



BIOINFORMATICS AND COMPUTATIONAL BIOLOGY GRADUATE PROGRAM AT IOWA STATE UNIVERSITY

INTERDISCIPLINARY NATURE OF BCB

Nearly 70 faculty members participate in this interdisciplinary graduate program established in 1999. Numerous cross-discipline collaborations offer students research opportunities from the biological, computational, statistics and math fields.

TRAINING PROGRAM

First-year students participate in research rotations in three laboratories to gain experience in both wet and dry labs.



Sweta Vangaveti, joined BCB in Fall, 2008. She enjoyed learning about the research underway in the labs she rotated through.

In the second year, students initiate their interdisciplinary thesis research projects under the guidance of mentors from the Biological, Computing and Information Sciences.

CURRICULUM AND RESEARCH

A cutting-edge core curriculum provides a strong foundation for research-based training in all major areas of computational molecular biology, including genomics, structural genomics, functional genomics, and systems biology.

Iowa State has outstanding computational research facilities that support collaborative research groups. A wide array of instrumentation facilities provide services to ISU researchers. ISU houses two supercomputers. Cystorm is capable of 15.44 trillion calculations per second.

PROGRAM FELLOWSHIPS AND FUNDING

- **National Science Foundation (NSF) Fellowships**--Top applicants are nominated for these \$30,000 fellowships.
- **Wendell Miller Trust Graduate Fellowships** - Admitted applicants can be chosen to receive this three-year award of up to \$5,000 per year in addition to their yearly stipends.
- **Plant Science Institute Fellowships** - Those interested in plant science can be nominated for and receive these four-year \$25,000 Fellowships.
- All admitted students receive **Research Assistantships** with monthly stipends, and full tuition and health insurance credits.

HOW DO I APPLY?

Send these materials directly to the address below by Jan. 15 and obtain an application fee waiver:

- BCB Program Application – On-line
- Curriculum Vitae
- Photocopy of All Transcripts
- Photocopy of GRE General Test Scores
- Statement of Professional Goals
- Three Letters of Recommendation
- Statement of Research including relevant experience and publications

Website: <http://www.bcb.iastate.edu>

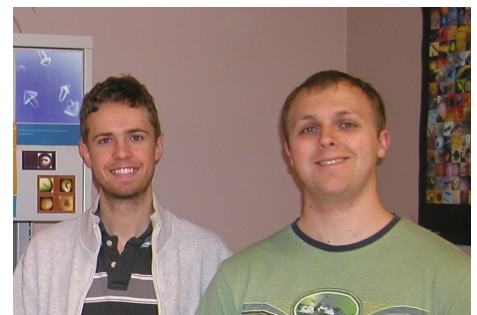
Email: bcb@iastate.edu

Phone: 515.294.5122; 888.569.8509

THE BCB LAB

The BCB Lab showcases the wide range of interdisciplinary research projects available at Iowa State. Students who enter the BCB Graduate program take part in this student-led group to help life science researchers at ISU create and apply computational and bioinformatics solutions to biological problems.

In the process, students learn from the exchange of experience, knowledge, and resources with one another while making substantial contributions to on-going research efforts. Pictured below are Scott Boyken and Jesse Walsh who, along with several other students, are working to increase success rates in protein crystallization to help further protein structure determination research. The project has been dubbed Crystal Ball.



Many BCB lab projects have been completed for researchers at ISU resulting in publications for first-year students. Through the BCB Lab, students learn how to best implement bioinformatics tools and techniques into ongoing biological research efforts.

GRADUATES OF BCB

Our 60+ graduates work in the academic, industrial and public sectors. Find more information on the BCB website.

Bioinformatics and Computational Biology
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