RUTGERS Institute for Quantitative Biomedicine (IQB)

Quantitative Biomedicine Graduate Program

Where the Quantitative, Biological, and Medical Sciences Meet!

The Program

The graduate program in Quantitative Biomedicine is an interdisciplinary program designed for graduate students who wish to embrace the knowledge and quantitative tools of chemistry, physics, mathematics, computational sciences, engineering, and/or statistics to tackle complex, unsolved biological problems. Many of our students have an interest in biomedicine, a rapidly evolving area of excitement at Rutgers, although this is not a required area of focus.

Students may work either toward a Ph.D. within this program [with an M.S. and/or M.Phil. degree(s) as a possibility(s) along the way] or a joint Ph.D. in combination with one of many partnering graduate programs [e.g., Chemistry and Chemical Biology; Mathematics; Physics; Molecular Biosciences (Microbiology & Molecular Genetics; Biochemistry; Cell & Developmental Biology; Cellular & Molecular Pharmacology; Physiology & Integrative Biology; Medicine; and Neuroscience) Biomedical Engineering; Electrical and Computer Engineering; Computer Science, Materials Science, and Linguistics]. Students making satisfactory progress can anticipate full funding with benefits until the Ph.D. is awarded.

The Curriculum

The curriculum builds on the world-class strengths in quantitative biology of the faculty at Rutgers. Over 60 faculty members from 15 departments provide education and training opportunities in diverse areas of study. The curriculum is designed to provide a solid base for tackling any problem in quantitative biology, enhanced by the personalized addition of student-specific courses or minicourses to provide an education pertinent to the trajectory of the student's areas of interests and research.

The Facilities

The graduate program is housed in the Center for Integrative Proteomics Research, a new 75,000 square foot facility dedicated to fostering interdisciplinary studies of complex biological phenomena. Center members include: (1) internationally recognized Rutgers faculty, leading research groups focused on computational chemistry, structural biology, mechanistic enzymology, and bioinformatics, as well as (2) the RCSB Protein Data Bank (www.rcsb.org). Core facilities include state-of-the art instrumentation for NMR spectroscopy, mass spectrometry, high performance computing hardware, and a cryo-electron microscopy suite currently being built.



More information: iqb.rutgers.edu/graduatestudy Institute for Quantitiatve Biomedicine at Rutgers

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