

## Academic Resources

### Library Affairs

Morris Library is named after the late Delyte W. Morris, University President from 1948 to 1970. Students, faculty, and staff of the University benefit from unlimited access to millions of dollars of research materials carefully selected and maintained by professional library faculty and staff through lib.siu.edu. The catalog, I-Share@Morris Library (available via lib.siu.edu), is the gateway to identify and request items held in Morris Library, as well as from over 100 other academic libraries in Illinois. Items requested from other libraries arrive within a few days through I-Share or Interlibrary Loan. Online resources include academic journals, e-books (now over 249,000 in number), full-text databases, and freely-available resources. The building houses nearly three and a half million volumes, three and a half million microforms, and 49,990 currently-received periodicals and serials. The physical collections also include government documents, maps, films, DVDs, and sound recordings. Morris Library is a selective U.S. Federal Depository Library and an Illinois State Depository. With the exception of materials in the Special Collections Research Center, library materials are arranged on open shelves for convenient browsing.

Over 300 computers distributed throughout the building provide access to the catalog and to all of the online resources while patrons are in the Morris Library building. Throughout the building, patrons find wireless access, study tables with integrated power outlets, comfortable seating, and group study rooms of various sizes and configurations. Students may reserve group study rooms online. The basement and 5th floors are reserved for silent study. Other frequently-used services available in the building include copiers, scanners, printers, Debit Dawg machine, fax machine, vending machines, and free electronic device charging stations.

Morris Library has been transformed into a spectacular center of academic, social and aesthetic activity for the University and local community during the last decade. In addition to abundant natural light, a variety of seating arrangements cater to every patron's study preference. Visitors enjoy intellectual, historical, cultural, and artistic events in the 200-seat Guyon Auditorium, Hall of Presidents and Chancellors, and two Rotundas. Art and exhibits adorn many areas of the building with receptions and lectures announced frequently.

Delyte's Cafe serves coffee and other beverages as well as yogurt, soup, sandwiches, salads, baked goods, and snacks from early morning into the evening. During the academic year, the building is open to all, Sundays from 1 p.m. - Midnight, Mondays - Thursdays 7:30 a.m. - Midnight, Fridays 7:30 a.m. - 9 p.m. and Saturday 10 a.m. - 6 p.m.

Library services provided in Morris Library include:

- The Information Desk invites patrons to ask questions, obtain assistance with academic, professional, and personal research, and get technology help (SalukiTech). The Information Desk and the "Ask a Librarian" service (libguides.lib.siu.edu/askalibrarian) are staffed by library faculty and staff who are eager to help students, faculty, staff, and others in fulfilling their research needs. Consultations,

instructional sessions, online tutorials, videos, and guides are provided free of charge on a continuous basis.

- Disability Support Services features software, hardware, and assistance for those who need adaptive technologies.
- Circulation Services checks out library materials, course reserves, interlibrary loan items, laptops, adaptors, and other devices.
- Instructional Materials Center (IMC) contains a collection of PreK-12 materials designed to provide students, teachers, and school administrators both on-campus and in southern Illinois with sample teaching materials that can be used in the classroom or in evaluating curricular materials.
- Geospatial Resources includes the Map Library and Geographic Information Services (GIS). The Map Library houses more than a quarter of a million maps and nearly 100,000 aerial photographs. GIS assists patrons in locating existing digital maps or in creating customized maps.

The Special Collections Research Center (SCRC) is located off the Hall of Presidents and Chancellors. SCRC houses unique materials such as rare books, manuscript collections, and the University archives. It contains significant research collections in American Philosophy, First Amendment Freedoms, American and British twentieth century literature and theatre, a Political Papers archive, and the history of southern Illinois.

In addition to comprehensive library services, the Morris Library building is home to Math Central (classrooms and lab), Learning Support Services (Tutoring Center, Testing Services), Center for Teaching Excellence, the University Honors Program, the Writing Center, and Saluki Tech (walk-up technology support and personal device configuration).

### Information Technology

The Office of Information Technology (OIT) supports the University mission by providing students, faculty, and staff with reliable access to the technology they need to succeed. OIT Technology Services supports a wide range of technology resources including email and network ID set up; phone, email, and walk-in support via SalukiTech; on-campus device repair; desktop support; student printing services for convenient printing across campus; and site-licensed software for departmental and personal use. Technology Services also operates five general access Computer Learning Centers (CLC labs) with computers running Windows, Mac, and UNIX operating systems. These computer classrooms are available for instruction that requires the use of technology. Technology devices and peripherals may be purchased on campus through the SalukiTech Computer Store located in the Student Center. Research Computing supports SIU researchers and graduate students doing research with access to the University's 34.7 Teraflop supercomputer. Free access to this high-performance computing cluster is requested through OIT. OIT Networking supports campus WiFi and Ethernet access in the student residence halls. Networking also provides network-based information resources, as well as Internet2 connectivity, to all main campus buildings. SIU's network is connected through three independent Internet Service Providers (ISP). Networking supports campus telephone services and all

network infrastructure on campus. OIT Enterprise Applications controls records management services, administrative information systems, student information systems, and all major implementations on campus. One of the most valuable tools Enterprise Applications offers is SalukiNet (salukinet.siu.edu). This portal connects students to their SIU personal records: admissions, housing, financial aid, grades, transcripts, account information, student payroll and more. A second tool of great interest to students is Degree Works—a software program that allows students to review requirements for their majors to keep themselves on track to complete their degrees on time. OIT Systems is the backbone of University computing. Systems houses critical, enterprise-wide technology, including all of the computers needed to run the business of the University. Systems maintains redundant systems on and off campus to ensure that OIT can back up and restore information in the event of catastrophic system failure. OIT's Project Management Office works with campus constituents to assess, plan, organize, and push technology-heavy projects forward.

## Research and Service Centers

### **Advanced Coal and Energy Research Center**

The Advanced Coal and Energy Research Center (ACERC) ACERC is the hub for access to resources and information regarding advanced coal and energy research for SIU and the regional community. ACERC was established in 1974 as the Coal Research Center and expanded its focus in 2014 to include the broad array of energy research occurring across campus. ACERC received the Energy Boost Grant in 2015 which funds additional energy-related research grants, scholarships, educational programs, graduate assistant and teaching positions at the Carbondale campus.

Starting in Fall 2018, students in SIU's Mechanical Engineering and Energy Processes (MEEP) department can earn a minor or a specialization in Energy, and non-MEEP students can earn a minor in Energy. ACERC also supports SIU's Professional Science Master's in Advanced Energy and Fuels Management program, which affirms an impressive post-graduation employment percentage. ACERC provides a number of scholarships for eligible students in these programs each year.

ACERC provides seed grants for faculty research, funding for commercialization projects, and student grants for undergraduate research projects. Research has been conducted ranging from mine reclamation, coal processing, and gasification to energy policy, biofuels and renewables. Ever at the forefront of efforts for safer, cleaner and more efficient energy, SIU researchers are making discoveries in areas such as carbon dioxide utilization, chemical looping combustion, microalgal fermentation and advanced materials for fuel cells. Faculty and students from such diverse fields as engineering and technology, science, business, education, law and agriculture have contributed to the University's international reputation in advanced coal and energy research.

ACERC manages the Illinois Energy Development Park (IEDP) in Carterville, Illinois. Efforts at the IEDP have targeted technologies that promise nearterm commercial application. The IEDP has housed numerous technology projects including

federal, state, and privately funded projects.

More information can be found by exploring [energy.siu.edu](http://energy.siu.edu), emailing [acerc@siu.edu](mailto:acerc@siu.edu) or by calling 618/536-5521.

### **Center for Alzheimer's Disease and Related Disorders**

The School of Medicine's center in Springfield has research projects that cover a wide range of basic science and clinical studies relating to normal aging, memory impairment, Alzheimer's disease, Parkinson's disease, tremor and functional MRI. The Center also maintains a brain bank of human brain tissue. The web address is: [siumed.edu/alz](http://siumed.edu/alz).

### **Center for Archaeological Investigations**

The Center for Archaeological Investigations engages in research in the American Midwest and Southeast, and Mexico. Funding is provided by state and federal agencies, and private institutions. The Center also conducts archaeological research for firms and government agencies that are required to comply with environmental and antiquities laws. The Center supports an annual field school with the Department of Anthropology and provides thesis/dissertation data and research opportunities for students. It also curates large collections of archaeological materials, representing more than 60 years of research in the American Midwest and Southwest. The web address for the Center for Archaeological Investigations is [cai.siu.edu](http://cai.siu.edu).

### **Center for Autism Spectrum Disorders**

The Center for Autism Spectrum Disorders (CASD) is a research, training, & service program within the Rehabilitation Institute and a partner in the Illinois Autism Program. The CASD provides interdisciplinary training for students enrolled in various programs at SIU, including Communication Disorders and Sciences, Behavior Analysis and Therapy, and Psychology. The CASD also collaborates with several area service providers, such as local special education districts, Early Intervention agencies, as well as state agencies, to help them provide best practice treatment. Diagnostic and treatment planning assessments are conducted to determine the presence of ASD and functional objectives in therapy. CASD faculty and students are engaged in cutting edge research in areas related to ASD such as Acceptance and Commitment Therapy and Relational Frame Theory in both early learners and adolescents and adults. Additionally, the researchers focus on staff training, and early identification. The web address is <http://casd.siu.edu>.

### **Center for Delta Studies**

The Center for Delta Studies builds linkages among scholars in the SIU system, universities in the region encompassed by the Delta Regional Authority, and between researchers and the larger public. Its mission is to promote groundbreaking research that will contribute innovative solutions to the endearing problems of poverty and associated human and ecological endemic to the Delta region. The web address for the Center for Delta Studies is [deltastudies.siu.edu](http://deltastudies.siu.edu).

### **Center for Ecology**

The purpose of the Center for Ecology is to provide an umbrella for ecological research, teaching, and training at SIU. More than 50 faculty members and numerous students and staff from several departments in the Colleges of Agricultural

Sciences, Engineering, Science, and Liberal Arts participate in this interdisciplinary program. Independent, cooperative, and collaborative research conducted by Center faculty takes advantage of the exceptional range of natural resources of the region across a variety of ecosystems in Illinois, throughout the United States, and around the world. The Center offers a variety of resources and opportunities for graduate and undergraduate students at SIU and beyond, including internships, a state of the art analytical laboratory, an annual student research symposium, and the 1,400 acre Middle Mississippi River Wetland Field Station. Doctoral students pursuing ecological studies at SIU can earn a Specialization in Ecology, which appears on the transcript, through the Center. Learn more about the Center for Ecology at [ecology.siu.edu/](http://ecology.siu.edu/).

#### **Center for Environmental Health and Safety**

This center is responsible for the facilitating and monitoring of campus-wide compliance to policies, guidelines, and regulations with respect to environmental and occupational health and safety, specifically those of the University, Environmental Protection Agency, Illinois Emergency Management Agency-Division of Nuclear Safety, Occupational Safety and Health Administration, National Institutes of Health, Office of the Illinois State Fire Marshal and other federal and state agencies as applicable. The center's web address is [cehs.siu.edu](http://cehs.siu.edu).

#### **Illinois Soybean Center**

Established in 1997, the Illinois Soybean Center focuses on developing information and technologies that enhance soybean production in Illinois and the North Central region, increase soybean utilization by the global community, contribute to the base of scientific knowledge, and educate human capital in the various attributes and applications of soybean. SIU faculty members in the College of Agricultural Sciences collaborate with those in the College of Science and the School of Medicine, along with university colleagues throughout the nation, to implement interdisciplinary research, education, and outreach programs on soybeans. The Center addresses issues related to all aspects of soybean production, utilization and policy, including breeding and genetics, biotechnology, crop protection, human nutrition and food, animal nutrition, marketing, and consumer acceptance. For more information see the website at [coas.siu.edu/research/illinois-soybean-center](http://coas.siu.edu/research/illinois-soybean-center).

#### **Center for Workforce Development**

The Center for Workforce Development was established to create a research, education and training group that provides students and faculty with the opportunity to collaborate on research and development, education and training, and information and product dissemination. The objectives of the Center emphasize:

1. Research and Development—addressing the broad array of issues affecting the nature of the workforce and workplace settings.
2. Education and Training—addressing development and delivery of customized workforce education and training programs/courses in collaboration with agencies and organizations in the public and private sectors.
3. Information and Product Dissemination—addressing the

need for dissemination of curriculum and instructional resources useful for promoting work-related education and training.

The Center for Workforce Development will serve as a broker in the exchange and sharing of information and higher education resources associated with the nature of the workplace and workforce. Further, the Center will act as a catalyst in bringing together leaders from business, research, education and government to interact and work together to formulate public policy associated with workforce development. For more information, visit the center's website: [ehs.siu.edu/wed/research](http://ehs.siu.edu/wed/research).

#### **The Nurse Aide Testing Project**

The Nurse Aide Testing Project is a collaborative, multi-faceted research, education, and innovation project that utilizes the latest technologies to provide training, certification testing, curriculum development, and content delivery to a variety of programs across the SIU campus, the state of Illinois, and the United States. The project was initiated to create and administer the certification exam for Nursing Assistants for the state of Illinois and continues to certify tens of thousands of individuals annually for employment eligibility. This project has seen significant growth over the years, and now it has grown to encompass several other fields of research to include gamification to better engage students, a motion capture laboratory for training development, online course development, specialized video techniques to enhance content delivery, and online training development. The project also includes a Workforce Education Research and Developmental Laboratory whose mission is to enhance the current and future effectiveness of organizations by maximizing the value of human capital through innovative training techniques and staff development.

#### **Center for Fisheries, Aquaculture, and Aquatic Sciences**

Graduate research in fisheries, aquaculture, and aquatic ecology is conducted through the Center for Fisheries, Aquaculture, and Aquatic Sciences. Graduate study in fisheries, culminating in the Master of Science or Doctor of Philosophy degree, is offered in the Department of Zoology. In addition to a wide variety of support courses, nine fisheries courses are taught. Research activities include studies in fish management, aquatic conservation, fish genetics, aquatic toxicology, and aquaculture. Emphases include warmwater, coolwater, and coldwater fishes native to Illinois. There are also opportunities to work with exotic species of fishes and shellfishes, both freshwater and marine. Some of the areas of research stressed are trophic ecology, water quality, large river ecology, aquaculture, conservation biology, invasive species, nutrition, fish physiology, fish genetics, utilization of nursery areas, ecology of larval fishes, age and growth studies, stable isotopes, population dynamics, and aquatic toxicology. Facilities in the Center for Fisheries, Aquaculture, and Aquatic Sciences include offices, well equipped laboratories, a computing faculty, vessels for work on rivers and lakes, aquarium rooms, culture ponds, a greenhouse for hydroponic and recirculating water system studies, the new state of the art Aquatic Research Laboratory and Saluki Aquarium ([aquarium.siu.edu](http://aquarium.siu.edu)), an 8,300 square-foot wet-laboratory building and a 90-pond research/

demonstration facility. The web address for the Center for Fisheries, Aquaculture, and Aquatic Sciences is <http://fisheries.siu.edu/>. Phone number: 618-536-7766.

#### **Global Media Research Center**

The Global Media Research Center serves as an intellectual hub for research on international, national and local media. Faculty in the College of Mass Communication and Media Arts partner with University faculty, colleagues, and institutions around the world. Center-sponsored research produces a body of knowledge that expands and extends the critical dialogue surrounding issues of importance in global media studies and practice.

The Center builds upon SIU's long traditions of international academic exchange by conducting a strong and innovative research program directed toward the dynamic, complex field of global media communication. Center researchers and practitioners study and work in areas of global media including foreign news reporting, world cinema, global advertising, broadcasting and streaming media, and all forms of international media circulation. Research and practice in this field engages in comparative media studies, investigations of media responsibility and ethics, and explores the interfaces between media art and research.

Center activities include seminar programs with outside speakers as well as campus presentations by faculty and graduate students, which help create steady awareness of new and unfolding issues. The Center also hosts visiting scholars and artists, arranges exchange programs for faculty and students, and engages in grant-sponsored research initiatives. For more information visit the Center's website at <http://mcma.siu.edu/research-creative/gmrc/>.

#### **The Materials Technology Center (MTC)**

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 a competitive grant program that funds start-up 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 studies in 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 and Biosensors, and Energy Storage. Other research programs included catalysis, magnetic materials, materials for alternative and traditional energy, polymers, chemical vapor deposition and infiltration, and plasma induced deposition techniques. 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 [mtc.siu.edu](http://mtc.siu.edu).

#### **Meyers Institute for Interdisciplinary Research in Organic and Medicinal Chemistry**

The Meyers Institute, founded in 2000 through an endowment provided by Dr. Cal Y. Meyers, Distinguished Professor Emeritus, advances knowledge in fundamental and applied organic and medicinal chemistry. Institute personnel include members of the College of Science, College of Agricultural Sciences, and School of Medicine, among others. In conjunction mainly with the Department of Chemistry and Biochemistry, undergraduate and graduate students and postdoctoral fellows are afforded stipends to participate in advanced research projects. As part of its activities, the Institute hosts bi-annual symposia. The Institute's web address is [chem.siu.edu/research/meyers-institute](http://chem.siu.edu/research/meyers-institute).

#### **Paul Simon Public Policy Institute**

The Paul Simon Public Policy Institute (also called the Paul Simon Institute) is a resource for SIU students, the campus community, the region and the State of Illinois. The Institute's mission focuses on fostering ethical conduct in government, opportunity and fair treatment for people in America and throughout the world, and promoting responsible citizenship for all Americans--but particularly for young Americans. The Institute executes its mission by :Conducting nationally known public opinion polls (The Simon Institute Poll™ and The Southern Illinois Poll™) to inform decision makers and citizens; Publishing analysis of public policy issues in its occasional papers (The Simon Review); Providing and supervising paid internships, graduate assistantships and fellowships for undergraduate and graduate students in Carbondale, Springfield and elsewhere; hosting noted leaders in public policy, politics, journalism and other fields to campus for speeches, conferences, and hosting leadership and civic education opportunities for high school students.

The Institute's popular "Pizza and Politics" programs are geared to both undergraduate and graduate students of all majors to interact with Institute guests. Other Institute undergraduate opportunities include the Vince Demuzio Internship program where juniors and seniors learn about public service during paid internships in local governmental offices. Undergraduate students can learn about public service while working paid internships in Springfield state government offices through the Gene Callahan Internship and the Alexander Lane Internship. The Institute has also sponsored learning opportunities for students in Washington D.C. and Pittsburgh, PA. Student and parents can learn more at our website, [www.paulsimoninstitute.org](http://www.paulsimoninstitute.org), and are encouraged to contact us at 618-453-4009 with questions, or stop by the Institute on campus at 1231 Lincoln Dr. (the Forestry Building). Like us on Facebook at <https://www.facebook.com/paulsimoninstitute>.

Paul Simon established the Public Policy Institute in 1997 upon his retirement from more than 40 years in elected office. Simon was a state Representative, state Senator and Illinois Lieutenant Governor before being elected to five terms in the U.S. House of Representatives beginning in 1974 and then serving two terms as U.S. Senator. Additionally, he was a candidate for the Democratic nomination for President of

the United States in 1988 and a political mentor to many, including President Barack Obama. He remains one of Illinois' most revered political leaders and enjoyed broad bipartisan support from voters most of his career.

After Sen. Simon's passing in 2003, Mike Lawrence, who had been press secretary and senior adviser to Illinois Governor Jim Edgar in the 1990s and who served as the Institute's associate director since its inception, was named director. He retired in 2008. David Yepsen, a political columnist at the Des Moines Register for more than 30 years, was named director in 2009. He retired in 2016. Jak Tichenor was named interim director on November 1, 2016. Jak is a veteran broadcast journalist who spent the majority of his reporting career at WSIU Public Television in Carbondale. Tichenor is the executive producer and host of the statewide Illinois Lawmakers series on the Illinois General Assembly for Illinois Public Television and has served as Statehouse Correspondent for the series since 1991.

#### **Fermentation Science Institute**

Established in 2014, the Fermentation Science Institute is a campus resource that supports educational, research and outreach activities involving various aspects of fermentation. Topics include the production and analysis of alcoholic beverages and fermented foods, as well as the production of fuels, pharmaceuticals and biomaterials. As an interdisciplinary initiative involving various departments from multiple colleges, the Institute coordinates and supports collaborative research projects and outreach programs providing advanced educational and training opportunities. The Institute also houses and operates the Bachelor of Science degree in Fermentation Science (see undergraduate catalog). Located in newly renovated space in the McLafferty Annex, the Institute provides state-of-the-art teaching and research facilities and operates a fee-for-service laboratory providing analysis of wine, beer and distilled spirits for industries in the region. The Fermentation Science Institute's website is [fermentation.siu.edu](http://fermentation.siu.edu).

#### **Safety Center**

The Safety Center was established in 1960 and is affiliated with the Department of Public Health and Recreation Professions. The Center's research activities, carried out by faculty, staff, and graduate students, focus on injury control and prevention as well as traffic safety. The Center also offers training programs in motorcycle rider safety, emergency/evasive driving/protective services, and child and occupant safety protection. It provides consulting services to businesses, agencies, and the general public. The Center hosts meetings, courses, seminars, and conferences on a wide range of injury prevention and health promotion topics. The Center's programming and research activity can be viewed at the Department's website: [ehs.siu.edu/phrp/safety/php](http://ehs.siu.edu/phrp/safety/php).

#### **STEM Education Research Center**

With the approval of the Illinois Board of Higher Education, SIU and the College of Science have created a Research Center of Science, Technology, Engineering, and Mathematics (STEM) Education. The need for such a Center flows from critical issues that have emerged or are emerging in STEM education at the national, state, and local level.

At the national level, there is a clarion call for an increase in college graduates in STEM programs to address the critical need in the very industries that will be at the center of the continuing transformation of the world economy. National reports indicate the danger of the U.S. economy losing ground internationally unless our educational system becomes more effective at producing students interested in and capable of the rigors of the educational programs in the STEM disciplines. In addition, once these students enter university-level STEM programs, they must be greeted with effective state-of-the-art STEM content and pedagogy.

At the state and local level, one of the key components of an increase in the effectiveness of STEM education is the implementation of the Common Core State Standards ([corestandards.org](http://corestandards.org)) and the Next Generation Science Standards (NGSS; [nextgenscience.org](http://nextgenscience.org)) at the state level. While adopting these national standards is voluntary at the state level, Illinois has agreed to implement the Common Core and is an active lead state partner in the NGSS efforts. The implications of these decisions are just beginning to emerge and will completely transform the content and pedagogy employed in K-12 classrooms across the state. In addition, new high-stakes assessments (PARCC) have been prepared that have replaced the Prairie State Exam at the high school level. As the state research University in the Southern Illinois region, SIU has an obligation to provide as much support as possible during this important transition period to our local school districts.

The structure and programs of the STEM Education Research Center will correspond to the primary areas of interest: K-12 STEM education, undergraduate STEM education, and graduate STEM education. As indicated above, K-12 STEM education is in a period of rapid transformation. One area of emphasis of the Center will be coordination of the existing programs already implemented at SIU, many of which reside in the College of Science.

STEM education at the undergraduate level is under increasing scrutiny. From finding ways to improve success rates in lower-level undergraduate STEM classes to identifying new and innovative ways to deliver undergraduate STEM content in our courses, our programs are undergoing rapid change. SIU must continue to ensure that the content and structure of undergraduate STEM courses provide the optimal preparation either for graduate school or for our students' chosen professions. In support of our undergraduates, the Center will be the natural leader in developing internship opportunities. One important collection of current programs that will be natural candidates for continued research will be the research experience for undergraduates (REU) programs that exist in the STEM disciplines.

Graduate STEM education must also stay current with the massive technological changes that are affecting our entire educational system. While the advisor-student mentorship which is at the heart of graduate education will almost certainly be preserved, the optimal uses of technology should be explored, and this will also be included under the umbrella of research programs at the STEM Education Research Center.

#### **Cooperative Wildlife Research Laboratory**

Since its founding in 1950, the CWRL has achieved a

distinguished record training graduate students in basic and applied principles of vertebrate ecology and wildlife biology. It is a comprehensive program that is recognized among the premier wildlife research units in the nation. Independent, cooperative, and collaborative research supported by industry, foundations, and state and federal agencies lead to better understanding and management of natural resources. Areas of acknowledged laboratory expertise include the biology and ecology of a variety of terrestrial wildlife species; land-use impact on wildlife resources; wildlife and environmental toxicology; waterfowl/wetland ecology; thermal ecology; and the epizootiology of zoonotic and other diseases in wildlife. The CWRL has pioneered in the reclamation and enhancement of mined lands for the benefit of various resources; current efforts provide unique research and training opportunities. More than 30 projects directed by laboratory staff currently afford broad and varied research opportunities to graduate fellows and research assistants, as well as undergraduate students. These activities exceed \$1,000,000 each year in contracts and grants, resulting in significant contribution to academic needs of students and staff and requests for service by state, federal, and private agencies. The website for the CWRL is [wildlife.siu.edu](http://wildlife.siu.edu).

### **Research Support Facilities**

The services of several centralized research support facilities are available to faculty, staff, and students at minimal cost. IMAGE (Integrated Microscopy and Graphics Expertise) provides training, technical service, and research in electron, atomic-force, and light microscopy ([image.siu.edu](http://image.siu.edu)). It also offers technical assistance to those in need of scientific photography or computer-graphics illustration as part of their research. The Mass Spectrometry Facility (housed within the Chemistry Department but available to researchers across campus) has a variety of instruments and offers qualitative and quantitative analysis services ([mass-spec.siu.edu](http://mass-spec.siu.edu)). The Laboratory Animal Program, a fully accredited facility, is directed by a veterinarian with specialty training in laboratory animal medicine to ensure proper and humane care of research animals ([iacuc.siu.edu](http://iacuc.siu.edu)).

### **Office of Sponsored Projects Administration**

The Office of Sponsored Projects Administration (OSPA) offers a number of services for faculty, staff, and students who wish to submit grant applications to funding agencies. Graduate students seeking funding for their research projects (dissertation support, research fellowships, travel grants, etc.) should start with OSPA's website [ospa.siu.edu](http://ospa.siu.edu), which offers access to a searchable grants database (Grant Forward), includes links to several funding agencies, and provides other grant-related material. For this and other information specific to graduate students, visit [ospa.siu.edu/student-research](http://ospa.siu.edu/student-research).

Many of the necessary forms and data required to complete grant proposals are easily available on the website. OSPA staff are available for assistance in proposal preparation and submission. OSPA also works with faculty and student researchers throughout the award process including negotiating grant/contract award agreements, accessing the funding, and fiscal reporting.

One of OSPA's responsibilities is to ensure that research conducted at SIU complies with all applicable federal and funding-agency regulations. Funded or unfunded research that will involve any of the following must have institutional approval before the research project begins: human subjects (including administering questionnaires, conducting interviews, or accessing confidential databases), research animals, radiological materials, hazardous biological materials, recombinant DNA, or hazardous waste. Students should contact OSPA 618/453-4540 or their graduate advisor for guidance. (See related information in section on Student Responsibility elsewhere in this chapter.)