



Medical Scientist Training Program

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Graduate Training

UCSF offers a world-class research environment for students and is known for its collaborative, interdisciplinary approach to scientific discovery. Each MSTP student declares an affiliation with a graduate program mid-way through their second year of medical school and enters graduate school after completing the USMLE Step 1 examination. Many students have already completed two laboratory rotations by this time and begin their thesis work while they are also taking any remaining required graduate courses.

The required course work has been reduced for MSTP students. By completing graduate courses during the first two years of medical school, course work during the third year is reduced further for many students. This positions MSTP students to take their qualifying exams at the end of the third year or early in the fourth year. They remain full-time graduate students until they complete their thesis work and have written an approved dissertation.

Each graduate program ^[1] establishes policies for thesis committees, but MSTP students are required to have at least one MSTP Council member on her/his committee regardless of the program they join. This mechanism provides programmatic oversight for our students and helps ensure that progress towards completion of PhD thesis work occurs within an optimal time frame. Whereas the graduate programs require thesis committee meetings yearly, the MSTP requests that these meetings occur at 6-month intervals.

The bench science programs at UCSF are organized into "umbrella" groups called the Program in Biological Sciences (PIBS) and the Biomedical Sciences (BMS) Program. Two additional programs for physician-scientist training is the joint UCSF/UC Berkeley Graduate Program in Bioengineering (BioE) and the joint UCSF/UC Berkeley Graduate Program in Medical Anthropology. These two programs admit one MSTP student per year.

Please see the links below for more information about the graduate training portion of the MSTP at UCSF, or visit the Graduate Division website ^[2].

Affiliated Graduate Programs

Click on the banners below to visit the program's website.

Bioengineering (BioE)

[3]

The rapid development of nanotechnology, dynamic imaging, and other tools for investigating biologic problems and understanding disease pathogenesis presents an unprecedented need for physician-scientists with rigorous training in bioengineering. The joint UCSF/UC Berkeley Graduate Program in Bioengineering provides an outstanding environment for graduate training in this emerging area.

Bioinformatics (BI)

[4]

The program offers two optional designated emphases in Computational Biology and Bioinformatics and Complex Biological Systems designed to prepare scientists to use tools from mathematics to physics and from chemistry to biology to gather, store, analyze, predict and disseminate information about biology.

Biomedical Sciences (BMS)

[5]

Includes tracks in Cancer Biology & Cell Signaling, Developmental & Stem Cell Biology, Human Genetics, Immunology, Neurobiology, Tissue/Organ Biology & Endocrinology, Vascular & Cardiac Biology, Virology & Microbial Pathogenesis.

Biophysics (BP)

[6]

[6] Focuses on biophysical approaches to cell biology, complex biological systems, computational and theoretical biophysics, membrane biophysics, protein engineering and synthetic biology, proteomics and genomics, structural biology. Additionally, offers a designated emphasis in Complex Biological Systems.

Chemistry & Chemical Biology (CCB)

[7]

Focuses on biological chemistry and synthetic biology, chemical biology and molecular design, computational chemistry and biology, macromolecular structure function and dynamics, nanomolecular design.

Developmental & Stem Cell Biology (DSCB)

[8]

Focuses on stem cells and cell differentiation, organogenesis and tissue regeneration, pattern formation and morphogenesis, evolutionary developmental biology.

Medical Anthropology

[9]

The Department of History, Anthropology and Social Medicine administers the medical anthropology graduate program. The primary objective of this joint degree program is to produce sophisticated and well-rounded medical anthropologists, fully equipped to handle both theoretical and applied problems in health care and community settings, as well as in academia.

Neuroscience

[10]

Research interests encompass diverse areas ranging from molecules and cells to systems, cognition, and behavior in order to better understand neurological disorders, including pain, addiction, degenerative diseases and psychiatric disorders.

Contact Us
UCSF Main Site

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Links

- [1] <https://graduate.ucsf.edu/programs>
- [2] <https://graduate.ucsf.edu/>
Includes degree granting programs in
- [3] <http://bioegrad.berkeley.edu/>
Biochemistry and Molecular Biology, Cellular
- [4] <https://bioinformatics.ucsf.edu/about>
Biology, Developmental Biology and Genetics. Its
- [5] <http://bms.ucsf.edu>
interdisciplinary program emphasizes
- [6] <https://bioprev.ucsf.edu>
collaborations among laboratories to solve
- [7] <http://dshg.ucsf.edu>
outstanding problems in modern biology.
- [8] <http://dshg.ucsf.edu>
- [9] <http://dahsm.ucsf.edu/programs/medical-anthropology/>
- [10] <http://neurograd.ucsf.edu/>
- [11] <http://tetrad.ucsf.edu/>