Biophysics

The Biophysics program spans research at the interface of physics, chemistry, and biology. It is aimed at students who want to explore the physical properties, structures, and interrelationships of living things by using physics and chemistry to quantify biological processes at the molecular, cellular, and systems levels.

Early access to emerging technologies allows students in the UCSF Biophysics graduate program to explore biology in entirely new ways – before these technologies are generally available to other scientists. As important, the Biophysics faculty has achieved high recognition both nationally and internationally for its accomplishments. More than 10 members of the faculty are members of the National Academy of Sciences. UCSF faculty members pioneered applications of electron microscopy, crystallography, NMR, and image reconstruction techniques. As one measure of its strength, the UCSF Biophysics graduate program ranks among the top in the US, according to a September 28, 2010 report by the National Research Council.

faculty

More than 50 faculty members are associated with the Biophysics program from the departments of bioengineering and therapeutic sciences, biochemistry, pharmaceutical chemistry, cell and tissue biology, neurology, and physiology; as well as the Gladstone Institute and the Cardiovascular Research Institute at UCSF.

The Biophysics program is a member of the Quantitative Biosciences Consortium (QBC), the Program in Biological Sciences (PIBS), and the Integrative Program in Quantitative Biology (iPQB) at UCSF.

sub-disciplines

- biophysical approaches to cell biology
- complex biological systems
- computational and theoretical biophysics
- membrane biophysics
- protein engineering and synthetic biology
- proteomics and genomics
- structural biology

The Biophysics program office is located at the Mission Bay campus. Visit the program website for more information.