

## **Postdoctoral positions in machine learning and computational network biology**

### **BACKGROUND:**

A postdoctoral position is immediately available in Dr. Sushmita Roy's research group to develop computational methods to build genome-scale cell type-specific predictive regulatory networks in mammalian developmental lineages. This position entails integrating published and novel transcriptional and epigenomic datasets to construct cell type-specific regulatory networks and generate prioritized predictions that will be tested in collaboration with experimentalists.

The Roylab's research focuses on computational network biology and regulatory genomics. We are specifically interested in developing tools, based on statistical machine learning, to predict regulatory network structure and function in diverse dynamic processes. We aim to use these genome-scale networks to construct predictive models of complex phenotypes in mammalian systems. We work in close collaboration with developmental biologists who are interested in how gene regulatory networks drive overall cellular fate and are able to test model predictions as well as to generate new datasets to improve regulatory network reconstruction.

The Roylab is situated in the Wisconsin Institute for Discovery (WID). The WID, established in 2010, has state of the art research and computing infrastructure and was voted the 2012 Laboratory of the Year. WID offers a unique interdisciplinary and highly collaborative environment bringing together scientists spanning broad computational and biological disciplines: Epigenetics, Systems Biology, Optimization, Living Environment Laboratory and Bionates.

### **REQUIREMENTS:**

A PhD in computational biology, bioinformatics, computer science, machine learning, statistics, or engineering, with experience with analyzing genomic datasets.

### **LOCALE:**

Madison, WI, USA

### **HOW TO APPLY:**

To apply, please send (1) CV with publications, (2) statement of research describing current research and future goals, and, (3) contact information of two references. Please send this information to [sroy\[at\]biostat.wisc.edu](mailto:sroy[at]biostat.wisc.edu).