

Quantitative Biology

UC San Diego

The University of California San Diego invites applications from outstanding candidates for multiple tenure-track or tenured faculty positions as part of a multi-year, campus-wide initiative to establish a preeminent program in the area of Quantitative Biology (qBio), emphasizing quantitative experimentation and theoretical analysis to study living systems. The qBio initiative builds on the interdisciplinary infrastructure provided by the NSF Center for Theoretical and Biological Physics, the NIH Center of Excellence in Systems Biology, the BioCircuits Institute, existing divisional strengths and various interdepartmental graduate programs. Candidates are encouraged to apply to each specific position that fits their interests; successful candidates may be affiliated with multiple academic units and will complement and participate in the development of quantitative biology across campus. All candidates must have earned a Ph.D. or equivalent degree and demonstrate a strong commitment to teaching at the undergraduate and graduate levels. The University is committed to excellence and diversity in its faculty and student body. Preference will be given to scholars with demonstrated excellence and creativity in research, scholarship, and commitment to diversity, equity and inclusion in higher education.

Cellular Dynamics and Pattern Formation (10-503): The Division of Physical Sciences is leading a broad-based search for a creative experimentalist for a tenure-track position at the Assistant Professor level, with focus on the dynamical aspects of cellular differentiation and multicellular development using novel physical approaches. Subject matters may range from organs and tissues in higher eukaryotes to biofilms and other microbial communities. Approaches might include advanced methods of *in vivo* imaging and novel functional probes to quantify molecular interactions and forces to dissect the spatiotemporal progression of morphological and physiological change, with the goal to elucidate the organizational principles of living systems from the sub-cellular to multi-cellular scales. While this search will be conducted University-wide, successful candidates will ultimately be appointed to a specific department within UC San Diego.

Quantitative Biological Networks (10-506): The Division of Biological Sciences is leading a broad-based search for a tenure-track faculty position in Quantitative Biological Networks at the Assistant Professor level. Candidates pursuing innovative research focused on exploring network interactions that control intra- and/or inter-cellular behavior, are encouraged to apply. Potential areas of interest include but are not limited to the use of cellular systems to explore spatial-temporal control principles underlying decision making in signaling and gene-regulatory networks, multicellular or organismal systems directed towards a quantitative understanding of how networks govern biological interactions within populations of cells or tissues, or in ecological communities that contain multiple species. Departmental affiliation will be tailored to the selected candidate.

Quantitative and Chemical Biology (10-445): The Department of Chemistry and Biochemistry in the Division of Physical Sciences seeks to hire a talented and creative tenure-track Chemical Biologist who combines quantitative analysis, synthesis, and biological systems. Interests include but are not limited to candidates who have a strong chemistry background and predictively probe or engineer living systems.

Soft Condensed Matter and Biological Physics (10-496): The Department of Physics in the Division of Physical Sciences seeks to hire a talented and creative experimentalist for a tenure-track Assistant Professor position in the area of Soft Condensed Matter and biological physics. The successful candidate is expected to use physical reasoning and quantitative tools to define the future of pure and applied biological research. The search is broad-based, and extends to individuals with purely scientific approaches as well as those that combine advanced instrument design with scientific discovery. All candidates must have a Ph.D. in Physics or a closely related field.

Systems/Quantitative Developmental Biology (10-491): The Section of Cell and Developmental Biology, division of Biological Sciences, invites applications for a faculty position in Developmental Biology at the tenure-track Assistant Professor or Associate Professor level. Candidates pursuing innovative research using systems, quantitative or dynamical approaches to investigate the generation, regeneration, or maintenance of a particular cell type, tissue, or organ are encouraged to apply.

Quantitative Biosystems Engineering (10-507): The Department of Bioengineering in the Jacobs School of Engineering seeks to hire a tenure-track systems bioengineer who combines engineering principles and methods, and modern biomedicine to develop quantitative models of living systems in normal and pathophysiology. Interests include but are not limited to candidates who have a strong engineering background and quantitatively probe or engineer living systems.

Salary will be commensurate with qualifications and based on UC pay scales. Review of applications will commence as early as November 1, 2012 and will continue until the positions are filled. Interested applicants must submit a cover letter, curriculum vitae with a list of publications, statement of research, statement of teaching, reprints of 3 to 5 representative publications, contact information for 3 to 5 references, and a separate statement that addresses past and/or potential contributions to and leadership in promoting diversity, equity and inclusion (see <http://facultyequity.ucsd.edu/Faculty-Applicant-C2D-Info.asp>). Applications must be submitted through the University of California San Diego's Academic Personnel RECRUIT System at <https://apol-recruit.ucsd.edu/>.

UCSD is an equal opportunity / affirmative action employer with a strong institutional commitment to excellence and diversity (<http://diversity.ucsd.edu/>).