

Grad Preview 2025!

Department of Biology
San Francisco State University





**Graduate Program contacts:
Dr. Andrea Swei and
Giovanna Tuccori**

Questions about the program application process, can be directed to us.

We can be reached at
biograd@sfsu.edu

Biology Concentration Coordinators

Concentration coordinators



Cell & Molecular Biology (CMB): *Dr. Ivan Anastassov, on leave 2025-2026*

Integrative Biology (IB): *Dr. Robert Boria*



Physiology and Behavioral Biology: *Dr. Robyn Crook*

Professional Science Masters (PSM): *Dr. Lily Chen*



Biology Graduate Degrees – thesis based

Cell and Molecular Biology

- consolidates CMB, CMB-Stem Cell, and Microbiology concentrations

Integrative Biology

- consolidates EECB and Marine Biology concentrations

Physiology and Behavior

- Physiology and behavior concentrations

Biology Graduate Professional degree

Training for a degree in biotech



San Francisco State University
A Y 2 0 2 5



California Institute for Regenerative Medicine San Francisco State University Bridges Stem Cell Science Master's Program



*Preparing Future Researchers to
Advance Regenerative Medicine,
Stem Cell Therapy and Gene
Editing Technologies*

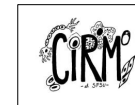
- One-year biomedical science graduate training fellowship.
- A graduate training program provides a solid foundation to prepare a broadly inclusive, well-trained life science workforce in stem cell biology and regenerative medicine.
- Prepares a diverse cadre of students through combining academic training, hands-on research opportunities with strategic and structured mentorship experience.

Program Highlights

- 2-year Master of Science program in Biomedical Science (Stem cell Science or Biotechnology)
- Academic coursework in stem cell biology, cell molecular biology, biotechnology, data science and management.
- 12-month master's internship project in stem cell research, regenerative medicine, cell therapy or gene editing.
- Internship research training opportunities at UCSF, Stanford, UC Berkeley, Gladstone Institutes and Bay Area biotech companies.
- 1 year CIRM fellowship includes \$36,000 stipends, \$8,000 tuitions, \$3,300 research-related funds and \$1,000 conference travel.

Application Weblink

https://sfsu.co1.qualtrics.com/jfe/form/SV_b8lkxqPpghANoA6



Program Website

<https://psm.sfsu.edu/cirm-bridges-science-masters-program-2022-2027>
<https://biology.sfsu.edu/graduate-programs-1>

Contact

Dr. Lily Chen – Program Director
(415) 338 – 6763; lilychen@sfsu.edu
Biology Department: biograd@sfsu.edu

Application Process

Prerequisites:

Must have completed a bachelor's degree and have a minimum 3.0 GPA (exceptions can be granted)

Application:

Apply by February 1, 2026 at Cal State Apply (calstate.edu/apply)

Personal Statement of Purpose

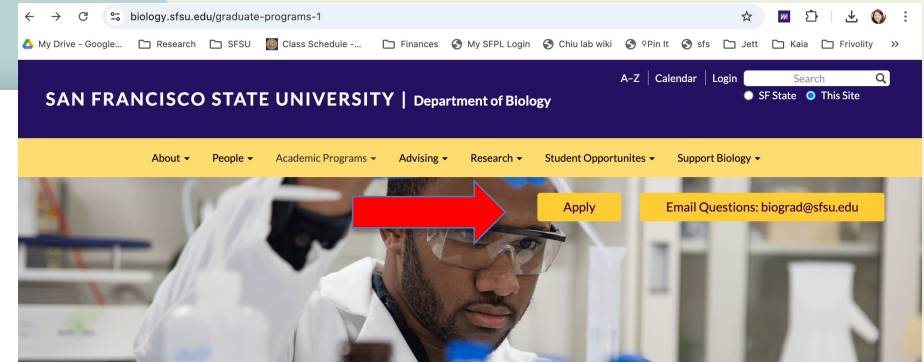
All Science transcript

Letters of recommendation (minimum 2)

Identifying a research mentor

All graduate students must have a mentor that has accepted them into their labs. Contact potential mentors to see if they are a good research fit and have space for new students. We have 40+ labs to choose from in 18+ disciplines including the California Academy of Science.

Biology.sfsu.edu/graduate-programs-1



Graduate Programs

The SF State Department of Biology community provides a rich academic experience for graduate students through peer collaboration, hands-on mentored research training, and a rigorous curriculum focused on discussion-style courses and seminars. Altogether, our programs provide an effective springboard to enable our graduate students to further their professional careers in academic research, education, environmental consulting, governmental agencies, biotechnology, health professions and more.

How to identify a mentor

Faculty by Research Discipline

Our faculty have published 2,305 peer-reviewed scientific studies and have accumulated over 135,068 scientific citations!

Click on the headings below to view faculty members whose research labs are on the main campus of SFSU in the Department of Biology. We also have affiliated faculty who can supervise research at the Estuary & Ocean Science Center and at the California Academy of Sciences.

Animal Behavior	+
Biology Education	+
Biotechnology & Stem Cells	+
Botany	+
Cell & Molecular Biology	+
Climate Change	+
Computational Biology & Bioinformatics	+
Conservation Biology/Restoration Ecology	+

- Search by research discipline on Biology website:
biology.sfsu.edu/faculty/field
- Research alignment
- Fit and mentoring style
- Persistence! Email repeatedly!

Biology Graduate Program

Focus of Master's program is on the research thesis



Biology Graduate Program Curriculum

CORE =15 units

- 3 units Introduction to Research Skills BIOL700
- 2 units Biology Colloquium BIOL870
- 6 units Research BIOL897
- 4 units Culminating Experience (CE) BIOL895/898

Concentration specific seminar =2 units

- 2 units of Seminar: BIOL861 (CMB), BIOL862 (IB), BIOL865 (PB)

Electives =13 units

- 13 units (decided with your advisor)

Biology (M.S.): Concentration in Integrative Biology - 30 units

Required Courses (17 units)

Code	Title	Units	
BIOL 700	Introduction to Research Skills	3	
BIOL 870	Biology Colloquium	2	
BIOL 897	Research	6	← Spread out over 3 semesters and is the individualized research activities
<i>Culminating Experience (the thesis)</i>		4	} Based on advisor's lab. Includes a written thesis and oral defense
BIOL 895	Research Project or		
BIOL 898	Master's Thesis		
BIOL 862	Advances in Ecology and Systematic Biology	2	
Total of Required Courses		17	
Electives		13	← Discuss what to take with your advisor. Should support thesis.
Total for Degree		30	

Biology (M.S.): Concentration in Physiology and Behavioral Biology - 30 units

Required Courses (13 units)

Code	Title	Units	
BIOL 700	Introduction to Research Skills	3	
BIOL 870	Biology Colloquium	2	
BIOL 897	Research	6	← Spread out over 3 semesters
<i>Culminating Experience</i>		4	} Discuss which on you should take with your advisor
BIOL 895	Research Project or		
BIOL 898	Master's Thesis		
BIOL 865	Advances in Ecology and Systematic Biology	2	
Total of Required Courses		17	
Electives		13	← Discuss what to take with your advisor.
Total for Degree		30	

Biology (M.S.): **Concentration in Cell and Molecular Biology** - 30 units

Required Courses (13 units)

Code	Title	Units	
BIOL 700	Introduction to Research Skills	3	
BIOL 870	Biology Colloquium	2	
BIOL 897	Research	6	 Spread out over 3 semesters
<i>Culminating Experience</i>		4	} Discuss which on you should take with your advisor
BIOL 895	Research Project or		
BIOL 898	Master's Thesis		
BIOL 861	Advances in Cell and Molecular Biology	2	
Total of Required Courses		17	
Electives		13	 Discuss what to take with your advisor.
Total for Degree		30	

Graduate Program Requirements

- A minimum of 30 units of upper-division upper division and/or graduate credit.
- Required 17 units for each concentration (15 core, 2 concentration specific)
- Additional 13 units of electives
- An **oral defense** of the thesis or research project is required.
- **Written thesis** paper or manuscript is also required

13 units of Electives

700 and above – graduate level classes

Some examples:

BIOL 738 Bioinformatics and Sequence Analysis

BIOL 716 Skills for Scientific Proposal Writing (Spring 2025)

BIOL 750 Scientific Teaching for Scientists

Biol 806/808 GOLD program courses

ATTENTION SFSU GRADUATE STUDENTS!

Would you like to ...
Gain formal training in how to effectively teach biology?
Learn to apply a scientific approach to your teaching?
Develop the skills to promote active learning and student engagement in courses?
Practice collecting assessment evidence about student thinking?

Then register for...
BIOL / SCI 750:
SCIENCE TEACHING FOR SCIENTISTS

Co-taught by:
Kimberly Tanner, Ph.D.
Professor, Department of Biology & Director, SEPAL: The Science Education Partnership & Assessment Laboratory
Lucy Luong, Ph.D.
Program Coordinator & Postdoc, SEPAL: The Science Education Partnership & Assessment Laboratory

COURSE DETAILS FOR FALL 2024:
• Fridays, 12:00-1:40 pm
• 2-units, counts towards graduate degrees in biology
• To peruse a past course syllabus, visit:
<https://www.sfsusepal.org/courses/graduate/>

SEPAL
The Science Education Partnership & Assessment Laboratory

SFSU GRADUATE STUDENT REFLECTIONS ON THE COURSE...
"I am changed as a teacher, a student, and a scientist because of this class."
"This is one of the best classes I've ever taken in grad and undergrad combined. This class has already been enormously helpful in my own teaching, and the skills I have gained will remain with me throughout my career."
"Not only has this course taught me many great teaching techniques, it has also showed me a whole new world of scientific teaching!"
"I have gained confidence in my ability to teach. Really and inwardly and to experiment with new approaches!"





DEPARTMENT OF BIOLOGY
DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY



GOLD

Graduate Opportunities to Learn Data Science



Dr. Nicole Adelstein
GOLD coordinator
nicoleal@sfsu.edu

Check out the GOLD website:
<https://biology.sfsu.edu/gold>

Talk to your advisor about
whether GOLD is right for you!

The Graduate Certificate in Data Science for Biology and Chemistry

Example 2-year timeline

Semester 1

1. Work with your advisor to develop a thesis research project.
2. Assemble a thesis/project committee
3. Review your [Individual Development Plans](#) (IDPs) with your PI/advisor.



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Semester 2

1. Present thesis prospectus to your committee.
2. Research!

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Semester 3

1. Check in with your thesis/project committee to make sure you are making good progress.
2. File your [Culminating Experience Form and Advancement to Candidacy](#).

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Semester 4

1. Check in with your thesis/project committee.
2. Enroll in Biology 895 or 898.
3. [Write, Defend and File your master's thesis/project](#).
4. Apply to graduate



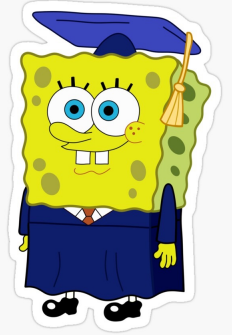
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How it started



Semester 2

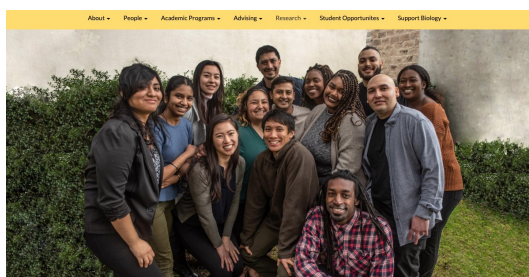
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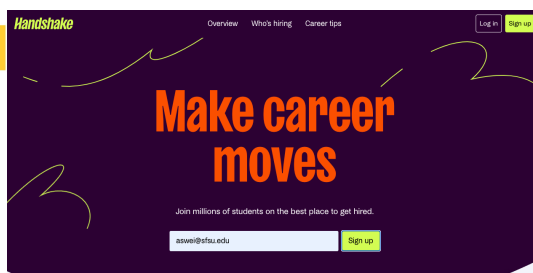
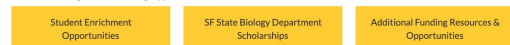
Funding – check out the manual!

- **Student Enrichment Office, CoSE, Biology**
- Bio Newsletter
- **Handshake** – job and internship opportunities
- **SFSU Academic works**
sfsu.academicworks.com



Funding Opportunities

Quick Link Navigation to Funding Opportunities



San Francisco State University

Student Enrichment Opportunities



**Application Period: Dec 1 – Feb 15
for following Academic Year**

For application information see the SEO website:
<https://seo.sfsu.edu/>

For questions, contact
seo@sfsu.edu, or 415-338-1305,
or join our Zoom office hours on
Wednesdays from 1-3 PM.



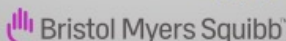
For majors in Biology, Chemistry & Biochemistry, Computer Science, Engineering, Mathematics, or Physics interested in pursuing an advanced degree in a biomedical field.

Complete ONE application for multiple SEO scholarships

Undergraduate Scholarships for Juniors & Seniors

Graduate Fellowships for 1st & 2nd year MS students







Scholarship programs to prepare students from underrepresented groups including those with disabilities for competitive biomedical PhD programs or advanced professional degrees through academic support and stimulating research experiences. Students with DACA and AB 540 status are eligible to apply for the Genentech Foundation Scholarships.

Student Organizations

BE-STEM

Black Excellence in STEM

Stephanie Uzordinma Awuzie

SACNAS

Society for the Advancement of Chicanos and Native Americans in Science

Maureen Montes and Ashley Meinke

WISE

Women in Science and Engineering

AUGUST 24TH, 2024

2024 SACNAS PICNIC

AT
GOLDEN GATE PARK
GGP-PIONEER LOG CABIN PICNIC AREA



THIS WILL BE AN EXCELLENT OPPORTUNITY FOR STUDENTS TO NETWORK WITH SACNAS PROFESSIONALS AND LEARN A BIT MORE ABOUT INDUSTRY OPPORTUNITIES.

TO RSVP FOR THIS EVENT, PLEASE FILL OUT THIS GFORM ATTACHED

Breakout room with Biology Concentration Coordinators

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