

STRATEGIC PLAN 2009-2013
SCHOOL OF BIOLOGICAL SCIENCES

MISSION

The School of Biological Sciences advances the growing body of biological knowledge through synergistic programs in research, teaching, and service. Our faculty conducts basic and applied research to educate, mentor, and train successive generations of scientists and to command national and international recognition. Our active instruction in classrooms, laboratories, and field sites promotes a sophisticated understanding of biological principles and methodologies. Our professional service and outreach advance the biological sciences, disseminating knowledge widely, and applying it to relevant societal issues.

VALUES

Above all, the School of Biological Sciences is committed to scholarship: original research that advances our knowledge, our teaching, our service, and the connections we build between them. We value the diversity of questions, conceptual approaches, methods, and subject areas contained within the discipline of biology embodied in a common school.

Research is intrinsically important to our discipline. Biology is a rapidly advancing science, evolving with the advent of new technology, concepts, and information. Through research, faculty, postdoctoral fellows, graduate, and undergraduate students develop new knowledge in key areas of biology. Because of the importance of research, we promote and facilitate the development of excellent, vigorous

programs by our faculty. We also recognize that the quality of our teaching is linked to the quality of faculty research programs, and thus is essential for our teaching mission.

We provide students with a foundation of biological knowledge preparing them for further study and active participation in biological research, teaching, medicine, environmental science, industry, and other professions.

In keeping with the Illinois State University mission, we provide undergraduates with a small-college experience and large-university opportunity. On one hand, students enjoy easy access to faculty, close mentoring, individual attention, and classes that are taught primarily by tenure-track or tenured faculty. At the same time, students have the opportunity to participate in nationally and internationally recognized research programs using cutting-edge facilities, technologies and approaches.

VISION

The School of Biological Sciences will continue to build its international reputation for research excellence across the life sciences. We will provide Illinois' best broad-based B.S., M.S., and Ph.D. degree programs in Biological Sciences, while also offering outstanding specialized degree programs representing important subdisciplines within the Biological Sciences. We will ensure our long-term success by attracting and retaining the best available faculty, attracting the most talented students, and enhancing key elements of our infrastructure: facilities, technology, financial health, and intellectual environment.

GOALS

The goals of the School reinforce those of the College's Strategic Plan and those of *Educating Illinois*, and include the following:

- Enhance the School's reputation in scholarship, education, and professional service
- Attract better-qualified undergraduate and graduate students and postdoctoral fellows
- Provide optimal student advising and faculty mentoring, to provide students with the best possible undergraduate and graduate experience
- Increase the percentage of undergraduates participating in research and Senior Thesis (BSC 303)
- Strengthen our tradition as a major source of Illinois highly qualified high school science teachers
- Balance student enrollment with the School's instructional capacity
- Encourage diversity among students and faculty
- Encourage the natural development of interdisciplinary research and educational programs
- Encourage the natural development of Centers and Institutes
- Support the primacy of original research and scholarship
- Provide state-of-the-art facilities in support of our scholarly activities.
- Enhance support for our teaching and research by alumni, business, and foundations
- Use our research, teaching, and service activities to build our national and international reputation

Strategy One – Enhance the quality of our undergraduate and graduate programs

Actions

- Increase admission requirements (e.g., GPA, test scores, class rank) for undergraduates and graduate students
- Increase participation of undergraduates in research and Senior Thesis (BSC 303) by informing students of these opportunities by their sophomore year
- Improve the intellectual atmosphere and understanding of the wider scientific community through increased funding of our School seminar series
- Enhance the laboratory experiences of our students
- Revise undergraduate and graduate curricula to allow students an increased selection of electives
- Establish new Programs, Sequences and Certificates within our undergraduate and graduate programs to train undergraduate and graduate students for career opportunities and to help to recruit highly qualified students
- Establish competitive recruiting fellowships for incoming graduate students to enable us to attract the best graduate applicants to our M.S. and Ph.D programs, sequences and certificates
- Establish competitive recruiting scholarships for gifted undergraduate students to enable us to attract the best students to our programs
- Increase TA stipends to be competitive with our peer institutions
- Provide a dedicated undergraduate advisor to students interested in professional schools (e.g., pre-health care majors) and another dedicated advisor for undergraduate majors in Biological Sciences
- Maintain the excellence of our growing biology teacher education program by converting our biology teacher-education advisor position to permanent status
- Provide expanded education of students about the diverse career paths available to them and provide appropriate career mentoring and advisement by a dedicated undergraduate advisor complemented by faculty input
- Encourage and support participation of qualified students in interdisciplinary research, Centers, and Institutes that develop
- Encourage and support participation of qualified students in Honors programs and Honors sections

Strategy Two – Increase support for faculty research and provide faculty more time to seek external funding and to publish research findings

Actions

- Increase start-up for new hires to \$200,000 - 250,000
- Replenish our diminished faculty numbers before the next wave of retirements
- Fill all future vacated faculty lines within two years of becoming vacated
- Add new faculty lines as the population of the school continues to grow.
- Increase faculty salaries at all ranks to meet or exceed those of peer institutions
- Replace obsolete research equipment and facilities
- Support interdisciplinary collaborations on research projects and grants
- Seek a voice for the School on issues related to research, external funding, and teaching from the University to the international level.
- Improve support for faculty between grants to encourage ongoing grant submissions

Strategy Three – Enhance the School’s visibility at national and international levels

Actions

- Encourage high quality publications in top-tier journals
- Encourage research collaborations with other institutions
- Increase travel funds to present papers at conferences from \$700 to \$1,000 per year (\$1,500 to present at international conferences)
- Provide travel funds to undergraduate and graduate students to attend professional conferences
- Streamline intramural service roles of faculty and encourage extramural service activities
- Encourage and support faculty in seeking large external grants from federal agencies and other prestigious sources
- Encourage public outreach/education and involvement in societal issues that utilize faculty expertise

Strategy Four – Maintain a School and University infrastructure conducive to excellence in scholarship and graduate education

Actions

- Find new funding to maintain and support information technology and improve networking in all facilities
- Obtain more laboratory, office, and support space for the School
 - Beginning with renovating three laboratories on the fourth floor of SLB
- Secure an improved animal facility
- Obtain university commitment to constructing an annex to SLB
- Obtain a conservatory greenhouse with related academic facilities for teaching, research, and public outreach in order to better house and use our exotic and herbarium plant collection
- Encourage the University to adopt an institutional research model consonant with most Doctoral Research Extensive Universities with Ph.D. programs in the Biological Sciences
- Increase electronic access to the scientific literature
- Foster collegiality and mutual respect with open discussion of all issues and transparent administration

Strategy Five – Enhance School fundraising activities in pursuit of strategies 1-4

Actions

- Strengthen efforts to cultivate alumni, private industry, and other sources for funding or in-kind support
- Establish an equipment fund (new equipment and service contracts)
- Establish a travel fund (for students and faculty)
- Establish new scholarship and fellowship funds for graduate students and undergraduates
- Establish an SLB Annex Fund
- Establish an Endowed Chair fundraising campaign
- Strengthen efforts to publicize achievements within the School to a diverse audience, including alumni and possible sources of funding, through newsletters, web pages, and other outlets.