

Centers and Institutes

Annual Reporting

Fiscal Year 2021

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 2022



Southern Illinois University System
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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 FY2021 are provided for the SIU Board of Trustees. It is the seventh 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, 2020 – June 30, 2021

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

1.	Reporting Institution	<u>Southern Illinois University Carbondale</u>
2.	Center/Institute	<u>Advanced Coal and Energy Research Center*</u>
3.	Date	<u>March 18, 2022</u>
4.	Director	<u>Ken B. Anderson See note Infra</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"/>

Notes:

1. Dr. Ken B. Anderson was appointed Director of ACERC starting August 2020.
2. After this reporting period, the Advanced Coal and Energy Research Center (ACERC) was officially renamed Advanced Energy Institute (AEI). This change is reflected in all current documentation and records concerning the organizational unit. ACERC is used throughout herein to reflect the name in use during the period covered in this report.

9. Overview

9.1 Description

ACERC 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 Coal and Energy Research Center 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, Director Emeritus
- Kevin O’Brien, Director, Illinois Sustainable Technology Center, Prairie Research Institute
- Norm Peterson, Director, Government Relations, Argonne National Laboratory
- Thomas A. Sarkus, Division Director, Major Projects Division, U.S. Department of Energy
- Don Stevenson, Gas Technology Institute, VP and Managing Director, Energy Supply & Conversion

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 grants awarded	Up to 5	0**
2. Graduate Assistant positions	1-2	1**
3. Undergraduate Scholarships awarded	Up to 10	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	2

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

**Due to Covid-19 University-wide shutdown

11.2 Major Accomplishments (In This Year)

- The External Advisory Board was reactivated after a hiatus of 2 years, resulting from the passing of the previous director and restrictions created by the Covid-19 pandemic.
- Energy Boost Seed Grant Program completed the proposal solicitation and review process which identified 6 awardees for support starting FY 2022.
- Accepted 3 New Course Development Grant Proposals for funding in FY 2022.
- Awarded 2 Undergraduate Energy Boost Scholarships and supported continuing scholarship awards for 6 undergraduate recipients.
- Due to Covid-19, an extension was approved for 2 Energy Boost Seed Grant FY 2020 awardees, allowing completion of their research. Managed the extended research timeline which allowed 7 graduate assistant positions to continue research activities through the end of August 2020.

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

ACERC established and maintains 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.

RESOURCES: Advanced Coal and Energy Research Center

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues:					
State Appropriations	117,741	104,998	225,315	274,541	335,441
Income Funds	160,722	170,083	184,059	148,698	152,439
Grants*	2,709,863	2,631,930	3,003,443	3,460,940	4,163,608
Total Revenues	2,988,325	2,907,011	3,412,817	3,884,179	4,651,488
Expenditures: <i>(Sources: Combined Grants and State Accounts)</i>					
Salaries: Staff/Faculty	200,978	158,004	405,427	410,301	457,578
Graduate Assistant Support	16,472	70,376	59,050	104,507	96,861
Student Worker Support <i>(Sources: State and FWS Matching)</i>	2,774	7,632	8,123	6,722	7,982
Travel		35	218	3,839	5,770
Commodities	5,063	4,255	14,253	16,196	28,659
Equipment	189	0	388	275	961
Contractual Services	21,691	74,923	394,213	111,075	151,469
Student Research Awards and Scholarships	30,000	45,000	11,000	7,500	9,000
Awards and Grants— Property Damage Settlement		(15,937)			
Telecommunication Services	8,962	8,570	8,285	17,006	13,447
Fringe Benefits	43,000	43,658	107,413	78,638	96,369
Facilities and Administrative Costs	19,040	24,975	71,870	45,973	56,366
Total Expenditures	348,169	421,490	1,080,241	802,027	924,461
Revenue Minus Expenditures	2,640,156	2,485,521	2,332,576	3,082,152	3,727,027

Staffing <i>(Full Time Equivalent)</i>	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	.25	0.0	.083	.083	2
Staff	2.25	3.3	6.300	7.800	7
Total Staffing	2.50	3.3	6.383	7.883	9

*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, 2020 – June 30, 2021

(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>3/11/2022</u>
4.	Director	<u>Dr. Mark Wagner</u>
4.1	Telephone	<u>618-453-5055</u>
4.2	E-mail	<u>mjwagner@siu.edu</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 has five missions as identified in our last (2015) self-study report. 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 2016-2021; (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 (2021-2022) 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 form of applied or hands-on training to help prepare students for careers as professional archaeologists with private, state, and federal 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. The number of creative contributions for 2021-2022 decreased as a result of the COVID pandemic, with many conferences at which CAI typically gave presentations suspending operations.

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	10
2. Intellectual & Professional Contributions	10	9
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 2021-2022 included acquiring \$631,557 in new external grants. These grants include funding for research projects supported by the National Parks Service, USDA Forest Service, Bureau of Indian Affairs, University of Illinois, and Peabody Energy. With our continuing grants from previous years, the CAI had an annual grant total of \$866,752 for 2021-2022. 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, (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 2025 SIUC strategic vision plan and the newly released 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 1.5 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	<u>2015</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 Archaeological Investigations

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	\$120,642.45	\$163,946.00	\$140,233.00	\$124,242.00	\$88,414.00
Starting Grant Balance	\$235,195.00	\$120,651.00	\$397,699.00	\$308,026.00	\$151,426.00
New Grants & Contracts	\$631,557.00	\$450,516.00	\$275,602.00	\$423,892.00	\$405,610.00
Annual Grant Total	\$866,752.00	\$571,167.00	\$673,301.00	\$731,918.00	\$557,036.00
Total Revenues	\$987,394.45	\$735,113.00	\$813,534.00	\$856,160.00	\$645,450.00
Expenditures					
Grant Funded Salaries	\$199,724.36	\$207,986.00	\$462,316.00	\$161,366.00	\$118,258.00
Grant Funded OTS	\$39,346.78	\$127,986.00	\$90,334.00	\$162,853.00	\$130,752.00
State Funded Salaries	\$115,621.96	\$156,222.00	\$132,212.00	\$117,660.00	\$82,271.00
State Funded OTS	\$5,020.49	\$7,724.00	\$8,021.00	\$6,582.00	\$6,143.00
Total Expenditures	\$359,713.59	\$499,918.00	\$692,883.00	\$448,461.00	\$337,424.00
Revenue Minus Expenditures	\$627,680.86	\$235,195.00	\$120,651.00	\$407,699.00	\$308,026.00

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Staff (State Supported)	1.5	1.5	2	2	1
Staff (Grant Supported)	3	3	3	3	2
Total Staffing	4.5	4.5	5	5	3

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University Carbondale						
2.	Center/Institute	Center for Autism Spectrum Disorders						
3.	Date	March 22, 2022						
4.	Director	Michelle Kibby						
4.1	Telephone	618-453-2872						
4.2	E-mail	mkibby@siu.edu						
5.	Year Established	2021 - see note below						
6.	Illinois State Statute (if pertinent)	IL Public Act 93-0395						
7.	Reporting Unit	School of Psychological and Behavioral Sciences						
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%; padding: 2px;">Instructional</td> <td style="border: 1px solid black; text-align: center; width: 40%; 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							

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

9. Overview

9.1 Description

The CASD provides teaching, 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], applied behavioral analysis [ABA], and clinical psychology [CP]). 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.
- Community Service: we provide a multitude of services to children with ASD and their families, which include assessment and therapy within and across disciplines (currently SLP, ABA, and CP).

9.2 Mission

Our 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 in our region to teachers, other professionals and 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
- Begin 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

Janet R. Albers, MD	Chair, Professor	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 & Developmental Ctr
Anna Little, MD	Pediatrician	Shawnee Health Service
Craig Rogers	Publisher	The Southern Illinoisian
Rocio Rosales, Ph.D., BCBA-D	Assistant Professor	Umass Lowell
Jenny Seachrist	Special Education Administrator	Effingham Community Schools
Terri West	Mother of ASD client	Center for Autism Spectrum Disorders

10.2 Number of Meetings (In This Year) 0 – between re-organizing during a pandemic (setting up 2 clinics and reshaping the others due to COVID safety precautions and faculty losses) and addressing TAP changes in requirements (our major source of funding), this was accidentally overlooked

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1. Students trained in ASD assessment & treatment in our clinic	N/A	18
2. Graduate Assisant positions	N/A	4
2. Screening & diagnostic evaluations for children with ASD (measured in number conducted)	N/A	119
3. Therapy hours provided for children with ASD and/or their parents	N/A	183
4. Consultations with parents/families of children with ASD (measured in number conducted)	N/A	58
5. Training and consultation hours provided to professionals, paraprofessionals, and their trainees	N/A	42
6. Attain extramural grants (measured in number attained)	N/A	2
7. Raise money via donations	N/A	\$1475
8. Present our work at conferences (measured in number of presentations)	N/A	4

Measure	Target for Year	Results in Year
9. Publish our findings (this was heavily affected by the pandemic and substantial faculty [including their staff] losses in 2020)	N/A	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)

- Developed center-wide research protocol to compare IPP and inter-professional education (IPE) to standard care at the end of FY 2021. It was approved by the IRB in January 2022.
- Began IPE through an interdisciplinary Brown Bag series
- Wrote 14 foundation grants to compare IPP and IPE to standard care in FY 2021. One was awarded at the end of FY2021.
- Awarded State (TAP) grant to continue services at the Center
- 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)
- Wrote two alumni newsletters to help with fundraising efforts. Received positive feedback regarding them from the community plus some donations

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

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 54 children (CDC, 2020). Thus, for students in the Communication Disorders and Sciences (CDS, trains students in SLP), Behavior Analysis and Therapy (BAT, trains students in 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 also are involved as part of their training. The new Director is working towards expanding the number of academic programs involved with the Center as well (this includes OT, plus discussions with another program in FY2022).

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

ASD is now the second most common, serious developmental disability affecting children in the USA (intellectual disability is first; Newschaffer et al., 2007). 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.

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 Director 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 18 students in such techniques/practices in FY 2021
 - Provided 161 supervision hours of these students' work
- Provide high-quality assessment and intervention to individuals with ASD and their families
 - Conducted 89 screenings for ASD to determine if further assessment is warranted (this number was affected by pandemic policies/precautions)
 - Conducted 30 diagnostic evaluations (this number was affected by pandemic policies/precautions)
 - Provided 183 therapy hours to clients (this number was affected by pandemic policies/precautions)
 - 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 58 hours of consultation services to parents/families (this number was affected by pandemic policies/precautions)

- Provided 42 hours of training and consultation services to professionals and paraprofessionals and their trainees (this number was affected by pandemic precautions). 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)
 - 4 conference presentations; student research in progress
 - The pandemic slowed down presentation and publication rates (plus student work), along with substantial faculty losses due to their leaving SIUC
- Attain extramural funding
 - Awarded IL TAP grant (\$161,500.00) at the start of FY2021
 - Awarded foundation grant (\$13,160.00) towards the end of FY2021 (for FY2022) after applying to 14 foundations in spring & early summer, 2021
 - Raised \$1475 in donations via alumni newsletters
- Begin 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.
 - Awarded foundation grant to begin IPP in FY 2022 (\$13,160 total costs), as noted above
 - Began inter-professional education (IPE) by starting a Brown Bag series. We conducted 2 ‘brown bags’ during spring semester, 2021. Faculty and students from CDS, BAT, and CP attended these talks (called ‘brown bags’ because they occur near lunch time so folks can eat during them). IPE is required before IPP research and assessment can begin.
 - Began monthly inter-disciplinary faculty meetings to facilitate IPP and IPE

11.5 Evidence of Organizational Effectiveness

Over the course of FY2021, 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 over 40 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 18 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 4 students via graduate assistantships. We also delivered 4 conference presentations despite the pandemic and staff losses, sharing our research findings at the State and National levels. In addition, we attained 2 extramural grants and 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 N/A (we became an IBHE-approved center in FY2022)

12.2 Decision at Last Review: Not applicable
 Center/Institute in Good Standing
 Center/Institute Flagged for Priority Review
 Center/Institute Suspended

12.3 Explanation Not applicable

RESOURCES: Center for Autism Spectrum Disorders

Financial Resources	FY2021**	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	0				
Grants & Contracts	161,500				
Fund raising	1,475				
Total Revenues	162,975				
Expenditures*					
Salaries & Wages	65,226				
Fringe Benefits	18,798				
Equipment	12,459				
Supplies	4,355				
Contractual & Subawards	841				
Consultants (prof. services)	20,100				
Telecommunications	156				
Indirect Costs	32,757				
Total Expenditures	154,692				
Revenue Minus Expenditures	8,283				

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

Staffing (FTE)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	0.72				
Staff	0				
Total Staffing	.72				

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University Carbondale						
2.	Center/Institute	Center for English as a Second Language (CESL)						
3.	Date	January 18, 2022						
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	<p style="text-align: center;">Activity (check all that apply)</p> <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;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Research</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Public Service</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> </tr> </table>	Instructional	<input checked="" type="checkbox"/>	Research	<input type="checkbox"/>	Public Service	<input type="checkbox"/>
Instructional	<input checked="" type="checkbox"/>							
Research	<input type="checkbox"/>							
Public Service	<input 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

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 have moved on to SIU degree programs.

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; and
- * 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 Carpenter, CESL Senior Lecturer; Stacie Lawley, CESL Senior Lecturer; Practice, Susan McFalls, CESL Senior Lecturer; and Colin Robinson, CESL Associate Professor of Practice.

10.2 Number of Meetings (In This Year) 6

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1.	<p><u>Pricing and Revenue:</u> Conduct operations so that income is maximized.</p>	<p>Allow CESL to cover its current costs with resumption of regular pricing, total per term face-to-face student number of 40 full time students, and online students as necessary and appropriate.</p> <p>CESL planned to resume face to face instruction as soon as it could in FY21, while also maintaining online instruction as long as there was demand for it. It did these things. Satisfying these two goals simultaneously required advance planning for staffing that involved adding teaching assistants each term as necessary. The CESL Director and Assistant Director took the measures necessary to accomplish this goal. Related to these changes and adjustments, CESL aimed to regain a</p>

Measure		Target for Year	Results in Year
			<p>level of 40 full-time face-to-face students per term in order to earn approximately \$385,000 in tuition and fees per year, enough to cover its current minimum costs (\$425,000 annually) at its current staffing level and current structure. This assumed a full-time face-to-face tuition of \$1800, with a \$60 tech fee and a \$50 activity fee. Efforts to attain these ends were effected largely by social media advertising efforts, and the 40-student level was projected to be established by the start of the 2022-23 academic year; however, it was expected that enrollments would grow slowly over the intervening period, i.e. during FY21, as the COVID situation was expected to recede. CESL both accomplished and did not accomplish these goals. Face-to-face</p>

Measure	Target for Year	Results in Year
		<p>enrollments are still considerably lower than the 40 student level and pricing power, given the ongoing pandemic, remains very limited. However, CESL has managed to create programming for large numbers of students online and, thus, has adjusted rather well to the ongoing pandemic situation. I note, however, that CESL managed to effect payment from the Panamanian government in FY21 for approximately \$250K owed to CESL from services rendered during FY19. This additional income was greatly helpful in stabilizing CESL's finances during the ongoing pandemic and allowed us to basically avoid an operating loss in FY21.</p>
2.	<p><u>New Programming Initiatives:</u> Develop new collaborative relationships with foreign higher education institutions that produce multiple student cohorts over time.</p>	<p>Produce at least 40 full-paying students per year through at least two new</p> <p>The CESL Director pursued attainment of this strategic CESL goal, and the</p>

Measure	Target for Year	Results in Year
	relationships related to Community Engagement and/or 8-week Intensive English study, with repeating iterations.	objective was that two new relationships would be in place by the end of the 2020-21 academic year (FY21), with students to come after that. A partnership in addition to the 2 new partnerships mentioned in this goal was started in Winter 2020 with Soka University in Japan (20 students received in Winter 2020). That institution has now sent three separate groups to CESL and the relationship is strong. One possibility for a second new relationship was with Seowon University in South Korea. It was thought CESL would be able to offer programming to Seowon student groups. The income generated from the desired new relationships was to generate \$40-60,000 a year, complementing the \$385,000 planned to be earned from face-

Measure		Target for Year	Results in Year
			<p>to-face study by the start of the 2022-23 academic year, thus allowing CESL to fully cover its costs as it is currently structured. The above goals were partly accomplished and partly not accomplished. COVID caused a breakdown in concrete planning with Seowon University, and a second new relationship has not yet been established. That said, as mentioned, CESL's relationship with Soka University of Japan has developed nicely, with three groups already having studied with CESL (50+ students total) and more planned to come. In addition, CESL continues to receive students from Kyoto University of Foreign Studies and from Tokushima University, providing over the past two years (FY20 and FY21)</p>

Measure		Target for Year	Results in Year
			40 students and 20 students per year, respectively.
3.	<p><u>Curriculum and Organizational Structure:</u> Improve and maintain the quality of CESL's operational structure, practices, and curriculum.</p>	<p>Implement all measures required by Commission on English Language Accreditation (CEA), CESL's accreditor, as indicated in their 5-year Interim Report, required midway through the current 10-year period of CESL accreditation (2014-24).</p>	<p>This was an enormous task because CEA's response to CESL's 5-year interim report in 2019 and 2020 included a great many new commitments. These included a) an increase in structural and internal consistency and coherence for the CESL 8-week Intensive English Program curriculum (already largely accomplished); b) implementation of a strategic plan (already occurring); c) implementation of systematic program review at all levels, including placement, use and review of diagnostic and instructor-made tests, use and review of teaching methods, systematic assessment of textbooks, and ongoing assessment of coherence for classroom activities, student</p>

Measure		Target for Year	Results in Year
			<p>assessment, student advancement, and student performance measures; d) implementation of a professional development policy (already in place); e) implementation of systematic onboarding and assessment of teaching assistant performance (already in place); and f) systematic application of feedback from students for program improvement (already in place). A full meeting of CEA's requirements was accomplished by the end of the 2021 calendar year, with most of the necessary work having taken place during FY21. The main task going forward is the gathering of data to indicate ongoing adherence to standards.</p>
4.	<p><u>Appropriate Staffing:</u> Make sure that staffing is appropriate and adequate for circumstances, minimizing cost, maintaining quality, and maximizing efficiency and effectiveness.</p>	Review staffing in all key areas (full-time administrative staff,	CESL made the necessary changes to have optimal staffing by the end of the 2021

Measure		Target for Year	Results in Year
		administrative graduate assistants, non-tenure track faculty, teaching assistants, and student workers), and adjust each as necessary and appropriate to provide optimal balance between cost, flexibility, stability, quality, and effectiveness in rapidly changing competitive environment.	calendar year, and most of the preparation for those changes took place during FY21. These changes included installment of a permanent CESL Assistant Director, minimization of number of front desk student workers and administrative graduate assistants, and a permanent faculty staffing level that can cover the classes that are offered at CESL's busiest times while also minimizing faculty overstaffing at CESL's slowest times.
5.	<p><u>Relations with Other SIU Units:</u> Make sure that CESL acts as a responsible and contributing University citizen.</p>	Continue to be seen as, and to be in fact, a positive contributor to SIU operations, academically, financially, and organizationally; maintain the contributions currently being made by encouraging participating staff; and encourage currently non-participating staff to make their own contributions.	CESL continues to pay its own way, providing funding from its own sources for all its expenses. It also continues to contribute students to degree programs at SIU by helping those students attain the necessary level of English language proficiency for eligibility to study, and it uses a portion of its own

Measure	Target for Year	Results in Year
		<p>funds to promote SIU in addition to CESL in order to attract such students to the University. CESL also pays an annual "tax" to the College of Liberal Arts to pay for the services that it receives from the University, and CESL staff and faculty are involved in a number of SIU organizations and efforts, including CoLA Council, Latin American Student Association, AP Staff Council, Association of Civil Service Employees, and Hispanic and Latino Staff and Faculty Council. These contributions are publicized within CESL and all CESL staff and faculty are also encouraged to participate in the larger University. CESL leadership will continue to promote such activity going forward</p>

* 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 maintained online instruction for both individual students and group programs during FY21.

** Despite the disruption caused by COVID, it nonetheless managed to obtain approximately 140 enrollments, mostly online, during FY21.

** CESL also rationalized its staffing structure to attain minimal but fully adequate staffing. In correspondence with this, it has also reduced its non-personnel operating costs to a minimum.

** CESL maintained during FY21 strong relationships with its institutional partners, continuing to offer online programs, while planning for the return to face-to-face instruction as soon as possible.

CESL obtained an unusually large cohort of Fulbright scholars in FY21 – 12 students. It expects to receive an even larger cohort in FY22.

** By effecting late payment from the Government of Panama for services rendered in FY19, CESL was able to greatly improve its financial situation, once again almost breaking even for the fiscal year despite COVID and the very difficult circumstances caused by it.

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 also succeed in their lives and in their careers, is central to the University's mission to internationalize and to attract as many students as possible from diverse backgrounds. Also, by means of our Community Engagement Program, we interact with a large number of local community service organizations for mutual benefit, with representatives of these organizations educating CESL students and CESL students assisting with organizational activities.

11.4 Evidence of Support for Center/Institute Objectives

By employing a number 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 SIU's School of Education. It should also be noted that CESL provides developmental guidance to all the teaching assistants it employs, thus making major contributions to their educations.

11.5 Evidence of Organizational Effectiveness

CESL graduates students fully prepared for success in SIU undergraduate and graduate programs. This fact is evidenced by the success of students who have gone on to those programs. Also, in working with other tertiary institutions and governmental entities in bringing non-degree students to CESL and to SIU for varying periods of time, we enhance the University's image and reputation and we make it more likely that at least some of those students, or those who they tell about their positive experiences in CESL, will come back to pursue SIU degree programs. A key example of this is the large number of Saudi students CESL has graduated over the past few years who have gone on to pursue degrees in SIU Aviation. Moreover, CESL also enhances the University's relationships and image with the foreign institutions with which it maintains long-standing and ongoing collaborations. These include The Institute of International Education, Laspau (affiliated with Harvard University), The Saudi Arabian government, the Panamanian government, the city of Bogota Colombia, Kyoto University of Foreign Studies (Japan), Tokushima University (Japan), Reitaku University (Japan) Nagoya University (Japan), Soka University (Japan), Saudia Airlines, and others.

12. Institutional Assessment

12.1	Date of Last Review	<u>March 14, 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) <hr/>

RESOURCES: Center for English as a Second Language

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations					
Student Tuition and Fees	461,074	860,585	874,564	1,031,909	1,210,247
Grants & Contracts					
Investment Income	10,506	15,000	6,000	5,678	6,262
Miscellaneous				51,175	10,447
Total Revenues	471,580	875,585	880,564	1,088,762	1,226,956
Expenditures*					
Salaries and Wages	403,156	576,402	622,663	704,154	1,036,380
Insurance Contributions	9,191	15,000	20,000	22,261	31,261
Travel	83	16,000	39,000	24,665	24,158
Equipment		3,000			5,617
Commodities	2,043	34,828	74,000	83,375	59,413
Contractual Services	33,440	53,336	95,000	124,082	132,466
Other	35,788	179,706	64,650	100,962	75,596
Total Expenditures	483,701	878,272	915,313	1,059,499	1,364,891
Revenue Minus Expenditures	(12,121)	(2,687)	(34,749)	29,263	(137,935)

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	4	4	5	6	12
Staff	3	3	4	5	8
Total Staffing	7	7	9	11	20

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020- – June 30, 2021

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

1.	Reporting Institution	<u>Southern Illinois University Carbondale</u>
2.	Center/Institute	<u>Center for Fisheries, Aquaculture, and Aquatic Sciences</u>
3.	Date	<u>March 18, 2022</u>
4.	Director	<u>James Garvey</u>
4.1	Telephone	<u>618-536-7761</u>
4.2	E-mail	<u>jgarvey@siu.edu</u>
5.	Year Established	<u>1950</u>
6.	Illinois State Statute (if pertinent)	<u>N/A</u>
7.	Reporting Unit	<u>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

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. The center comprises research facilities shared across colleges and departments including a 100-pond outdoor aquaculture facility near Touch of Nature, and 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 teaching responsibilities in the College of Agricultural, Physical, and Life Sciences and research appointments in the Vice Chancellor for Research's office. 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.
- 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	\$1,728,382
2. Peer-Reviewed Publications	15	24
3. Graduate Students Enrolled	15	25
4. Graduate Students Finishing Degrees	5	9
5. Undergraduate Research Projects Supervised	5	13

* 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 2021, leading to 24 publications in the peer-reviewed literature.

Additional accomplishments include:

- Several CFAAS students received state and national awards for their research
- Dr. Greg Whitley served as Associate Editor of a special issue of the North American Journal of Fisheries Management
- Obtained new genome sequencer through external funds
- New trucks and boats acquired as new field research began
- Acquisition of a 2,500 gallon aquarium for sturgeon research and education in Saluki Aquarium wet lab

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 or government agencies in the state and region.

11.4 Evidence of Support for Center/Institute Objectives

- Obtained more than \$1.7 M in funding
- 24 peer-reviewed publications
- 25 graduate students enrolled
- 13 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 greater than \$345,000 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 2021 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	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) <hr/>

RESOURCES: Center for Fisheries, Aquaculture, and Aquatic Sciences

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues:					
State Appropriations	624,315.44	669,049.23	487,089.28	437,674.43	201,178.26
Local Accounts	240,726.68	205,305.70	165,937.34	138,199.12	164,379.44
Grants & Contracts	1,728,382.86	934,260.83	987,539.83	1,085,227.05	1,298,984.53
Total Revenues	2,593,424.98	1,808,615.76	1,640,566.45	1,661,100.60	1,664,542.23
Expenditures:					
Salaries	1,366,664.98	1,360,971.03	1,068,267.32	962,160.75	1,151,946.20
Wages	28,034.49	18,247.26	11,192.74	17,408.97	23,591.25
Travel	52,951.44	77,649.98	70,547.58	56,003.17	64,252.18
Equipment	262,523.90	52,856.26	116,245.82	25,478.16	108,586.96
Commodities	256,673.65	226,724.25	272,155.85	134,356.87	186,334.01
Contractual Services	786,173.68	469,447.55	89,874.53	115,818.89	118,060.76
Op/Auto	51,668.88	35,350.21	34,773.51	49,522.48	46,289.74
Telephone	4,000.90	5,913.79	5,796.77	3,971.86	4,504.75
Fringe Benefits	152,743.18	166,986.10	150,261.94	150,423.77	205,523.52
Indirect	209,106.32	176,833.95	149,407.27	103,679.71	105,835.37
Other	108,660.76	19,446.99	15,988.32	15,271.79	10,799.48
Total Expenditures	3,279,202.18	2,610,427.37	1,984,511.65	1,634,096.42	2,025,724.22
Revenue Minus Expenditures	(685,777.20)	(801,811.61)	(343,945.20)	27,004.18	(361,181.99)

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	5	5	4	4	2.25
Staff	31.5	37	45.1	40.2	28.7
Students	11	4	4	2.6	5
Graduate Assistants	11	10.5	8	8.8	10.5
Total Staffing	58.5	56.5	61.1	55.6	46.45

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1,2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University School of Medicine										
2.	Center/Institute	Center for Rural Health and Social Service Development										
3.	Date	02/28/2022										
4.	Director	Jeffrey Franklin										
4.1	Telephone	618-453-1251										
4.2	E-mail	jfranklin@siumed.edu										
5.	Year Established	Academic Year 1991										
6.	Illinois State Statute (if pertinent)	N/A										
7.	Reporting Unit	Southern Illinois University School of Medicine										
8.	Type	<table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Activity</td> </tr> <tr> <td colspan="2" style="text-align: center;">(check all that apply)</td> </tr> <tr> <td style="border: none;">Instructional</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> <tr> <td style="border: none;">Research</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> <tr> <td style="border: none;">Public Service</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> </table>	Activity		(check all that apply)		Instructional	X	Research	X	Public Service	X
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

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 66 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

CRHSSD Advisory Board: A 14-member advisory board made up of community and university volunteers guides the Center for Rural Health and Social Service Development and acts 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
- Jennifer Brobst, Assistant Professor, SIU School of Law
- 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

10.2 Number of Meetings
(In This Year)

2 (Due to COVID)

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1. External funding generated	\$500,000	\$2,500,000
2. Grant Applications – Number/Funding Sought	3 Projects/\$250,000	7
3. Publications and Presentations	5	9
4. Continuing Education Programs	5	27
5. Community Collaborations	75	125
6. University Collaborations	10	15

* 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)

Program Title: SUD Regional Leadership Center

Program or Grant Overview/History/Objectives

The Substance Use Disorder Leadership Centers were created by IDHS with funds from the Substance Abuse and Mental Health Services Administration State Opioid Response II grant. The CRHSSD SUD Leadership Center serves as the rural health expert in the network of five Illinois SUD Leadership Centers. Leadership Center work will address substance use disorder (SUD), SUD in the criminal justice population, social equity, methamphetamine and cocaine use, housing stabilization, and workforce development.

Program objectives include:

- Assist local providers & stakeholders in the development of a clinical/program learning network focused on prevention & treatment of SUD.
- Create workforce development strategies and implement plans to train & consult with local leaders in identified topic areas.
- Develop SUD Provider Network structures to support ongoing local councils, including the inclusion of local ROSC Councils and related recovery support services.
- Support the development of community prevention/education programming with local leadership.
- Enable and support ongoing clinical & recovery support services as determined necessary for each area.
- Develop plan for sustainability of services & supports.

FY21 Accomplishments: FY21 consisted of program planning and hiring of staff. The CRHSSD Leadership Center activities FY21 activities included developing planning for expansion of telehealth, workforce development through creation of a Peer Recovery Support Specialist training program focused on addiction, development of Mobile Medication Assisted Recovery, and development of SUD programs for Veterans and justice-involved populations.

Program Title: Rural Opioid Prescriber Training Program

Program or Grant Overview/History/Objectives

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.

FY21 Accomplishments: The CRHSSD developed and delivered three Rural Opioid Prescriber Training Program webinars:

- Effects of the Opioid Epidemic in Veterinary Medicine. Presenter: Jack Teitelman, CEO Titan Group, DEA Compliance Expert
- The Crossroads of Opioids, Pain and Addiction, by Arwen Podesta, MD, ABPN, FASAM, ABIHM
- Non-Opioid Analgesics: Anticonvulsants, Antidepressants, and Skeletal Muscle Relaxants, presented by Chris Herndon, PharmD, BCACP

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 FY21 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

Under this program, an ECHO series was created for non-medical professionals providing wraparound services for those with OUD. The series includes the following training topics:

1. Harm Reduction
2. History of Opioids
3. OUD in Rural Communities
4. Myths about OUD
5. OUD and COVID
6. What is OUD?
7. Pregnancy and OUD
8. Trauma and OUD

Program Title: MAR (Medically Assisted Recovery) Stipend Program

Program or Grant Overview/History/Objectives

The MAR Stipend Program was designed to incentivize providers to become x-waivered, enabling them to prescribe buprenorphine for Opioid Use Disorder.

FY21 Accomplishments: Six MAR training courses were offered between the months of March and June: Carle Health sponsored one, ISAM sponsored two, and SIU sponsored three, live, online classes. Participants in the six MAR Eligibility Trainings represented 43 counties, 25 of which are considered rural, 24 are medically underserved, 15 counties are partially medically underserved. Additionally, 29 counties are underserved for mental health services, and four are partially underserved for mental health services. All who completed the requirements received \$1,000, except for resident physicians, who received \$1,500. The SIU SoM CRHSSD received 300 stipend applications; 266 applicants registered for one of the six trainings, and 220 applicants completed all requirements to receive a stipend.

Program Title: Rural Health, Inc. RCORP

Program or Grant Overview/History/Objectives:

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.

FY21 Accomplishments: The CRHSSD supported Rural Health, Inc. through attendance at Advisory Board meetings and sharing of recourses

Program Title: Arrowleaf, Inc. RCORP

Program or Grant Overview/History/Objectives:

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

FY21 Accomplishments: The CRHSSD staff completed an evaluation of the Arrowleaf 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.

Program Title: Prescription Monitoring Program

Program or Grant Overview/History/Objectives:

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.

FY21 Accomplishments: In FY21 the CRHSSD worked with health departments to develop substance misuse resources tri-folds; 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 meetings with the LHDs on the second Wednesday of every month.

Program Title: Drug Endangered Children (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 Eric Nation, Director of Training and Development, as well as Stacey Read, Director of DEC Network Development, both of whom have extensive experience in child protective services and the Drug Enforcement Agency. The overall goal is to create local DEC alliances that involve multidisciplinary involvement in each community.

FY 21 Accomplishments: Established a Richland County DEC Alliance, implemented and completed the creation and signing of the Richland County, IL DEC Alliance Memorandum of Understanding involving 12 community organizations. The “Handle With Care” program was implemented in the RCCU school system as well as 2 local private schools. Formal integration with the National DEC Alliance was completed, local DEC logo was created and approved. The Illinois DEC Alliance began planning for a virtual “train the trainer” event to be done during the summer of 2021. The Illinois DEC Alliance also began the process of gaining signatures for the statewide Memorandum of Understanding, also completing the formal integration with the National DEC Alliance including the development of the Illinois state DEC logo. Finally, we were invited to participate in a national round table advisory event in Providence, RI with the National DEC Alliance team regarding various future project implementation efforts including the CheckDEC App, alliance development strategies, language/media issues, and expansion of current programming.

Program Title: 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 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 21 Accomplishments: SIU School of Medicine was again approached to collaborate with the UB Summer Program. A “Medical Career Exploration” class was developed and offered in 2 locations (Olney Central College and Wabash Valley College). 36 students who will be seniors in high school for the 2020-21 school year are registered for the class that meets one day per week over 5 weeks. Topics include medical career exploration, medical school preparation and requirements, ethics in medicine, problem based learning opportunities/case studies, pharmacy, opioids and

illegal drugs, and rural family practice. Special speakers included local providers (PA/NP/MD/Pharmacy), nurses, and administration.

Program Title: Take Action Today:

Invitation for SIU SOM to serve on the Board of Administration in the Fall of 2020 for this grass-roots organization that serves the addiction and recovery community, as well as the homeless community. This organization is located in West Frankfort, IL and is preparing to serve multiple counties in their area with Peer Recovery Support Services.

FY21 Accomplishments: Applied to the Recovery Corps to provide 4 Peer Recovery Specialists to begin 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. Services for those incarcerated in area county jails was initiated including post-incarceration planning and services, transportation to treatment, and weekly 12-step studies. Involvement with several county drug court teams was initiated. Training development for CPRS certification was developed.

Program Title: Delta States Rural Development Network Grant Program (DELTA)

Program or Grant Overview/History/Objectives:

CRHSSD has received funding since 2002. Although during this most recent grant period, there has been a shift in funding due to rural-urban designations. Because of this,

CRHSSD is currently sub-contracted by Egyptian Public and Mental Health Department. Nevertheless, the partnerships and services still exist. This is greatly due to Illinois CATCH onto Health Consortium's dedication to providing children with the knowledge and skills to make healthy choices for a lifetime. Ultimately, ICHC's vision is to build sustainable school environments that positively impact the health of children and the communities in which they live. This work is driven by the following goals/objectives that also align with Healthy People 2030.

Program Title: Community Transformation Grant – Listening Session/Needs Assessment

CRHSSD partnered with the Institute for Healthcare Delivery Design at the University of Illinois Chicago to lead a community needs assessment program for the Metro East region of Illinois. CRHSSD staff conducted Listening Session as a part of the needs assessment. Results were used to shape the Community Transformation Grant.

Program or Grant Overview/History/Objectives:

- Partner with UIC to understand how community input sessions have been conducted to date and determine if and how they should be modified for East St. Louis
- Contract with community organization(s) to conduct the community input sessions
- Identify and supervise 1-2 students who can support the community input sessions with notetaking and analysis.
- Identify community organizations that are health-mission-aligned, community-embedded and who have the skills and availability to take on recruiting & facilitation of input sessions.

- Work with UIC to train the community organizations to conduct the input sessions.
- Take notes at the session and organize notes into an excel spreadsheet after sessions

Program Title: Farm Family Resource Initiative

Program or Grant Overview/History/Objectives:

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. While the Farm Family Resource Initiative (FFRI) is still in the growth phase, the initiative already provides a range of resources including a helpline to assist with farmer and farm-related issues that include mental and physical health needs. Additionally, the initiative offers ongoing outreach, education and training to rural clients and partners working to improve the health and safety of farm families.

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.

Currently, the FFRI is being successfully piloted in six counties that include Christian, Logan, Macon, Macoupin, Morgan and Sangamon. Since it was created, to support the needs of farmers in the 6 pilot counties

FY21 Accomplishments:

- Brought Illinois' Ag industry-related organizations together to focus on farm family mental health issues – Advisory Council which meets monthly
- Completed a needs assessment
- Developed and put into operation a 24/7, free, confidential helpline for farmers and farm families and others: 1-833-FARMSOS
- Created an extensive farm resource guide to be used by call center staff to direct callers to local, state, national resources
- Developed and executed an extensive marketing plan
- Developed a website with resources for farmers and farm families: www.siumed.edu/farm
- Provided Rural Resilience training for call center staff
- Entered into a partnership with University of Illinois Extension to co-sponsor Mental Health First Aid training
- Partnered with Farm Credit Illinois to offer scholarships for the Nurse Scholar Program – 7 nurses from southern 66 counties have been recruited to date
- Provided professional development webinars for Ag industry partner ADM
- Provided professional development opportunities for high school Ag teachers
- Provided webinars for farmers and farm families
- Created blogs as part of outreach effort
- Began discussions to offer telehealth counseling sessions as a follow-up to calls
- Exploring text and email options for helpline

- Provided content for IDOA USDA grant submission which would allow FFRI to expand statewide

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, 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 FY2021, 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	_____	2019	_____
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: Center for Rural Health and Social Service Development

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017	FY2016
Revenues						
State Appropriations	295,443	210,443	150,372	150,372	153, 576	153,576
External Grants	2,228,938	2,513,799	2,216,506	1,692,518	1,261,162	559,282
Contractual/Income	137,132	1,537.	30,342.	4,313	7,688	20,793
Rural Health Initiative ¹	135,501	161,600.	161,600	161,600	112,000	120,000
Indirect/Overhead Return	97,575	75,848	43,590	32,404	25,794	14,604
Total Revenues	2,894,589	\$2,963,227	\$2,602,410	\$2,041,207	\$1,560,200	\$868,255
Expenditures						
Salaries	384,122	456,835	606,031	569,350	422,938	394,576
Fringe Benefits	14,850	56,154	117,111	154,228	118,294	56,372
Travel	1,386	29,300	20,293	29,535	19,422	7,210
Equipment	3,646	3,844	1,856	4,627	0	4,351
Commodities	31,663	31,803	23,590	17,585	20,905	5,737
Community/University Program Grants ²	100,521	609,791	708,111	687,921	481,864	289,405
Contractual - Other	324,000	430,000	139,331	110,761	71,395	47,771
Indirect to University	170,366	110,249	151,140	136,402	121,857	59,405
Total Expenditures	\$918,636	\$1,727,976	1,767,463	1,710,409	\$1,256,695	\$864,827
Revenue Minus Expenditures	\$1,975,953	\$1,235,251	\$834,947	\$330,798	\$303,505	\$3,428

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	0.00	0.00	0.00	0.00	0.00
Staff	10.00	11.00	11.00	7.80	8.00
Extra Help	1.00	3.00	3.00	0.77	0.00
Graduate Assistants	3.00	2.00	5.00	2.00	3.00
Practicum/Intern Students	2.00				
Student Workers	0.00	0.00	1.00	0.00	0.00
Total Staffing	16.00	16.00	20.00	10.57	11.00

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	Clinical Center
3.	Date	March 10, 2022
4.	Director	Holly Cormier
4.1	Telephone	618-453-2361
4.2	E-mail	cormierh@siu.edu
5.	Year Established	1958
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	Associate Provost – Marc Morris
8.	Type	Activity (check all that apply)
	Instructional	Yes
	Research	Yes
	Public Service	Yes

* 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 Clinical Center graduate training program provides the training site for several graduate programs including Clinical Psychology, Communication Disorders and Sciences (CDS), and Educational Psychology and Special Education. The Clinical Center's mission is to provide the training resources and milieu for graduate students in these areas to complete direct experience training as required by their specific program. The specific areas of training that the graduate students participate in include: speech, language, and hearing services; psychological services including individual adult and child therapy, couple and family therapy, group therapy, and psychological assessment. To facilitate this training, the Clinical Center maintains required medical/clinical records; provides therapy rooms; provides recording equipment and other supervision supports such as one-way observation areas; maintains a resource library that houses and maintains psychological testing material, speech and language assessment materials, treatment manuals and supportive materials, intervention equipment such as language materials, toys and other therapy materials. We maintain a client lobby and receptionist. We ensure that professional standards required by the departmental accrediting bodies and laws, such as those regarding client confidentiality, are maintained and that professional standards are not transgressed. The Clinical Center maintains licensed professional coverage for mental health services during open hours as required by Medicare. This licensed professional is available to back up any student clinician in an emergency situation. The clinic is open 51 hours a week.

9.2 Mission

The mission of the Clinical Center Training Program is the same mission that it was charged with in 1958 at its inception; that is, to provide training to graduate students to prepare them for their professional career, to serve the community, and to facilitate research.

9.3 Objectives

- 1) To provide clinical training experiences that prepare students for licensure and/or internship placement.
- 2) Ensure that students are trained to use research based, best practice treatments and assessments.
- 3) Coordinate with academic programs to ensure that the clinic provides training experiences and opportunities that are congruent with national accreditation standards for a given discipline.
- 4) Provide community service in the course of fulfilling training mission.
- 5) Provide research opportunities for supervising faculty.

10. Advisory Board

10.1 Advisory Board - Membership

1)	Deb Pender – Counselor Ed.2)
2)	Chad Drake – Clinical Psychology
3)	Karla Fehr – Clinical Psychology
4)	Erin Connelly – Communication Disorders and Speech
5)	Atheana Meadows – Communication Disorders and Speech
6)	Holly Cormier – Clinical Center director
7)	Amber Drake – Clinical Center
8)	Cindy Clark – Clinical Center

10.2 Number of Meetings (In This Year) No meetings this year.

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1. Client Satisfaction Surveys We have not collected client satisfaction data this year.		Overall Satisfaction with therapy services (max. 5) – the average client rating was 4.7 Overall Satisfaction with Staff Services was 4.58
2. Re-applied for Jackson County 708 Funding	\$20,000.00	\$20,000.00
3. Collect and Explore Clinical Center Client Data	N/A	Actively compiling a database
4. Initiate Research Activity and Collaborate with Outside Training Clinics	N/A	The clinic director is on two research committees within the Association of Psychology Training Clinic Directors
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)

We have successfully secured another year of funding from the Jackson County 708 board. Furthermore, and most notably, when the pandemic hit and the university shut down, the clinic shifted to offering therapy services via a telemental health model. We suspended services for two weeks, while we prepared for a telemental health delivery model (including training students, supervisors, and staff). Aside from a two week pause, clients had no interruption in services and student clinicians continued to collect their required clinical hours while students in other clinical settings experienced a long interruption in their training.

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

The clinic's central mission is training. In service of fulfilling this mission, the Clinical Center provides service and support to our surrounding communities. We offer an array of clinical services at a reduced rate. The clinic collaborates with a number of community agencies to address issues related to accessibility and availability and is active in many areas related to community engagement.

11.4 Evidence of Support for Center/Institute Objectives

- 1) We assign clients to student clinicians. Clinicians carry a caseload that is consistent with their program and national accrediting body requirements.
- 2) Students receive didactic training in their home departments and receive clinical supervision of the work with clients. Student clinicians provide clinical treatment that is consistent with didactic training and supervision.
- 3) The clinic director and the clinical support staff work with instructional and supervising faculty of the various programs that we serve. These meetings and collaborations ensure that the clinic provides a training setting that is consistent with program requirements.
- 4) We provide an array of clinical services to members of our surrounding communities.
- 5) Three faculty supervisors are currently collecting data in the Clinical Center. Two other faculty members are in the planning phase of a clinical research study, but they have since separated from the university.

11.5 Evidence of Organizational Effectiveness

The mission of the clinic is training. While in the clinic, students accrue direct service hours and receive supervision and training in treatment and assessment. Near the completion of their programs, these students compete for internship placements across the country. In clinical psychology, this is a highly competitive process given that there are more students seeking APA accredited internship placements than there are available placement positions. Since 2013, all clinical psychology graduate students have successfully matched for internship placements, and in most cases, they matched with the first or second choices. A part of what makes these students so competitive are the skill and expertise that they acquire as part of their training in the Clinical Center.

In addition to student success, the clinic also surveys clients to assess satisfaction with services. Client ratings of their experiences in the clinic are consistently high average and above average in all domains queried (e.g. they feel that services addressed presenting concerns, therapists were professional and competent, they would return to the Clinical Center in the future).

The clinic has also increased outreach efforts to the community, established collaborations with integrated health care settings (SIU Family Medicine, Pediatric Group, and the Center for Medical Arts (there has been a recent hire of a child Psychiatrist). Finally, faculty are conducting clinical research with clients looking at therapeutic change, resilience, and the impact of therapeutic intervention.

Additionally, the director of the clinic (and the author of this report) is meeting with the Associate Provost (Lizette Chevalier) to assess the possibility that SIU can organize programming that aligns with the recent legislation that allows psychologists to prescribe psychotropic medication. While this task is not necessarily a direct responsibility of the clinic director, it is illustrative of the interest and motivation to actively to contribute to all levels of university programming.

12. Institutional Assessment

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

RESOURCES: SIU Clinical Center

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	389,400.05	337,988.60	338,621.74	319,132.19	359,585.56
Income Fund	134,845.50	127,186.37	139,469.95	147,055.00	
Grants & Contracts	9,540.00	6,360.00	29,502.00	23,810.00	
Non-Mandatory Transfer In	0.00	0.00	4,000.00	4,400.00	
xxx					
xxx					
Total Revenues	533,785.55	465,810.97	511,593.69	494,397.19	
Expenditures*					
Salaries	356,568.53	365,685.46	373,193.80	337,885.34	
Equipment	1,920.82	21,766.21	450.68	11,918.54	
Travel	0.00	263.70	2,358.62	4,494.36	
Contractual	10,965.43	19,695.37	13,424.28	18,013.49	
Commodities	10,873.23	14,521.60	11,862.37	10,189.38	
Telecom	4,109.45	3,000.52	4,106.77	4,878.62	
Wages	4,179.00	6,698.07	4,106.77	4,878.62	
Refunds and Returned Checks	0.00	495.00	7,912.49	7,200.64	
Awards & Grants	1080.00	1,622.52			
Non-Mandatory Transfer out	6578.36	6,184.83			
Total Expenditures	396,274.82	439,933.28	413,719.01	389,039.31	
Revenue Minus Expenditures	137,510.73	25,877.69	97,874.68	105,357.88	

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
GAs	3.5	3.5	3.5	3.5	3.5
Staff	6.5	6.75	6.75	6.75	6.75
Total Staffing	10	10.25	10.25	10.25	10.25

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020- – June 30, 2021

(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 18, 2022						
4.	Director	James Garvey (acting for Gary Kinsel, OVCR)						
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	<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 six full time Faculty members (one position in Wildlife Toxicology is currently vacant), 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 ~30 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:

- Fill the currently vacant faculty position in Wildlife Toxicology
- 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.

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	1,040,160
2. Peer-Reviewed Publications	15	30
3. Graduate Students Enrolled	15	31
4. Graduate Students Finishing Degrees	5	6
5. Undergraduate Research Projects Supervised	5	9

* 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 2021, leading to 30 publications in the peer-reviewed literature.

Additional accomplishments include:

- Dr. Guillaume Bastille-Rousseau was appointed as a Scialog fellow: Mitigating Zoonotic Threats

- Dr. Mike Eichholz served as Chair Elect – The Wildlife Society College and University Education Working Group
- Internal funding for deer monitoring on SIU’s campus was procured.

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.

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: Cooperative Wildlife Research Laboratory

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues:					
State Appropriations	363,651.60	306,060.55	355,414.84	458,493.58	221,266.16
Local Accounts	72,479.24	75,122.18	92,553.44	76,128.29	28,557.18
Grants & Contracts	1,040,160.63	125,628.49	222,593.61	434,498.90	320,614.35
Total Revenues	1,476,291.47	506,811.22	670,561.89	969,120.77	570,437.69
Expenditures:					
Salaries	874,442.35	878,357.32	850,688.42	906,538.23	681,670.29
Wages	24,116.20	20,257.97	30,205.12	26,295.14	11,516.91
Travel	9,471.32	35,677.52	35,541.92	27,591.96	26,772.27
Equipment	2,791.00	42,282.44	3,325.92	1,027.99	(36,285.04)
Commodities	153,118.03	122,109.71	188,961.46	260,681.40	124,062.01
Contractual Services	58,627.86	74,855.92	59,597.45	58,987.69	52,255.67
Op/Auto	44,441.48	93,490.48	75,883.80	33,312.16	15,175.32
Telephone	24,058.25	9,718.31	13,081.46	2,987.60	3,053.86
Fringe Benefits	22,188.11	28,990.02	23,274.49	47,618.51	5,911.55
Indirect	153,936.60	176,373.58	155,889.78	150,297.27	48,848.67
Other	3,737.88	574.00	1,000.00	29,528.30	20,000.00
Total Expenditures	1,370,929.08	1,482,687.27	1,437,449.82	1,544,866.25	952,981.51
Revenue Minus Expenditures	105,362.39	(975,876.05)	(766,887.93)	(575,745.48)	(382,543.82)

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	5	5	5	7	5
Staff	39	58	71	54.3	21.3
Students	12	15	21	14.5	12
Graduate Assistants	10	10.5	8	13.5	8.8
Total Staffing	66	88.5	105	89.3	47.1

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1,2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University School of Medicine (Springfield)
2.	Center/Institute	Dale and Deborah Smith Center for Alzheimer's Research and Treatment (Smith Alzheimer's Center), including the Parkinson's Disease Center (PDC)
3.	Date	(date)
4.	Director	Erin R. Hascup, PhD
	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 (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 Dale and Deborah Smith Center for Alzheimer's Research and Treatment (Smith Alzheimer's Center) at SIU Medicine (formerly the Center for Alzheimer's Disease and Related Disorders; CADRD) was established as a Regional Alzheimer's Disease Assistance Center by the State of Illinois, pursuant to Public Act 90-0404. The Smith Alzheimer's Center is dedicated to assisting patients and families who may be affected by Alzheimer's disease and related conditions through patient care, education, research, and service to the community.

The Parkinson Disease Center (PDC) was established by the Illinois state government to address the needs of Parkinson disease patients in the region. The Smith Alzheimer's Center and the PDC are integrated into the SIU Neuroscience Institute (NSI) and are incorporated into this report.

9.2 Mission

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.

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 specially-trained in 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 victims of Alzheimer's disease and related disorders, (iii) appropriate and adequate equipment necessary for diagnosis and treatment, (iv) transportation services necessary for outreach to the service area defined by the Illinois Department of Public Health and 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 victims 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 Board - Membership

The Smith Alzheimer's Center has 2 active advisory boards, the Administrative Advisory Board and the Clinical Health, Analytical Neuroscience, and Community Engagement (CHANCE) Advisory Board. The Smith Alzheimer Center is also working to establish an external advisory board.

Administrative Advisory Board:

- Kari Wolf, MD, Chair of Psychiatry and Interim Chair of Neurology at SIU Medicine
- Marcella Bland, Administrative Director of the NSI at SIU Medicine
- Lisa Daniels, Business/Administrative Associate of the Smith Alzheimer's Center at SIU Medicine

CHANCE Advisory Board (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

10.2 Number of Meetings (In This Year) Each board meets monthly (12 times/year)

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)		1,050
2. Follow-up patient visits (Springfield site)		3,087
3. Evaluations of new patients (network)		167
4. Follow-up patient visits (network)		378
5. Educational programs– Number of Programs		115
6. Educational programs - Attendance		1,126
7. Clinical Studies (Industry sponsored and investigator initiated)– Number of studies per IRB		26
8. Research – Number of publications & presentations		28
9. Active research grants		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)

1. Patient focus continues to be the treatment of existing patients along with screening new patients at the Smith Alzheimer’s Center in Springfield, as well as those partners in the Memory and Aging Primary Provider sites.
2. “Beyond the Medical Center” consists of 7 different evidence based programs which offer services for dementia patients and caregivers. These programs are:
 - a. **Art Express** - This program is evidence based and designed for persons experiencing memory loss or dementia. Activities include: exploring the arts and experiencing new things, expressing yourself using a variety of materials, enjoying the benefits of social and cognitive stimulation and enjoying a no stress, easy environment.
 - b. **Music and Memory** - This program provides portable music players to individuals with a memory loss or dementia diagnosis, and includes the individuals favorite songs. It is an evidence based program which has shown to improve quality of life by providing therapeutic music and helps people reconnect with the world through music.
 - c. **What to Expect When You are Not Expecting to be a Caregiver** - This is an educational program for care partners of those suffering from dementia or memory loss. This is equipped to help those patients still living at home.
 - d. **Stepping Up** - This is an evidence based exercise program for patients with memory loss or dementia, as well as including their care

- partners. The goal is to improve flexibility, strength, endurance and balance. The program has been shown to reduce falls in adults.
- e. **Minds in Motion** - This is an evidence based program, designed for persons experiencing memory loss or dementia. The goal is to improve or maintain mental, physical and emotional well-being. Activities include: brain games, creative activities, art, music, socialization, chair yoga, lunch, and the program uses all 5 senses. -
 - f. **Opening Minds through Art** - This program is offered in partnership with the Springfield Art Association. Volunteers work one on one with individuals to provide guidance while promoting autonomy. This opportunity for persons with memory loss helps to creatively express themselves and engage socially in a small group setting. This program is geared for those further along with the disease.
 - g. **Early Stage Memory Loss Support Group** - This program is for persons with memory loss and their care partner and has both an educational and support component. This program is run by an Alzheimer's disease counseling specialist and helps those newly diagnosed patients and families better understand the disease and learn some coping mechanisms.
3. The Smith Alzheimer's Center provides a training rotation site for the Neurology, Internal Medicine, Psychiatry, and Family and Community Medicine departments in the center's Memory and Aging Clinic.
 4. Participation in twenty-six clinical studies focusing on Alzheimer's and Parkinson's diseases, including 12 investigator-initiated studies and 14 multi-center clinical trials.
 5. Faculty and staff contributed to 15 peer-reviewed publications and 13 national and international presentations.
 6. Continue to secure and utilize external (NIH) research funding for bench and translational neuroscience labs.
 7. Continued participation and teamwork in the development of the SIU Neuroscience Institute, which Smith Alzheimer's Center now falls under this scope.

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

The Smith Alzheimer's Center continues to advance several priorities of the State of Illinois, Southern Illinois University, and SIU School of Medicine. As noted, the Smith Alzheimer's Center (previously the Center for Alzheimer's Disease and Related Disorders) was established by Public Act 90-0404 as a state-designed Regional Alzheimer's Disease Assistance Center. The Smith Alzheimer's Center has been successful in this role, as evidenced by its continued designation by the State of Illinois as a regional center. The Smith Alzheimer's 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 shown in the 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 Smith Alzheimer's Center has been invited to participate in many local, regional, and state programs sponsored by the Alzheimer's Association, the RADAC Committee for the Illinois Department of Public Health, and the Illinois Cognitive Resources Network. The Smith Alzheimer's Center has also collaborated with researchers in other SIU departments both in Springfield and in Carbondale, as well as those in the other two state designated Regional Alzheimer's Disease Assistance Centers. The goal is to assist the Illinois Department on Aging in obtaining a "Community Living" grant. The Director has also been a member of strategic planning committees both at the SIU School of Medicine and SIU system levels. These activities directly support the SIU Board of Trustee's priorities for community partnerships, SIU Carbondale's priority for research and innovation, and SIU School of Medicine's goals for research and professional engagement.

Smith Alzheimer's Center physicians and other health professional staff provide essential patient care for Alzheimer's patients in SIU Springfield clinics as well as extend their expertise as consulting **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 and Aging Clinic. This includes SIU medical students, physician assistant program students, and nurse practitioner students. This allows those in medical training programs to learn the clinical aspects of Alzheimer's. 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 basic science 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, 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 experts for the SIU Extension for Community Healthcare Outcomes (ECHO) project for Memory and Aging topics. ECHO is designed to improve access and care to patients in rural areas and concentrates on those with memory and dementia issues. One-hour sessions occur monthly following the ECHO model which is 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. This program allows CARE to meet the rural area healthcare providers by virtual means for engagement. We use this "All Teach, All Learn" model consisting of a 15 minute didactic topic provided by Smith Alzheimer's Center Faculty followed by a case presentation by a

community healthcare professional. This gives opportunities for participants to ask questions and provide a means of consultation. The session ends with a summary of recommendations and potential next steps. Participants come from the Smith Alzheimer's Center Memory and Aging network clinics, central and southern Illinois health systems and others working in service organization to seniors. Together this supports the Illinois Public Health Agenda, SIU Board of Trustees, and SIU Campus Strategic Planning.

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. Due to the Covid-19 pandemic, the majority of these events were held in a virtual format this year (ECHO, Beyond the Medical Center Programs, etc). However, due to the technical challenges for some of the population that we serve (rural, cognitive impaired, etc.) the number of people we were able to reach with the services decreased for this year. We were also not hold our annual Memory and Aging Conference, but it has been scheduled for this spring in May of 2022.

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)

The Smith Alzheimer's Center and Parkinson's disease center directly advanced the objectives during FY2021. As noted above, patient care, consultation, and referral services were provided in over 4,100 patient visits in the Smith Alzheimer's Center Springfield site and 500 additional patient visits in the Smith Alzheimer's Center Primary Provider network sites. In addition, a major function of the center has been its development and maintenance of its state-mandated Primary Provider Program, which comprised 32 sites in FY2021. These activities support the patient care objectives (Objectives 1 and 2) above. Basic clinical and increasingly population health research projects were advanced in FY2021, and efforts to increase them continued in support of the research objectives (Objectives 3 and 6). There were 115 educational programs for caregivers and health care providers with attendance of 1126 in FY2021, in support of Smith Alzheimer's Center community educational objective (Objective 4). The 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 FY2021.

11.5 Evidence of Organizational Effectiveness

The strongest evidence of organizational effectiveness is that already presented in the preceding sections. The centers continue to be recognized as a leader in the clinical, educational, and research aspects of Alzheimer's disease and Parkinson's disease in Illinois and is growing its reputation nationally and internationally. 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. The Smith Alzheimer's Center is focused on

continuing its excellence in the areas of Clinical Health, Analytical Neuroscience and Community Engagement, while expanding its recognition and reputation to the national and international stage.

12. Institutional Assessment

12.1	Date of Last Review	<u>2018 - 2019</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: Dale and Deborah Smith Center for Alzheimer's Research and Treatment

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	\$1,391,500	\$1,644,500	\$1,391,500	\$0	\$0
Income Fund				0	0
Grants & Contracts	\$1,640,911	\$2,360,744	\$1,950,135	1,032,995	622,470
State Support via Hospital Contracts ¹	0	0	0	0	0
Transfers from SOM ²	0	\$433	0	146,058	61,055
Other Revenues	\$40,475	\$38,072	\$31,682	43,454	25,424
Total Revenues	\$3,072,886	\$4,043,749	\$3,373,317	\$1,222,507	\$708,949
Expenditures [*]					
Salaries	\$822,508	\$1,103,654	\$874,520	\$246,217	\$222,029
Fringe Benefits	\$160,581	\$212,681	\$166,986	58,900	36,325
Equipment	\$25,695	\$239,477	\$109,812	0	5,933
Commodities	\$223,784	\$270,954	\$187,612	49,569	6,325
Contractual Services ³	\$423,848	\$600,093	\$755,859	587,611	158,599
Other Expenses	\$418,947	\$675,066	\$472,389	444,049	62,544
Total Expenditures	\$2,075,363	\$3,101,925	\$2,567,178	\$1,386,346	491,755
Revenue Minus Expenditures	\$997,523	\$941,824	\$806,139	-\$163,839	\$217,194

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.
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 Provider Network, which includes 32 separate sites supporting a 93-county area. 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 (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	4.29	3.29	4.29	1.00	1.00
Staff	12.24	8.00	10.67	6.56	6.56
Total Staffing	16.53	11.29	14.96	7.56	7.56

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	<u>Southern Illinois University Carbondale</u>
2.	Center/Institute	<u>Fermentation Science Institute (FSI)</u>
3.	Date	<u>3/18/2022</u>
4.	Director	<u>Matthew McCarroll</u>
4.1	Telephone	<u>618-453-7508</u>
4.2	E-mail	<u>mmccarroll@siu.edu</u>
5.	Year Established	<u>2014 (approved by IBHE)</u>
6.	Illinois State Statute (if pertinent)	<u>N/A</u>
7.	Reporting Unit	<u>Dean (College of Agricultural, Life, and Physical Sciences) and Vice Chancellor for Research (dotted-line reporting)</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 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	-	\$145
2. Research Projects	2	1
3. Sponsored/Hosted Events	2	2†
4. Carbondale Brewfest	-	-†
5. FSI related Grant Proposals Submitted	2	7
6. Grant Proposals Funded	2	4
7. Testing & Services	\$30,000	\$32,997

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

Measure	Target for Year	Results in Year
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†Several planned events were cancelled due to the COVID-19 pandemic.

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
 - Fae Minor McGill Kitchen and Sensory Laboratory (provided by charitable donation to and in collaboration with Hospitality Management)
 - 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 pending action by the Capital Development Board)
 - Submitted \$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
 - Administered the 4-year BS degree in fermentation science
 - Developed new courses and conducted an update of fermentation science courses to streamline offerings and provide greater flexibility in instructional staffing
 - Renewed contract of Mr. Wade Begrow of Founders Brewing Company as an assistant lecturer to teach the advanced yeast technology course (FERM 462), who has become a valued member of the FSI

- 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
 - Expanded the FSI Service Laboratory, which is a fee-for-service 3rd 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 3rd party testing facilities triply certified for beer, wine and spirits nationally)
 - Has provided services for over 70 business, 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 FY21, 823 analyses were performed on 598 submitted samples for a revenue of \$33k.**
 - 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)
 - 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. Catering was arranged by FSI staff and drink service was offered by students and staff of the FSI.

Note: most planned activities were cancelled due to COVID-19

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 5 graduates and has nearly 20 majors and growing. We anticipate accelerated growth in the program as we (hopefully) roll out of the pandemic.

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 assisted in recruiting and developing a successful offer to bring in a new faculty member in August of 2019. Professor Jayakody holds a joint appointment with the Departments of Microbiology and Plant Biology, with a 25% appointment in the FSI.

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 fiscal year due to the pandemic, but were still able to host and provide tours for a number of groups, including SIU President Mahony, Senator Fowler, and the leadership group of the Delta Regional Authority.

Support of Other Academic Opportunities. The FSI actively engages with other departments and academic programs. In a recent success, the FSI director serves 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 FY21, 823 analyses were performed on 598 submitted samples for a revenue of \$33k.**

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 a number of 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 2021**. These funds will allow infrastructure and projects to be fast-tracked along with the \$2.5M that is in cue in the Capital Development Board for action.

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, where it awaits action from the Capital Development Board to begin the project. (As of March of 2022 the process has begun to move with the Capital Development Board)

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.

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.

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.

Fae 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 Fae Minor McGill. As a collaborative effort with the Department of Animal Science, Food and Nutrition, plans have been developed to build a teaching kitchen and sensory laboratory in the McLafferty Annex. The project will result in a commercial production kitchen and formal sensory laboratory that will be used by multiple departments for teaching, research and outreach activities.

The infrastructure proposed in the *iFERM Hub* will support and allow completion of this resource.

Public Outreach and Engagement.

Carbondale Beer Festival. The festival was cancelled for two years during the pandemic and is planned to relaunch in May of 2022.

The FSI also hosts various activities engaging the local community, including educational tasting events, partnering with the local homebrew club (hosting meetings and competitions). The FSI also co-sponsors the SIU Farm to Fork event, which is a semi-annual, sold-out event for 150 students, faculty, staff, and community members. These activities did not occur during the pandemic but will be reconsidered in the future.

11.5 Evidence of Organizational Effectiveness

The institute continues to benefit from stable and efficient staffing the past 2 years. Despite additional challenges during the pandemic, efficient operations were maintained due to the efforts of a strong team. All business aspects of the Institute are now running smoothly and at full capacity. As an essential front-line service, the FSI maintained safe operations through the COVID-19 pandemic providing service to the industry. This was particularly impactful as the brewing industry pivoted from on-premises draft-based sales to primarily packaged sales and the increased demand of quality control testing.

Challenges remain in the realm of instructional capacity for the fermentation science program. The instructional needs for courses needed to maintain adequate student progress have largely been met by effort of the Director in addition to normal duties and by careful scheduling of courses. The instructional capacity of the FSI will be improved with a planned faculty hire in FY 2022 and efforts to develop additional resources to improve the effectiveness and impact of the FSI are ongoing.

12. Institutional Assessment

12.1 Date of Last Review Permanent Status for FSI Granted by IBHE 2019, Degree Program Reviewed in 2021 and in Good Standing

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

12.3 Explanation

RESOURCES: Fermentation Science Institute

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	223,861.43	198,696.37	184,712.22	142,075.58	59,517.97*
Service Lab	32,997	37,129.36	15,484.19***	**15,640.96	19,829.72
Overhead Recovery (expenditure)	250	3,766.09	15,000.00	6,266.02	2,598.22
Overhead Recovery (income)	75.94				
Course Fees	1,020	1,035.00	1,380.00	1,455.00	NA
Awards and Grants	1,140,000††	160,427.00†	53,244.47	120,427.00	NA
Total Revenues	1,398,204.37	401,053.82	269,820.88	285,864.56	81,945.91
Expenditures*					
Salaries	217,096.43	189,475.70	153,884.72	132,854.58	139,451.69
Travel	373.87	6,575.86	12,112.33****	4,690.15	2,254.28
Equipment	5,701.81	108,444.04	53,315.70	3,678.80	1,576.21
Commodities	17,357.41	25,251.67	14,855.00	14,065.05	9,886.78
Contractual Services	5,701.81	20,377.25	9,129.94	8,477.80	13,711.35
Awards and Grants	0	0	0	0	0
Telecommunications	1,091.45	734.07	613.26	962.31	960.00
Course Fees	1,459.69	276.51	1,839.16	1,075.58	
Total Expenditures	248,782.47	351,135.10	245,750.11	165,804.27	167,840.31
Revenue Minus Expenditures	1,049,421.90	49,918.72	24,070.77	120,060.29	-85,894.40*

* Negative balance is a result of retroactive sweep of state account following state budget crises. State budget was on track for a balanced closeout and revenue from the Service Lab would have been positive.

** Represents a beginning cash balance of \$6,632.60.

*** Represents a deficit of \$2,273 balanced by accounts receivable in FY20.

****Includes travel related to equipment transportation.

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

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	.38	.25	.5	.25	.25
Staff	2.5	2.5	2.5	2.5	1.5
Total Staffing	2.88	2.75	3.0	2.75	1.75

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

(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 15, 2022
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	24	15
2. Public Service Activities (Field Days, Conferences, workshops, etc.)	16	13
3. National/Regional Research Projects or Working Groups	19	12
4. Graduate Students Trained (MS and PhD)	20	22
5. Undergraduate Student Workers Trained	18	18
6. Undergraduate Leadership Training (Agronomy Honor Society)	0	0
7. Undergraduate Job Placement/Graduate School	3	9
8. Graduate Students Job Placement/Graduate School	5	9
9. Grant Dollars	\$8,216,497	\$4,633,555
10. Internships	7	4

* 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)

Covid-19 greatly impacted many aspects of the faculty research, teaching, and outreach. However, ISC faculty secured substantial research grants, coordinated national research projects, published numerous research articles, and trained the largest number of undergraduate and graduate students in many years.

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 500 industry, alumni, and soybean stakeholders in the past year. Center faculty also helped place 18 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 22 graduate students (MS and PhD).

Support undergraduate research activity – Faculty research grants led to the support of 18 undergraduate student researchers.

Enhance the university's external reputation – Faculty were engaged with 12 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 500 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 15 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

A significant limitation of the ISC is that there are limited funds to operate, and there are no staff members assigned to the Center. The ISC external program review was conducted during the Spring of 2021 and was rated in good standing. Several suggestions from the review centered on the administration of the ISC and the newly formed College of Agricultural, Life, and Physical Sciences (CALPS). Dr. Eric Brevik began serving as the inaugural Dean of CALPS in July 2021. Many of the new schools and program areas are already part of the ISC. We look for even greater multidisciplinary collaborations in soybean research for the benefit of Illinois Soybean growers. Under Dr. Brevik's leadership, a new Board of Directors was seated that represents all new schools in CALPS in addition to critical schools from outside the College. The Board of Directors has met and is developing an internal RFP that will be released in April. Additionally, a permanent Director will be identified in the next few months.

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) <hr/>

RESOURCES: Illinois Soybean Center

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	-	-	-	-	-
Income Fund	-	-	-	-	-
Grants & Contracts (faculty research activity)**	-	8,216,497	2,455,216.00	5,493,186.00	2,067,169.00
University Match on Interest from Endowment***	22,936.98	21,816.86	20,542.51	82,138.29	-
Distribution from Endowment	22,936.98	21,816.86	20,542.51	20,535.29	20,535.20
Total Revenues****	-	-	-	-	199,853.95
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.

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	-	-	-	-	-
Staff	-	-	-	-	-
Total Staffing	-	-	-	-	-

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1,2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University Carbondale
2.	Center/Institute	Materials Technology Center
3.	Date	March 18, 2021
4.	Director	Ian Ivar Suni
4.1	Telephone	618-453-7822
4.2	E-mail	isuni@siu.edu
5.	Year Established	1983
6.	Illinois State Statute (if pertinent)	Unknown
7.	Reporting Unit	Office of the Vice Chancellor for Research
8.	Type	Activity (check all that apply)
	Instructional	Aspirational
	Research	XX
	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 Materials Technology Center was established in 1983 as a result of a high-technology thrust by the state of Illinois. Charged with stimulating Materials-related research on the campus of SIU, the center accomplishes this mission through initiating interdisciplinary research in the Colleges of Engineering and Science, disseminating results to researchers in academia, industry, and national laboratories, and organizing Materials seminars and discussion groups. The center encourages research in new areas by administering competitive seed grant programs that fund projects for faculty entering new areas of materials research and provides technical, administrative and financial support to start-up and established research programs. A historical strength of the center has been research in the area of carbon-carbon composites, but the center has expanded its leadership and expertise in carbon science to include areas such as carbon nanotubes and development of carbon material precursors. New areas of emphasis include Materials Design by Iterative Computation, Synthesis and Characterization; Sensors, Biosensors, and Biointerfaces; and Energy Storage. Other research programs focus on catalysis, including CO₂ reduction; magnetic materials, including Heusler alloys; alternative and traditional energy technologies; polymers, including organic photovoltaics and protein immobilization chemistries; chemical vapor deposition; inkjet, wax, and 3D printing; mechanical behavior of cells, and their behavior atop surfaces; covalent materials; carbon nanotubes, graphene, and other nanotechnologies; data-driven Raman spectroscopy; and metal-organic frameworks. Under the guidance of established experts, students associated with MTC receive hands-on training and valuable experience. The total program of the center offers an opportunity for students at all levels of experience to train in the fields of Materials Science and Engineering. The web address for the Materials Technology Center is <http://mtc.siu.edu/>

9.2 Mission

The mission of the Materials Technology Center is to advance and develop new technologies involving the synthesis, processing, understanding, and application of advanced materials in order to address the Grand Challenges facing humanity, and to provide students with the necessary education and training to address these Challenges. These Grand Challenges include economical solar energy and other alternative energies; improved medicines and biomedical technologies, including those involving the human brain; carbon sequestration; reduced greenhouse gas emissions and environmental remediation; improved clean water technology; finding sustainable alternatives to rare earth elements, and other scarce elements of technological importance; and advancing scientific inquiry.

9.3 Objectives

We endeavor to:

- Invite outside seminar speakers and guests in the field of Materials Science and Engineering (MSE) to SIUC to enable greater understanding of the various MSE sub-

disciplines by our students and faculty. This is particularly valuable for the three research focus areas of the Materials Technology Center: Materials Design by Iterative Computation, Synthesis and Characterization, Sensors and Biosensors, and Energy Storage.

- Provide editorial advice, matching funds, and other assistance as needed for Materials faculty to write grant proposals to federal agencies, state agencies, foundations, and industry as needed.
- Provide periodic support for seed grants to MTC faculty to aid in their ability to start research projects in new fields, and subsequently obtain external grant funding.
- Provide periodic guidance and advice into emerging areas within Materials Science and Engineering research as need for MTC faculty. One emerging area is the application of advanced topics in Computer Science and Mathematics (i.e. Machine Learning, Data Science-Mining) to Materials Science and Engineering research.
- If possible, start appropriate graduate curricula in the field of Materials Science and Engineering. This is a specific suggestion from our previous IBHE review. The Materials Technology Center awaits further action to implement a sustainable funding mechanism for such graduate programs.
- Lobby for, write proposals for, and support the acquisition of advanced equipment for Materials characterization and Materials processing.

10. Advisory Board

10.1 Advisory Board - Membership

Dr. Punit Kohli, Professor of Chemistry and Biochemistry
 Dr. Michael Lydy, Professor of Zoology, and Adjunct Professor of Chemistry and Biochemistry
 Dr. Farhan Chowdhury, Professor of Mechanical Engineering and Energy Processes
 Dr. Lichang Wang, Professor and Chair of the Department of Chemistry

10.2 Number of Meetings (In This Year) 1

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1. Host outside seminar speakers	2	0 (COVID-19)
2. Peer reviewed publications by MTC faculty	50	63
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)

The Materials Technology Center normally hosts a series of academic seminars, bringing internationally renowned researchers to campus to meet with SIUC students and faculty. Unfortunately, during FY 21, both our planned seminar speakers (Andrzej Nycz, Oak Ridge National Laboratory; Brendan Harley, University of Illinois Urbana-Champaign) canceled their planned visits to SIU. ORNL did not allow any of their Ph.D. staff to make seminar visits.

In order to substitute for our usual seminar series, Materials faculty and graduate students participated in an online seminar series, the North American Materials Colloquium Series (NAMCS), which was created by the University Materials Council (UMC). Southern Illinois University Carbondale is a member of the UMC. The Fall 2020 and Spring 2021 NAMCS schedules are available online at:

<http://namcs.org/fall-2020-schedule>

<https://namcs.org/spring-2021-schedule>

As discussed in previous annual reports, the Director of the Materials Technology Center is keenly interested in creating a new M.S. degree program in Materials Science and Engineering. This discipline is the technical focus of the Materials Technology Center, and is described in detail at this Wikipedia site:

https://en.wikipedia.org/wiki/Materials_science

We already offer enough graduate courses at SIUC to offer an M.S. degree in this field, and many universities have found such degrees to be a significant source of revenue. This has been problematic at SIUC due to the lack of a tuition return model for self-supporting graduate students. Advising M.S. students requires significant faculty time and effort, as well as funds to purchase materials, supplies, software, etc.

A sustainable financial model would involve some direct tuition return to the participating faculty and programs. Many institutions have such a model. Otherwise, the Director does not have the time and resources to advise all of our Materials M.S. students himself. He estimates that he could eventually enroll ~50 self-supporting graduate students in a sustainably managed program. A complicating factor is that the current market for self-supporting M.S. students in Materials Science and Engineering is international rather than domestic students. Thus, the online model for tuition return is not applicable, since international students desire entry into the USA.

The Director periodically discusses this idea with academic administrators and will continue to do so. Both colleges (CALPS, CECTM) involved in the Materials Technology Center (MTC) have relatively new Deans, and the Director of the MTC has discussed this idea with both of them.

During previous summers, we aided with administration and support, including financial support, the Materials Research and Education for Undergraduate (REU) program funded by the National Science Foundation (NSF) through a grant to two faculty Members (Dr. Saikat

Talapatra and Dr. Boyd Goodson) of the Materials Technology Center. Unfortunately, this program was canceled during Summer 2020 due to the global COVID-19 pandemic. The Materials Technology Center will continue to support this program in the future. Profs. Goodson and Talapatra have had funding for this program from the NSF for at least the last ten years, and annually host undergraduate student researchers from SIUC and other universities nationwide.

During FY21, the MTC Director did the following university service:

- Served on the Willis Swartz Scholarship Award committee.
 - Served on the Graduate Committee, School of Chemical and Biomolecular Sciences.
 - Member of the Research Council, College of Engineering, Computing, Technology and Mathematics (CECTM).
 - Member of the ad hoc committee to restructure the Illinois Soybean Center, College of Agricultural, Life, and Physical Sciences (CALPS).
 - Judge, Region 8 Science Fair at Southern Illinois University.
-

The Director organized a faculty team in Fall 2020 to solicit federal funding to purchase an x-ray photoelectron spectrometer (XPS) from Physical Electronics. The other leaders of this effort were Dr. Boyd Goodson (Associate Dean CALPS, Professor of Chemical and Biomolecular Sciences), Dr. Saikat Talapatra (Director and Professor of Physics), and Dr. Punit Kohli (Interim IMAGE Director and Professor of Chemical and Biomolecular Sciences). The other involved faculty were Dr. Pravas Deria (Chemical and Biomolecular Sciences), Dr. Sabrina Nilufar (Mechanical, Aerospace, and Materials Engineering), Drs. Dipanjan Mazumdar and Bumsu Lee (Physics); Dr. Sally Potter-McIntyre (Geology), and Dr. Jia Liu (Civil, Environmental, and Infrastructure Engineering). We first submitted an internal proposal to the Office of the Vice Chancellor for Research (OVCR), since each university is limited to two submissions to the Major Equipment Infrastructure (MRI) program at the National Science Foundation (NSF). Once we were selected from the internal competition, we submitted a proposal entitled, "Acquisition of an X-ray Photoelectron Spectrometer for Research, Education and Outreach," to the NSF in January 2021. Unfortunately, our proposal was not selected for funding.

In March 2019 the Director announced a new \$10,000 seed grant competition for members of the Materials Technology Center. Only projects in the following areas were considered:

- Collaborations between computational and experimental Materials faculty.
- Materials for quantum information science, identified for its importance by the recent National Academies publication, "Frontiers of Materials Research: A Decadal Survey (2019)."
- Collaborations with a Mathematics professor on data mining to predict new Materials or Materials properties.
- Biotechnology related proposals, including the MTC focus area "Biointerfaces and Biosensors."

The original due date for this seed grant proposal was May 1, 2020. Due to the COVID-19 pandemic, this was delayed until July 1, 2020. The grant proposals were reviewed and an award was made during FY21.

This grant was awarded to Profs. Farhan Chowdhury and Sabrina Nilufar (Mechanical, Aerospace, and Materials Engineering) for their project entitled, "3D-Printed Biointerface to Study Antiviral Signaling." The central hypothesis is that cell-generated endogenous forces can lead to a mechanical state where viral infections can be mitigated by strong RIG-I activation. Profs. Chowdhury and Nilufar aim to precisely control the endogenous cellular contractility using 3D bioprinted hydrogels with varying stiffness, and to subject these cells to a mechanical microenvironment of defined stiffness to determine their RIG-I activation response. This research field has a long-term goal to provide broad-spectrum protection against RNA virus infections.

The Director periodically meets with faculty in different programs at SIUC who are involved or interested in research into Materials Science and Engineering. Discussions include their research, research of other faculty in different Schools and Colleges, and how the Director might be able to facilitate interdisciplinary collaboration. This includes forwarding relevant papers, identifying research programs to which one might apply, and assistance with editing proposals. In future annual reports, the Director will provide further information on his efforts to support and collaborate with junior faculty in Environmental Engineering.

During FY21, the Director became interested in new research tools, involving Data Science and Machine Learning, that could be applied to Materials Science and Engineering research. Since these topics are new to most Materials faculty at SIU, he began planning new initiatives in Data Science and Machine Learning for the future. These will be discussed in future annual reports.

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

The Illinois Public Agenda for Science and Technology is perhaps best summarized by the Illinois Science and Technology Roadmap, published by the Illinois Science and Technology Coalition in 2017:

https://www.istcoalition.org/wp-content/uploads/2017/03/ISTC_RoadmapFINAL.pdf

This document lists the following areas for future investment by the State of Illinois on pages 28-74:

- **Advanced Materials**
- **Alloys and Metals**
- **Polymers**
- **Batteries and Energy Storage**
- **Biofuels and Biomass-derived Products**

- Medical Biotechnology
- **Nanotechnology**

The areas **highlighted in bold face** above are sub-fields within Materials Science and Engineering, which is the thematic focus of the Materials Technology Center. In addition, some areas within Medical Biotechnology and Materials-related. The Director eagerly anticipates future investment in these areas as part of efforts to stimulate economic development and job growth in the State of Illinois.

The Materials Technology Center strives to aid the SIUC administration, faculty, students, and other stakeholders to accomplish the goals outlined in our Strategic Plan. For example, among the values described in our Strategic Plan are:

- We are proud of our status as a nationally ranked public research university
- We pride ourselves on innovation in research and creative activity

All of the activities described elsewhere in this Report are focused on maintaining our status as a nationally ranked public university, and increasing the quality and quantity of our research and creative activity. The Strategic Plan also identifies two important goals:

- Enhance research, scholarly and creative activity productivity to the benefit of students, community and other University stakeholders.
- Enhance our reputation for providing cutting-edge graduate and undergraduate research opportunities.

The Materials Technology Center is primarily focused around these goals through our various scholarship-focused activities.

11.4 Evidence of Support for Center/Institute Objectives

The Illinois Public Agenda for Science and Technology is perhaps best summarized by the Illinois Science and Technology Roadmap, published by the Illinois Science and Technology Coalition in 2017:

https://www.istcoalition.org/wp-content/uploads/2017/03/ISTC_RoadmapFINAL.pdf

This document lists the following areas for future investment by the State of Illinois on pages 28-74:

- **Advanced Materials**
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- **Polymers**
- **Batteries and Energy Storage**
- Biofuels and Biomass-derived Products
- Medical Biotechnology

- **Nanotechnology**

The areas **highlighted in bold face** above are sub-fields within Materials Science and Engineering, which is the thematic focus of the Materials Technology Center. In addition, some areas within Medical Biotechnology and Materials-related. The Director eagerly anticipates future investment in these areas as part of efforts to stimulate economic development and job growth in the State of Illinois.

The Materials Technology Center strives to aid the SIUC administration, faculty, students, and other stakeholders to accomplish the goals outlined in our Strategic Plan. For example, among the values described in our Strategic Plan are:

- We are proud of our status as a nationally ranked public research university
- We pride ourselves on innovation in research and creative activity

All of the activities described in this report are planned and executed to support the Center objectives that are outlined above. These include:

- Bring in outside seminar speakers and guests in the field of Materials Science and Engineering (MSE) to SIUC to enable greater understanding of the various MSE sub-disciplines by our students and faculty. This is particularly valuable for the three research focus areas of the Materials Technology Center: Materials Design by Iterative Computation, Synthesis and Characterization; Sensors, Biosensors, and Biointerfaces; Energy Storage.
- Provide editorial advice, matching funds, and other assistance as needed for Materials faculty to write grant proposals to federal agencies, state agencies, foundations, and industry as needed.
- Provide periodic support for seed grants to MTC faculty to aid in their ability to start projects in new fields, and subsequently obtain external grant funding

11.5 Evidence of Organizational Effectiveness

This is thoroughly documented in the remainder of this Report.

12. Institutional Assessment

12.1 Date of Last Review IBHE review conducted during FY 14 by Dr. James Allen, SIUC Associate Provost for Academic Programs

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

12.3 Explanation

Not applicable.

RESOURCES: Materials Technology Center

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	76242	76317	75486	75486	75426
Income Fund	36367	40000	23000	23431	
Grants & Contracts				3731	17193
xxx					
xxx					
xxx					
Total Revenues	112609	116317	98486	102648	92619
Expenditures*					
Salary	76242	76316	75486	75486	75486
GA Salary	1625	1000	13000	22480	17193
OTS	66				
xxx					
xxx					
xxx					
Total Expenditures	77933	77316	88486	97966	92679
Revenue Minus Expenditures	34676	39001	1000	4682	0

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	1	1	1	1	1
Staff					
Total Staffing	1	1	1	1	1

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	Meyers Institute
2.	Center/Institute	Meyers Institute
3.	Date	03/11/2022
4.	Director	Yuqing Hou (Acting)
4.1	Telephone	(618)-453-5174
4.2	E-mail	houyq@siu.edu
5.	Year Established	(2000, and re-established in 2020)
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	VCR
8.	Type	Activity (check all that apply)
	Instructional	Yes
	Research	Yes
	Public Service	No

* 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 Meyers Institute for Interdisciplinary Research in Organic and Medicinal Chemistry was initiated by late Distinguished Professor Cal Y. Meyers through a \$3 million endowment to SIU foundation in 2000. Cal Y. Meyers served as the first director of the institute until his death in 2012. The institute currently is managed by Dr. Yuqing Hou. Professor Meyers firmly believed that basic research leads to new applications and broad-field publications. Students with exposure to a variety of interdisciplinary research activities are prime candidates for positions in the scientific, medical, and commercial sectors.

The institute has provided assistantships, postdoctoral fellowships, and undergraduate stipend during the past years. The students get their degrees in chemistry. Currently, the institute supports two graduate students, who are working on their advanced degrees.

The Institute is located in the Neckers Building, which houses the Department of Chemistry and Biochemistry.

9.2 Mission

The institute carries out basic research in organic chemistry, medicinal chemistry and related interdisciplinary fields. The institute aims to provide education opportunities for undergraduate, graduate, and postdoctoral students in these fields.

9.3 Objectives

The current objectives of the institute are:
Holding biannual symposium to promote SIUC and research
Teaching and supporting students in the institute
Recruiting more students
Seeking external funding
Providing instructional service to the Department of Chemistry and Biochemistry when needed
Carrying out research activities
Communicating results to scientific communities

10. Advisory Board

10.1 Advisory Board - Membership

Dr. Chuck Rawlings
Professor Rob Schwartz
Ms. Gayla Borgognoni

10.2 Number of Meetings (In This Year) None

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1. Continue on three research projects	3	3
2. Teach courses in Chemistry	1	1
3. Recruiting graduate students	1	1
4. Publications/conferences	1	0
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)

Dr. Yuqing Hou taught Chem 549 in the Department of Chemistry and Biochemistry. Lihong Gao, a PhD student, extended her research into organic frameworks and catalysis. She is finishing up her PhD study.
Folu Olubiyo has joined the institute as a PhD student.
Collaboration with Dr. Boys Goodson in the Chemistry Department continues.

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

Dr. Yuqing Hou also volunteered as the Illinois Junior Science Fair judge.

11.4 Evidence of Support for Center/Institute Objectives

The institute has contributed to the Department of Chemistry and Biochemistry by teaching chemistry courses. Dr. Yuqing Hou also serves on several graduate students' committees, helping and guiding the students, writing cumulative exams.
The Institute provided financial support for the graduate students carrying out research in the institute.
We have continued collaborative research with Dr. Goodson in the Department of Chemistry and Biochemistry.
Our biannual Meyers Symposium has been postponed because of the pandemic. We will resume this biannual meeting soon.

11.5 Evidence of Organizational Effectiveness

The institute has been managed by Dr. Yuqing Hou since Dr. Meyers's death. We have graduate students doing research with us, and we also contribute to the Department of Chemistry and Biochemistry. He also manages the account/PCard, and purchases chemicals.

12. Institutional Assessment

12.1 Date of Last Review _____ (list the year of the last program 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: Meyers Institute

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	0	0	0	0	0
Income Fund	150,000	150,000.00	120000.00	120000.00	120000.00
Grants & Contracts	0	0	0	0	0
Previous year balance	59315.00	39000.00	28000.00	49000.00	70000.00
xxx					
xxx					
Total Revenues	209315.00	189000.00	148000.00	169000.00	190000.00
Fringe benefits	35000.00	33400.00	30000.00	32000.00	32000.00
Contractual service	7920.00	410.00	3000.00	1000.00	1000.00
Salaries	102000.00	78100.00	100500.00	100500.00	100500.00
Commodities	5165.00	3200.00	7500.00	7500.00	7500.00
Equipment	2600.00	1100.00	6000.00	0	0
xxx					
xxx					
Total Expenditures	152685.00	129685.00	147,000.00	141,000.00	141,000.00
Revenue Minus Expenditures	56630.00	59315.00	1000.00	28000.00	49000.00

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty					
Staff	1	1	1	1	1
Total Staffing	1	1	1	1	1

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University School of Medicine
2.	Center/Institute	Neuroscience Institute
3.	Date	1/29/22
4.	Director	James Gilchrist M.D.
4.1	Telephone	217-545-7226
4.2	E-mail	jgilchrist@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 FY2021 include:

- James Gilchrist, MD, Professor and Chair, Neurology, SIU School of Medicine (Executive Director)
- Kari Wolf, MD, Associate Professor and Chair, Psychiatry, SIU School of Medicine
- 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
- Marcella Bland, Associate Director, NSI/SIU School of Medicine
- Lisa Price, Assistant to the Chair of Surgery, SIU School of Medicine

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

11. Annual Performance

11.1 Performance Measures *

Measure	Target FY22	Results in FY21
1. Patient Encounters – Visits	60,000	78,147
2. Total Patients Served – Unduplicated Count	15,900	18,029
3. New Patients Served – Unduplicated Count	3,100	4,423
4.		

Measure	Target FY22	Results in FY21
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 FY2021 by successfully recruiting a Center for Alzheimer’s Research and Treatment (CARE) Director, completing an external program review of CARE, 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 successfully recruiting faculty to the NSI. These efforts have advanced the SIU Neuroscience Institute. Department specific and overall NSI accomplishments include:

Neurology:

- Developed strategic directions for the Center for Alzheimer’s Research and Treatment with a greater emphasis on research, patient care and community outreach
- Implemented 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 PM&R Faculty recruitment, 1 Stroke faculty recruitment.
- In conjunction with Memorial Medical Center, continued to support a Level 3 Comprehensive Epilepsy Program from the National Association of Epilepsy Centers.
- Expanded 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.
- Became a certified implantation center for Responsive Neurostimulator (RNS) system as of October 2020.
- Planning to provide first patients with implantation of RNS system in the new year.
- 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.
- Initiate recruitment for FTE of Advanced Practice Provider to support the increase need for movement disorder program outpatient clinic.
- Continued to mature epilepsy and spine multidisciplinary clinics
- Initiation of 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 74 total active studies. These include 47 investigator initiated, 23 sponsored clinical trials and 4 animal study protocols, 37 peer reviewed publications and 65 book chapters.
- Received 2 supplemental grants from the National Institute of Aging

- Started an outpatient program in Physical Medicine and Rehabilitation for musculoskeletal pain, spasticity, mild traumatic brain injury and non-operative sports medicine
- Incorporated the SIU FQHC into the spine multidisciplinary clinic

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
- Continued planning for a 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.
- Continued NSI Multidisciplinary Clinic Epilepsy Surgery Evaluation
- Collaboration with St. Mary's Hospital (SMH) leadership to initiate planning for phase 2 which includes psychiatry staffing the adult and geriatric inpatient services
- Initiated 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, 1 Adult Psychiatry Faculty Member and 1 Neuropsychologist Faculty Member.
- Continued a new practice at Jacksonville, Illinois in collaboration with 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.
- 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.
- Redesigned clinic operations to dramatically increase access to psychiatric care in Sangamon County
- 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
- Provide phone consultation clinic to rural primary care clinic
- Furthered the academic and research mission through 12 investigator initiated studies, 5 industry sponsored clinical trials, 6 grants, 8 peer reviewed publications and 61 book

chapters as well as 24 presentations at National Meetings, including one international presentation

- 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

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

Neuroscience Institute (NSI):

- Continued multidisciplinary clinics for epilepsy, movement disorders, Heart/Brain and spine
- Initiated planning for Alzheimer's/Memory and Pain Management Clinics
- Developed strategic directions for Center for Alzheimer's Research and Treatment (CARE)
- Continued rapid telehealth services to maintain patient access during COVID-19 pandemic
- Ended FY21 with a positive operating margin, the third time since the formation of the NSI in 2015.
- Expanded Movement Disorders treatment program by expanding Deep Brain Stimulation surgeries
- Continued planning with Memorial Health to develop a system for regional stroke care in Decatur and other Memorial Health hospitals
- Began providing clinical leadership to the Springfield Memorial Hospital Pain Program through Spineworks.
- Continued discussions to absorb neurology, pain management, and neurosurgery practices from Decatur Memorial Hospital into the NSI
- Implemented a consolidated annual report describing the scholarly activities of the Institute's Departments

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 21, 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

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017	FY2016
Revenues						
State Appropriations	0	0	0	0	0	0
Income Fund	0	0	0	0	0	0
Grants & Contracts	0	0	0	0	0	0
Patient Care Revenues	11,070,774	8,679,930	8,862,475	6,371,042	6,156,008	6,465,387
Non-Patient Care Revenues ¹	1,828,848	1,335,741	1,017,762	839,266	833,601	721,894
Ancillary Revenue ¹	0	0	0	604,410	484,453	436,988
Accumulated Balance ²	0	0	0	0	0	0
Total Revenues	12,899,622	10,015,671	9,880,240	7,814,718	7,869,682	7,851,407
	Expenditures³					
Department Overhead	2,056,149	1,549,796	1,221,411	1,148,631	1,219,579	1,218,574
Space Costs	1,067,582	863,013	873,753	1,173,353	1,022,811	946,305
Malpractice Insurance	237,658	638,359	834,940	691,615	615,455	604,616
Other Direct Expenses	961,084	974,991	1,034,325	226,755	135,541	122,920
Academic Support Expenses	927,310	926,702	930,661	872,767	853,583	904,495
Provider Compensation	3,297,744	2,895,102	2,826,743	2,724,408	2,643,180	2,592,356
SIU MED Overhead	1,009,755	977,626	978,601	998,485	1,008,793	1,048,736
Ancillary Expenses	801,247	932,131	541,549	504,579	370,740	413,405
Total Expenditures	10,358,529	9,757,723	9,241,983	8,340,593	7,869,682	7,851,407
Revenue Minus Expenditures	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.

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

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

(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
3.	Date	March 28, 2022
4.	Director	Lynn Andersen Lindberg, Interim Executive Director
4.1	Telephone	618.453.6754
4.2	E-mail	LINDBERG@SIU.EDU
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 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, 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, Center for Innovation, Saluki Ventures student business incubator, Saluki Innovation Lab, and the University Innovation Fellows.

The SIU Research Park, a separate, 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>SIU Research Park Board of Directors 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) Gary Kinsel (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>SBDC Advisory Board Darren Berger, Business Development Specialist, Bank of Carbondale 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 Mary Mechler, Advisor, Illinois Manufacturing Excellence Center Lee Messersmith, Owner Cycle 1 Cycling Studio Amy Mills, Owner, 17th Street BBQ Steven Mitchell, Economic Development Director, City of Carbondale Harriet Mize, Director, Carterville Chamber Les O’Dell, Owners, 2 Bugs and a Bean Jennifer Olson, Manager, Greater Egypt Regional Planning & Development Corporation Robyn Laur Russell, Executive Director, Champion Community Investments Nic Skovgaard, Owner, AlterEgo Marketing & Jackson CEO facilitator 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 – 2; SBDC - 1

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1. Total clients (SBDC & PTAC)	306	560
2. Total business counseling hours (SBDC & PTAC)	3,900	2,919
3. Total jobs created—technical assistance (SBDC & PTAC)	116	133
4. Total jobs retained—technical assistance (SBDC & PTAC)	100	82
5. Number of business start-ups (SBDC)	20	18
6. Amount of loans secured for clients (SBDC)	\$4,000,000	\$4,650,739
7. Amount of equity secured for clients (SBDC)	\$1,500,000	\$2,014,036
8. Companies assisted (IMEC)		1,617
9. New and retained sales per project (IMEC)		\$967,315
10. Cost savings per project (IMEC)		\$65,662
11. Jobs created and retained (IMEC)		5,679
12. Aggregate impact (IMEC)		\$450,502,048
13. Entrepreneurs-in-Residence engaged		2
14. Number of training events (SBDC & PTAC)	32	55
15. Number of training participants (SBDC & PTAC)	N/A	787

* 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)

- * Increased incubator tenancy to nearly 100%
- * Continued to offer online, hybrid, and in-person business advising and training programs to emerging and expanding small businesses
- * Collaborated with Greater Egypt Regional Planning & Development Commission and other Southern Illinois organizations to offer small business navigator assistance to businesses affected by the COVID-19 pandemic
- * Completed second year of operations of the PTAC, offering assistance in local, state, and federal government contracting opportunities
- * Secured additional funding to complement the Innova*ship program, funded by the US Small Business Administration; the Catalyst program brings together SIU Carbondale, Murray State University, and the University of 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
- * Continued to offer proctored online tests to all applicants of Illinois' CNA exam certification
- * Administered nearly 15,000 certification exams across Illinois despite restrictions imposed by the COVID-19 pandemic

- * Generated nearly \$1 million in testing revenue for Nurse Aide Testing and Direct Support Personnel certification
- * Developed an advanced CNA training program for Illinois
- * 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 Office of Technology Transfer
- * Provided assistance to the Jackson County high school CEO program, promoting retention of youth entrepreneurs, through a variety of workshops and in-person activities
- * 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 transfer, 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 and a colleague at SIUe, Tim Sullivan, pulled together 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. As a new strategic plan was developed from the Chancellor's Listening Tour, 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; 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, soon to be 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.
- 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 to remain consistent with Illinois’ COVID-19 restrictions.
- Become 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

On top of losing more than one-fourth of its funding during the Illinois budget crisis, OIED and the Research Park lost the budget support for another full-time senior professional during FY21. The staff have continued to provide high quality, impactful services throughout the campus and region despite these dramatic funding losses. The team pulled together in a variety of ways during the beginning of the pandemic to look for opportunities to not only continue to serve clients, tenants, and community members but to meet their rapidly changing needs. Staff continue to serve on various boards, committees, and working groups and provide leadership in many of these activities. The organizational effectiveness of OIED 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.

RESOURCES: Office of Innovation & Economic Development

Financial Resources	FY2021	FY2020**	FY2019	FY2018	FY2017
Revenues					
State Appropriations	\$276,499	\$379,370	\$386,651	\$327,874	\$317,423
Income Fund	205,473	196,470	91,197	7,608	11,175
Grants & Contracts	2,450,392	2,282,524	1,495,095	1,609,976	1,527,492
SBDC Generated Income	0	700	2,333	926	1,700
Online Course Revenue**	95,500	117,250			
Total Revenues	\$3,028,297	\$2,976,314	\$1,975,276	\$1,946,384	\$1,857,790
Expenditures*					
Salaries/Wages & Benefits	\$2,007,142	\$2,133,956	\$1,704,085	\$1,697,231	\$1,584,167
Building Maintenance	15,043	24,898	13,465	26,735	3,568
Internal Roof Loan	0	0	0	12,026	12,026
Contractual	382,451	345,452	104,112	125,979	41,885
Supplies & Commodities	14,315	31,643	10,968	18,880	16,193
Miscellaneous	593,296	597,251	158,813	177,839	59,872
Total Expenditures	\$2,997,204	\$3,133,200	\$1,991,443	\$2,058,690	\$1,717,711
Revenue Minus Expenditures	\$30,093	\$-156,886	\$-16,167	\$-112,306	\$140,079

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

** Because of COVID-19 in March 2020 and a change in accounting systems for the OWIR when it became part of this unit during FY2019, the FY2019 numbers do not reflect this program's financial resources; hence, FY2020 appears to be a larger increase than it actually is

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	0	0	0	0	0
Staff	21	21	22	18	16
Total Staffing	21	21	22	18	16

RESOURCES: SIU Research Park

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	\$0	\$0	\$0	\$0	\$0
Income Fund	0	0	0	0	0
Grants & Contracts	202,549	255,295	252,036	204,218	235,111
Budget Allocation from SIU	82,518	98,556	99,233	123,766	131,648
Interest Income	1,746	1,851	1,139	734	649
Award Income	56,817	40,000			
Total Revenues	\$343,630	\$395,702	\$352,406	328,718	367,408
Expenditures*					
Budget Expended at SIU	\$82,518	\$98,556	\$99,233	\$123,766	\$131,648
Management and General	262,429	255,456	246,984	251,948	259,438
Depreciation	13,525	12,046	12,046	13,503	28,457
Total Expenditures	\$358,472	\$366,058	\$358,263	389,217	419,543
Revenue Minus Expenditures	\$-14,842	\$29,644	\$-5,855	\$-60,499	\$-52,135

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	0	0	0	0	0
Staff	1	1	1	1	1
Total Staffing	1	1	1	1	1

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

(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	02/10/2022						
4.	Director	John 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	Provost & Vice Chancellor for Academic 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;">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 Paul Simon Public Policy Institute was opened in January 1997 in order 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)
 Meera Komarraju (*ex officio* member, SIU Carbondale Provost)
 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)		4 papers
2. Public Events		40 events
3. Internships Filled	8	7 internships filled
4. Graduate Assistants funded	2	2 positions filled

11.2 Major Accomplishments (In This Year)

- We held 40 events in a wide variety of topics that were free and open to the public. These events included 34 Understanding Our New World events, five Meet the Mayor events, and one student Ambassador sponsored event.
- We published four academic Simon Review papers covering citizens' opinions of the checkout bag tax proposal, the role of midwives in reducing motherhood mortality, legalization of recreational cannabis in Illinois, and public budgeting in Illinois. All papers are made available via OpenSIU. The monthly download count shows that these papers are widely used by scholars and practitioners.
- We placed five interns in Springfield for the spring 2021 legislative session, plus had two interns serving in a local Carbondale office.

- We completed our search for the Institute’s new communications and marketing associate in March 2021 with the hiring of Alison Quick.
- We continued successful fundraising efforts for our 26 Foundation accounts.
- Awarded the Jean Hurley Simon Memorial Scholarship, Barbara Brown Memorial Scholarship, Edwin D. Philips Debate Team Scholarship, Mike Lawrence Scholarship, and David Yepsen Scholarship to SIU students.

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

PSPPI 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 2021.

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 principal 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 but plan on hosting a conference in 2022 outlining the theme of “One Illinois: Nobel Aspiration or Impossible Dream.” We invited speakers virtually 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 large attendance turnouts at our events, averaging approximately 100 people on any given event. 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. In this year alone, we had over 1,653 unique downloads. There have been over 46,800 downloads of these papers by users from the 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. We also continue to place Demuzio interns in local government offices in Southern Illinois. These interns are supervised by Dr. John Jackson.

We continued our partnership with the Celia M. Howard Foundation which now provides a fellowship via the Institute for two graduate students. They have been impressed by the work of our past and current fellow and decided to offer more fellowship opportunities via the Institute. Therefore, they have increased their support now to two fully funded (\$20,000 each) fellowships.

Our supporters donated over \$8,335 for SIU's fourth annual Day of Giving.

12. Institutional Assessment

12.1	Date of Last Review	FY20
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) N/A

RESOURCES: Paul Simon Public Policy Institute

- See attached sheet for FY20 and past fiscal years.

Financial Resources Revenues	FY2021	FY2020	FY2019	FY2018	FY2017
State Appropriations	\$412,659.36	\$378,717.84	\$346,075.17		
Budget Reduction	\$27,331				
Budget Increase		\$5,351.52	\$9,586.03		
Ending Budget	\$385,328.36	\$384,069.36	\$355,661.20		
Income Fund					
Grants & Contracts					
Endowment Accounts	\$163,211.75	\$224,191.45			
Overhead Recovery					
Total Revenues	\$548,540.11	\$608,260.81			
Expenditures*					
Salaries – Staff/Faculty	\$376,802.52	\$383,875.78	\$355,661.02		
Graduate Assistants/Student Wages	\$48,263.62	\$8,969.17	\$18,372.37		
Travel			\$368.68		
Commodities	\$249.23	\$1,091.83	\$1,996.04		
Contractual Services	\$2,036.68	\$8,626.87	\$9,445.68		
Telecommunications	\$644.25	\$3,094.47	\$2,421.19		
Fringe Benefits			\$3,633.00		
Facilities & Administrative Costs			\$179.00		
Total Expenditures	\$427,996.30	\$405,658.12	\$392,076.98		
Revenue Minus Expenditures	\$120,543.81	\$202,602.69			

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	0.77	1	1	1	
Staff	4	4	2.75	3.75	
*We have two half-time graduate assistant to make 1.0. No extra help.					
Total Staffing	4.77	5	4.75	5.75	

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

(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	January 1 st , 2022
4.	Director	Aziz Khan, MD
4.1	Telephone	217-545-7969
4.2	E-mail	akhan@siumed.edu
5.	Year Established	Academic Year 2000
6.	Illinois State Statute (if pertinent)	N/A
7.	Reporting Unit	(list the college, school, or administrative unit in which this center/institute exists)
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 free 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 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

Objective Number	Objective Description
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 Executive Committee:</u> provides recommendations to the SCI Executive Director on matters concerning the goals and performance of the institute in accordance with its mission. FY2021 members were:</p> <ul style="list-style-type: none"> • Aziz Khan, MD, Executive Director, Simmons Cancer Institute • Jerry Kruse, MD/MSPH, Dean and Provost, SIU School of Medicine; and CEO SIU Medicine • John Flack, MD, Professor and Chair, Internal Medicine, SIU School of Medicine • Michael Neumeister MD, Professor and Chair, Surgery, SIU School of Medicine • Laurent Brard, MD, Professor, Obstetrics and Gynecology, SIU School of Medicine • Don Torry, Associate Dean of Research, SIU School of Medicine • Charles Callahan, MD, President and CEO, Springfield Memorial Health
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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 FY2021, 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 Executive Committee – two (2) meetings in FY2021 (meetings are held quarterly) – meeting format changed February 2021

SCI Management Committee – twelve (12) meetings in FY2021 (meetings are held 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	22,412
2. Total New Patients Served by SCI – Total New Patients Seen	4000	4358
3. Total Infusion Patients Treated by SCI	7300	6407
4. Clinical Trial Studies – Open Studies (NCORP Studies and SCI Clinical Trials)	125	138
5. Clinical Trial Participation – NCORP studies and SCI Clinical Trials)	164	139
6. Cancer-Related Research – Funded Discovery Science and Translational Projects and Non-Clinical Trial IRB regulated Studies.	33	15 [#]
7. Published Articles – Number	90	54
8. Patient/Community Education Programs – Attendees	2,508	**135
9. Outreach Programs/Screenings – Attendees	2606	**15

* 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 FY2021, major accomplishments of the Simmons Cancer Institute included the following:

- Due to pharmaceutical contracting and reimbursements, SCI decided to change to retail pharmacy from oral dispensing.
 - Hematology/Oncology Fellowship program officially began July 1, 2019 and as the program has grown, we successfully recruited 2 additional fellows to meet our goal of 6 fellows in the program.
 - Hematology/Oncology services became available at our Jacksonville location in April 2021 to service patients 5 days a week. Services include infusion capabilities 2 days per week.
 - SCI held its fourth annual combined Summer Internship Presentation and Donor Appreciation event. Donors who contribute to Denim & Diamonds, fund the paid summer internships for six college undergrads who are interested in cancer research. Each intern gave a 15 minute presentation of their research project. The event had 50 in attendance, including faculty, researchers, intern mentors, family members and donors.
 - SCI continued to participate in Mammogram Mondays outreach services that includes Springfield, Lincoln, Taylorville, and Hillsboro locations. Six hospitals participate in Mammogram Mondays.
 - Dr. Hussain joined SCI in April 2021 under Hematology/Oncology.
 - As SCI continues to navigate through COVID pandemic mandates and restrictions, changes continue to evolve clinical operations. All clinics implemented Telehealth services. This allowed for patients to stay connected with their providers virtually to help ensure patient safety. The pandemic also affected how we work in our clinic areas. SCI implemented a robust remote working schedule for our employees to control how many staff we had on site to help reduce the spread of infection.
 - Due to COVID, many of the spring health fairs and screening were canceled.
- These accomplishments were in addition to ongoing patient care, research, educational, and outreach efforts performed by SCI in FY2021.

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 FY2021, 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

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Expenditures					
Salaries ³	1,263,717	1,377,990	\$1,314,119	1,555,044	1,651,033
Travel	0	473	2,292	1,004	2,773
Equipment	53,818	49,782	73,527	23,658	15,881
Commodities	4,519	8,100	14,853	12,730	76,098
Contractual Services ⁴	222,594	224,506	329,325	354,289	365,055
Telecommunications	35,106	30,364	23,473	23,863	32,643
Other ⁵	2,864	15,503	16,270	21,573	20,670
Total Expenditures	1,582,618	1,706,718	\$1,773,859	1,992,161	2,164,153
Revenue Minus Expenditures	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. Salaries are lower due to mandatory furloughs.
4. Contractual Services includes medical services provided to clinical trials patients, external consultant fees, and bond repayment.
5. Other includes indirect costs from clinical trial expenses.

Staffing (Full Time Equivalent)¹	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	4.32	4.076	4.3825	5.025	8.09
Staff ²	60.25	55	55	50	11.53
Total Staffing	64.57	59.076	59.3825	55.025	19.62

- 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, 2020 – June 30, 2021

(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 18, 2022
4.	Director	Harvey Henson
4.1	Telephone	618-453-4214
4.2	E-mail	henson@siu.edu
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 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 at SIU seeks to organize and sustain a diverse community of faculty and staff to collaboratively prepare the next generation of STEM educators, researchers and professionals and to advance STEM literacy at the local, state and national levels through interdisciplinary and integrative strategies in research, education and service.

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 our region's K-12 teachers and administrators.
3. Research and facilitate strategies of teaching aligned to the NGSS and Common Core 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>Internal Board of Advisors Lingguo Bu, Associate 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 Jessica Lynn Suda, Assistant Professor, College of Applied Sciences and Arts Valerie Rasp, Assistant Dean, College of Agricultural, Life, and Physical Sciences* *No longer at the university</p> <p>External Board of Advisors 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 Steve Gough, CEO, Little River Research Design, Carbondale, Illinois** **Deceased</p>

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 proposals and contracts	Submit 3-4 proposals and maintain \$1,000,000 in funding	Exceeded target, 5 proposals were submitted, 3 were funded, & 4 grants continued
2.	Professional conference presentations by staff and faculty	5 national presentations & 5 regional presentations	9 presentations at national conferences (including virtual presentations); 2 presentations at regional & local conferences; <i>some conferences were suspended due to pandemic</i>
3.	Publications in peer-reviewed journals by staff and faculty	2 articles	8 published articles

Measure		Target for Year	Results in Year
4.	Coordinate new and existing outreach activities	Add 2 new programs	Completed
5.	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 included approximately 125 teachers, and hand scoring the ISA involved 200 teachers
6.	Obtain physical space for the STEM Education Research Center	Submit request to Provost and Space Committee	Space Allocation Request submitted February 25, 2021; Decision tabled until reorganization is completed and new Deans hired
7.	External and Internal Advisory Boards	Replace board members and meet more frequently	Lost one member on each board; Only the 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 2021)

The STEM Education Research Center continued the partnership with the Illinois State Board of Education to develop, implement, score, and report the Illinois Science Assessment (ISA) which seeks to test science learning among 425,000 students in grades 5, 8, and 11 annually.

Three S-STEM proposals were developed by STEM faculty and submitted to the NSF in April 2021. These 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.

In March 2021 the SERC co-sponsored and hosted the 43rd annual Illinois Junior Science and Humanities Symposium for High School students to present research projects (virtually due to COVID-19) at SIU and compete for chance at nationals. This program seeks to promote STEM research among 9-12 grade students and introduce STEM career opportunities in the private and public sectors.

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 2020. <https://www.kfvs12.com/2020/10/13/great-shake-out-is-set-thursday/>

SERC activities were featured in 2 radio interviews and 1 television interview.

“The Great ShakeOut’ is set for Thursday”, KFVS-TV – October 13, 2020, <https://www.kfvs12.com/2020/10/13/great-shake-out-is-set-thursday/>

“The region’s geologic history and earthquakes”, WJPF Morning Newswatch, March 26, 2021, <https://www.wjpf.com/episode/newsradio-wjpf-interview-with-harvey-henson-march-26-2021/>

“Discussion of Southern Illinois regional history and geology top five locations”, WJPF Morning Newswatch, June 25, 2021, <https://www.wjpf.com/episode/newsradio-wjpf-interview-with-mark-motsinger-harvey-henson-june-25-2021/>

SERC faculty and students created and donated 3D-printed face shields to healthcare workers at Southern Illinois Healthcare and other programs during the pandemic.

STEM-Art 3D Designs for Math and STEM education were developed in the 3D Printing Lab by Dr. Lingguo Bu. More than 20 designs (total > 250) were released during 2021 at <https://www.thingiverse.com/lgbu/designs>

SERC faculty and students in partnership with the Scholastic Trust Singapore, LLC developed the American Math Olympiad (AMO) for students in Grades 2-11. Assessment development, review, and implementation occurred in spring and summer 2021. The AMO competition invites students from 34 countries including the U.S. and the first competition took place in Oct-Nov of 2021.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, 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 has identified a new strategic plan, **Imagine 2030** (<https://imagine2030.siu.edu/>), that 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 align very well 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 2021 the SERC provided financial support and work experiences in STEM research, service, outreach, and education for 8 undergraduate and 5 graduate students directly within the Center. Faculty and staff collaborated to obtain external grants (see Objective 1. in section 11.4) that provided undergraduate student scholarships and support through research and professional development projects funded through the NSF S-STEM program. SERC colleagues continued to seek other external funding for additional 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 among the most disadvantaged of students. This support from SERC programs and projects increased recruitment, retention, graduation, and career success of STEM students.

Research and Innovation: During FY 2021, the SERC continued obtaining significant external funding for STEM education research. The SERC successfully invested these grant funds and the indirect cost recovery funds to cover the operational costs for the Center, to advance the research mission, and to conduct service at SIU, among our schools, and with other partners. Indirect cost recovery from these grants and contracts was 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 Faculty Associates or perhaps a Faculty Fellowship program for faculty professional development to enable faculty release time to improve 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 citizens. Therefore, it is essential that our collaboration is diverse, equitable and inclusive. SERC intentionally seeks to recruit diverse talent and to especially include individuals from

underserved groups. Our staff 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 collaborated with and supported faculty members on grant applications and promoted interdisciplinary research projects targeting underrepresented groups, which are also a high priority for obtaining funding from state and federal agencies. The SERC faculty and staff were PI or Co-PI on multiple grant proposals, several of which were funded (see section 11.4). The SERC continued to serve as a partner for STEM faculty seeking proposal funding from the NSF, and thereby increased competitiveness of proposals submitted by STEM and other faculty. SERC presented and published research in collaboration with faculty, staff and students, and the Center connected faculty with local education agencies, youth organizations, community partners and the general public for opportunities of broad community engagement.

Branding and Partnerships: The SERC continued to seek new and develop 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, and now internationally to increase student recruitment and success at SIU and to provide support for the Center 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. This SERC partnership with STS is providing STEM competitions in the U.S. and in 35 countries around the globe to increase student learning and engagement in STEM. Mr. Ong and STS granted \$110,000 to the Center to start the program and made a substantial donation to SIU in support of the new international scholars program. Through this new partnership SIU is being promoted to students, parents, teachers, and leaders globally, and revenue generated from this new partnership is supporting new scholarships for international and domestic students to enroll at SIU beginning Fall 2022. (Note: *SERC faculty and staff partnered with Singapore to conduct the first American Mathematics Olympiad (AMO) in Oct-Nov 2021 which had 20,000 global competitors in grades 2-11. Approximately 1,100 students in Illinois participated in the AMO.*)

The SERC continues to serve as an outreach provider to PreK-12 schools and a partner to teachers and administrators. 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. 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 2021.

The SERC expects to expand the educational loaner program and increase the educational materials currently available through the Educational Resource Area. However, SERC will need adequate space and facilities to accomplish this.

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.

Support for IBHE State Goals

- 1. Increase Educational Attainment to Match Best-performing States.** 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, and on the SIU campus collaborations with STEM faculty and staff are highly productive. Additionally, SERC has created other regional, state, national, and international projects and 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 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 5th, 8th, and 11th grade student. The SIU SERC has been the principal partner of the ISBE to accomplish this task with support through a large multi-year contract since March 2017. This partnership has fulfilled the student assessment goals and provided students, educators, the ISBE, and feds with results and a large scale assessment aligned to the Illinois Learning Standards for Science based upon the Next Generation Science Standards (NGSS). Another program, *Pathways to STEM Leadership*, created by PI DeRuntz and Co-PI Henson continued building STEM leaders in FY 2021. This scholarship program is funded by the NSF S-STEM program and has a 100% graduation rate and a 94% STEM career placement record.

- 2. Ensure College Affordability for Students, Families and Taxpayers.** The SERC understands the tremendous financial need students, parents, teachers, and administrators face to be successful and to be able to participate, especially among first-generation and underserved populations. SERC is demonstratively committed to creating partnerships and programs which provide scholarships, co-curricular experiences, internships, graduate assistantships, student worker wages, teacher fellowships, independent contractor work, and tuition waivers through external grant and contract awards and through regional community partners. The SERC interim director 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 and waivers, employment, and academic program improvements across the region and the state.
- 3. Increase the Number of High-Quality Postsecondary Credentials to Meet the Demands of the Economy and an Increasingly Global Society.** The SERC continued supporting 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 collaboration expanded to include 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 opportunities to foster a more qualified workforce of STEM educators and professionals in Illinois and beyond.

4. Better Integrate Illinois' Educational, Research, and Innovation Assets to Meet Economic Needs of the State and Its Regions. The SERC continued developing partnerships to promote student success in STEM and submitted research proposals to increase funding for new research and discoveries which stimulate and strengthen local, region and state economies. This revenue was obtained by STEM faculty and staff at SIU who are 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. Again in FY 2021, 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 to conduct large-scale science assessment scoring and development.

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 used 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. Five graduate students and 8 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.

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 6 grant proposals submitted in FY 2021, and three of these proposals were funded for a total of \$127,110. Four previous funded grants totaling \$13,800,816 continued during FY 2021 as noted below.

Grant Proposals Submitted and Not Funded During FY 2021

1. *“Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists”*
PI: Ruopu Li Co-PIs: Harvey Henson, Leslie Durham, Justin Schoof & Dee Rotolo
Agency: NSF S-STEM Dates: 1/01/22 - 12/31/26 (\$1,440,269)
2. *“Pathways to STEM Leadership - Track 3”*
PI: Bruce DeRuntz Co-PIs: Harvey Henson, Brian Chapman, Dee Rotolo & John Frost
Agency: NSF S-STEM Dates: 10/01/20 - 9/30/25 (\$4,999,887)
3. *“Converging Earth Science and Sustainability Education and Experience to Prepare Next-Generation Geoscientists”*
PI: Ruopu Li Co-PIs: Harvey Henson, Leslie Durham, Justin Schoof & Dee Rotolo
Agency: NSF S-STEM Dates: 1/01/21 - 12/31/25 (\$999,994)

Grant Proposals Submitted and Funded During FY 2021

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. *“Scholastic Olympiad Initiative - STS and SERC Partnership”*
PI: Harvey Henson Co-PIs: Lingguo Bu & Andrew Carver
Agency: Scholastic Trust of Singapore Dates: 03/25/21 - 06/30/22 (\$110,000)
3. *“Illinois Junior Science and Humanities Symposium”*
PI: Harvey Henson Co-PIs: Duane Lickteig & Angela Box
Agency: National Science Teaching Association Dates: 10/01/20 - 07/30/21 (\$3,000)

Grant Proposals (Funded) Continuing During FY 2021

1. *“Noninvasive Ground Penetrating Radar Investigation of Crayfish Subsurface Habitations”* PI: Harvey Henson Co-PI: Zachariah Seaman
Agency: American Geophysical Union (AGU) and GSSI Dates: 05/19/19 - 12/31/20 (\$2,000)
2. *“Illinois Science Assessment Partnership – Item Development & Scoring”*
PI: Harvey Henson
Agency: Illinois State Board of Education Dates: 02/15/18 - 06/30/22 (\$12,798,822)
3. *“Pathways to STEM Leadership Careers”*
PI: Bruce DeRuntz Co-PIs: Harvey Henson, Terri Harfst & Laurie Bell
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 grants generated indirect cost recovery funds for the university and the SERC. These funds were used 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 IJSHS program is a tri-service – U.S. Army, Navy, and Air Force – sponsored STEM competition coordinated through the National Science Teachers Association to promote original STEM research and experimentation at the high school level and to publicly recognize students for outstanding achievement. The SERC also assisted with recruitment, organization, and judging for the symposium.

The NSF-funded *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 and collaborative program includes STEM faculty 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 to work in the center and funds are provided to support and sponsor student leadership team projects. A multiyear, collaborative NSF proposal with lead PI Dr. Bruce DeRuntz to research implementation of a new leadership development curriculum was developed and submitted to NSF in FY 2021. 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 and plans to present a SERC recognition award to entries that exemplify STEM innovation or creativity to encourage student interest in STEM advancement and industry. The SERC staff also participated in *Expanding Your Horizons* conference, which provides hands-on enrichment for girls in grades five through nine.

Faculty associated with the SERC were supported through significant 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 *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 partnership with the Illinois State Board of Education (ISBE) to develop the ISA collaboration, which expanded in FY 2021 to include more assessment item development. Pre-service teachers and graduate students were involved in project planning and development and had exposure to a network of nearly 400 teacher partners and leaders in at the State Board of Education in this unique state-wide collaboration.

Objective 2. *Provide professional development, curriculum development, workshops and*

support for our region's PreK-12 teachers and administrators.

Again this year approximately 100 teachers from across Illinois joined nearly 300 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 seize an opportunity to shape the assessment process. Professional development occurred for the teachers as they must apply processes to ensure that sound measurement and psychometric practices are followed in the development of test items. They learned about acceptable rates of item difficulty and item discrimination. Item developers learned characteristics of good items as part of important professional development on the NGSS content standards provided teachers during the ISA partnership. Workshops on ISA item development were hosted by the SERC, ISBE and the National Science Teaching Association (NSTA). Future workshops and meetings were scheduled to fulfill the ISA blueprint.

The SERC partnered with the *Illinois Math and Science Academy (IMSA)* to provide workshop space and logistics for the *IMSA Fusion* program to expand their outreach south of Interstate 64. Through the efforts of the SERC, partnering locations included the Crab Orchard National Wild Life Welcome and Education Center, a SIU Geology classroom, John A. Logan Community College Biology classroom, and ROE office in Mount Vernon, IL. The *IMSA Fusion* program is a teacher professional development and student STEM enrichment program for Illinois students who are talented, interested and motivated in mathematics and science. By design, the *IMSA Fusion* curriculum is inquiry based, problem centered and integrative. Teachers from each participating school were supported with professional development for the delivery of the curriculum and use of appropriate pedagogy.

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 as members of the *Science in the South* steering committee to organize and host the conference on the SIU campus in January. Unfortunately the event was canceled due to the pandemic. Planning for next year is underway.

Objective 3. *Research and facilitate strategies of teaching aligned to the NGSS and Common Core for improved student and public literacy.*

The SERC created or partnered in multiple grant-funded projects that guided teachers in developing an understanding of the Next Generation Science Standards (NGSS) and Common Core 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* which served to improve teacher understanding of NGSS content (principally content that appeared on the ISA). In particular, the staff modeled the Scientific Explanation Framework model and relevant disciplinary core ideas.

During FY 2021 several SERC graduate students partnered with SERC faculty and affiliates to publish research article in the highly reputed journal, 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 grad 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 Association of Teacher Educators and NASA Joint Commission on *STEM Education in the Future* completed its work in 2020. Interim Director Dr. Harvey Henson served on the commission for 3 years. 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. Henson has been working with two Commission colleagues, John McConnell and Philip Short, to produce a new book which will include outcomes of the Commission on best practices, research, advocacy and policy, professional development, educator preparation, and related topics in STEM education.

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 2021. 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 conducted several radio and television interviews and conducted other outreach discussing the earthquake threat. An informational kiosk was created this year for the Arkansas Division of Emergency Management to assist those officials in educating the public in their state about the earthquake threat to the Midwest. Additional portable kiosks are planned for the use in Illinois, Indiana, and other states.

As discussed previously (and later in 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) was recruited to be a SERC partner 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.

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) 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, our teacher partners, and ensure standards alignment. The ISA project created a support network for teachers to access STEM resources and receive professional development related to assessment. By working with the SERC on the ISA and other projects teachers gained confidence and buy-in of the assessment and standards process, and they learned about services and resources available in the center as they were engaged by SERC faculty and staff.

The ISA is mostly an online assessment and a few test questions provide the opportunity for students to create written answers to extended response questions. The ISA represents the first time extended response test items were used in an Illinois-developed science assessment. As part of the SIU and ISBE partnership, SERC staff recruited, managed, and evaluated the hand-scoring process of the ISA which included constructed responses from 5th, 8th and 11th grade students in Illinois public schools. The SERC staff coordinated recruitment, qualification and training of STEM educators to hand score the constructed response items. Recruitment began with an email campaign to teachers, schools, regional offices of education (ROE) who were previous partners on other projects and professional development workshops hosted by SIU STEM faculty. Further 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 process are now aligning their instruction to the NGSS. The hope 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 improved 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 led several initiatives to foster collaborations to support student success. Last year the SERC partnered with the Office of Vice Chancellor of Research and the Office of Sponsored Projects Administration to provide workshops for faculty interested in NSF S-STEM. 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 in April 2020. Although none of the proposals were selected for funding, the faculty teams were encouraged and supported to revise and resubmit their proposals. Three of the teams did so and will soon learn whether the NSF will approve. Based upon this success, other grant proposal preparation workshops are being considered, and SERC will offer support throughout the grant application process.

SERC staff and graduates students initiated 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. Between October 2020 and June 30, 2021, the SERC team hosted nine online Saluki Teen Science Cafes. Teen Science Café organizers included one SERC faculty member, a Geology Master's graduate student, and a Curriculum and Instruction, PhD student. Teens were informed of the meetings via email distributed through school administrators, teachers, Facebook, and word of mouth. The meetings averaged 10 attendees from area schools including Carbondale, Mount Vernon, Herrin and Pinckneyville high schools. Café presenters included mostly SIUC faculty, but also a Rend Lake associate professor.

The SERC partnered with STEM and education faculty to help improve educational attainment for students. For example 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 more than 20 designs (of a total > 250) in FY 2021 (see <https://www.thingiverse.com/lgbu/designs>).

Through these partnerships the center continued to assist and improve academic preparation and increase motivation in STEM so that Illinois students successfully prepare for STEM careers. One such program, *Pathways to STEM Leadership*, created by PI DeRuntz and Co-PI Henson is funded by the NSF S-STEM. DeRuntz started this remarkable leadership development program (LDP) in 2007 with a few engineering majors, and with NSF funding DeRuntz and Henson expanded the program to all STEM majors. The LDP continues to build and graduate STEM leaders with a 96% graduation rate and a 94% STEM career placement record. Program

outcomes, findings, and experiences were shared with other faculty and presented as papers and posters at national conferences in Engineering and STEM education during FY 2021.

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.

The SERC has been successful in obtaining a wide range of grants to support its activities (see section 11.4). As discussed previously, these grants 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; and SERC faculty and staff served on thesis and dissertation committees. The SERC also provided student mentoring to students, and registered student organizations including the STEM Education Ambassadors, Education Living and Learning Community, Saluki Science Ambassadors, Science Living and Learning Community, and Leadership Development Program.

In FY 2021 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 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 as a mainstay for 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 visiting schools, assembling outreach materials, and coordinating volunteers. SERC seeks to enable sharing of resources, such as 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 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 our goals (section 9.3 Objectives) 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 previous sections (11.2, 11.3, and 11.4)

Grant Applications & Research

STEM Center revenue through grants and contracts decreased in FY 2021 and combined with continuing grants totaled \$1,543,783. We exceeded our target for grant proposal submissions. Center faculty and staff served as principal investigator (PI) or Co-PI on 6 grant proposals submitted in FY 2021, and three of these proposals were funded for a total of \$127,110. Previously funded grants totaling \$13,800,816 continued during FY 2021.

Research was conducted as part of external grant funding and disseminated broadly to other scholars and practitioners. Dissemination and sharing of research and teaching outcomes at conferences and professional meeting is essential and expected among SERC colleagues, staff, and students. The SERC continued to support faculty and students to accomplish this widely. The number of peer-reviewed presentations, peer-reviewed publications and invited presentations produced during the last several fiscal years by faculty and staff directly supported in the SERC with the combined FTE are listed in the table below. Dissemination activity of collaborative faculty and staff who are not supported by the SERC, or who are supported as personnel or by contract 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 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

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.

RESOURCES: STEM Education Research Center

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017	FY2016
Revenues						
State Appropriations	\$0	\$0	\$0	\$0	\$0	\$0
Income Fund	\$0	\$0	\$0	\$0	\$0	\$0
Grants & Contracts (less Indirect Costs)	\$1,543,783	\$2,443,299	\$1,700,957	\$1,183,580	\$253,457	
Other Internal Salary/Startup					\$11,397	\$11,397
Indirect Cost Recovery	\$26,258	\$24,047	\$35,187	\$42,650	\$20,346	\$0
Total Revenues	\$1,570,041	\$2,467,346	\$1,736,144	\$1,226,230	\$292,561	\$11,397
Expenditures*						
Faculty & Staff Salary	\$284,302	\$308,117	\$300,311	\$242,436	\$107,810	\$11,397
GA support/Student Worker	\$116,342	\$126,682	\$122,991	\$66,956	\$58,360	\$0
Supplies, Services, Equip	\$1,029,925	\$2,020,317	\$1,304,021	\$891,207	\$99,560	\$0
Travel	\$1,640	\$18,650	\$6,500	\$9,000	\$0	\$0
Total Expenditures	\$1,432,209	\$2,473,766	\$1,733,823	\$1,209,599	\$265,730	\$11,397
SIU F&A	\$112,288	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
Revenue Minus Expenditures	\$25,544	(\$6,420)	\$2,321	\$16,631	\$19,470	\$0

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

Staffing (Full Time Equivalent)	FY 2021	FY2020	FY2019	FY2018	FY2017	FY2016
Faculty	1.25	1.25	1.25	1.25	1.25	0.25
Staff	1.5	2.5	2.5	2.0	1.0	0
Graduate Assistants	2.0	2.0	2.0	2.0	0.5	0
Student Workers	1.0	1.0	1.0	1.0	0.25	0
Total Staffing	6.25	6.75	6.75	6.25	3.0	0.25

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1,2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University Carbondale						
2.	Center/Institute	Touch of Nature Outdoor Education Center						
3.	Date	March 17, 2022						
4.	Director	Thomas Brummer						
4.1	Telephone	618-453-3941						
4.2	E-mail	tombrummer@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="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;">Instructional</td> <td style="border: 1px solid black; text-align: center; width: 40px;">X</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Research</td> <td style="border: 1px solid black; text-align: center;">X</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">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	7800
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)

Completed construction on Phase 1 of a multi-use trail system and held grand opening. Phase 1 build included a 33-car parking lot, a Kid's Bike Terrain Park, and 10 miles of single-track trail. Started Phase 2 with flagging the next 10 miles of trail and completing botany survey. Overall project will include 30+ miles of trail and the addition of an outdoor Event Center space and an Adult Terrain Park.

Completed phase 1 of forest management plan (in partnership with SIU Forestry). Phase 1 includes the removal of invasive species in main camp and trail areas. Over \$100,000 in grants, cash donations, and in-kind support were given for this phase.

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

- Received a \$25,000 grant to build an adaptive boat dock for individuals with disabilities to improve community health & wellness and to increase inclusivity to the patrons from the Southern Illinois and the surrounding states.
- Received a \$500,000 grant to build an event center that will provide an outdoor venue to promote health & wellness and increase tourism to Southern Illinois.

11.4 Evidence of Support for Center/Institute Objectives

- Dawg Days donations - receive over \$20,000 per year from departments on the main campus to support the Dawg Days New Student Program
- Multi-use Trail project – this project has received over \$360,000 in grants and donations to date
- SIU Credit Union – Donates \$15,000 per year to support SIU student focused programs at the Center
- River Radio – Donates over \$43,000 per year in radio advertising to the Center to support all Community Programs and Camp Little Giant

- Donors/volunteers – The Center receives 1000s of volunteer hours per year to support Forest Management projects, trail building, program support, a community event support

11.5 Evidence of Organizational Effectiveness

With the successful implementation of the 2 split positions (see * below), the School of Human Sciences and Touch of Nature are working toward creating 2 additional split positions.

- * NEW position - 75% Assistant Director of Outdoor Recreation and Education / 25 % Assistant Lecturer in Recreation Professions position was approved and hired
The Recreation Therapy Specialist retired and was replaced with a 75% Recreation Therapy Specialist / 25% Assistant Lecturer in Recreation Professions position

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"/> <u> </u> Center/Institute in Good Standing <input type="checkbox"/> <u> </u> Center/Institute Flagged for Priority Review <input type="checkbox"/> <u> </u> Center/Institute Suspended	
12.3	Explanation	NA	

RESOURCES: Touch of Nature Outdoor Education Center

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

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

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

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

(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 14, 2022
4.	Director	Fred Martino
4.1	Telephone	618-453-6181
4.2	E-mail	fred.martino@wsiu.org
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	200
4. Indie Lens Pop Up Attendees	200	250
5. Individual Outreach contacts	1,000	1,811

* 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 WSIU Radio and Television stations continued to provide important daily news and public safety programming without interruption for our broadcast audiences and web channels throughout the fiscal year as the COVID-19 pandemic entered its second year. Our coverage included hundreds of local radio news stories and in-depth television features, interviews, and web content. The WSIU Television stations launched the monthly InFocus video series to provide our viewers information on how the pandemic was affecting the lives of our audiences in central, western, southern, and southeastern Illinois. Episodes included interviews with Illinois Governor J.B. Pritzker, Illinois Department of Public Health Director Dr. Ngozi Ezike, and numerous other public health officials, community leaders, and University experts on the subject throughout the fiscal year. Infocus also covered the impact of the pandemic on the arts, education, and social services throughout our service areas. WSIU Radio continued its live coverage and web streaming of the Illinois Governor's daily news conferences concerning the pandemic. The expanded coverage was implemented despite a variety of stay-at-home orders that required most of the WSIU staff to work remotely or in highly restricted conditions to ensure health and safety. This included implementation of remote interviewing technology such as Zoom on radio, television, and the web including our television station's weekly Capitol View series on state government and politics. Zoom technology was also utilized to produce our statewide Illinois Lawmakers series during the spring and fall veto sessions of the Illinois General Assembly that were distributed to Illinois PBS and NPR member stations statewide. There were major improvements to the television stations' technical facilities during the fiscal year that included a new digital television transmitter and construction of a 900-foot transmission tower for WSEC-TV near Jacksonville, IL as part of the Federal Communications Commission's spectrum auction as well as new fiber-optic interconnections for the WSIU-TV stations. WSIU-TV also secured private and corporate funding to license and install a television translator facility near Cape Girardeau, Missouri that greatly improved over the air coverage to underserved areas of southeast Missouri and southern Illinois.

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

Student Success: WSIU Radio and Television offered students experiential learning opportunities in all aspects of the media industry. WSIU worked with over 77 university and community volunteers who contributed over 2,000 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.

11.4 Evidence of Support for Center/Institute Objectives

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 radio news casts, full-length audio programming and national distribution, digital and social media productions, full-length television productions including: River Region Evening Edition, Saluki Sportview, Scholastic Hi-Q, alt.news 26:46, the Lincoln Academy’s hour-long PBS special, the Illinois Lawmakers series, and Capitol View. WSIU Radio, in cooperation with the SIU University Press, and students in the SIU Creative Writing program geared up to launch the weekly Blanket Fort Radio podcast that serialized readings of University Press books beginning with “A Knight of Another Sort, the Legend of Charlie Birger”. 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. Although studio-based television programs were mostly suspended in March 2020 due to COVID, WSIU pursued new ways of creating virtual versions of our regular programming like Capitol View 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, Illinois Stories, and Capitol View series; facilitated educational opportunities for children at local libraries; created investigative partnerships with local journalists.

WSIU-TV provided production support for the SIU Foundation’s annual Day of Giving in March, 2021 web streaming event that raised over \$2.8-million dollars 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 36% of the full-time staff it operated with 20 years ago (down from 50 to 32). WSIU generates \$2.8 million in outside grant funding and more than \$1.3 million in local community support to compliment \$690,292 in University operating cash support.

12. Institutional Assessment

12.1 Date of Last Review 2013-2014

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: WSIU Public Broadcasting

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	690,292	764,306	827,203	836,348	888,010
Operating Grant – CPB	2,534,849	3,118,965	2,539,961	1,137,167	1,177,136
Operating Grant – State of IL	254,045	245,705	171,010	164,710	0
Project Grants	159,943	43,355	52,329	21,569	20,149
Membership Income	878,336	875,819	823,292	442,140	478,761
Underwriting Income	429,774	422,404	390,542	432,628	501,616
Production Income	3,429	5,408	42,379	39,142	32,993
Tower Income	62,267	115,260	95,810	59,206	59,206
Royalties (EBS, PBS)	103,502	0	0	0	0
Federal Work Study	7,892	10,932	18,161	26,423	33,441
Direct University Support	313,521	436,399	450,333	441,662	511,571
Indirect/In-Kind SIU Support	1,136,524	1,040,528	1,008,996	995,377	968,697
Other Indirect Support	13,901	39,996	49,716	40,401	43,162
Building & Equip SIU Support	0	0	41,747	0	45,401
Investment Income	33,761	1,999	4,952	7,770	12,848
State Benefit Payments	1,789,142	685,074	708,015	1,511,307	1,615,649
Miscellaneous Income	0	0	2,701	3,616	4,368
FCC Repack Funding	205,769	1,961,710	10,957	0	0
Total Revenues	8,616,947	9,767,860	7,238,104	6,159,466	6,393,008
Expenditures*					
Programming & Production	3,779,875	3,247,965	2,957,047	3,043,989	3,288,246
Broadcasting & Engineering	2,131,353	1,998,224	1,638,450	1,198,769	1,138,840
Program Info & Promotion	174,093	206,545	403,992	317,718	362,766
Fundraising & Membership	522,980	548,936	314,786	337,165	350,559
Underwriting & Grant	609,248	381,188	144,420	150,313	258,359
Management & General	1,098,556	1,053,794	1,015,643	1,079,059	1,048,571
Loss-Disposal of Equipment	257,937	0	0	0	0
Total Expenditures	8,574,042	7,436,652	6,474,338	6,127,013	6,447,341
Revenue Minus Expenditures	42,905	2,331,208	763,766	32,453	(54,333)

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty-Full Time	1.40	1.40	1.50	1.50	1.50
Staff-Full Time	32.03	25.60	22.00	22.00	26.00
Student Employees-FTE	8.88	14.69	15.71	11.33	13.96
Total Staffing-FTE	42.31	41.69	39.21	34.83	41.46
Student Employees Number/Yr	29	40	56	55	76

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1,2020 – June 30, 2021

(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	March 11, 2022
4.	Director	Carolyn Butts-Wilmsmeyer
4.1	Telephone	618-650-2682
4.2	E-mail	cbuttsw@siue.edu
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. Submit peer-reviewed articles for publication	2	4
3. Establishment of Faculty Fellows Program	1	1
4. Assist SIUE Office of Enrollment Management with student retention and student success projects, including presentation of results to campus.	1 initiated & 1 completed	4 completed
5. Creation of Data Science Interns (DSI) program so that students have a mechanism for receiving transcriptable credit for their learning experiences.	1	1
6. Train students in data science through experiential learning opportunities.	1 grad, 3 undergrad	2 grad, 8 undergrad
7. Promote the ethical use of data science within the SIUE Campus community through workshops, seminars, etc.	3 workshops 45 participants	5 workshops 229 participants

Measure		Target for Year	Results in Year
8.	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
9.	Disseminate Center for Predictive Analytics activities through press releases.	3	3
10.	Presentation at conferences.	2	9
11.	Assistance with other campus-wide data efforts	1	2 Automated cleaning of COVID-19 database Creation of COVID Dashboard

* 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 FY21 in three areas: pursuit of external research, training of students through experiential learning, and service to the SIUE campus community through data analysis and reporting. Looking first at the pursuit of external funding, C-PAN addressed this goal in three ways. First, the Center submitted grant proposals and contracts in which Center personnel were listed as either PI or Co-PI. These submissions totaled \$2,045,682 in submissions and \$615,830 in awards, with a 75% success rate by proposal count. The largest among these awards was a USDA Education and Workforce Development grant entitled *Crossing the Digital Divide: Creating a Data-Savvy Workforce with Open-Source Data Training Resources and Novel Industrial Credentialing Programs*. The purpose of this program is to make training in data science and geospatial analysis/GIS more readily available to all, thereby supporting the growing need for these professionals in these areas. Thus, in addition to providing a source of funds for grant activity, many of the external funds awarded to C-PAN also have an experiential learning component associated with them.

The other two ways in which C-PAN was able to enable the pursuit of external funding by SIUE were related to enabling other faculty, rather than pursuing the funds by the Center directly. Starting in FY21, C-PAN hosted nearly monthly workshops during the academic year that focused on helping faculty learn how to analyze their own data. These workshops were open to all faculty and graduate students at SIUE. In FY21, 229 people participated in these workshops. The second resource C-PAN made available to support scholarly activities and external projects at SIUE was to expand its human capital resources. Starting in FY21, C-PAN awarded three faculty fellow positions. These fellows not only worked on their own research in data science, but they also are available for questions from faculty around campus.

In the area of student training, C-PAN worked with SIUE's Career Development Center to create the Data Science Interns (DSI) program in FY21. This 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. Through this experience, students learn not just technical skills, but also soft-skills such as teamwork, time management, and project management and deliverables. This is in addition to the Experiential Learning In Applied Statistics (ELIAS) fellowship program, which provides students with concurrent training in the life sciences and applied statistics/introductory data science. These students 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. Students are also provided with career advice. During FY21, the program boasted a 100% placement rate among student fellows.

C-PAN was also directly involved in large, campuswide data projects in FY21. These projects can generally be classified into one of two categories: COVID-19 response, and diversity, equity, and inclusion (DEI) analysis. The COVID-19 work undertaken by the Center included cleaning all case data reported to SIUE, parsing that data to make it amenable to further calculation, automating the tabulation of case rates, and constructing a dashboard for the real-time and transparent reporting of the COVID-19 response. Although this work has continued into FY22 and there have been additional updates to the dashboard that will be reported next year, the current dashboard can be found at <https://www.siu.edu/about/announcements/coronavirus/reporting-confirmed-cases/>.

The DEI analyses in which C-PAN was involved focused on student support and if the university could identify which support mechanisms were most important to students in historically underprivileged groups. The analysis started first with Black/African American male students, who have a noticeably lesser one-year retention rate than their peers. This first analysis only considered economic and academic factors among this particular student population. The second analysis then built off of this preliminary analysis by examining whether student mentorship programs (i.e. GAME and SOAR) might be impacting student retention. A third analysis was then created to examine how GAME and SOAR might be exhibiting differential impacts by GPA group, as opposed to examining all factors simultaneously. Lastly, a fifth analysis was conducted that analyzed the importance of the identified factors not just for Black/African American males, but for females as well. The results of this work were shared at the 2021 Diversity Summit.

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 two years of operation (FY20 and FY21), C-PAN has successfully obtained \$1,864,359 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. 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 FY21, we partnered with 11 departments/units at SIUE, as well as multiple external partners, for submission of \$2,045,682 in external proposals and contracts. This does not include collaborations in which C-PAN served as key personnel on proposals.

Program Area/Sponsor	Partnering Units/Institutions	Amount
Berkeley Research Group	SIUE Department of Economics and Finance	\$9,560
Illinois Department of Public Health	SIUE School of Pharmacy	\$60,000
USDA-NIFA, Education and Workforce Development	SIUE GeoMARC, Office of Online and Educational Outreach; Illinois State University Department of Agriculture; Heartland Community College; Parkland Community College; Madison County and St. Clair County Workforce Partners	\$500,000
Applied Analysis Solutions, LLC	NA	\$5,000
Illinois Innovation Network	SIUE School of Engineering	\$30,000
NSF Data Science Corps	SIUE GeoMARC, Office of Online Services and Educational Outreach; the St. Louis Regional Data Alliance; University of Missouri-St. Louis.	\$1,335,787
Illinois REALTORS Association	SIUE Department of Public Administration and Policy Analysis, Department of Economics and Finance	\$11,270
Michael J. Fox Foundation	SIUE School of Pharmacy	\$94,065
External Total		\$2,045,682

Broad Objective 2: Create Infrastructure and Access to Expertise
 Following the establishment of the Center and formal recognition by the IBHE in FY20, the next infrastructural phase of the Center was to expand operational capacity, beginning in FY21. The first of these steps in FY21 was the creation of the faculty fellows program. This program supported three faculty in FY21, who not only conducted research in their area of expertise with access to C-PAN computational resources, but also were available to assist other faculty with their data analysis questions. Additionally, five data science workshops and five data science courses were developed to help support continued learning in data analytics and data science. Likewise, due to the infrastructure and access to expertise that we had created in the prior fiscal year, C-PAN was also able to construct a real-time dashboard that reported current COVID-19 metrics and helped SIUE remain transparent about the status of the pandemic on its campus.

Broad Objective 3: Student Retention and Success

In FY21, C-PAN worked with ESRA to aggregate, format, mine, and model data pertaining to one-year student retention rates among historically underprivileged students and determine which support measures are helping students the most. Our initial goal was to initiate and complete one project related to one-year retention among Black/African-American males. However, as the project progressed, additional questions quickly became evident. The final analyses included not just financial and academic metrics, which have historically been used in basic models, but also which mentorship and “sense of belonging” support systems are also most important for not just Black/African-American males, but also Black/African American females. These analyses also identified the critical intervention points for both of these student groups.

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

In addition to the four ELIAS undergraduate fellows, the Center hired 2 graduate students and 8 undergraduate students as part of its Data Science Interns (DSI) program in FY21. These students gained experience working with real-world datasets and in generating reports for collaborators which helped 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.

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 measures. Given that FY21 was only the second year of operation for C-PAN, our metrics have shifted from the establishment of physical infrastructure (year 1, FY20) to operational infrastructure, with some metrics measuring 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

Revenue collected through grants and contracts with C-PAN either as a primary unit or a collaborating unit totaled \$615,830 in FY21, with additional funds being secured in FY21 for initial funding in FY22. Below is a list of C-PAN presentations and publications in FY21.

Year	# Scholarly Publications	# Scholarly Presentations	FTE Research Faculty
FY21	4	12 (9 professional and 3 public)	1.25

12. Institutional Assessment

12.1	Date of Last Review	NA – Center Established in FY20	<hr/>
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	Center established in FY20. Has not yet undergone formal review.	<hr/>

RESOURCES: Center for Predictive Analytics (CPAN)

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	125,000	154,168	0	0	0
Income Fund	0	0	0	0	0
Grants & Contracts	86,069.31†	26,500	0	0	0
Salary Transfer	2,400	0	0	0	0
Non-Recurring Funds	0	0	0	0	0
ICR	11,944.15	0 Transferred in FY21	0	0	0
Total Revenues	225,413.46	180,668	0	0	0
Expenditures*					
Salaries	127,695.79	105,953.31	0	0	0
Student Wages	728.00	0	0	0	0
Travel	0	0	0	0	0
Equipment	1,561.28	28,275.07	0	0	0
Commodities	706.38	954.88	0	0	0
Contractual Services	39,808.75	0	0	0	0
Awards	29,000	0	0	0	0
Scholarships	0	0	0	0	0
Telecommunications	0	275.00	0	0	0
F&A	9,655.00	3,975.00	0	0	0
Benefits	943.72	4,725.93	0	0	0
Participant Support	410.00	0	0	0	0
Non-Mandatory Transfers	0	23,000	0	0	0
Total Expenditures	210,508.92	167,159.19	0	0	0
Revenue Minus Expenditures	14,904.54	11,186.81	0	0	0

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

†Represents grant funds budgeted for FY21. The total figure of \$615,830 includes funds as part of multi-year awards.

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty	1.25	1	0	0	0
Staff	0.1	0	0	0	0
Graduate Students	0.5	0.25	0	0	0
Total Staffing	1.85	1.25	0	0	0

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

(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 21, 2022						
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	<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 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 2021

Internal Advisory Group:

Connie Barber, Assistant Professor, Computer Management and Information Systems
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, SEHBB
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 Szpali, Science Teacher, Collinsville High School

10.2 Number of Meetings (In This Year) None due to pandemic

11. Annual Performance

11.1 Performance Measures¹

Measure	Target for Year	Results in Year
1. Develop grant proposals as PI and/or collaborator with SIUE departments or external partner (see Section 11.4)	6	11
2. Submit peer-reviewed articles for publication	4	6
3. Present findings at conferences	20	25
4. Issue RFP and award Faculty Fellow(s) in undergraduate education	1	1 (continuation)
5. Promote use of lending library	790 direct impact	1392 direct impact ²
6. Offer educator professional development	5 sessions	2 sessions
7. Develop new contracts with relevant partners	2 contracts	1 contract
8. Coordinate STEM community outreach activities	25 outreach events	27 virtual activities 10 in person events
9. Provide teaching expertise to SIUE units	6 credit hours	19 credit hours
10. Disseminate STEM Center activities and achievements through press releases	15	14

¹ Center/institute-defined measures and targets. Depending on the particular center/institute, these may include intellectual contributions (such as publications), grants, public service activities.

² Previous semesters have focused on visitors to the STEM Resource Center and through outreach programming. For this fiscal year we aggregated visitors to our online videos, social media posts, and virtual programming.

11.2 Major Accomplishments (In This Year)

ACTIVE GRANTS

Illinois State Assessment (funded by Illinois State Board of Education)
 STEM Center and SIUE faculty continued its partnership with the Southern Illinois University Carbondale STEM Center to hold a series of professional development opportunities to support Illinois science teachers as they develop assessment items for the state-level Illinois Science Assessment (ISA) test. The partnership brings together SIUE and SIUC faculty with expertise in STEM and STEM education with southern Illinois K-12 teachers. The second year of implementation resulted in several items that appeared on the 2021 ISA and will appear on the 2022 ISA. This partnership also resulted in a research collaboration with the team examining how this novel form of teacher professional development supports a greater understanding of the Next

Generation Science Standards (NGSS) and means of assessing the NGSS among Illinois teachers. The team presented their research results at the 2021 American Educational Research Association.

Environmental Health Investigators (funded by National Institute of General Medical Sciences)

In cooperation with Madison County middle and high schools, STEM staff implemented the Environmental Health Investigators program as part of the \$1.3 million NIH-funded Science Education Partnership Award project (SEPA). The program occurred remotely using lessons that were developed by the STEM Center for underrepresented students in STEM fields to gain experience with environmental health topics. STEM Center staff also developed and implemented a citizen-science curriculum through an NSF-funded project in the Youth Led Citizen Science program (Y-CITYSCI).

STEM Center staff also completed professional development for 15 middle school teachers as part of the SEPA program in July 2020. The project team held a two-day remote workshop for a nation-wide group of middle school teachers on how to implement the PhotoVoice and environmental health science curriculum which was developed as part of the project. This training was repeated in person for 16 middle school teachers in June 2021.

The STEM Center, in collaboration with the SIUE Departments of Environmental Sciences and Public Health, continues to implement student programming that connects area youth with exposure sciences. Through the Y-CITYSCI and Environmental Health Investigators programs, funded by the National Science Foundation and National Institutes of Health respectively, STEM Center faculty and staff developed innovative, virtual programming that helped youth explore technologies and concepts that supports a greater understanding of their environments. With this programming, STEM Center faculty and staff also developed middle school curriculum that we then shared with area science teachers in a series of teacher professional development sessions. Participating teachers received copies of this curriculum, as well as PurpleAir monitors. STEM Center graduate students have helped install the PurpleAir monitors given to the teachers at schools throughout the Metro East. These monitors collect real-time air quality data that teachers can then use in their classrooms. Feedback from the teachers suggest that they are using these PurpleAir monitors to engage their students in exposure sciences, as well as developing new curriculum based on the data collected by the PurpleAir monitors

STEM Center graduate students who support the Y-CITYSCI and Environmental Health Investigators programming presented results of their thesis research at the Illinois State Academy of Science annual meeting, with the STEM Center graduate students, faculty, and staff presenting three posters at this event. STEM Center graduate student, Josh Gifford, received first place in the student poster presentation competition in environmental sciences for his research poster.

STEM+C (funded by National Science Foundation)

The STEM Center implemented the final student programming associated with a National Science Foundation-funded STEM+C award in partnership with the East. St. Louis Christian Activity Center, the iBIO Institute EDUCATE Center, and SIUE's Department of Computer Science. While programming had been planned to finish in the spring semester of 2020, the ongoing pandemic halted that outreach and it was restarted in the fall of 2020. The STEM Center integrated computational thinking into an established, rigorous STEM curriculum designed for elementary school youth, and we continue to refine and finalize the four units and prepare them for

dissemination. Funds from this program continued to support STEM Center Research Fellow Henriette Burns, who is leading the research on the new curriculum. Ms. Burns brings expertise as a math and science education researcher to the project, as well as a passion for supporting women and other underrepresented groups in STEM. Lesson plans were assembled and delivered by Colin Wilson, outreach specialist at the STEM Center, who also shifted these lesson plans to an online medium for the final outreach effort. The videos and online activities associated with this program are part of the STEM Center’s growing online learning resources.

STEM at Home (STEM Center Initiative)

To continue facilitating at-home learning for families in the region and beyond during the pandemic, the STEM Center maintained the STEM at Home program throughout FY21. A further 25 videos and 72 lessons were completed to create 40 total weeks of material for families and educators by the end of 2020. Starting in 2021 this collection was revised to make STEM at Home a resource that could continue into the future, with more than half (22 weeks) being re-released by the end of FY21.

Science and Engineering Research Challenge (STEM Center Initiative)

The STEM Center hosted the Science and Engineering Research Challenge in April of 2021. Our Science and Engineering Research Challenge attracts hundreds of students from throughout southwestern Illinois. Because of restrictions related to the pandemic, our challenge was once again in a virtual format. Participation was up compared to last year’s virtual event thanks to the outstanding reputation of our Challenge as being well-organized with quality judges. We remain a lifeline to the region as they deal with pandemic restrictions 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. All of these fairs were even more accessible thanks to virtual designs and the STEM Center was part of making virtual plans for the IJAS 2021 fair. The STEM Center’s plan and implementation for a virtual fair was also the basis for an article which was accepted by the NSTA Science Scope journal and set to be included in January 2022.

INVITED PRESENTATIONS

The Society for American Archaeology invited STEM Center faculty, Colaninno, to present her National Science Foundation-funded research at the 2021 annual meeting’s Presidential Session. This research investigates means of developing safer and more inclusive field learning experiences for undergraduates majoring in anthropology and pursuing careers in archaeology

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, making the process faster and safer even as health concerns continue to impact campus visits.

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 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 computational thinking (STEM+C) 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.
- (b) Anti-Racism, Diversity, Equity and Inclusion: The STEM Center staff created a lending library of books about issues in diversity, equity, and inclusion and conducted a series of internal discussions about how these important issues affect the Center's outreach efforts and role on campus. These discussions impacted community partnerships to better support communities of color. In addition, the STEM Center sponsored a speaker series of experts in diversity, equity, and inclusion open to the university community. The speakers in this series were:
- Dr. David Delaine, College of Engineering, Ohio State University
 - Dr. Mary Atwater, College of Education, University of Georgia
 - Dr. Ebony McGee, Peabody College, Vanderbilt University
- (c) 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. We partnered with numerous external organizations in FY21, including the Madison School District, Girl Scouts of Southern Illinois, Boys and Girls Clubs of Bethalto, and Watershed Nature Center. Director Locke writes a monthly column on education for the local newspaper, *The Edwardsville Intelligencer*, to raise awareness of the importance of STEM in the broader community. Locke also advised a graduate student to complete a greenhouse gas inventory for the City of Collinsville to advance the City's sustainability plan.
- (d) Research, Creative Activity and Partnership: The STEM Center is nationally recognized for the quality of its programs and Director Locke has a leadership position in the National Network of STEM Education Centers. The center consults with SIUE faculty to improve their teaching, and provides instructional support for science content courses for pre-service teachers. The STEM Center's Faculty Fellows Program enables faculty to improve undergraduate education at SIUE by testing innovative approaches to instruction, which in turn helps improve retention. Faculty Fellows in turn submit external research proposals in partnership with the center. The FY21 STEM Faculty Fellow is Dr. Kathleen Vongsathorn, Department of History, who specializes in the history of science and medicine and amplifying the voices of groups that have been historically marginalized.
- (e) Faculty and Staff: The 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. We also present and publish research in collaboration with faculty and connect faculty with opportunities for community engagement with schools, youth organizations, and the general public.

- (f) Infrastructure: The center has a high return on investment from grant funding relative to state support of center 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 and promotion of materials for loan reduces costs to academic departments.

(2) Support for IBHE State Goals

- (a) Increase Educational Attainment: The center is directly addressing the STEM workforce pipeline in Illinois by providing instructional supports to improve student outcomes at both the K-12 and undergraduate levels. We help improve academic preparation and increase motivation in STEM so that Illinois students successfully transition from high school to higher education, and into careers.
- (b) Improve College Affordability: Center programs provide scholarships, internships, and graduate assistantships through grant awards. Center Director Locke was one of the lead writers for the NSF Noyce grants, which is providing \$2.2 million in funds deposited directly into SIUE Bursar accounts for student scholarships.
- (c) Strengthen Workforce Development: The center has a strong focus on supporting evidence-based, hands-on training for future science and math teachers. Our work, in partnership with the School of Education, Health, and Human Behavior and College of Arts and Sciences, increases the number of highly qualified teachers in Illinois, with a particular focus on preparing teachers who will be successful in high-needs school districts. The GEOPATHS program is increasing undergraduates' awareness of geoscience career pathways and providing training to create a more highly skilled geoscience workforce.
- (d) Link Research and Innovation to Economic Growth: Involvement of STEM Center faculty and staff in scientific and engineering research proposals increases SIUE's competitiveness for national funding in basic and applied research that fuels new discoveries with commercialization potential. Outreach and evaluation sections written by center faculty and staff consistently receive positive reviews.

11.4 Evidence of Support for Center/Institute Objectives

Objective 1: A primary objective is to facilitate interdisciplinary grant applications. We use our experience to strengthen grant applications and pursue a range of research project types and topics. In FY21 we partnered with **eight** SIUE departments/units for submission of more than **\$3.3 million** in internal and external proposals: Applied Health, Art Therapy, Civil Engineering, Environmental Sciences, Geography, Mechanical Engineering, Mathematics & Statistics, Pharmacy.

	Internal Proposals		
	Innovations in Excellence in Graduate Education	Transforming the STEM Graduate Experience at SIUE	\$6,375
	Research Equipment and Tools	NVivo Software for Qualitative Analysis	\$16,121
	<i>Internal total</i>		<i>\$22,496</i>
	External Proposals		
	National Science Foundation (PI (subaward) Colaninno)	INCLUDES with ESA	\$250,026
	National Science Foundation (PI Bracey; co-PIs Locke, Stephen)	CS4All	\$500,000
	SIUC/Illinois State Board of Education (PI Colaninno)	Geography, Mechanical Engineering July 9, 2020	\$13,085
	National Science Foundation (Co-PIs Colaninno, Locke)	Civil Engineering, Environmental Sciences, Geography (submitted)	\$1,500,000
	National Science Foundation (Senior Personnel Colaninno)	w/Martinez & Brown (Geography)	\$112,604
	Colaninno (ISBE)	supplement 6/23/21 (awarded)	\$7,598
	Locke	City of Collinsville Greenhouse Gas Inventory internship Jan 29, 2021 (awarded)	\$5,667
	Locke	NSF INCLUDES (subaward from University of Cincinnati)	\$200,000

	Locke	NSF INCLUDES (subaward from The Algebra Project)	\$756,383
	<i>External total</i>		<i>\$3,345,363</i>

Objectives 2 and 6: In FY21 the Resource Center provided materials loans and consulting services that impacted approximately 1,400 STEM learners. The improved and expanded STEM Center website assists area teachers with access to a wide variety of classroom resources and STEM activities. The resources of the STEM Center provide new ways of engaging with STEM topics to expand the reach of STEM learning in southern Illinois and increase STEM literacy in K-12 settings and beyond.

Objective 3: The STEM Center has ongoing participation on the project leadership team of the NSF-funded IFLIP project (PI Chaya Gopalan). 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 in FY21.

The STEM Center leads the National Science Foundation funded SIUE GEOPATHS project, which is supporting 20 SIUE undergraduates who identify as underrepresented in STEM to participate in faculty-mentored research, field excursions to the Western U.S., career seminars, professional skills training, and conferences. GEOPATHS support for these activities is the equivalent of \$10,000 per student.

The Center's Faculty Fellows Program enabled improvements in undergraduate education at SIUE by testing two innovative approaches to instruction: Dr. Kathleen Vongsathorn of the Department of History is researching the approaches and benefits of integration of STEM and history in undergraduate curriculum.

Objective 4: 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 preservice teachers. STEM Center instructor Colin Wilson continues to serve as an instructor for one section of Science 241b and is involved in planning the future of the course with other instructors. The STEM Center also provides lesson plans and materials to preservice teaching students as they continue their coursework at SIUE and through the Noyce Scholars and Noyce Interns program encourages students considering careers as STEM teachers. Through professional development and outreach the STEM Center works directly with local Regional Offices of Education, attends monthly meetings, and presents at yearly professional development conferences.

Objective 5: 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. As many groups were forced to shift to remote learning in FY21, the STEM at Home series and continuing modified programming from the STEM Center were a means of continuing STEM learning in a time when it otherwise might have ceased entirely.

11.5 Evidence of Organizational Effectiveness

Organizational effectiveness in achieving predetermined goals

Metrics for FY21 continue to be difficult to assess because of the major disruption caused by the pandemic. However, as conferences moved to remote operations we were able to present at more conferences during FY21 than during the previous fiscal year. We expect the convenience of virtual conferences to continue to provide more presentation opportunities for our staff. Our lending services and teacher professional development were discontinued as the STEM Resource Center remained closed due to the pandemic, though our STEM at Home series reached learners remotely. Our grant proposal submissions and peer-reviewed article submissions exceeded targets again, in part because these writing-intensive activities could continue during work from home.

Public Service and Instruction

The STEM Center created guidelines and detailed instructions for 42 total weekly STEM at Home activities at three grade levels (elementary, middle, high school) so that families could support their children’s STEM learning and engagement during the COVID-19 pandemic. With this many weeks of instruction, the STEM at Home series can support learning through an entire traditional academic year.

Center faculty and staff taught credit-bearing undergraduate and graduate courses in the Departments of Environmental Sciences and Geography.

Research & Grant Applications

STEM Center revenue through grants and contracts was \$1,044,206, which is nearly 80% of our total revenue. In this fiscal year, the center submitted 9 external proposals requesting \$3,345,363.

In FY21, Center faculty and staff gave 25 scholarly presentations and published findings from research and education projects in order to enhance the regional and national reputation of the SIU system.

Year	# Scholarly Publications	# Scholarly Presentations	FTE Research Faculty
FY21	6	25	3.2
FY20	7	8	3.2
FY19	6	11	3.2

RESOURCES: Center for STEM Research, Education, and Outreach

Financial Resources	FY21	FY20	FY19	FY18	FY17	FY16
Revenues						
State Appropriations	289,048	283,275	283,642	212,239	215,000	213,655
Course Specific Fees	1,725	3,975	4,775	4,775	4,825	5,125
Salary Transfer	1,425	1,957	12,128	0	423	15,225
Non Recurring Funds	400	28,483	90,000	0	0	0
Income Fund	300	30,872	45,833	44,664	91,572	88,917
Grants & Contracts	951,996	1,229,674	674,371	928,636	760,378	2,381,064
ICR	92,210	156,526	75,281	140,886	353,790	171,871
Foundation	0	0	300	1,120	23,493	22,014
Total Revenues	1,337,103	1,727,292	1,186,330	1,332,320	1,449,482	2,897,871
Expenditures						
Salaries	635,901	527,316	492,476	367,509	482,333	464,603
Grant Collaborators	46,333	67,557	43,751	83,006	57,498	39,905
Faculty Fellow	0	0	0	4,899	0	0
Graduate Assistant	153,719	115,435	46,751	31,867	52,768	44,191
Student Interns	0	0	0	(59,665)	4,871	26,304
Student Wages	15,220	13,643	12,637	12,501	12,486	11,393
Travel	1,528	11,141	21,251	9,7884	22,588	20,856
Equipment	15,651	40,994	6,936	(1,749)	20,731	7,598
Commodities	13,346	12,239	19,744	8,563	21,322	17,374
Contractual Services	134,705	145,802	164,319	4,500	962,106	262,858

Awards	3,175	511	21,150	(344,172)	64,050	24,678
Scholarships	57,500	69,200	115,000	152,510	90,533	148,747
Automotive	0	278	720	2,398	1,184	111
Telecommunications	5,002	4,353	4,747	4,311	5,092	4,750
Benefits	117,054	93,949	73,353	92,992	125,457	89,526
Participant Support	55,062	77,286	77,088	882,832	27,528	24,646
Non Mandatory Transfers	110,540	83,930	170,422	4,409	70,159	39,623
Total Expenditures	1,364,735	1,263,633	1,270,315	1,247,945	2,020,724	1,227,164
Revenue Minus Expenditures ¹	(27,631)	463,659	(83,985)	84,375	(571,242)	1,670,706

¹ In FY17, FY19, and FY21 the Center had high expenses associated with grant funds received as revenue in the preceding years. This is the reason for the large surplus in those years, followed by a deficit (on paper) in FY17, FY19, and FY21. Note that revenue still exceeds expenditures over those two years.

Staffing (Full Time Equivalent)	FY21	FY20	FY19	FY18	FY17	FY16
Tenured/Tenure-Track Faculty	1	1	1	1	1	1
Research Faculty	3.2	3.2	2.2	1.7	1.2	2
Non Tenure-Track Faculty	0.8	1	2	1	1	0
Staff	4	4	3	3	5	5
Total Staffing	9	9.2	8.2	6.7	8.2	8

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University Edwardsville
2.	Center/Institute	East St. Louis Center
3.	Date	March 15, 2021
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.

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

Plans are awaiting revisions/approvals from the Provost and Vice Chancellor for Academics, as well as the Chancellor.

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 (In This Year)

Head Start/Early Head Start

- Received the 5-Year Non-Competitive Grant
- SIUE Head Start was awarded an OHS grant to install surveillance camera systems in all Head Start/Early Head Start centers.
- SIUE Head Start Administrative staff have been 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; which will be conducted via Zoom from 5/10/22 to 6/1/22.
- Staff and parents attended the NHSA Conference in Orlando, FL, December 2021.
- Staff and parents will attend the NHSA Conference in Baltimore, May 2022.
- SIUE Head Start will provide Head Start/Early Head Start services in a new managed site located in the O'Fallon/Lebanon area.

Collinsville Upward Bound Programs

- 2 UB seniors named **Illinois State Scholars**
- 32 UB scholars were on the **CHS First Quarter Honor's Roll list** (GPA 3.4+)
- 27 UB scholars were on the **CHS First Semester Honor's Roll list** (GPA 3.4+)
- 1 UB junior enrolled in **SWIC Running Start Program**; will earn associate degree and high school diploma in 2023.

Veterans Upward Bound

- Veterans Upward Bound hosted the Veterans Resource Fair. The fair connected more than one hundred area veterans with much needed services and resource.
- Distributed over 100 free suits to Veterans

Library/Learning Resource Center

- The new partnership the LRC has with the East St. Louis Historical Society has garnered community members to join in increasing our scope of community engagement; our first event in early February garnered 27 participants and the event on March 23 had 41 participants attending both in person and virtually.
- The monthly book club has grown in the last 12 months from 7 registered members to 32.
- The monthly Lunch & Learn with Carrollton Bank is now being included in Carrollton Bank's monthly calendar of events to the greater St. Louis area to promote our event even further.

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

The programmatic engagement and services in FY20-21 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 2021

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)

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

Financial Resources	FY2021	FY2019	FY2018	FY2017	FY2017
Revenues					
State Appropriations	1,252,054	740,715	827,844	732,043	683,121
Income Fund	437,366	693,896	767,558	334,743	308,885
Grants & Contracts					
Head Start/Early Program	10,624,298	11,873,960	11,538,375	12,060,570	11,613,514
Latchkey Program	0	0	0	0	0
Project Success/East St. Louis	16,888	159,529	150,435	201,234	264,919
Upward Bound (BEV)	124,041	358,262	328,858	328,858	311,492
Upward Bound (EC)	354,197	663,085	623,347	608,663	593,818
Upward Bound Math and Science Center	305,171	279,162	264,141	256,250	257,500
UB Math and Science-Cahokia & Madison	297,601	287,537	275,155	263,938	0
UB-ESTL High School Academy	380,824	287,537	275,155	263,939	0
Veterans Upward Bound	427,207	287,537	275,155	263,938	0
Child & Adult Food Care Program	107,666	303,290	560,329	562,978	586,489
National School Lunch Program	0	0	0	0	-
Summer Food Service Program	1,335	-	12,131	16,394	16,015
ISBE Healthy Communities FY18	-	-	22,271	22,521	
IAC-SIUE ESTLC Operating Support				2,200	
Building Futures	150,080	119,385	123,635	224,800	
Kindergarten Readiness Camp	-	-	36,156	56,000	65,000
ICCB	609,867	674,904	844,963	872,703	260,974
ICCB Construction Project	902,000				
Post-Secondary Completion Strategies Program					10,000
Preschool for All	-	-	300,000	264,045	170,735
ESL STEM & Energy Constellation	-	-	366	49,011	37,500
Total Revenues	15,990,594	16,728,798	17,225,874	17,384,827	15,179,961
Expenditures*					
Misc**	804,609	44,272	60,005	65,444	281,592
Salaries	4,525,981	7,396,047	7,156,983	7,020,501	6,488,918
Fringes	421,610	3,740,996	3,781,576	3,728,702	3,486,176
Travel	4,794	20,373	41,379	30,759	29,207
Equipment	908,963	44,869	92,509	512,479	264,019
Commodities	189,033	230,331	187,770	350,054	267,269
Contractual Services	3,008,565	791,292	1,469,428	2,639,065	2,438,223
Operation of Auto	84,935	1,901,113	2,019,620	83,974	94,234
Telecommunication	193,468	71,635	66,985	230,559	118,217
Indirect Cost	1,016,737	523,251	886,552	1,434,447	951,934
Total Expenditures	11,158,695	14,764,178	15,762,807	16,095,982	14,419,787
Revenue Minus Expenditures	4,831,900	1,964,621	1,463,067	1,288,845	760,174
* 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)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty (summer teaching for TRIO programs)				6	6
Staff				211	211
Total Staffing	0	0	0	217	217

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

(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	3/9/2022
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

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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 include 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 the quality of our nation's water.

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
Utility Superintendent, Glen Carbon, IL
- *Ed Matecki has retired and will be replaced by a Facilities Management Director (Donna Meyer or Donte Harris) for 2022 pending SIUE approval.

10.2 Number of Meetings (In This Year) _____ 1

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	17
2. Maintain a pass rate of greater than 80% on the state certification exams.	80%	82%
3. Maintain excellent job placement for graduates.	80%	87%

* 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 FY21. The 2020 class was affected by the postponement of almost all internships in the summer of 2020. All students (with one exception) were able to meet their internship requirements for graduation, but many continued into August/September of 2020 due to the delayed start. The in-person graduation ceremony that was scheduled for July of 2020 was also postponed. The 2021 class was also affected by the COVID pandemic. Due to social distancing requirements in the ERTC auditorium, we were limited to admitting 21 students to the Class of 2021 Water Quality Control Operations Program. This decrease in admittance accounted for the low enrollment numbers reported above. Four students dropped out of the program during/after the Fall semester. The operations of the program were basically unaffected except for masking requirements, social distancing requirements, and the elimination of field trips to water and wastewater plants.

The in-service offerings were postponed until August 2020 due to the pandemic. Once the offerings returned, all in-person classes were limited in size due to the social distancing restrictions. This caused a large decrease in revenue that did not begin to see recovery until February 2021. The addition of virtual and correspondence courses helped to offset the in-person revenue decrease.

Despite the effects of the COVID pandemic, revenues for FY21 remained strong. From the period of July 2020-December 2020, the large decrease in revenues greatly affected the balance of the ERTC 4-account. Revenues began to rebound in January 2021 and the fiscal year finished in the black with a revenue minus expenditures of \$43,523. This marked a net revenue increase of \$90,410 year-over-year.

A positive impact of the pandemic was the creation of many online offerings for in-service students. All water related certification training was moved to an online format. Class A, B, C and D courses were created and began delivery in October 2020. The shift in delivery eliminated the travel requirement for teacher and students. This made the training more accessible to everyone since it was no longer dependent on a location. Wastewater certification preparation offerings were also developed, and offerings began in the Spring of 2021. Additionally, two water/wastewater math virtual courses were also created and began delivery in February 2021.

The pandemic also allowed us to revise our correspondence program. Two courses were created Water Distribution and Operation of Wastewater Treatment Plants Vol 1. The courses were added in January 2021. Thirty operators registered for the courses in FY21.

The interagency agreement with IEPA will be ending in September 2021. This fiscal year included numerous equipment purchases in finalizing the agreement. Purchases included: a new Flygt Pump for influent to the ERTC from the SIUE WWTP, (3) new chemical feed pumps for the water plant, (3) new dissolved oxygen monitors for the wastewater plant, a flow meter for the membrane bioreactor, a pipe and cable locator, a low service raw pump, electrical setup for the PSD system, and the fabrication of a new wastewater filter.

Additionally, the interagency agreement provided funding for maintenance and a software conversion of the wind turbine. Tower-N-Turbine Services (out of Minnesota) will be performing the conversion and maintenance in July/August 2021.

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. The most recent IEPA interagency agreement was finalized in October 2018 and will run through September 2021. A new proposal was drafted in June of 2021 and sent to IEPA for assessment.

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 Illinois Water Environmental Association (IWEA), Illinois Potable Water Systems Operators Association (IPWSOA), and the Illinois Association of Water Pollution Control Operators (IAWPCO). Due to the COVID pandemic, many of these conferences were canceled or adjusted to an online format.

The ERTC Director of Water Reclamation is the official Operator-In-Charge (OIC) for the SIUE wastewater treatment plant. The OIC is an IEPA required position of responsibility.

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 sixteen years.

In June of 2021, the state of Illinois created a list of approved WIOA programs. The ERTC was initially left off this list due to the limited number of students that had taken advantage of the program. The ERTC worked with the Madison County Employment & Training Center to submit a waiver request that would allow the ERTC to be an approved provider. The request was approved and the ERTC was added as an approved program. Madison County also completed a program assessment of the ERTC on June 25, 2021. There were no deficiencies reported. Two students were funded via the WIOA program in FY21.

The IEPA has supported the ERTC financially by providing operating funds for 40 years. The current IEPA interagency agreement runs from October 2018 through September 2021. A new proposal was drafted in June 2021 and sent to IEPA for assessment.

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. The scholarship was adjusted to a full scholarship in FY20 and two scholarships were offered to students in FY21.

The ERTC continued our partnership with Edwardsville Fire Department by making our auditorium and confined space training apparatus available to the Edwardsville Fire Department for their training purposes.

A legacy scholarship is available to students who verify that they have a relative working in the water or wastewater field. Recipients receive a \$500 decrease in tuition.

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 include:

SCWPOA Scholastic Award (2 students)

MISKA Scholastic Award (3 students)

IAWPCO Scholastic Award (2 students)

11.5 Evidence of Organizational Effectiveness

The ERTC graduated 15 students in FY21 (down three students from FY20). The initial enrollment was limited to 21 due to the social distancing requirements of the ERTC auditorium. One student failed to graduate, because he was unable to complete his internship requirements. Five students dropped out of the program before the start of the Spring semester. Two of the students dropped due to disagreements with the SIUE on COVID policy. The other three dropped due to financial concerns.

The ERTC one-year program continues to provide a high-quality training in water treatment technology to future water and wastewater treatment professionals. Pass rates for the drinking water certification (75%) and wastewater certification (88%) in Illinois remain high. The drinking water certification exam pass rate just missed our internal target of 80%. In both categories, the ERTC 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.

Job placement statistics continued to be strong with 87% of students finding jobs within six months of program completion (13 of 15). This result continues to meet the Madison County WIOA target of 74%.

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 2020 through June 2021, the ERTC trained 551 students and awarded 34,481 continuing education and classroom clock hours. This showed a substantial decrease from the previous fiscal year (1,080 students → 551 students) and a decrease in hours awarded (38,000 → 34,481). The offerings added were larger in terms of CEU hours, so a 49% decrease in enrollment only resulted in a 9% decrease in hours awarded. This fiscal year was affected by the pandemic throughout its duration. The COVID pandemic eliminated all scheduled training for July and most of August. Classes were able to resume in mid-August, but enrollment was limited due to social distancing requirements. In-person offerings that normally saw very strong demand (Class B & A Water Supply Evening Course and Basic Wastewater Treatment Evening Course) were cancelled due to low enrollment. There seemed to be hesitancy to enroll in in-person offerings due to the uncertainty of completion. Almost all conferences and collaborations with water/wastewater organizations were cancelled, which also contributed to the decrease in numbers. The additions of virtual offerings and correspondence courses helped to offset the enrollment and hours that were lost from in-person offerings.

12. Institutional Assessment

12.1 Date of Last 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 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 on-line 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.

RESOURCES: Environmental Resources Training Center

Financial Resources	FY2020	FY2019	FY2018	FY2017	FY2016
Revenues					
State Appropriations					
One-Year Program	139,696	147,292	146,909	232,206	246,168
Grants & Contracts	275,396	505,881	304,504	278,694	341,687
CCCDI Training/Symposium	73,410	80,215	111,745	100,505	110,845
CCCDI Recertification	94,913	59,530	82,825	65,960	68,000
Night Classes	10,555	22,095	37,080	29,575	41,925
Workshops	103,822	65,250	88,950	82,500	71,475
Correspondence Courses	4,950	N/A	N/A	N/A	N/A
Total Revenues	702,742	880,263	772,013	789,440	880,100
Expenditures*					
Full Time Salaries	457,276	477,687	432,788	490,469	532,303
Adj. Staff & Student Workers	48,773	24,289	41,480	46,556	46,064
Telecom/Communications	6,230	6,491	6,514	6,561	12,933
Commodities	33,695	46,328	79,914	70,456	74,218
Equipment	22,176	13,033	30,797	9,847	23,807
Contract Services	63,463	91,117	48,570	78,116	N/A
Permanent Improvement	0	242,000	N/A	N/A	N/A
Computer	0	0	0	0	3,810
Travel	18,941	24,930	22,212	31,798	36,353
Marketing	0	0	0	0	30,658
Refunds	8,665	1,275	N/A	N/A	N/A
Total Expenditures	659,219	927,150	662,275	733,803	750,146
Revenue Minus Expenditures	43,523	(46,887)	109,738	55,637	129,954

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

Staffing (Full Time Equivalent)	FY2020	FY2019	FY2018	FY2017	FY2016
Faculty	0	0	0	0	0
Staff	7	7	7	7	7
Total Staffing	7	7	7	7	7

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	<u>Southern Illinois University Edwardsville</u>
2.	Center/Institute	<u>Illinois SBDC for the Metro East at SIUE</u>
3.	Date	<u>3-21-22</u>
4.	Director	<u>Giovanna May</u>
4.1	Telephone	<u>618.650.2929</u>
4.2	E-mail	<u>gdimagg@siue.edu</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 counseling, 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 29, 2021. Next scheduled for March 14, 2022

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 ITC is co-leading the Select USA Tour of Southwest Illinois, tentatively scheduled for June, 2022.

The SWILTIC is the first of its kind in Illinois. The Council's board meets regularly four times a year.

<http://swillinoistrade.org/Council>

<https://www.siue.edu/business/itc/about/sw-ill-trade-investment-council.shtml>

10.2	Number of Meetings (FY21)	SBDC - 3 meetings	ITC- 4 meetings
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11. Annual Performance FY21

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1. Number of Jobs Created (SBDC)	25	14
2. Number of Business Starts (SBDC)	9	5
3. Number of Clients Advised (SBDC)	425	501
4. Number of Clients Advised (ITC)	55	115
5. Client Exports (ITC)	\$20,000,000.00	\$ 32,072,348

* 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 (FY21)

SBDC:

Advised 501 Clients and helped them secure over \$ 2.1 Million in Debt Funding through more than 2790 hours of contact.

Efforts implemented to augment SBDC services with CARES Act funding received.

Supported Belleville, Edwardsville, Monroe/Randolph County, Riverbend and Fayette County High School CEO Programs

Cohosted two (2) Annual Veteran Reboots (One Live and One Virtual)

Hosted 7th Annual Metro East Startup Challenge promoting Entrepreneurship and Innovation in St. Louis Region

Cohosted (as Small Business Week of SW IL) Small Business event with 3 days of presentations live or virtual. Had 4 satellite locations for convenience as well.

Hosted or participated in numerous COVID-19 Small Business Relief Funding Webinars from July 2020 to June 2021.

Conducted and/or Hosted 33 Workshops/Training Sessions with approximately 485 attendees

Published 9 Success Stories celebrating our local Entrepreneurs and Small Business Owners.

ITC:

- The ITC continued communicating 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.
- With the use of technology, a pilot project continues to be discussed by the ITC and UL to help small businesses increase their export/import capacities with the support of the Illinois SBDC ITC International Network and the participation of students, providing them with opportunities to garner experience in the areas of international trade and commerce. This initial project seeks to combine some key areas, such as exchanging best practices, co-counseling clients, sharing trade data and delivering training programs. These discussions were put on hold in 2020 due to the COVID pandemic.
- The ITC restarted communications with the American Chamber of Commerce in Peru (AmCham Peru) to promote the visit to SW Illinois by a Peruvian delegation led by AmCham, originally scheduled for August- 2020 that had to be postponed due to the COVID pandemic. Virtual connections are being scheduled for July, 2021 with the head of the Supply Committee of AmCham Peru, Mr. Roberto Figari, who is currently visiting Chicago and who would be presenting the visit proposal to his board upon his return to Lima.
- The ITC successfully completed its first export training program "EXPORT NOW", with five participating businesses from the southern region, partnering with the Illinois District Export Council and LR International in Chicago. This program was made possible thanks to funding through the Federal CARES Act.
- Sponsored/Co-sponsored ten programs with very positive feedback. Over 150 business representatives from the bi-state region participated.
- Sponsored 3 businesses with their participation in virtual and in-person trade missions and shows in Europe and Latin America. This was a lower number of participants since most international events were cancelled due to the pandemic. These clients were also assisted with research work performed by the ITC.
- Continued providing specialized assistance regarding Latin America.
- Continued partnering with World Trade Center St. Louis, St. Louis Regional Chamber of Commerce, the U.S. Department of Commerce, the Small Business Administration and Missouri International Trade & Investment Office to further develop the St. Louis Trade Commission, a task force responsible for helping regional businesses and organizations find information about exporting and opportunities in foreign markets.
- Continued upgrades of the ITC's website. The site now contains up-to-date COVID-19 information, as well as articles from the International Trade Center Network, DCEO's

Office of Trade and Investment Network, upcoming regional events, trade directories, Export Guides (Spanish/English), several other resources, and a CARES Act Supplemental Funding section.

- Expanded the ITC's access to online marketing databases of potential clients as well as industry and country statistics.
- The following initiatives continued to be developed with the support of CARES funding: "Team South"
 - Together with domestic and international partners and consultants, the Illinois SBDC ITC at SIUE continued expanding its reach to build a stronger and more cohesive network of assistance; first, by identifying small businesses in the southern region that are 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.
 - "Southern Illinois Exports": Connecting the Region with the World
The ITC moved along with the development stages for this much-needed online resource to provide support and help identify and assist small businesses affected by COVID-19 by providing advice, guidance, and access to new customers and markets.

Three sections are currently being developed /offered to small businesses from the southern region:

1. Online Platform/Business Directory: an electronic listing of businesses (less than 500 employees), sorted by industry, to facilitate the promotion of their products or services domestically and globally.
2. Virtual Advising: provided through partnerships with domestic and international consulting firms. All virtual sessions are being held via Zoom (ITC has a licensed account through SIUE).
3. One-on-one Advising Sessions.

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

Provided business counseling and/or support to many SIUE students (Clients, Students, Alumni and CEOU/Entrepreneurship Club) in CY2021; 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 \$32M in ITC client exports; 33 SBDC training sessions.
 Starting a Small Business Workshop is offered at no cost.
 Center supports SIUE CEOU/Entrepreneurship Club & The Other 40 Competition. Spoke to various classes throughout Fall 2020 and Spring 2021 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 FY21, 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

Financial Resources	CY2021	CY2020	CY2019	CY2018	CY2017	CY2016
Revenues						
State Appropriations	125,710	123,866	124,388	157,523	111,475	144,416
Income Fund	3,032	1,061	15,016	12,315	8,843	11,545
Grants & Contracts	505,715	385,000	185,000	180,000	180,000	122,827
Total Revenues	634,457	509,957	324,404	349,838	300,318	278,788
Expenditures*						
Salaries/Fringes	268,526	255,922	256,460	277,062	217,863	225,661
Commodities	6,048	5,420	4,460	2,824	3,941	4,116
Contractual	223,118	64,293	42,982	28,042	0	36,109
Travel	6,118	1,594	15,555	15,403	13,851	13,189
Consultants/Indep. Contractors	55,913	37,005	0	0	16,000	0
Equipment	0	0	0	155	0	0
Telephone/Other	3,618	3,853	4,432	4,569	42,209	12,851
Total Expenditures	563,341	368,087	323,889	328,055	293,864	291,836
Revenue Minus Expenditures	71,116	141,870	515	21,783	6,454	(13,048)

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

****CY 2021 includes \$50,000 in CARES Act funding received for COVID-19 relief efforts and \$270,715.44 on Illinois Navigator Grant. 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.**

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017	FY2016
Faculty	0	0	0	0	0	0
Staff	3	3	3	3	3	4
Total Staffing	3	3	3	3	3	4

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University Edwardsville						
2.	Center/Institute	IRIS Digital Humanities Center						
3.	Date	3/21/2022						
4.	Director	Jessica DeSpain, Kristine Hildebrandt (co-directors)						
4.1	Telephone	618-650-2667						
4.2	E-mail	jdespai@siue.edu, khildeb@siue.edu, iris@siue.edu						
5.	Year Established	November 11, 2020						
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 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 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 Ramsby 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) 0, due to pandemic

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	6
2. Submit products for publication	6	4
3. Present research at conferences	8-10	6
4. Conduct workshops directed at campus community	6	6
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	5
8. Recruit additional students to the minor	2	4

* 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 report marks the IRIS Center’s first year of IBHE probationary status, beginning in November 2020, though this report lists major accomplishments for the entire fiscal year. Despite pandemic conditions, IRIS met or exceeded several of its benchmarks, and had a productive year of student, faculty, and community engagement in addition to submitting six grants. This productivity was largely due to the addition of Dr. Margaret Smith, the Center’s new Research Assistant Professor, who started her position in the Center in February 2021.

IRIS faculty support DH teaching across the university. Over the last year, IRIS faculty have visited classrooms to introduce students to digital research methods and teach students to use digital platforms for research and curation. IRIS engages SIUE students

outside the classroom too. Through faculty research projects like Madison Historical, the Schaefer Edoid Archive, and E-Stories, students have learned to use digital tools and research methods and collaborated closely with faculty mentors to produce innovative, community-engaged scholarship. These student-faculty collaborations occur under the auspices of URCA and through donor support via the SIUE Foundation.

To Implement one of its broadest pedagogical innovations, the Center was awarded an NEH Humanities Connection Grant for Community-Oriented Digital Engagement Scholars (CODES) in collaboration with Lewis and Clark Community College in June 2020. CODES 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. The first CODE Scholars will begin their coursework in Fall 2022.

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. For instance, in April 2021, Dr. Howard Rambsy launched the African American Poetry Tracker, a digital project that highlights the circulation of African American poetry in anthologies produced over the course of a century. The site was developed by Dr. Margaret Smith and served as proof of concept for multiple grant applications in Summer 2021, including a successful Mellon Foundation grant supporting a collaboration between SIUE and the University of Kansas. Dr. Cory Willmott has also collaborated with IRIS on several projects, including a digital mapping component accompanying a peer-reviewed article on Anishinaabe regalia, a migration of the University Museum's digital collections to Omeka S, and a student-curated digital exhibit called *Birdman Rising*. This year also involved the planning, development, and piloting of 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. Directed by Dr. Jessica DeSpain, The Hub supports a community dedicated to mentoring women and people of color working in the digital humanities.

IRIS faculty have also supported DH pedagogy beyond the university through regional, cross-institutional, and K-12 partnerships, expanding SIUE's reputation for digital humanities both locally and nationally. In June 2021, Dr. Margaret Smith offered instruction in data visualization for the African American Literatures and Cultures Institute led by Dr. Howard Rambsy (SIUE, English) at the University of Texas San Antonio. The Center completed Conversation Toward a Brighter Future Program 2.0, an NEH-funded program in partnership with the Mannie Jackson Center that involved eight area high schools and over one hundred high school students in digital storytelling initiatives. The Center supported Dr. Rambsy's Douglass at the Literary Crossroads, an NEH-funded institute for secondary educators by giving lectures on digital methods and developing the supporting website. The Center also became regionally recognized for its DH contributions with the funding of "Expanding Access to Digital Humanities in St. Louis," a partnership with Lindenwood University, begun in February 2021, that supports DH pedagogy across the metro St. Louis region by developing curricular and infrastructural resources for area secondary and post-secondary institutions.

11.3 Evidence of Support for Illinois Public Agenda, SIU Board of Trustees, 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 regional 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, Birdman Rising, 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 4** (Research and Creative Activities Partnerships) and **University Goal 5** (outreach, partnerships, and reputation), IRIS has been successful in securing internal and external funding through grants and contracts for many initiatives. IRIS also recruited and hired a Research Assistant Professor, to support research and administrative needs of the Center, including writing grants, developing and implementing DH projects, supporting teaching and learning opportunities, and monitoring technology resources. Additionally, IRIS was included as an example of productive collaboration in research and creative activities in the SIU Cross-System Growth in Research and Creative Activities report published in July 2020 (<https://siusystem.edu/about/strategic-plan/pdf/Research.pdf>).

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 FY21:

- Dr. Howard Ramsby, African American Poetry Tracker: The poetry tracker applies a quantitative lens to anthologized African American poetry, providing an accessible entry to a robust data set.
- Dr. Cory Willmott, Mapping Anishinaabe Regalia: In Spring 2021, Willmott began collaborating with Smith to create a digital supplement to Willmott’s forthcoming peer-reviewed article “Decolonizing the Museum to Reclaim and Revitalize the Anishinaabe Strap Dress” in *Winterthur Portfolio*. The digital component consists of an interactive map showing locations and associated metadata for extant examples of Anishinaabe regalia.
- In Spring 2021, Dr. Jessica DeSpain completed a book proposal for *Creating a Sense of Place with Digital Community Engagement*. The book is a guide for community members, scholars, and students of all levels about how to establish, manage, and maintain digital community engagement partnerships.
- In Spring 2021, the Center submitted a proposal to the NEH’s American Recovery Plan granting initiative. As part of the grant-writing process, IRIS faculty met with colleagues across CAS and the Library to assess needs of current projects and to develop new proposals. Although the grant was not funded, many of the individual projects have subsequently been funded through other grants.
- In April 2021, Dr. Margaret Smith collaborated with Dr. Thomas Finan (Saint Louis University) to organize “New Perspectives in Castle Studies,” a virtual conference highlighting innovative scholarship (particularly projects using digital methods). The conference attracted scholars from around the world, and the proceedings will be published in Summer 2022.
- In October 2020, Dr. Kristine Hildebrandt presented on her digital language documentation project “Nepal Earthquakes: In Their Own Voices,” which captures the survivor stories recorded by Hildebrandt’s National Science Foundation-funded research team in multiple regions of Nepal in response to the disastrous earthquakes of April and May 2015.
- In June 2021, Smith presented on her digital history project “Submission Strategies: The Irish Submissions to Richard II, 1395,” at the Irish Conference of Medievalists. This project presents an encoding, visualization, and analysis of

medieval sources to create a nuanced depiction of the alliances, hostilities, and spheres of influence that shaped the social networks of England and Ireland.

- Smith presented to SIUE faculty on how humanists and social scientists can work productively and responsibly with data manipulation and analysis.
- Smith presented to SIUE faculty on how to find and select tools for digital humanities research.

Despite pandemic conditions inhibiting in-person interaction, IRIS **“supported projects via access to physical facilities, equipment, and human resources.”** Students working on the Schaefer Edoid Archive worked in the IRIS Center (on a set schedule that facilitated social distancing), making use of scanners and IRIS computers to digitize archival materials. IRIS faculty also provided instances of WordPress, Omeka, and Scalar to faculty and students so that they could work on research and community engagement projects remotely. IRIS continued to hold regular, virtual coffee hours and office hours to provide consultation and assistance on grant-writing, project development, project management, and technical questions.

Despite limited on-ground classes in Fall 2020, the Center **“fostered active mentorship and collaboration between faculty and students at undergraduate and graduate levels,”** including:

- Two faculty and four students in History used the Center weekly in the development of content for the Madison Historical.
- Dr. Kristine Hildebrandt launched the Schaefer Edoid Project, to archive the work of retired SIUE professor Ron Schaefer. Schaefer supported the work of seven students through generous donations to the SIUE Foundation.
- DeSpain and Smith supported Erin Vigneau-Dimick’s classroom uses of WordPress and Scalar, and DeSpain presented on digital storytelling methods in Dr. Jill Schreiber’s sociology class.
- In Spring 2021, Dr. Margaret Smith served on a thesis committee for an M.A. project that built and curated a digital archive.

Center faculty also developed and **“encouraged the development of curricular innovation that makes significant use of digital applications and resources.”** IRIS has continued to refine its minor curriculum, developing a new Introduction to Digital Humanities course that was submitted in FY21 and will be in place for Fall 2022. The DHSS minor added four students and continues to recruit and expand. Center faculty also began designing stackable graduate certificates in the digital humanities and social sciences.

In addition, the Center **“promoted digital endeavors that intersect with community initiatives and organizations,”** including:

- Expanding Access to Digital Humanities in St. Louis (Dr. Margaret Smith, IRIS, with Dr. Jeremy Carnes, Lindenwood University): Smith and Carnes began planning a regional hub for digital humanities practitioners across metro St. Louis, with the explicit aims of supporting DH pedagogy at the secondary and undergraduate levels. In June 2021, they submitted a Digital Humanities Advancement Grant application to the NEH, which was subsequently funded. They also met with the board of the Missouri Council for History Education regarding opportunities for supporting local high school educators.
- E-Stories (Dr. Connie Frey-Spurlock, TRHT/Sociology): The *E-Stories Project*, sponsored by SIUE’s Truth, Racial Healing and Transformation Center, provides an infrastructure

for sharing and documenting the individual experiences of East St. Louis community members through digital storytelling. These experiences form the basis of a shared narrative for the SIUE and East St. Louis communities. The project hopes to present a more positive image of the city and raise awareness about the effects of structural racism on the community.

- CTBF 2.0 (Dr. Jessica DeSpain, IRIS): Fall 2020 saw the conclusion of Conversation Toward a Brighter Future 2.0, a collaboration between the IRIS Center and the Mannie Jackson Center for the Humanities. In collaboration with area teachers, the team created a course of study incorporating novels, music, art, and oral histories that explores adolescence, adulthood, and aging. Students developed digital stories to foster conversation about how to communicate better across generational divides.
- Madison Historical (Dr. Jeff Manuel and Dr. Jason Stacy, History): Madison Historical informs the community about the history and culture of Madison County, Illinois, provides an authoritative and accessible resource for students, genealogists, scholars, and other persons interested in Madison County and local history, and creates a framework for ongoing documentation of Madison County history by providing a user-friendly digital collection of historically significant documents and oral histories.
- Douglass at the Literary Crossroads (Dr. Howard Rambsy, English): Dr. Rambsy organized this NEH-funded institute for the second year, responding to pandemic conditions and to concerns about sustained access to institute materials by implementing a digital companion site. That site differs from other NEH institute sites in that it will serve as a permanent resource for students and teachers rather than an informational site about the institute itself.
- Illinois Humanities support (Jessica DeSpain, English): In October 2020, Dr. DeSpain presented on a panel for Illinois Humanities attended by multiple Illinois cultural and historical organizations about how to leverage social media to reach audiences in interactive ways during the Pandemic

11.5 Evidence of Organizational Effectiveness

(briefly provide any evidence of the center/institute's organizational effectiveness in this year)

Despite the challenges of the pandemic and the shortened evaluation period since the Center's receipt of IBHE status, the IRIS Center has succeeded in meeting or exceeding nearly 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. During this first year of IBHE probationary status, the Center established several organizational systems, including a budgetary system, a fee schedule, and an intake processes for new projects. 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 also established a project management framework,

including file management, communication, and workflow systems to support the organization of this workload.

In our first year as a Center, we have brought in x in grant funding, and paid 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 another developer in the coming five years.

12. Institutional Assessment

12.1	Date of Last Review	<u>Probationary Status Approved November 11, 2020</u>
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	<u>(briefly provide any explanation necessary of the institutional assessment or plans for pending program review)</u>

RESOURCES: IRIS Digital Humanities Center

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	250				
Income Fund	18,028				
Foundation	10,120				
Grants and Contracts*	0				
Salary Transfer (summer salary for DeSpain Hildebrandt supported by the graduate school)	15,659				
Support of Anthro project	600				
Support of SOAR project	3,793				
Support of Douglass Grant	2,490				
Support for Recovery Hub	45,967				
Total Revenues	96,817				
Expenditures					
Salaries	59,486				
Student Wages	4,468				
Office Supplies	250				
Benefits	7,056				
Total Expenditures	71,260				
Revenue Minus Expenditures	25,557				

* IRIS did not have an organizational number in FY21, so grants were recorded for other organizations and funds were moved into our accounts.

Staffing (Full Time Equivalent)	FY2020	FY2019	FY2018	FY2017	FY2016
Tenure Track Faculty	.5*				
Non-Tenure Track Faculty	1				
Staff	.1				
Total Staffing	1.6				

*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, 2020 – June 30, 2021

(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 21, 2022						
4.	Director	John Caupert						
4.1	Telephone	618-659-6737 ext. 226						
4.2	E-mail	jcaupert@ethanolresearch.com						
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 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 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 for producing bio-based materials
- **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.

Absence of Quorum for the Illinois Ethanol Research Advisory Board Since 2012:

The NCERC repeatedly made requests, written, verbal and face to face meetings, with the Governor’s Office of Executive Appointments, to get vacant / expired terms filled.

NCERC Stakeholder Advisory Board:

Due to absence of a quorum, since 2012, of the Governor Appointed Advisory Board, the NCERC created a Stakeholder Advisory Board. This Board consists of representation of Industry, Academia, Industry and Trade. In addition, the SIU President and the SIUE Chancellor have participated in these meetings.

The goal of NCERC is to hold an Illinois Ethanol Research Advisory Board Meeting, Spring of 2022.

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.

The NCERC Stakeholders Meeting was held, October 27, 2020

11. Annual Performance

11.1 Performance Measures *

Measure	Target for Year	Results in Year
1. Presentations	5	2
2. Publications	2	0
3. Grant Awards and Contracts	10	5 – Primarily Contracts
4. Outreach	10	5
5. Policy/Legislative Advocacy	5	2

11.2 Major Accomplishments (In This Year)

- Jackie Hayes hired as Director of Business Development and Client Relations
- Conducted 60 day long contractual research project, operating 24 hours / day, 7 days per week, utilizing 20+ Interns and other part time employees
- Did not have to do any layoffs of full time personnel
- Attended first “In Person” conference, Growth Energy Executive Leadership Conference, since the beginning of the pandemic

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 65 technologies now in the commercial marketplace, NCERC has provided valuable services to the biofuels 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 also developed two new undergraduate "focus areas" within the Integrative Studies baccalaureate program at SIUE. NCERC has generated millions of dollars in funding from competitive grants and private client contracts. A significant portion of these funds have been returned to SIUE in the form of indirect dollars, which support the University's operating expenses and administrative services.

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 that works in FY21.

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 – 12th Congressional District of Illinois
- Agriculture Advisory Council – 13th 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 – 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

NCERC staff also serve on the following committees and boards:

- Jackie Hayes, Chair of Young Professionals Network (YPN) of the Renewable Fuels Association.
- Jackie Hayes, Young Friends Committee of Danforth Science Center
- Jackie Hayes, St. Louis Agribusiness Club – Congressional Tour Committee
- Art Kotsybar, Lewis & Clark Community College Process Operations Technology Advisory Board
- Yan Zhang, Shimadzu SPARQ Lab Committee

Conferences, Meetings, Visits

Advanced Bioeconomy Leadership Conference

Virtual

July 7-10, 2020

AAFCO Annual Meeting

Virtual

August 5-7, 2020

2020 AIChE Spring Meeting & 16th Global Congress on Process Safety

Virtual

August 17-21, 2020

USDA ARS National Center for Agriculture Utilization Research

Virtual

September 1, 2020

Growth Energy Biofuels Summit
Virtual
September 14-17, 2020

DOE Bioeconomy Initiative Forum
Virtual
September 15-16, 2020

Fuel Ethanol Workshop
Virtual
September 15-17, 2020

Joint Bioenergy Institute Annual Meeting
Virtual
September 17, 2020

Joint Bioenergy Institute Advisory Board Meeting
Virtual
September 18, 2020

AgTech Next
Virtual
October 6, 13, 20, 27, 2020

St. Louis AgriBusiness Club
Virtual
October 13, 2020

Women in Ag Roundtable Discussion
Virtual
October 19, 2020

National Corn Growers Association
Virtual
October 19, 2020

CAS Dean Leonard Visit & Tour
Virtual
October 24, 2020

NCERC Annual Stakeholders Meeting
Virtual
October 27, 2020

AgTech Next
Virtual
November 10, 2020

Illinois Corn Growers Association Meeting
NCERC Office
April 7, 2021

St. Louis Agribusiness Club Monthly Meeting
Virtual
April 14, 2021

Roots, Shoots and Flutes Webinar by the Donald Danforth Plant Science Center
Virtual
April 14, 2021

Advancing Synergistic Waste Utilization as Biofuels Feedstocks: Preprocessing, Co-products, and Sustainability Workshop
Virtual
April 14-15, 2021

Renewable Fuels Association April Board Meeting
Virtual
April 20, 2021

Growth Energy's Executive Leadership Conference
Scottsdale, AZ
May 5-7, 2021

Renewable Fuels Association's Technical Committee Meeting
Virtual
May 4, 2021

STL Agribusiness Club Meeting
Virtual
May 11, 2021

Renewable Fuels Association's Co-Products Committee Meeting
Virtual
May 12, 2021

National Corn Growers Association's Corn Utilization Technology Conference
Virtual
May 13, 2021

Danforth Center's "Conversation" Series: Achieving the Impossible with Pat Brown
Virtual
May 13, 2021

IL Corn Growers Association + Associated Builders and Contractors of IL
NCERC Facility, Edwardsville, IL
May 25, 2021

STL Agribusiness Club Congressional Tour Committee Meeting Virtual May 27, 2021 Danforth Center Young Friends Committee Meeting Virtual June 16, 2021

11.5 Evidence of Organizational Effectiveness

Organizational Effectiveness:
 FY21 continued to be an extremely difficult year, but, I believe NCERC proved to have incredible "Organizational Effectiveness". Despite the world continuing to be essentially on business lock down, due to the ongoing COVID pandemic, NCERC did not have to lay off a single full time core staff employee. For the project work we did conduct in FY21, our primary workforce was made up of Student Interns, and while a difficult challenge, we made it work. The highlight of FY21, was the hiring of Jackie Hayes as our Director of Business Development and Client Relations. Jackie is an absolute rock star, who no doubt, will be the future Executive Director of NCERC.

12. Institutional Assessment

12.1 Date of Last Review Last meeting of the Illinois Ethanol Research Advisory Board, 2012

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)

RESOURCES: NCERC at SIUE

Financial Resources	FY21	FY20	FY19	FY18	FY17	FY16
Revenues						
Beginning Cash	7,123,688	5,696,078	4,014,258	2,940,561	1,479,284	
State Appropriations	1,322,949	1,301,770	1,300,000	1,412,950	293,310	293,198
Client Contractual Research	814,504	2,161,677	2,808,926	4,485,600	2,953,942	3,565,655
Grants	-	-	143,357	703,860	504,825	767,915
Other Revenue	71,795	102,226	115,699	289,788		310,567
Foundation	100,000	100,000	100,000	59,402	137,000	140,000
Total Revenues	2,309,248	3,665,673	4,467,982	6,951,600	5,368,361	5,077,335
Expenditures*						
Salaries	720,607	1,030,826	1,069,542	1,813,360	1,273,341	1,377,000
Fringe Benefits	104,182	140,694	170,103	328,045	300,076	598,549
Operational Expenses	724,200	1,066,544	1,546,517	2,290,490	854,384	1,366,244
Total Expenditures	1,548,989	2,238,064	2,786,162	4,431,895	2,427,800	3,341,793
Cash + Revenue Minus AR and Expenditures	7,883,947	7,123,687	5,696,078	4,014,258	2,940,561	1,735,542

Staffing (Full Time Equivalent)	FY21	FY20	FY19	FY18	FY17	FY16
Faculty	2	2	4	5	1	1
Staff	12	36	36	40	22	16
Student Workers, Interns, GA's	25	10	15	30	22	15
Post Doc – Research Fellows	0	0	0	0	0	2
Total Staffing	39	48	65	75	45	34

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

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

1.	Reporting Institution	Southern Illinois University Edwardsville						
2.	Center/Institute	University Museum						
3.	Date	3/23/2022						
4.	Director	Erin Vigneau-Dimick						
	4.1 Telephone	618-650-2996						
	4.2 E-mail	evigneau@siue.edu						
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 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							

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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 Louis Sullivan Ornament Collection donated by the architectural photographer Richard Nickel and the Harrington Collection of over 23,000 artifacts with strengths in Native American, Asian, and African ethnology, as well as 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	1 exhibit
2. Virtual Exhibits		1 exhibit
3. Academic Research (Faculty and Student)		30 researchers
4. Public/Scholarly Research		6 researchers
5. Lectures Programming		1 program
6. External Grants (proposed or awarded)	1 grant	1 grant
7. Objects Inventoried		4,352 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: From Memories to Metals*
Meridian Village Senior Living Facility, Glen Carbon, IL
Curated by Erin Vigneau-Dimick
April 9, 2021 – Ongoing
 - *Healing Memories*
Curated by Reese Neill, Abigail Goodman, Reed Richardson, and Madelyn Knight
(Graduate students from HIST582)
Virtual exhibit available online at <https://iris.siu.edu/scalar/agnes-majtinsky-pal/index>
May 2021 – Ongoing
- Lectures/Programs
 - *"SIUE's Vigneau-Dimick Discusses Passion for Conservation and University Museum"*
SEGUE Radio Show; Interviewed by Dean Kevin Leonard
Aired: February 21, 2021
- Grants
 - Proposed
 - **Institute for Museum and Library Services Museums for America**
Collections Stewardship Grant FY21
\$153,459 request (submitted 11/16/2020)
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
 - Focus is on publicly installed art across all three campuses, the two-dimensional Fine Arts collection, and the Native North American collections.

- 4,352 objects inventoried in FY2021
 - (Stage I total of all objects inventoried by 6/30/2021 = 6,388)
- Inventory of publicly displayed art in 60 buildings and grounds across all three campuses concluded in May 2021 with a total of 2,128 objects identified and labeled.

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 world cultures and histories 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. Online 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, and St. Louis' City Museum. 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 \$130,000 federally funded grant to execute Stage I 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 332 items during FY2021, 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 FY2021 for use in the Anthropology Department's Ethnology Museum Laboratory to benefit student and faculty research.
 - 2 undergraduate and 1 graduate projects and exercises served
 - 105 museum objects loaned
 - The UM welcomed more than 36 faculty, students, and independent researchers in FY2020 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)
 - HIST580: Intro to Museology, HIST581: Collections Management, HIST582: Museum Exhibit Practicum, HIST 599: Master's Thesis
 - ART202C Introduction to Ceramics; ART 305/520 Advanced Ceramics
 - ANTH404 Anthropology and the Arts; ANTH490: Senior Assignment, ANTH570 Midwestern Prehistory; ANTH 590 Museum Internship
- 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 university guidelines, the University Museum archive remained closed to external and institutional visitors until the middle of the Fall 2020 semester and then only admitted researchers, faculty, and students on a limited basis.*
- 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:
 - Tim Samuelson, Cultural Historian, City of Chicago, IL
 - William Zbaren, Photographer, Zbaroff, Inc.
 - Robert Sharoff, writer, IWitness Media
 - Lori Belknap, Superintendent, Cahokia Mounds State Historic Site
 - Andres Tuccillo, Kenyon College/Intern, Cahokia Mounds State Historic Site
- 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:
 - *Historical Remnants in a Contemporary Museum: The Life and Evolution of the SIUE University Museum (Ami Null)*, - HIST 599 Master Thesis in History, Fall 2020
 - *Cultural Diversity exhibit case* – Anthropology 420, spring 2021
 - *African Instrument study* – Anthropology 420, spring 2021
 - *Towata Curation Internship*, - ANTH 489, Spring 2021
 - Development of two physical exhibits of historic local ceramicist

- 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
 - *Agnes Pal: From Memories to Metals*
Meridian Village Senior Living Facility, Glen Carbon, IL
Curated by Erin Vigneau-Dimick
April 9, 2021 – Ongoing
 - *Healing Memories*
Curated by Reese Neill, Abigail Goodman, Reed Richardson, and Madelyn Knight (Graduate students from HIST582)
Virtual exhibit available online at <https://iris.siue.edu/scalar/agnes-majtinskypal/index>
May 2021 – Ongoing
 - Programming
 - *“SIUE’s Vigneau-Dimick Discusses Passion for Conservation and University Museum”*
SEGUE Radio Show; Interviewed by Dean Kevin Leonard
Aired: February 21, 2021
 - 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 12/2022
 - Advisory council
 - two meetings held in FY21
 - Accessions
During FY2021 more than 924 individual objects were accessioned and have had records added to the catalog. These are 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.
 - 295 of these objects are from the Milton Harrington donation and were stored or put on display without having had their cataloging completed.
 - 76 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.

- 43 of these objects are donations to the museum whose paperwork was never completed, and the documentation was not accurately recorded.
- 510 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 FY21 (full collection is projected at more than 35,000 objects. Rough projections suggest 9 FTE years to complete.)
 - Collections Inventory Project Stage I: Inventory of 10,000 of the museum's 35,000+ displayed and stored collections
 - Focus was on installed art in 60 buildings across all three campuses, 2-dimensional Fine Art, and Native North American collections
 - 2,128 objects, artworks and sculptures located, verified, and labeled with identification signage publicly displayed across SIUE's three campuses during FY2021.
 - 4,352 objects located and verified in total during FY2021
 - 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.
 - The UM was awarded **\$130,000** in November 2019 from the IMLS for a Collections Stewardship grant to finance two Research Assistant's salaries for 14 months for Stage I.
 - After a hiring freeze in the spring and summer of 2020 due to COVID-19, two Research Assistants were hired in August of 2020.
 - The UM applied for a second Collections Stewardship grant from the Institute for Museum and Library Services (IMLS) in FY21 to fund salaries for Stage II.

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, 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, ART520, HIST304, 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 1A (completed May 2021) comprises all objects on display over three SIUE campuses in more than 60 buildings (projections estimated 1800 objects, actual 2,128 objects discovered across campus during inventory – an 18% increase in inventory totals.)
- Stage 1B (completed December 2021) comprises two of the most utilized collections: the two-dimensional Fine Arts collection and the Native North American collection which are in storage in the museum archive building.
 - 1,422 objects inventoried in the two-dimensional Fine Arts collection in storage during FY2021, some of which continued alongside stage 1A with efforts of graduate assistants.
 - 640 objects inventoried in the Native North American collection in storage during FY2021 (mid-May – June 2021)
- 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 2022)
 - 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 (projected completion spring 2024)
 - 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 surplussing 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 (list the year of the last program 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: University Museum

Financial Resource	FY2021	FY2020	FY2019	FY 2018	FY2017
Revenues					
State Appropriations	86,562	79,866	48,376	45,510	43,018
Income Fund	57,708	53,244	72,563	67,516	64,195
Grants & Contracts	79,863				
Foundation Funds					
Transfers from CAS			6652	6,651	6,651
Other Revenue/Sales					
ICR from CAS	1,298				
Total Revenues	225,431	133,110	127,591	119,177	114,195
Expenditures*					
Salaries (staff & graduate assistants)	182,127	113,180	103,917	95,532	89,963
Grant Fringe Benefits (non-state)	18,355				
Grant Facilities and Admin costs	31,153				
Wages	0	0	0	0	1,088
Travel	147	0	426	340	446
Equipment	223	406	2,291	1,159	1,670
Commodities	782	1,807	4,116	5,520	2,644
Contractual Services	13,013	10,318	9,495	9,905	11,174
Automotive	5,013	5,401	5,567	5,624	5,673
Telecommunication	1,227	1,346	1,357	1,413	1507
Total Expenditures	252,040	132,458	127,169	119,493	114,165
Revenue Minus Expenditures	(26,609)	652	422	(316)	30

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty		.33 FTE	1.5 FTE	2.0 FTE	2.0 FTE
Staff (including grant)	3.67 FTE	1.17 FTE	.5 FTE		
Graduate Assistants	.75 FTE	.90 FTE	.43 FTE	.75 FTE	.75 FTE
Student/Temp workers	.125 FTE	.25 FTE	.34 FTE	.1 FTE	.05 FTE
Total Staffing	4.545 FTE	2.65 FTE	2.77 FTE	2.85 FTE	2.80 FTE

CENTERS AND INSTITUTES
ANNUAL REPORTING

Report For: July 1, 2020 – June 30, 2021

(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	3/7/2022						
4.	Director	Jason Church						
	4.1 Telephone	618-650-3607						
	4.2 E-mail	jaschur@siue.edu						
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 three community-oriented shows (The Financial Café, Segue & Voices), 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. Jason Coomer, Mr. Musonda Kapatamoyo, Ms. Heather Kniffel, 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 58,600
3. Increase Social Media footprint by 15 percent	3174 follows on FB	3380 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)

- We were given the opportunity to hire Robin Boyce to serve as our full-time Associate Director for Underwriting Sales.
- We grew our student volunteer base from @ 10 students per semester, to over 20 students per semester.
- We now have 5 student volunteers who cover air shifts from 12 Midnight, until 6am.
- We welcomed several new key community on-air volunteers, including veterans Dean Mutter, Eric Weathersby and Tracey J. Shanklin. This has vastly improved our overall on-air product.
- WSIE was named a Finalist and one of the top 3 radio stations in St. Louis, according to St. Louis magazine's 2021 A-List.
- WSIE was given permission to purchase an annual subscription to Nielsen's ratings product, which has increased our ability to bring in more underwriting support.
- WSIE is now a "Top-20" station in the St. Louis market, according to Nielsen data.
- WSIE has one of the most diverse listening audiences, as compared to all other St. Louis market radio stations, according to Nielsen data.
- We continue to court and close new clients and supporters like The St. Louis Reparatory Theatre, Thrivent, The Pasta House Company and The Alzheimer's Association of Greater Missouri, among others.
- We now boast over 50 monthly, recurring donors, as compared to just 3 in 2018.
- WSIE achieved a milestone in December when we officially had more income for the month than expenses. This marked the first month in WSIE's history that we made more money than expenses for the month.
- WSIE continues to be a leader in the format when it comes to Jazz programming around the United States.

RESOURCES: WSIE-FM, 88-7, the Sound, Broadcasting

Financial Resources	FY2021	FY2020	FY2019	FY2018	FY2017
Revenues					
State Appropriations	.00	.00	.00	70,620.00	141,240.48
Income Fund	.00	.00	.00	.00	36,828.15
Grants & Contracts	12,800.00	50,675.00	.00	.00	2,600.00
Fees from Underwriters	60,110.99	56,053.00	86,665.50	66,072.94	51,342.96
Rental Revenue	10,220.40	9,893.00	9,606.78	9,327.25	8,736.00
Listener Gifts to the SIUE Foundation	55,953.80	54,282.82	23,500.00	16,103.70	26,255.00
Total Revenues	\$139,085.19	\$170,903.82	\$119,772.28	\$162,123.89	\$267,002.59
Total Revenues Minus State Appropriations and Income Fund	\$139,085.19	\$170,903.82	\$119,772.28	\$91,503.89	\$88,933.96
Expenditures*					
Salaries	192,641.79	189,176.00	182,618.12	156,674.65	67,957.50
Wages	.00	676.00	1,937.76	16,863.89	75,863.19
Equipment	.00	.00	21,272.76	1,125.10	2,503.52
Commodities	226.24	1,164.00	4,260.47	4,354.96	592.00
Contractual Services	20,849.79	18,442.29	17,197.72	24,817.59	25,095.64
Telecom	8,826.62	9,362.00	9,299.53	8,639.34	8,560.30
Expenditure from Foundation Account	.00	.00	.00	.00	369.75
Total Expenditures	222,544.44	\$218,820.29	\$235,962.36	\$212,475.53	\$180,941.90
Revenue Minus Expenditures	(\$83,459.25)	(\$47,916.47)	(\$116,190.08)	(\$50,351.64)	\$86,060.69
Revenue Minus Expenditures Minus State Appropriations and Income Fund	(\$83,459.25)	(\$47,916.47)	(\$116,190.08)	(\$120,971.64)	(\$92,007.94)

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

Staffing (Full Time Equivalent)	FY2021	FY2020	FY2019	FY2018	FY2017
Faculty					
Staff	3	3	3	2.5	2
Student Workers	0	0	1	1	5
Total Staffing	3	3	4	3.5	7