Highly motivated students with interest in the field of Computational Biology are encouraged to apply. Cross-disciplinary training in biological and quantitative sciences is common among many of our applicants.

We welcome applications from students with degrees in computational biology, bioinformatics, and related areas as well as those with cross-disciplinary coursework or research experience in biology, chemistry, computer science, engineering, mathematics, physics, statistics, and/or other STEM disciplines.

PROGRAM OVERVIEW

- Research program combining the strengths of the internationally renowned computational and biomedical research programs of Carnegie Mellon University and the University of Pittsburgh
- Broad, interdisciplinary curriculum and training
- All trainees have access to advisors, classes, and facilities at both institutions
- Competitive stipend and full tuition remission

CURRICULUM

- Core courses offer an overview of the current state-of-the-art in computational biology, and the fundamental concepts and approaches in its component life, physical, and computer sciences.
- A wide selection of advanced elective classes are available in computational biology, computer science, biomedicine, and related areas
- A seminar series, journal club, and research ethics training complement the coursework.

AREAS OF SPECIALIZATION

- Bioimage Informatics
- Cellular and Systems Modeling
- Computational Genomics
- Computational Structural Biology

STUDENTS CAN LEARN TO:

- Analyze gene sequences as part of the future of personalized medicine
- Construct models of cell-signaling networks that can identify novel drug tests
- Run large-scale simulations of molecular machines
- Analyze evolutionary history to predict critical pathways and pathologies

WHO SHOULD APPLY?

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For more information contact: admissions@compbio.cmu.edu or admissions@compbio.pitt.edu