



Masters of Science in Biology

Concentrations:

- **Cell and Molecular Biology**
- **Integrative Biology**
- **Physiology and Behavior Biology**

Professional Science Master

- **Concentration in Biotechnology**
- **Concentration in Stem Cell Science**

The **Department of Biology at San Francisco State University** offers programs that cover the natural world to prepare you for professional careers in education, environmental consulting, governmental agencies, biotechnology, health professions, and more. These programs incorporate hands-on mentored scientific journals. It is common for students to travel to scientific meetings and present the results of their research in talks or posters. There is a strong spirit of collaboration among biology graduate students and faculty. Each student has a primary advisor, a thesis committee, and access to all faculty. Each thesis/project committee consists of three faculty members, and students can take advantage of the expertise of their committee to help guide their research and academic career.



RESEARCH OPPORTUNITIES

Research opportunities within the Biology Department abound, spanning the fields of ecology, physiology, behavior, and microbiology as well as evolutionary, molecular, developmental, cellular, and marine biology. Students are encouraged to communicate with potential M.S. advisors before they apply to identify suitable projects and available resources for completing their research. Specific areas of research are on faculty websites. Opportunities are also available to work with SFSU collaborators in the NIH-funded SF BUILD and NSF-funded Center for Cellular Construction projects.

- [Faculty Research Labs](#)
- [Faculty by Research Discipline](#)

APPLICATION REQUIREMENTS

- A Statement of Purpose
- 2-Letters of Recommendation
- List all-science courses
- **NO GRE REQUIRED**
- TOEFL or IESTS (international students only)
- Identify potential faculty mentors: Browse the Faculty Profiles to see what research interests you & contact the faculty (via email) to arrange an individual appointment to discuss opportunities in their laboratories. You will need to list the names of the faculty member on your application.

FUNDING

The **Student Enrichment Opportunities (SEO)** manages a number of undergraduate scholarships and masters level fellowships designed to prepare students from underrepresented groups, including those with disabilities, for biomedical advanced degrees by providing academic support and stimulating research experiences. There is one application for all of the SEO graduate fellowships - RISE, Bridge to the Doctorate, STC Center for Cellular Construction, SF BUILD, and the Genentech Fellows Scholarships.

<https://seo.sfsu.edu/content/fellowships>

<https://sfbuild.sfsu.edu/content/student-scholar-application>

<https://cose.sfsu.edu/scholarships>

The **Provost Scholar Award** provides a small number of selected domestic, non-resident students with an out-of-state tuition waiver for one year. Awards are granted based on academic excellence, department-required essay or statement of purpose, and letters of recommendation.

Graduate Teaching Assistant positions in the Biology department offers all incoming students the opportunity to serve as GTAs for selected Biology courses. The courses assigned depend on the student's prior teaching and educational experiences, concentration, and academic record.



GRADUATE STUDENT LIFE

Biology graduate students conduct their own research in a productive environment using state-of-the-art facilities. Research is often published in scientific journals. It is highly encouraged that students to travel to scientific meetings to present the results of their research in talks or posters. SFSU biology graduate students learn quickly the value and necessity of seeking extramural funding to support their research. Many of our students are successful in securing grants and fellowships.

STUDENT ORGANIZATIONS

The [Society for the Advancement of Chicanos/Hispanics and Native Americans in Science \(SACNAS\)](#), is an inclusive organization dedicated to fostering the success of students in STEM. We support the next generation of diverse STEM students & professionals by providing the opportunities & resources they need to advanced their education and careers.



The [Black Excellence in STEM \(BESTEM\)](#) is focused on supporting African American/Black students in science, technology, engineering, & math. Our mission is "to empower & support Black STEM students by providing mentoring, various outreach & networking opportunities, and future career planning in STEM skills.



FACILITIES

The [Cell and Molecular Imaging Center](#) provides state of the art equipment and training for contemporary biological light microscopy and cellular imaging. This includes confocal microscopy, flow cytometry, deconvolution, calcium ratio imaging, time-lapse photography, morphometric image analysis and more.

The [Electron Microscopy Facility](#) houses a Carl Zeiss Ultra 55 Field Emission Scanning Electron Microscope (FE-SEM) that provides SFSU faculty, local universities, and industrial partners with the ability to perform cutting-edge research across a broad range of disciplines.

The [Genomics/Transcriptomic Analysis Core \(GTAC\)](#) provides molecular biology equipment, sequencing services, materials, hands-on experience, & training in an active research environment to support student researchers and faculty projects.

The [Harry D. Thiers Herbarium](#) houses the largest collection of mushrooms west of the Mississippi. It contains over 140,000 fungi, lichens and plant specimens collected from around the world; while the [SFSU Greenhouse](#), is a modern, computer-controlled greenhouse that supports research and teaching in the Department of Biology.

[The Health Equity Research \(HER\) Lab](#) The HER Lab is a state-of-the-art facility that uses biomedical tools and techniques to address health disparities and how interventions may help reduce and prevent disease. Findings are shared with the communities from which the biospecimens and intervention data were collected and are used in efforts to reduce local health disparities.

OFF-CAMPUS FACILITIES

Located 30 miles north of the campus on the Tiburon Peninsula, the [Estuary & Ocean Science Center](#) offers graduate and undergraduate marine biology courses and research experiences.

Students gain an understanding of the Sierra Nevada ecosystems through applied ecology courses and programs at the 1900 meter elevation [Sierra Nevada Field Campus](#), located near Sierra City, CA.

Faculty at the [Moss Landing Marine Laboratories](#), work with students using a hands-on field-oriented approach to research focused on the Bay's ecosystem.

One of ten largest natural history museums in the world, the [California Academy of Sciences](#) maintains a large research division, and its facilities are available to Biology graduate students.