SIUE Campus  
June 2

Enjoy Illinois 300 at the World Wide Technologies Raceway  
Madison, IL  
June 5

NCGA Value Chain Stakeholder Meeting on Renewable Packaging  
Virtual  
June 6

Corn Utilization Technology Council  
Virtual  
June 7-8

Fuel Ethanol Workshop  
Minneapolis, MN  
June 13 - 15

RFA's Young Professionals Network Member Social Hour  
Minneapolis, MN June 14

BioMADE Member Meeting  
Minneapolis, MN  
June 13 - 15

Tour of the Jackie Joyner-Kersey Food, Agriculture & Nutrition Center  
East St. Louis, IL  
June 30

11.5 Evidence of Organizational Effectiveness

**Organizational Effectiveness:**  
 FY22 began a major rebound for NCERC in the quasi, “post COVID” environment. Activities were significantly increased, evidenced by number of conferences, visitors and meetings NCERC participated in.

A few areas of NCERC that truly stands out in FY22 are the following:

1. Client contractual revenue increased by more than a \$1 million over FY21.
2. For the first time in three fiscal years, NCERC was awarded competitive research grants.
3. Even though salary line increased, NCERC got more done with fewer personnel in the history of NCERC. This is a trend we need to continue, because, it means we’re adding more competent, industry proven professionals to our staff. While this strategy comes with an increase in overall salaries and benefits, the increase in revenue demonstrates the fact it’s working.

Finally, Jackie Hayes is an absolute rock star. The overwhelming majority of the improvements at NCERC would not have been possible without Jackie, and it’s for two reasons:

1. The way in which Jackie has refilled the pipeline of potential clients at NCERC, keeping our “sales funnel” full.
2. By having Jackie, it’s created more opportunities for the Executive Director to focus on attention deficit areas of NCERC operations and opportunities.

Jackie is an absolute rock star, who will be the future Executive Director of NCERC.

12. Institutional Assessment

12.1	Date of Last Review	2016	
<hr/>			
12.2	Decision at Last Review	X	<b>Center/Institute in Good Standing</b>
		_____	Center/Institute Flagged for Priority Review
		_____	Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment)	

**RESOURCES: NCERC at SIUE**

<b>Financial Resources</b>	<b>FY22</b>	<b>FY21</b>	<b>FY20</b>	<b>FY19</b>	<b>FY18</b>	<b>FY17</b>
<b>Revenues</b>						
Beginning Cash	<b>7,883,947</b>	<b>7,123,688</b>	<b>5,696,078</b>	<b>4,014,258</b>	<b>2,940,561</b>	<b>1,479,284</b>
State Appropriations	1,322,520	1,322,949	1,301,770	1,300,000	1,412,950	293,310
Client Contractual Research	1,708,889	814,504	2,161,677	2,808,926	4,485,600	2,953,942
Grants	228,745	-	-	143,357	703,860	504,825
Other Revenue	70,035	71,795	102,226	115,699	289,788	
Foundation	100,000	100,000	100,000	100,000	59,402	137,000
<b>Total Revenues</b>	<b>3,430,189</b>	<b>2,309,248</b>	<b>3,665,673</b>	<b>4,467,982</b>	<b>6,951,600</b>	<b>5,368,361</b>
<b>Expenditures*</b>						
Salaries	824,790	720,607	1,030,826	1,069,542	1,813,360	1,273,341
Fringe Benefits	206,018	104,182	140,694	170,103	328,045	300,076
Operational Expenses	1,105,993	724,200	1,066,544	1,546,517	2,290,490	854,384
<b>Total Expenditures</b>	<b>2,136,801</b>	<b>1,548,989</b>	<b>2,238,064</b>	<b>2,786,162</b>	<b>4,431,895</b>	<b>2,427,800</b>
<b>Cash + Revenue Minus AR and Expenditures</b>	<b>9,177,335</b>	<b>7,883,947</b>	<b>7,123,687</b>	<b>5,696,078</b>	<b>4,014,258</b>	<b>2,940,561</b>

<b>Staffing (Full Time Equivalent)</b>	<b>FY21</b>	<b>FY20</b>	<b>FY19</b>	<b>FY18</b>	<b>FY17</b>	<b>FY16</b>
Faculty	2	2	4	5	1	1
Staff	12	36	36	40	22	16
Student Workers, Interns, GA's	15	10	15	30	22	15
Post Doc – Research Fellows	0	0	0	0	0	2
<b>Total Staffing</b>	<b>29</b>	<b>48</b>	<b>65</b>	<b>75</b>	<b>45</b>	<b>34</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	SIUE						
2.	Center/Institute	University Museum						
3.	Date	3/14/2023						
4.	Director	Erin Vigneau-Dimick						
4.1	Telephone	618-650-2996						
4.2	E-mail	<a href="mailto:evigneau@siue.edu">evigneau@siue.edu</a>						
5.	Year Established	1979 - Established as “The Office of Cultural Arts and University Museum Programs”; 1983 - renamed “University Museum”. (Originally named “The Office of University Cultural Arts Services” (UCAS) 1977)						
6.	Illinois State Statute (if pertinent)	N/A						
7.	Reporting Unit	College of Arts & Sciences						
8.	Type	<div style="text-align: center;">Activity (check all that apply)</div> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">Instructional</td> <td style="text-align: center; padding: 2px 5px;">X</td> </tr> <tr> <td style="padding: 2px 5px;">Research</td> <td style="text-align: center; padding: 2px 5px;">X</td> </tr> <tr> <td style="padding: 2px 5px;">Public Service</td> <td style="text-align: center; padding: 2px 5px;">X</td> </tr> </table>	Instructional	X	Research	X	Public Service	X
Instructional	X							
Research	X							
Public Service	X							

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

The University Museum (UM) of Southern Illinois University Edwardsville, founded in 1979, is a repository and interpretive center whose interdisciplinary collections include more than 35,000 two- and three-dimensional objects of fine art, architecture, history, ethnology, archaeology, and the natural sciences. Highlights of the collection include the Fine Arts Collection which encompasses paintings, prints, and sculpture, the Louis Sullivan Architectural Ornament Collection, the anthropological collections numbering more than 20,000 objects with strengths in Native American, Asian, and African ethnology, as well as natural history collections with fossils from Cenozoic through Paleozoic eras.

### 9.2 Mission

The University Museum (UM) supports the instructional, research and public service functions of Southern Illinois University Edwardsville through the collection, interpretation, preservation, presentation and exhibition of tangible, physical objects to its students and the greater community which it serves.

### 9.3 Objectives

1. Provide access to university sponsored museum collections, expertise, and facilities, for object-based education and research to SIUE faculty and students and the broader community.
2. Enhance teaching and learning by providing meaningful opportunities for hands-on experiential learning within and outside of the classroom.
3. Encourage and facilitate research engaged with the museum's culturally diverse art and artifact collection for faculty, students, independent scholars, and members of the general public.
4. Serve as a visitor gateway to the campus and the University through outreach events, programming, and interactive experiences.
5. Act as responsible stewards for the publicly owned collections of the university.

## 10. Advisory Board

### 10.1 Advisory Board - Membership

The SIUE University Museum Advisory Council (UMAC)

- Associate Professor Laura Milsk-Fowler; History Dept.
- Associate Professor Cory Willmott; Anthropology Dept.
- Associate Professor Barbara Nwacha; Chair, Art & Design Dept.
- Associate Professor Luci Kohn; Biology Dept.
- Professor Caroline Pryor; Department of Teaching and Learning
- Professor Elza Ibroscheva; Assoc. Provost for Academic Affairs
- Erin Vigneau-Dimick; Executive Curator, University Museum
- Kyle Moore; Director of Development, SIUE Foundation
- Professor Kevin Leonard; Dean, College of Arts & Sciences

10.2 Number of Meetings (In This Year) 2 full council meetings



## 11. Annual Performance

### 11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. External Exhibits	1 exhibit	2 exhibits
3. Academic Research (Faculty and Student)		52 researchers
4. Public/Scholarly Research		9 researchers
5. Lectures Programming		2 programs
6. External Grants (proposed or awarded)	1 grant	4 grants
7. Objects Inventoried	5,000 objects	7,185 objects

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

- Exhibits
  - ***Agnes Pal: Memorial Exhibit***  
Fuller Dome Gallery – Center for Spirituality and Sustainability  
Curated by Erin Vigneau-Dimick  
December 18, 2021 – February 28, 2022
  - ***Kingdom Animalia Exhibit***  
Edwardsville Arts Center, Edwardsville, IL  
Curated by Erin Vigneau-Dimick  
March 25 - May 6, 2022
- Lectures/Programs
  - ***Agnes Majtinsky Pal Memorial Event and Lecture***  
Co-chaired by Erin Vigneau-Dimick and Emeritus Professor Paulette Myers  
Center for Spirituality and Sustainability  
December 21, 2021
  - ***The University Museum at SIUE: Art & Architecture***  
Illinois Association of Physical Plant Administrators  
Speaker: Erin Vigneau-Dimick, Executive Curator  
Morris University Center; Southern Illinois University Edwardsville
- Grants
  - Proposed
    - **Institute for Museum and Library Services**  
Inspire! Grants for Small Museums FY22  
\$50,000 request (submitted 11/15/2021)  
*SIUE University Museum Digital Access Expansion Project*
    - **National Endowment for the Arts**  
NEA American Rescue Plan Grant, FY22  
\$100,000 request (submitted 8/2/2021)  
*SIUE University Museum Curatorial Administration & Support*

- **National Endowment for the Humanities**  
NEH American Rescue Plan Grant, FY22  
In conjunction with the SIUE IRIS Center  
\$ 404,742 request (submitted 5/13/2021)  
*SIUE IRIS Center: Rebuilding Digital Humanities*
  - Awarded
    - **Institute for Museum and Library Services**  
Museums for America Collections Stewardship Grant, FY21  
**\$ 153,459.00** awarded: 7/22/2021  
*SIUE University Museum Collections Inventory Project Stage II*
- **Collections Inventory Project: Stage I**  
Inventory of 10,000 of the museum’s 35,000+ displayed and stored collections
  - Stage I completed 12/31/2021; Final report submitted
    - 4,421 objects for Stage I inventoried in FY2022
    - (Stage I total of all objects inventoried by 12/31/2021 = 10,809)
    - During Stage 1 of the inventory, 2,925 undocumented objects were found and inventoried moving the number of records in the catalog to more than 35,100. This 30% increase in objects to the totals was expected.
    - 23,879 digital images were attached to catalog records during Stage 1 of the Inventory Project.
- **Collections Inventory Project: Stage II**  
Inventory of 10,000 of the museum’s 35,000+ stored collections focusing on Native American, African, Oceanic, and Southeast Asian regional artifacts
  - Stage II commenced 1/1/2022
    - 2,764 objects for Stage II inventoried in FY2022

### 11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

SIUE University Museum (UM) serves the citizens of Illinois via numerous programs and activities. Through hands-on opportunities for learning and research, exhibits and programming the UM provides an enriching experience for students, scholars, and the public, connecting them to fine art, historical objects, natural history specimens and diverse cultural artifacts.

*The University Museum supports IBHE stated goals (underlined) as follows:*

1. The UM directly supports educational achievement through its instructional and research programs increasing K-12, undergraduate and graduate student’s knowledge and understanding of fine art, world cultures, and history as well as providing professional expertise and training in museological studies.
2. Improve College Affordability: The UM sponsors 8 or more semester-long professional level onsite graduate research assistantships per year, providing stipends, tuition waivers and professional level museum work experience to students from related courses of study from the departments of Museum Studies, Art & Design, History, Cultural Heritage & Resource Management, and Public Administration and Policy Development.
3. Strengthen Workforce Development: The UM works directly with students who are interested in careers in art handling, exhibition preparation, collections management,

and curation at museums and sites of cultural heritage. The extensive UM collections and facilities, coordinated with adjacent credentialing curriculums and programs, provide a museum professional training environment that is unique in the Southern Illinois/St. Louis metro region.

4. **Link Research and Innovation to Economic Growth**: New software, digital imaging and technological advancements have improved access to and management of the UM's collections for faculty, students, and the public. Access to databases, imagery, and educational content engages local and distant learners providing opportunities for scholarship and professional development.

**Support for SIUE Campus Priorities (Underlined)**

1. **Prepared and Diverse Students**: The access that the UM provides to students to its multi-cultural, world class collections through exhibitions, classroom hands-on encounters and individual and group research activities exposes them to a world of people and places beyond Illinois. UM sponsored graduate research assistantships, internships, and professional practicums train students in essential museum job skills, preparing them for future careers.
2. **High-Quality Programs**: The UM staff work directly with faculty to optimize opportunities for museum facilitated hands-on research with artifacts. Access to collections objects is essential to courses in Anthropology, History, Art & Design, and Museum Studies. The UM operations facility is set up to accommodate instruction for students in the storage archive and regularly loans and displays objects from the collections at the Anthropology Department's Ethnographic Museum Laboratory and in classrooms throughout campus.
3. **Co-curricular programs and services to enhance learning**: The UM is engaged directly with graduate students enrolled in the Integrative Studies master's program under the Cultural Heritage and Resource Management (CHRM) focus and the master's in History with a certificate in Museum Studies. UM professional staff serve on CHRM graduate thesis committees, teach Museum Studies courses, and provide mentorship focused on the interdisciplinarity of professional museum career opportunities.
4. **High-Quality, Dedicated Faculty and staff**: The UM facilitates faculty interdisciplinary research projects utilizing collections materials and benefitting from museum staff expertise. UM staff collaborate with and support faculty by participating as a primary investigator on internal and external grants and proposals and assisting on and co-authoring peer reviewed articles and conference presentations.
5. **Outreach and Partnerships**: Through exhibitions, artifact loans, educational lectures, interactive hands-on experiences and more, the UM connects to the local K-12 community and the public of the region through partners such as the Edwardsville Arts Center, the Schmidt Art Center at SW Illinois College, Meridian Village Senior Living, St. Louis' City Museum, and the National Building Arts Center. Additionally, UM staff present and publish research in regional and national venues on museum collections management and education.
6. **Physical and Financial Stability**: The UM's collections are housed in a secure climate-controlled building with modern, museum-quality storage structures. All 35,0000+ of the unique and valuable objects in the collections are covered by an independent rider on SIU's self-managed insurance policy (SIP). In 2015, SIU Office of Audit's Internal Review identified proper inventory control as one of the most important factors to improve the UM's fiscal, and ethical stewardship practices. Since that time the UM has successfully executed a major records reorganization, begun a multi-stage, multi-year Collections

Inventory project, and received a second federally funded grant in FY22 for **\$153,459** to execute Stage II of the project which is now in process.

#### 11.4 Evidence of Support for Center/Institute Objectives

- 1. Provide access to university sponsored museum collections, expertise, and facilities, for object-based education and research to SIUE faculty and students and the broader community.**
  - The UM loaned, installed, deinstalled, and/or moved, more than 582 items during FY22, in and out of its facility to provide items for teaching, research, exhibition, and public display.
  - The University Museum facilitated internal extended loans of artifacts in FY22 for use in the Anthropology Department's Ethnology Museum Laboratory to benefit student and faculty research.
    - 2 undergraduate projects and exercises served
    - 35 museum objects loaned
  - The UM welcomed more than 61 faculty, students, and independent researchers in FY22 to its limited access archive to view and research objects from the 1000's in our collections.
- 2. Enhance teaching and learning by providing meaningful opportunities for hands-on experiential learning within and outside of the classroom.**
  - In coordination with faculty of multiple disciplines from the College of Arts and Sciences, the University Museum has facilitated formal and informal hands-on educational experiences utilizing art and artifacts from the collections. These have included:
  - on-site faculty led interactive research experiences for students both on site in the archive and elsewhere on campus (Museum Studies, Art & Design, Anthropology, History, Biology)
    - HIST580: Intro to Museology, HIST581: Collections Management, HIST582: Museum Exhibit Practicum; HIST 590 Internship
    - ANTH20 Museum Anthropology; ANTH490: Senior Assignment
    - ART506 Professional Practices
    - BIOL590 Topics in Biology
  - Graduate student directed curation of exhibits for Museum Studies courses
    - HIST590 Internships in Museology; HIST582 Museum Exhibit Practicum.
  - Professional level practicums for Museum Studies students
    - HIST581 Management of Museum Collections
    - HIST590 Internships in Museology; HIST582 Practicum in Exhibition and Program Development
- 3. Encourage and facilitate research engaged with the museum's culturally diverse art and artifact collection for faculty, students, independent scholars and members of the general public.**
  - *Following State of Illinois and university COVID-19 guidelines, the University Museum archive began to admit researchers, faculty, and students on a limited basis in the Summer of 2021.*

- Museum staff worked with external researchers both locally and nationally on inquiries and projects involving fine art, natural history, ethnography and history including scholars and curators:
  - Lori Belknap, Superintendent, Cahokia Mounds State Historic Site
  - Andres Tuccillo, Kenyon College/Intern, Cahokia Mounds State Historic Site
  - Paula Lincoln, Gallery Manager; The Sheldon Art Galleries, St. Louis, MO
  - Benjamin Lowder, Creative Director; Center for Spirituality and Sustainability
  - Michael Hopper, student; University of Oklahoma
- Faculty and students (undergraduate and graduate) from the departments of Anthropology, Integrated Studies, Museum Studies/History, and Art & Design carried out independent research utilizing materials from the University Museum's collections. Projects this year included:
  - Kaia Cosgriff: African Harps *case exhibit*– Anthropology 420, Spring 2022
  - Kaia Cosgriff: Stringing Together the Past and Present with Central African Harps; *Senior Colloquium* – Anthropology 491, Spring 2022
  - Jaden Lawson: Uncovering the Truth behind SIUE's Atlatl Weights – *Senior Colloquium* - Anthropology 491, Spring 2022
- Support Diversity, Equity, and Inclusion with the Undergraduate Research and Creative Activities Assistantship (URCA): *Diversity Demography Project*
  - Michael Hubach – Fall 2021, Spring 2022
  - Genevieve Blanton – Fall 2021 – ART498, Spring 2022

4. **Serve as a visitor gateway to the campus and the University through outreach events, programming, and interactive experiences.**

- As an aspect of outreach programming to connect with and enrich the surrounding St. Louis regional community, the state and the nation, The University Museum brings exhibitions and programming to the Edwardsville community and the public at large.
- Exhibitions
  - ***Burials, Religion, and Shells***  
Cahokia Mounds World Heritage Site  
Curated by Intern Andres Tuccillo from Kenyon College  
July 14 – November 1, 2021
  - ***Agnes Pal: Memorial Exhibit***  
Fuller Dome Gallery – Center for Spirituality and Sustainability  
Curated by Erin Vigneau-Dimick  
December 18, 2021 – February 28, 2022
  - ***Kingdom Animalia Exhibit***  
Edwardsville Arts Center, Edwardsville, IL  
Curated by Erin Vigneau-Dimick  
March 25 - May 6, 2022
- Programming
  - ***Agnes Majtinsky Pal Memorial Event and Lecture***  
Co-chaired by Erin Vigneau-Dimick and Emeritus Professor Paulette Myers  
Center for Spirituality and Sustainability  
December 21, 2021
  - ***The University Museum at SIUE: Art & Architecture***

Illinois Association of Physical Plant Administrators

Speaker: Erin Vigneau-Dimick, Executive Curator

Morris University Center; Southern Illinois University Edwardsville

- Active loan program, enriching community relationships regionally and state-wide
  - Cahokia Mounds Historical Site (ongoing)
  - Parkin Archeological State Park (ongoing)
  - Edwardsville Arts Center Sculpture Garden (ongoing)
  - Meridian Village Senior Living Center (ongoing)
  - The City Museum, St Louis, MO (ongoing)
  - Multiple community and financial institutions: The Bank of Edwardsville, Scott Credit Union, Hortica, The City of Edwardsville and others (ongoing)

**5. Act as responsible stewards for the publicly owned collections of the university.**

According to nationally established standards and best practices, the SIUE UM legally, ethically, and effectively manages, documents, and preserves the collections in the following ways:

- Strategic plan
  - the current plan has been updated to extend until 12/2023
- Advisory council
  - two full council meetings held in FY22
- NAGPRA: Native American Graves Preservation and Repatriation Act  
*Enacted in 1990, NAGPRA is a federal law that requires museums and federal agencies to identify Native American human remains, funerary items, and objects of cultural significance in their collections and collaborate with Tribes and Native Hawaiian organizations to repatriate them.*
  - In January 2022, faculty, and UM staff from SIUE and SIUC met with administrators to discuss collaborating on a federal National Park Service NAGPRA grant.
  - In April 2022, Dr. Sheila Caldwell, Vice President for Anti-racism, Diversity, Equity, and Inclusion organized a SIU System NAGPRA Compliance Committee of which the UM Executive Curator is a member.
- Accessions

During FY22 more than 945 individual objects were accessioned and have had records added to the catalog. These are primarily not new acquisitions but objects that were already in the collections and on display. The discovery and resultant cataloging of these objects was a direct result of the thoroughness and accuracy of the wall-to-wall Collections Inventory Project's processes and one of the intentional goals of the project.

  - 393 of these objects are from the Milton Harrington donation and were stored or put on display without having had their cataloging completed.
  - 36 of these objects are transfers from other departments in the university of gifts or purchase awards of artworks that need to be placed within the collections for safekeeping and tracking.
  - 46 of these objects are donations to the museum whose paperwork was never completed, and the documentation was not accurately recorded.
  - 470 of these objects are deemed Found-In-Collections and will be processed according to Museum policy and Illinois state law.
- Intellectual and physical control of collections

- Multi-stage full inventory continues in FY22 (full collection is projected at more than 35,000 objects. Rough projections suggest 9 FTE years to complete.) To increase the preservation of the collection a staged approach was adhered to as an aspect of the inventory.
  - *During the inventory process objects were surveyed for condition and flagged for follow-up.*
  - *Some items at risk were removed from display during the onsite inventory.*
  - *Limited stabilization measures and simple housing practices were performed as fragile or at-risk items were inventoried in the archive.*
    - Collections Inventory Project Stage I:
      - Inventory of 10,000 of the museum’s 35,000+ displayed and stored collections funded in part by a federal grant for **\$130,000** from the Institute for Museum and Library Services
      - Stage I completed 12/31/2021; Final report submitted; 10,809 objects inventoried.
      - 23,879 digital images were attached to catalog records during Stage 1 of the Inventory Project.
    - Collections Inventory Project Stage II:
      - Inventory of second group of 10,000 of the museum’s 35,000+ displayed and stored collections funded in part by a federal grant for **\$153,459** from the Institute for Museum and Library Services.
      - Stage II commenced 1/1/2022: focusing on Native American, African, Oceanic, and Southeast Asian regional artifacts
      - 2,764 objects for Stage II inventoried in FY22

## 11.5 Evidence of Organizational Effectiveness

Organizational effectiveness is delineated below. The UM is classified as a Public Service center, but in fact, its activities encompass all three areas: instruction, research, and service.

### 1. Instruction:

- The UM Executive Curator is engaged in direct teaching for the graduate Museum Studies course HIST582 Practicum in Exhibition and Program Management.
- The UM Executive Curator serves on graduate thesis committees for Museum Studies/History and Cultural Heritage and Resource Management masters candidates.
- UM staff provide indirect teaching and major instructional support for HIST580 HIST581, HIST582, HIST590, INTG500, and INTG593.
- In coordination with faculty of multiple disciplines from the College of Arts and Sciences, the UM facilitates tours of the collections archives and provides access to objects and data for laboratory and classroom hands-on educational experiences for ART202C, ART305, ART470, ART506, ART520, HIST211, HIST304, HIST306, ANTH404, ANTH420, ANTH490, ANTH491, ANTH570 courses.
- Each graduate research assistant (8 term GA’s per year) receives 180 hours per semester of valuable, hands-on training in museum object handling, cataloging, interpreting, and preservation skills.

2. **Research:** The UM supports research for SIUE faculty and students and external scholars in art, anthropology, history, and museology by maintaining and providing access to its catalogue, digital images, archives, and collections objects.
  - Research outputs include papers, theses, poster sessions, journal articles, conference presentations, book chapters, and exhibitions.
  - UM staff provide support for and serve as primary investigators on internal and external grant proposals and projects.
  - The UM Executive Curator collaborates with faculty on publications and presentations for regional and national media and organizations.
  - The UM maintains institutional memberships in local, regional, and national professional organizations.
3. **Public Service:** The UM strives to operate as a visitor gateway to the campus and the University through public outreach and interactive experiences.
  - The UM brings exhibitions and programming to local galleries, K-12 schools, regional community colleges, and senior centers.
  - The UM operates an active loan program, enriching community relationships locally, regionally, and state-wide, providing loans of UM collections objects and creating interpretive materials for arts centers, historical sites, museums, and educational institutions.
  - An important facet of the UM's public service mission is to act as a responsible steward for the state-owned collections that it holds in trust for the public of Illinois. The UM works diligently to provide appropriate administration and care to legally, ethically, and effectively manage, document, preserve, curate, and provide access to the collections in accordance with the best practices and standards of the museum profession as promulgated by the American Association of Museums and all relevant state and federal laws and international agreements.
  - Improve governance and decision-making to increase communication and teamwork amongst stakeholders.
    - The UM has established strategic goals and milestones incorporating recommendations from its internal and external assessments outlined in the UM's 2022 Strategic Plan.
    - University Museum Advisory Council (UMAC) meets two or three times per year to guide and assist the administration of the UM to review and revise the Museum's mission and policies, develop a long-term plan for the museum and be responsive to its obligations.
  - Enable greater access and care of the collections by establishing greater intellectual and physical control over the holdings of the museum better serving the UM's stakeholders and the publicly owned collections.
    - Multi-stage full inventory commenced in May 2018 (current estimates project the collection holdings at more than 35,000 objects. Rough projections suggest 9 FTE years to complete full inventory.
      - Stage 1 (10,809 objects; completed December 2021) focused on 3 strategic areas of the collection:
        - 2,128 displayed objects across three SIUE campuses in more than 60 buildings (a group chosen because these were the most inaccurately tracked and the most at risk for environmental exposure concerns.)



- 4,203 items of two-dimensional Fine Art (chosen because of high usage.)
  - 3,112 objects from the Native American collection (chosen to increase knowledge for NAGPRA compliance)
- Stage 2 (Begun January 2022; expected completion August 2023), (2,764 objects inventoried in FY22) focused on 3 strategic areas of the collection:
  - Native American collection and Oceanic collection (for NAGPRA compliance)
  - African collection (because of nature of organic material and environmental risks)
  - Asian collection
- Enhance the visibility of the Museum and its collections to the broader campus and the surrounding community
  - Identification labelling.
    - Labelling is placed with more than 2,120 objects on display. This labelling is an effort on the part of the museum to educate the SIUE community about each individual artwork and provide evidence of the unique benefits of the Art on Campus program. Labelling identifies each artwork by artist, title, media and catalogue number and is labelled with the UM's logo to promote the cultural significance of the museum's collections on campus and provide a contact and a context for every piece.
  - Development of online presence: plan begun in May 2020 which includes:
    - University Museum web page (in process expected completion summer 2023)
    - Online exhibits (in coordination with SIUE's IRIS Center)
      - Multiple virtual exhibits now available on Scalar and MuseumViews platforms
    - Continuation of social media outreach
    - Development of accessible online catalog (seeking new funding sources in FY23)
      - Digital Access Expansion project – data cleanup and transfer
      - Cloud based catalog Public Access feature
- Systems Management and Accountability: Ongoing integrative practices which affect the UM's instructional, research, and public service capabilities across the board. Areas have been overhauled, reorganized, streamlined, and standardized including staff and GA hiring and retention, budgeting, records management, object tracking, storage, security, climate control, cataloguing procedures, policy development, and governance strategies. Physical resources and facilities have been reassessed and structural and organizational improvements are continually made to the records area, workshops, and storage spaces encompassing surplus of antiquated and excess equipment and materials, consolidating and expanding collections storage, and reorganizing and increasing dedicated working and teaching space.

12. Institutional Assessment

12.1 Date of Last Review 2020

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12.2 Decision at Last Review            Center/Institute in Good Standing  
XXX Center/Institute Flagged for Priority Review  
           Center/Institute Suspended

12.3 Explanation (briefly provide any explanation necessary of the institutional assessment or plans for pending program review)  

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**RESOURCES: University Museum**

<b>Financial Resource</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY 2018</b>
Revenues					
State Appropriations	85,517	86,562	79,866	48,376	45,510
Income Fund	57,011	57,708	53,244	72,563	67,516
Grants & Contracts	80,181	79,863			
Foundation Funds					
Transfers from CAS	2,871			6652	6,651
Other Revenue/Sales					
ICR from CAS	2,798	1,298			
<b>Total Revenues</b>	<b>225,507</b>	<b>225,431</b>	<b>133,110</b>	<b>127,591</b>	<b>119,177</b>
Expenditures*					
Salaries (staff & graduate assistants)	154,507	182,128	113,180	103,917	95,532
Grant Fringe Benefits (non-state)	8,701	18,355			
Grant Facilities and Admin costs	14,855	31,153			
Wages	0	0	0	0	0
Travel	0	147	0	426	340
Equipment	0	222	406	2,291	1,159
Commodities	834	782	1,807	4,116	5,520
Contractual Services	10,592	13,013	10,318	9,495	9,905
Automotive	5,417	5,013	5,401	5,567	5,624
Telecommunication	1,341	1,227	1,346	1,357	1,413
<b>Total Expenditures</b>	<b>196,247</b>	<b>252,040</b>	<b>132,458</b>	<b>127,169</b>	<b>119,493</b>
<b>Revenue Minus Expenditures</b>	<b>29,260</b>	<b>(26,609)</b>	<b>652</b>	<b>422</b>	<b>(316)</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.

<b>Staffing (Full Time Equivalent)</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty			.33 FTE	1.5 FTE	2.0 FTE
Staff (including grant)	3.125 FTE	3.67 FTE	1.17 FTE	.5 FTE	
Graduate Assistants	0.75 FTE	0.75 FTE	.90 FTE	.43 FTE	.75 FTE
Student/Temp workers	0.13 FTE	0.125 FTE	.25 FTE	.34 FTE	.1 FTE
<b>Total Staffing</b>	<b>4.005 FTE</b>	<b>4.545 FTE</b>	<b>2.65 FTE</b>	<b>2.77 FTE</b>	<b>2.85 FTE</b>

CENTERS AND INSTITUTES  
ANNUAL REPORTING

Report For: July 1,2021 – June 30, 2022

(IBHE Approved and/or Illinois State Statute Established Only) \*

1.	Reporting Institution	Southern Illinois University Edwardsville						
2.	Center/Institute	WSIE-FM, 88.7 "The Sound", broadcasting at 50 kilowatts from the SIUE Campus						
3.	Date	3/8/2022						
4.	Director	Jason Church						
	4.1 Telephone	618-650-3607						
	4.2 E-mail	<a href="mailto:jaschur@siue.edu">jaschur@siue.edu</a>						
5.	Year Established	A request for the radio station construction permit was submitted to the Federal Communications Commission (FCC) in October 1968; the station license application was submitted to the FCC in 1969; the FCC granted the license the following year; and the station went on the air for the first time on Sept. 4, 1970.						
6.	Illinois State Statute (if pertinent)	N/A						
7.	Reporting Unit	Office of the Chancellor/University Marketing & Communications						
8.	Type	<div style="text-align: center;">Activity (check all that apply)</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Instructional</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> <tr> <td>Research</td> <td style="border: 1px solid black;"></td> </tr> <tr> <td>Public Service</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> </table>	Instructional	X	Research		Public Service	X
Instructional	X							
Research								
Public Service	X							

\* Complete this form for each center and institute established (or that is in the process of being established) through the Illinois Board of Higher Education approval process (23 Illinois Administrative Code 1050) or by specific Illinois state statute. See University Guideline 2.4 for details. This report will be completed by the center or institute after conclusion of the academic/fiscal year.

## 9. Overview

### 9.1 Description

WSIE 88.7 “The Sound” is a 50,000-watt, non-commercial FM radio station, which serves the SIUE campus, the Metro-East and the entirety of the Greater St. Louis region. WSIE provides our listening audience with a rich blend of Jazz, Smooth Jazz, Blues and Easy R&B, among other “companion” genres of music. We also provide two community-oriented shows (The Financial Café & Segue), which air throughout the weekend programming. WSIE also serves as a training ground for several SIUE students, former students and community volunteers who wish to learn and hone their craft in a hands-on, working environment.

### 9.2 Mission

WSIE 88.7 “The Sound” is a non-commercial, community supported radio station which strives to celebrate, promote and educate on the institution of Jazz, in all its forms, throughout Edwardsville, the Greater St. Louis region and beyond. WSIE is also an educational facility, which serves as a professional training ground for SIUE students interested in pursuing a career in the field of Mass Communications and across multiple disciplines.

### 9.3 Objectives

WSIE will strive to achieve the development, promotion and provision of a radio station format which engenders listener loyalty, underwriting, and on-going financial support. WSIE-FM will also strive to serve the communication needs of SIUE, the Greater St. Louis Area and the Southwestern Illinois region through the delivery of community-focused information, sports and public affairs programming. WSIE-FM will strive to provide SIUE students with a myriad of opportunities to work in and experience the business of radio broadcasting through interaction with the professional staff of WSIE through the development and execution of high-quality student programming.

## 10. Advisory Board

### 10.1 Advisory Board - Membership

The WSIE Advisory Board is comprised of SIUE Faculty, staff and alumni, as well as supporters of the radio station from the surrounding region. Members (during the reporting period) are Mr. Carlos Bedoya, Ms. Robin Boyce, Ms. Bonni Burns, Mr. Jason Church, Mr. Joseph Pott, Mr. Musonda Kapatamoyo, Mrs. Kedra Tolson, Mr. Bob Kochan, Dr. Kevin Leonard, Ms. Stephanie Lewis and Mr. Michael Silverman.

10.2 Number of Meetings (In This Year) 1

## 11. Annual Performance

### 11.1 Performance Measures \*

Measure	Target for Year	Results in Year
1. Generate \$12,000.00 per month in revenue	\$144,000.00	\$139,085.19
2. Increase audience size by ten percent	Average weekly cume of 62,000	Average weekly cume of 75,900
3. Increase Social Media footprint by 15 percent	3887 follows on FB	3830 follows on FB
4.		
5.		

\* Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

### 11.2 Major Accomplishments (In This Year)

- In an effort to raise funds for a new WSIE transmitter, we have successfully obtained commitments from the Kranzberg Arts Foundation in the amount of \$150,000.00, along with a matching commitment from SIUE for \$150,000.00. We are currently on hold for a commitment with the Steward Family Foundation. This is the closest anyone has ever gotten to achieving the funding necessary for a new transmitter, which is direly needed.
- We are working closely with the SIUE Foundation on a plan to utilize Foundation resources, such as the call center, to assist in our Development efforts with WSIE.
- Two of our current student volunteers (both juniors at the time) were offered and accepted part-time jobs with Hubbard Radio group in St. Louis: one with the KSHE Street Team/Programming department and one with the cluster's Digital Marketing department.
- WSIE has been named a finalist in St. Louis Magazine's A-List in the category of "Best Radio Station" for a second year in a row.
- WSIE continues to be listed in the top-20 stations in the St. Louis market, according to Nielsen Ratings services.
- WSIE can now officially boast that we have the most diverse listening audience in the measurable St. Louis market, according to an average of 2022 data from Nielsen Ratings services.
- We continue to court and close new clients and supporters like Gulf Shores, the Missouri History Museum, Jazz St. Louis, The Factory in Chesterfield, Great Rivers Greenway, IllinoisSouth Tourism and Pure Catering STL, among others.
- We now boast over 50 monthly, recurring donors, as compared to just 3 in 2018.
- After the milestone outlined in the last report, concerning income to expense ratio, we've had several additional months when our monthly income has slightly exceeded our monthly expenses. This is a very important step forward in our quest for fiscal solvency.
- Robin was able to close on a \$9,000.00 underwriting buy with the St. Louis Symphony Orchestra, making it the largest underwriting purchase in WSIE's history.
- This was the first year that we had all on-air shifts filled and the first year that all Cougars Basketball games were covered by student volunteers.
- WSIE continues to be a leader in the format when it comes to Jazz programming around the United States.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning

WSIE Continues to broadcast promotional announcements designed to increase awareness of the effectiveness of SIUE as an educational institution. WSIE also broadcasts promotional announcements on the expanding in-state/out-of-state tuition program. WSIE also broadcasts Cougar athletic contests, including men’s and women’s basketball.

11.4 Evidence of Support for Center/Institute Objectives

WSIE continues to work with the faculty of the Department of Mass Communications to provide students a unique learning opportunity at the radio station. WSIE also works with the Office of the Chancellor and the Dean of the College of Arts and Sciences to produce and broadcast the half hour program “Segue.” The program highlights the work of SIUE and builds upon its relationship with the greater community by conducting interviews with community, civic, and political leaders.

11.5 Evidence of Organizational Effectiveness

We successfully recruited additional volunteers to replace departing voice-trackers. A complete list of engineering responsibilities was created and stored for easy access by staff members. The public inspection file was better arranged in preparation for the eventual migration to an all-electronic system with the Federal Communications Commission. Increased underwriting / community support.

12. Institutional Assessment

12.1	Date of Last Review	FY 2021
12.2	Decision at Last Review	<input checked="" type="checkbox"/> Center/Institute in Good Standing <input type="checkbox"/> Center/Institute Flagged for Priority Review <input type="checkbox"/> Center/Institute Suspended
12.3	Explanation	(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)

**RESOURCES: WSIE 88.7 The Sound**

<b>Financial Resources</b>	<b>FY2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Revenues					
State Appropriations	.00	.00	.00	.00	70,620.00
Income Fund	.00	.00	.00	.00	.00
Grants & Contracts	7,300.00	12,800.00	50,675.00	.00	.00
Fees from Underwriters	111,152.25	60,110.99	56,053.00	86,665.50	66,072.94
Rental Revenue	5,382.76	10,220.40	9,893.00	9,606.78	9,327.25
Listener Gifts to the SIUE Foundation	38,354.44	55,953.80	54,282.82	23,500.00	16,103.70
<b>Total Revenues</b>	<b>\$162,189.45</b>	<b>\$139,085.19</b>	<b>\$170,903.82</b>	<b>\$119,772.28</b>	<b>\$162,123.89</b>
<b>Total Revenues Minus State Appropriations and Income Fund</b>	<b>\$162,189.45</b>	<b>\$139,085.19</b>	<b>\$170,903.82</b>	<b>\$119,772.28</b>	<b>\$91,503.89</b>
Expenditures*					
Salaries	259,063.17	192,641.79	189,176.00	182,618.12	156,674.65
Wages	.00	.00	676.00	1,937.76	16,863.89
Equipment	424.97	.00	.00	21,272.76	1,125.10
Commodities	955.49	226.24	1,164.00	4,260.47	4,354.96
Contractual Services	19,598.96	20,849.79	18,442.29	17,197.72	24,817.59
Telecom	8,885.58	8,826.62	9,362.00	9,299.53	8,639.34
Expenditure from Foundation Account	.00	.00	.00	.00	.00
<b>Total Expenditures</b>	<b>\$288,928.17</b>	<b>222,544.44</b>	<b>\$218,820.29</b>	<b>\$235,962.36</b>	<b>\$212,475.53</b>
<b>Revenue Minus Expenditures</b>	<b>(\$126,738.72)</b>	<b>(\$83,459.25)</b>	<b>(\$47,916.47)</b>	<b>(\$116,190.08)</b>	<b>(\$50,351.64)</b>
<b>Revenue Minus Expenditures Minus State Appropriations and Income Fund</b>	<b>(\$126,738.72)</b>	<b>(\$83,459.25)</b>	<b>(\$47,916.47)</b>	<b>(\$116,190.08)</b>	<b>(\$120,971.64)</b>

\* Categorize expenditures in easily understood, consistent categories (e.g., salaries, Graduate Assistant support). Add additional rows as necessary.



<b>Staffing (Full Time Equivalent)</b>	<b>FY 2022</b>	<b>FY2021</b>	<b>FY2020</b>	<b>FY2019</b>	<b>FY2018</b>
Faculty					
Staff	3	3	3	3	2.5
Student Workers	0	0	0	1	1
<b>Total Staffing</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>3.5</b>