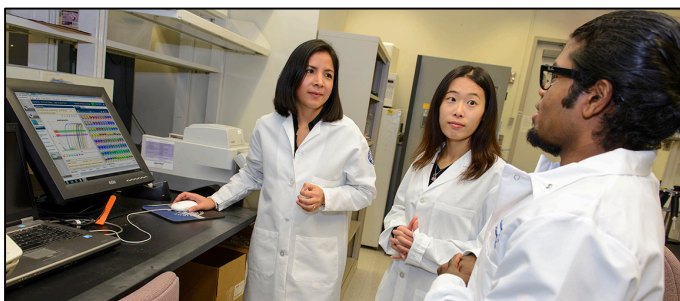


Biomedical Science Ph.D. Program at UConn Health

with Areas of Concentration in:

- Cell Biology
- Genetics and Developmental Biology
- Immunology
- Molecular Biology and Biochemistry
- Neuroscience
- Skeletal Biology and Regeneration
- Systems Biology



Our Program

The Ph.D. in Biomedical Science at the UConn Health campus in Farmington, CT emphasizes excellence in research training within an educational program tailored to your individual needs. After the first year of study, students accepted into the integrated Biomedical Science Ph.D. program choose an Area of Concentration and a thesis advisor from graduate faculty members with a wide range of well-funded research programs.

Each Area of Concentration sponsors journal clubs, research seminars, and other events that foster a vibrant and interactive scientific community. The Biomedical Science Ph.D. program collaborates with The Jackson Laboratory for Genomic Medicine, which is on the UConn Health campus. Students can take advantage of innovative training opportunities in mammalian genetics and genomic medicine.

Financial Support

As a student in our Ph.D. program in Biomedical Science, you will receive financial support throughout your graduate studies, provided that you remain a full time student in good academic standing. This support includes a waiver of tuition, a health insurance package, and a 12-month assistantship.

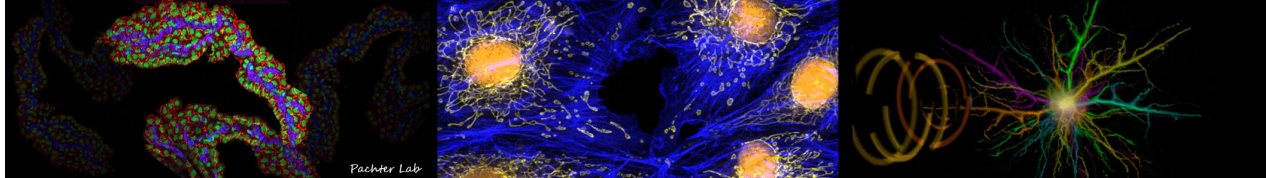
Campus/Area Activities

The Graduate Student Organization represents your interests as a student and sponsors activities and events throughout the year. The UConn Health community also sponsors multiple events such as the Health, Safety and Environment Fair, Fall Fest, Unda the Tunda, and Farmer's Market.

The Greater Hartford area is a richly diverse community that is home to art and historic museums, theatre, dance, opera, and concert venues, as well as dining options from the around the world. Major area festivals are celebrated year round, such as the Greater Hartford Jazz Festival and the Sunken Garden Poetry Festival at the Hillstead Museum, as well as annual events including celebrations of our African American, Puerto Rican, West Indian, and Native American communities.



In addition, outstanding local recreation areas offer camping, running, biking, hiking, horseback riding, canoeing/tubing, skiing, golfing, and fresh and salt water beaches. There are several professional sporting teams regionally. The area is also home to the nationally ranked University of Connecticut basketball, soccer, and field hockey teams. For more information on the area, please visit www.ctvisit.com.



Areas of Concentration

Cell Biology offers cutting edge research training in a wide range of topics related to the molecular and cellular basis of biology and disease across multiple departments and research centers on campus. Research areas include angiogenesis, cancer biology, reproduction, molecular medicine, sensory/signal transduction, cardiovascular/cardiac biology, gene expression, and vascular biology.

Genetics and Developmental Biology provides fundamental interdisciplinary training in modern molecular genetics and developmental biology. Faculty members from basic science and clinical departments study a wide range of organisms such as unicellular eukaryotes, fruit flies, mice, and humans (including stem cell biology).

Immunology has wide spanning implications in treating inflammation-based disease and maintaining human health, with research at the forefront of studying the basis of immunity to pathogens and cancer while controlling inflammatory responses. Innovative approaches and novel tools are used to aid vaccine and immunotherapy development, and formulate new methods to diagnose and treat autoimmune disease.

Molecular Biology and Biochemistry focuses on understanding the proteins and pathways affected in human disease. From the structural biology of cancer drug targets to the mechanistic interplay between viruses and human cells, faculty research basic molecular processes underlying human illnesses. Research areas include molecular biology and infectious diseases, structural biology and biophysics, computation and modeling, cellular pathways, and cancer biology.

How to Apply

Applicants to this competitive program should have a strong academic record and significant research experience. Applications and supporting materials must be received by **Dec. 1st** for admission consideration for the Fall semester of the following year. The online application and information describing individual concentrations in greater detail can be found at <http://health.uconn.edu/graduate-school/>.

Please Note: As of Fall 2022 admissions, the GRE General Exam **is no longer required**.

Inquiries can be made to:

UConn Health
Graduate Admissions-Biomedical Science Ph.D. Program
263 Farmington Ave., MC 3906
Farmington, CT 06030-3906
E-mail: BiomedSciAdmissions@uchc.edu

Neuroscience emphasizes an interdisciplinary approach to research with the goal of understanding the normal functions of the nervous system and its disorders. The interdepartmental program encompasses experimental approaches spanning molecular, cellular, and systems neuroscience. Research areas include glial cell biology, neural stem cells and developmental neuroscience, neurodegenerative disease and neurological disorders, synaptic plasticity, auditory physiology and audition, neuroanatomy, and behavior.

Skeletal Biology and Regeneration is focused on the study of the basic biological properties of skeletal, craniofacial, and oral tissues, and regeneration of connective tissues. Research is multidisciplinary, incorporating contemporary techniques of cellular/molecular biology and biochemistry. Research areas include stem cells, development and aging, bone and cartilage disease, genetic disorders of the skeleton, skeletal repair and regenerative engineering, and craniofacial/oral biology.

Systems Biology offers cross-disciplinary training in quantitative approaches to modern molecular and cell biology including mathematical, theoretical, optical, and biophysical approaches to understand cytoskeletal dynamics, signal transduction, dendritic spine function, RNA trafficking, and cell motility. The program trains scientists who combine quantitative experimental and theoretical approaches to cell biology and fosters collaboration among theoreticians and experimentalists.

