

Systems Biology Fellowships



The new field of **Systems Biology** aims to integrate experimental and computational approaches to find answers to fundamental questions about biological networks at the systems level. Mathematical models based on data from high-throughput experiments can help to elucidate the structure and dynamics of networks, and properties such as robustness and stability. This research agenda requires tightly integrated teams of researchers from diverse disciplines, supported by state-of-the-art experimental and computational resources. Bioinformatics provides quantitative and software tools for the management and analysis of the experimental data required for this effort.

The Virginia Bioinformatics Institute (VBI), and the College of Agriculture and Life Sciences (CALs) at Virginia Tech have each established one Systems Biology Fellowship per year for outstanding undergraduate students. These fellowships will provide an opportunity to spend ten weeks during summer working within one of the ongoing systems biology research projects at VBI and CALs. Room and board, airfare, and a \$2,500 stipend are provided.

VBI (<http://www.vbi.vt.edu/>) is organized around the philosophy of systems biology and the concept of team science. Rather than organizing research according to academic disciplines, the academic disciplines represented at VBI organize themselves around the specific needs of individual projects. Furthermore, VBI operates extensive core laboratory and computational facilities. The College of Agriculture and Life Sciences (<http://www.cals.vt.edu/>) at Virginia Tech combines basic and mission-oriented research to ensure a safe, plentiful food supply and advance our understanding of systems biology in managed environments. The faculty at CALs has developed extensive collaborations with VBI scientists and leveraged collective expertise to help advance the application of new knowledge to address the real world challenges.

The application deadline is **February 1, 2008**, with awards being announced two weeks after the application deadline.

Please submit the following:

1. A letter of application, including your contact information. It is important that we have an active phone number where we could reach you.
2. A statement describing your academic interests and goals, and how the VT internship is related to you (limit to 500 words).
3. Most recent academic transcript.
4. A letter of support from your research mentor.

All application materials must be submitted electronically (as PDF) to Susan Faulkner, faulkner@vbi.vt.edu

For more information, contact: Susan Faulkner, (540) 231-1259, faulkner@vbi.vt.edu