

ECONOMIC IMPACT REPORT



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LETTER FROM THE DEAN

How do you measure the impact and value of academic medicine? At SIU Medicine, we believe that it can be measured in the changed lives of our learners, our patients and in people within the communities we serve.

For more than 50 years, SIU Medicine has been an innovative leader in medical education and a key player in the development of the regional academic medical network of care that impacts the physical and economic health of the region.

Since our beginning, more than 3,000 medical students have graduated from SIU School of Medicine. These physicians have gone on to careers delivering care in Illinois and around the world. Today SIU Medicine clinicians provide services to approximately 430,000 patients annually to advance the health of our local communities.

Beyond the everyday impact we are making on our learners and patients, we can measure our investment in the economy. When you consider our university operations, student spending and alumni income, you get a better picture of our investment in the state of Illinois.

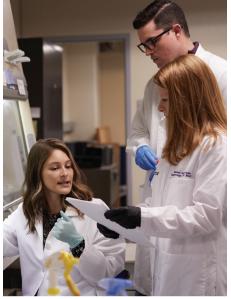
That impact is more than \$1 billion.

We do this work because we are committed to our mission to optimize the health of our region. With every advancement, every life touched, we aim to affirm, improve and progress human life and the vitality of communities we serve. Those advancements reach well beyond our classrooms and our clinics. We are providing a vital boost to the economic health of the state.













INTRODUCTION

Southern Illinois
University Carbondale
investigated SIU School
of Medicine's economic
impact in 2011. This
2024 study provides
an updated view of the
effects of the School on
the state and region. The
data used in this study
are from fiscal year 2023
(FY23).

This study examines the various ways the Southern Illinois University School of Medicine (SIU Medicine) contributes to the state's economy, emphasizing its role as a catalyst for driving the growth of the region. This report utilizes an IMPLAN economic impact modeling technique to measure the multiplier effect of economic activities. It calculates the cumulative impact of multiple rounds of spending triggered by expenditures, new incomes, or job creation within the region. Not all activities generate a quantifiable economic ripple effect. Certain activities, like volunteering as a doctor, are crucial in maintaining the community's well-being, yet they are not quantified or evaluated. The economic impact is calculated by adding up the initial direct spending and the subsequent ripple effects throughout the supply chain, including direct, indirect, and induced spending. The economic benefits are classified according to the following effects: 1) The effect of operational expenditures, 2) The influence of student expenditures, and 3) The contribution of alums to the region. Additionally, the medical research conducted at SIU Medicine advances medicine. It stimulates the creation of innovative methods and technologies that cater to the needs of the region and enhance the overall quality of life.





SIU Medicine is part of the SIU System, which is one of the most powerful economic engines in the southern half of the state. The SIU System employs more than 7,000 faculty, staff and administrators who serve approximately 23,500 students through campuses in Carbondale, Edwardsville and Springfield. The SIU System Office and SIU Medical School are in Springfield, Illinois as well as SIU Medicine clinics that serve thousands of patients.

SIU's economic impact extends far beyond our campus, creating a ripple effect that benefits the surrounding region, nation and the world. The system's operations, construction, capital projects and research directly affect the state economy, while student spending, visitor spending, and alumni activities support the region's industry. SIU graduates have a positive influence across the globe in a variety of professions.

The SIU System's economic impact in fiscal year 2023 was an astounding \$4 billion, and the system's economic activity helped support 45,075 jobs in Illinois. We are proud that SIU's impact has grown tremendously in our 155-year existence; we know this trend will continue with so many outstanding students, innovative faculty and staff members.

SIU MEDICINE PROFILE

SIU School of Medicine (SOM) is a publicly funded medical school and SIU Medicine is its clinical practice. Together they cater to the health care needs of downstate Illinois. When referring to both together, the term "SIU Medicine" will be used.

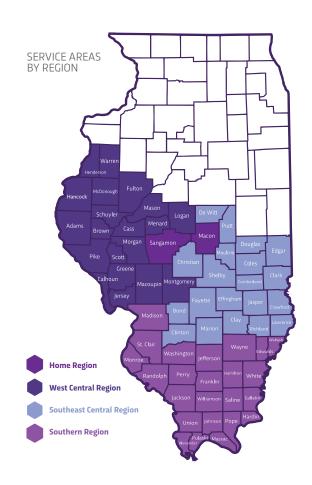
The School of Medicine is part of SIU-Carbondale. It is a regional, community-based medical school that has self-contained academic and clinical programs on campuses located in Springfield, Carbondale, Quincy, Decatur, and Alton. The main campus is in Springfield. SIU Medicine has been an innovative leader in medical education for more than 50 years and has played a significant role in the growth of Springfield's regional academic medical center. Located in the expanding Mid-Illinois Medical District of the city, the school plays a pivotal role in enhancing the overall health of the populace.

The core of the SOM student experience revolves around the principles of empathy and a philosophy that treats patients as unique individuals rather than just medical cases. As a result of innovative training techniques, SOM graduates possess exceptional expertise and self-assurance as clinicians. Exceptional scientific research and community outreach initiatives enhance the SIU mission. The faculty, learners and staff work together to achieve the Triple Aim + 1: making health care more effective, efficient, equitable and enjoyable.

Established in 1970, SIU SOM is a pioneer in 4-year medical education. SIU Medicine delivers health care services to approximately 429,000 patients annually. SIU Medicine has focused on the forces influencing the needs and desires of the people, communities and populations that it serves.

SOM's strategy addresses a major initiative of the Board of Trustees of the SIU System. This initiative centers on the unique nature of the geographical region in which SOM is situated – an area encompassing 40,000 square miles and containing 2.5 million+ people; a distinctly rural region comprised of the residents of small towns, cities and farms; and the environment in which they exist. The Board envisions the SIU System coordinating efforts to unify health services in this region and establishing SIU as the nation's preeminent institution for assessing, educating and delivering rural health care. The School of Medicine will assume a leadership role in this endeavor.

SIU Medicine has considered the systemic factors that pose a risk to the well-being of the individuals we assist. The health care system in our nation is characterized by fragmentation and lack of coordination. There is a significant overflow of disparities in access to care, delivery of care, education and the work environment. Air pollution and climate change represent the most significant potential long-term peril to human health. To tackle these components, SIU Medicine envisions a future characterized by deeper and more efficient collaborations. By forming multilateral alliances, SOM engages with academic, private and government organizations to yield the most effective solutions.



SIU MEDICINE LEADERSHIP

DEAN'S CABINET AND EXECUTIVE LEADERSHIP

Jerry Kruse, MD, MSPH

Dean and Provost, SIU School of Medicine, CEO, SIU Medicine

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Executive Associate Dean,
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John Flack, MD
J. Ricardo Loret de Mola, MD
Aziz Khan, MD
James Waymack, MD
Michael Neumeister, MD
Kari Wolf, MD

SIU MEDICINE

TOTAL ECONOMIC IMPACT FY23

\$1,089 BILLION 5,542 JOBS





OPERATIONS ECONOMIC IMPACT

\$901 MILLION 4,027 JOBS



STUDENT IMPACT

\$17.3 MILLION138 JOBS

DIRECT UNIVERSITY OPERATIONS \$452 MILLION

EVERY \$1 INVESTED BY SIU SCHOOL OF MEDICINE STUDENTS RETURNS

\$8.61



THE STATE'S INVESTMENT IN SIU MEDICINE YIELDS

\$35,953,600 IN TAX REVENUES

EXPENSES OF SOUTHERN ILLINOIS UNIVERSITY MEDICAL SCHOOL

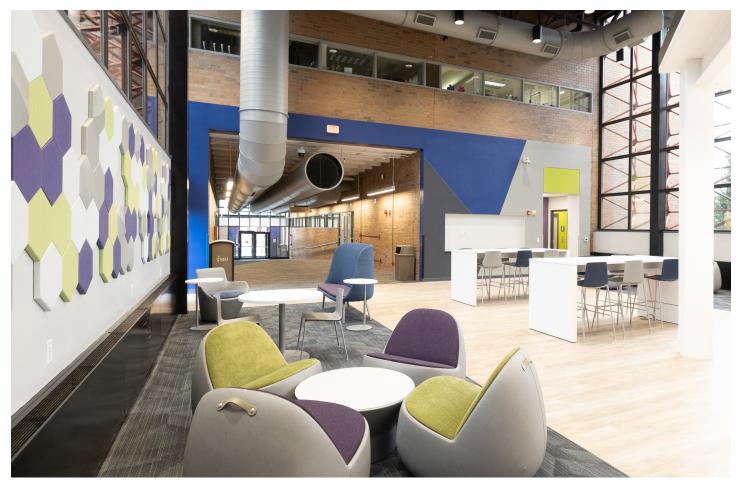
Operational expenditures, both in and out of the state, from SIU Medicine totaled more than \$285 million in FY 2023. However, when adding SIU Healthcare expenses, this amount increases to nearly half a billion dollars, i.e., \$452 million.

Caralayaa aalasiaa	In-state expenditures	Out-of-state expenditures	Total
Employee salaries, wages, and benefits	\$202,307,015	\$506,185	\$202,813,200
Operation and maintenance of plant	\$10,123,253	\$2,939,247	\$13,062,500
All other expenditures	\$35,755,671	\$33,370,629	\$69,126,300

TOTAL SIU MEDICINE ECONOMIC IMPACTS FROM UNIVERSITY OPERATIONS

\$248,185,939 IN-STATE **\$36,816,061** OUT-OF-STATE **\$285,002,000** TOTAL

Note: Expenses of Southern Illinois University Medical School table excludes expenses (income) and revenues (output) from SIU Healthcare. Those amounts are included in the SIU Medicine Economic Impacts from University Operations table.



SIU MEDICINE OPERATIONAL EXPENSES BY FUNCTION



INSTRUCTION **\$25,163,000**



RESEARCH **\$12,802,300**



PUBLIC SERVICES **\$16,227,100**



\$204,779,800



\$1,698,400



\$10,722,300



OPERATIONS & MAINTENANCE \$13,062,500



SCHOLARSHIPS & FELLOWSHIPS \$546,600

TOTAL OPERATIONAL EXPENSES

\$285,002,000

Note: This excludes expenses (income) and revenues (output) from SIU Healthcare.

Those amounts are included in the SIU Medicine Economic Impacts from University Operations table.



SIU MEDICINE ECONOMIC IMPACTS FROM UNIVERSITY OPERATIONS

SIU Medicine operations and spending created economic activity within Illinois and the St. Louis Metropolitan Area a through *direct, indirect and induced channels. This leads to increases in jobs, income and total economic output.

	Jobs	Income	Output
Direct	2,586	\$292,439,684	\$451,927,976
Indirect	346	\$33,757,365	\$125,871,067
Induced	1,095	\$101,942,862	\$323,429,128

TOTAL SIU MEDICINE
ECONOMIC IMPACTS FROM
UNIVERSITY OPERATIONS

4,027 JOBS **\$304,143,961** INCOME **\$901,228,171** OUTPUT

Note: This table includes expenses (income) and revenues (output) from SIU Healthcare that is not included in the previous tables.

*Direct economic impact: Impacts caused by SIU spending on operations, payroll, capital, benefits, student spending and visitor spending.

Indirect economic impact: The increase in demand for services and goods that support SIU, our students, visitors, faculty and staff.

Induced economic impact: Impacts created by household spending from SIU employees, students and employees of supplies.

SIU MEDICINE ECONOMIC IMPACTS FROM STUDENT SPENDING

Spending by SIU Medicine students off-campus generates significant economic impacts. All 496 students enrolled in SIU Medicine in FY23 lived off campus. The aid received is about 0.2% of the total operational budget.

	Jobs	Income	Output
Direct	97	\$5,589,536	\$9,088,208
Indirect	10	\$835,381	\$2,315,453
Induced	30	\$2,001,623	\$5,895,019

TOTAL SIU MEDICINE
ECONOMIC IMPACTS FROM
STUDENT SPENDING

138 JOBS **\$8,426,539** INCOME **\$17,298,679** OUTPUT

SIU MEDICINE ECONOMIC IMPACTS FROM ALUMNI

With 943 SIU Medicine alumni practicing medicine in Illinois, the present value of the alumni-increased incomes due to SIU School of Medicine education is \$104,846,819. Alumni impact on the state economy is about \$188 million.

	Jobs	Income	Output
Direct	946.05	\$62,498,479	\$99,580,456
Indirect	102.28	\$6,961,462	\$99,580,456
Induced	329.19	\$21,770,180	\$187,928,769

TOTAL SIU MEDICINE
ECONOMIC IMPACTS FROM
ALUMNI IMPACT

1,377.52 JOBS **\$91,230,121.23** INCOME **\$187,928,769** OUTPUT



SIU MEDICINE TOTAL ECONOMIC IMPACT

Combining the economic impacts of university operations, student off-campus spending and alumni incomes yields SIU Medicine's total economic impact. SIU Medicine has a large impact on the Illinois economy, over a billion dollars.

TOTAL SIU MEDICINE ECONOMIC IMPACT \$1,023,373,669

OPERATIONS \$901,228,171 STUDENT SPEND \$17,298,679 ALUMNI IMPACT \$104,846,819

POINTS OF PRIDE

SIU Medicine's public impacts include community benefits that are not measured in dollars but have human and social value. University service to the community has public impacts today, and university research will have public impacts and benefits in the future, as the research helps to shape future opportunities.



SIU School of Medicine was the first institution to incorporate problem-based learning and standardized patients into its medical school curriculum. The Professional Development Laboratory allows evaluation of students in standardized and real patient encounters in a precise replica of an exam room. It was the first such facility in the nation, providing the prototype for clinical simulation training observation.



SIU School of Medicine's Surgical Skills Laboratory was one of the first of its kind. Established in 2000, the lab enabled surgery residents to hone their skills using high-tech models, virtual reality simulators and direct hands-on instruction. A state-of-theart upgrade opened in 2015 within the Memorial Learning Center, a block south of the original site.



According to the AAMC, SIU School of Medicine consistently ranks above the 85th percentile of U.S. medical schools for graduates who are African American or Black, who practice in medically underserved areas, and who practice primary care. The school also ranks above the 70th percentile for percentage of faculty members who are women.

POINTS OF PRIDE



SIU School of Medicine is world-renowned for research of cancer, Alzheimer's and neurological diseases, and women's health. It is also an international leader in hearing research, including studies of deafness, vertigo and tinnitus.

SIU School of Medicine established the nation's original MEDPREP program (1972), designed to help educationally and economically disadvantaged undergraduate students prepare for health profession schools.

SIU Medicine is the largest multi-specialty physicians group in the region, with 325 full-time physicians and other medical professionals who provide patient care to more than 160,000 individuals each year.

SIU Medicine was selected by the Camden Coalition to lead the U.S. in the development of hot-spotting educational programs for outreach and care for the highest risk and most vulnerable patients, an essential program to improve outcomes, cost and equity in the U.S. health care system.

Emerging areas of SIU School of Medicine research include the role of microbiomes in disease, regenerative medicine, population science and outcomes-based research.

SIU School of Medicine
is the only medical school
in the world to receive two
consecutive accreditations from
the Liaison Committee for
Medical Education (LCME)
without any citations
(2007, 2015).

POINTS OF PRIDE

SIU School of Medicine was one of only two institutions in the world to receive the inaugural Stellar Award from the Association of Medical Education in Europe, for its cumulative achievements in student medical education.

SIU Medicine is one of the largest university-owned and administered Federally Qualified Health Center (FQHC) systems in the Midwest, serving the region with 13 clinics in eight cities.

> SIU School of Medicine was the first medical school in the U.S. to require a clinical competency examination before graduation. The exam is now a model for physician licensure throughout the country.

SIU Medicine's Dale and Deborah Smith Center for Alzheimer's Research and Treatment serves a total of 93 of 102 Illinois counties by providing clinical and educational services to patients and their families through a network of primary provider sites.



SIU's Institute for Plastic Surgery is rated as best in the U.S. for microsurgery, measured by successful reattachment of amputated limbs, hand surgery and therapy, reconstructive surgery, burn care, aesthetic surgery and problem wound care.



SIU Medicine's Fertility and IVF Center has one of the top infertility treatment rates in the country. The South-Central Illinois Perinatal Center, led by SIU Medicine providers, is the largest group in downstate Illinois, and provides tertiary care services to 30 hospitals and 36 counties. SIU Medicine's telemedicine network provides maternal-fetal medicine services to rural hospitals and clinics in central and southern Illinois.

RESEARCH TEAM

This report was prepared by a research team of SIU faculty that was led by Jebaraj Asirvatham, PhD in Agricultural and Applied Economics, and Scott Gilbert, PhD in Economics, with the help of economics graduate assistants Stephen Troveh and Haya Akram Khan. The full version of this report can be found at siusystem.edu/economicimpact. For questions, please get in touch with the study authors at jebaraj@siu.edu or gilberts@siu.edu.



Jebaraj Asirvatham, PhD

Jebaraj Asirvatham, SIU Carbondale Associate Professor of Agribusiness Economics

Jeb is an applied economist and works in multiple research areas, including agricultural marketing, agricultural finance, economic development, and nutrition and health economics. He is an associate professor of agribusiness economics at SIU Carbondale. Jeb's research work includes estimating regional premiums of specialty crops, exchange rate and agricultural trade, microfinance and business income, sustainable attitudes and behaviors among college students, women empowerment in developing nations, food environment in schools, peer-effects in health among schoolchildren, and the impacts of campaign and education policies.

In his research work, Jeb uses science-based evidence to model economic relationships. He has also developed mathematical models based on neuroscientific findings to explain dietary behaviors. Jeb's master's thesis and a paper from his dissertation received international awards. He teaches Financial Management in Agriculture and Marketing and Pricing of Agriculture Products covering topics, such as investment analysis or capital budgeting, financial management, and marketing principles.



Scott Gilbert PhD

Scott Gilbert, SIU Carbondale Associate Professor of Economics

Scott received his bachelor's degree from the University of California Berkeley. He completed his coursework there to go to medical school but found economics so interesting that he instead went to work as a research associate in the research department of the Federal Reserve Bank of San Francisco. After working there two years, he completed his PhD in economics at the University of California San Diego. After graduating in 1996, he worked as an assistant professor in economics at the University of Mississippi for three years, then joined SIU Carbondale in year 1999.

Gilbert teaches a variety of courses including econometrics, financial economics and monetary economics. He received the SIU Economics Faculty Teaching Award in 2006 and is the faculty mentor for the SIU's Economics Club and Blockchain Economics Club. He serves as the economics program coordinator and the undergraduate program director for economics. His areas of published research include econometrics, statistics, finance and cryptocurrencies.

Thanks to the following SIU leaders who also contributed to this report.

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