

Postdoctoral Positions in Computational Human Microbiome Research (The Department of Genome Sciences, University of Washington)

Four postdoctoral positions are available in the Borenstein group (<http://elbo.gs.washington.edu>) at the University of Washington. Borenstein's group focuses on **computational systems biology** research of the **human microbiome**. Specific research themes include *in silico* modeling of the human microbiome, metagenomic systems biology, computational analysis of species interaction and community structure in microbial communities, and computational methods development for metagenomic analysis.

We are looking for highly motivated postdoctoral fellows with a track record of research excellence in computational biology to take key roles in two NIH funded projects:

1) Computational modeling of the human microbiome using a combination of in-silico metabolic modeling, metagenomic analysis, computational systems biology, and complex networks. Research involves the development of innovative and novel methods for constructing predictive metabolic models of the microbiome, aiming to inform clinical microbiome-based therapy efforts. Three positions available.

2) Development of new computational tools for analyzing metagenomic data and for identifying compositional shifts in the human microbiome associated with disease. These tools will be applied to study the role of the microbiome in growth failures and malnutrition in children with CF. One position available.

Strong analytical, quantitative and computational/programming skills are essential as well as the ability to conduct independent, cutting-edge research. Experience with metabolic modeling (such as genome-scale constraints-based models), computational systems biology, network analysis, or metagenomics is highly desirable. A PhD in life sciences, computer science, mathematics, or bioinformatics is required.

The University of Washington is consistently ranked as one of the top research universities in the country and is the largest university in the northwestern United States. The Borenstein Lab is part of the Department of Genome Sciences (<http://www.gs.washington.edu/>), which addresses cutting edge questions in biology and medicine by developing and applying genetic, genomic and computational approaches. The department faculty includes ten NAS members (and a 2001 Nobel laureate in Medicine), four HHMI Investigators, and two recent recipients of the NIH New Innovator Award. The department moved into the new, state of the art Foege Building in 2006.

The Seattle area is home to many major academic institutes and hi-tech companies, forming a vibrant and exciting research community. Considered one of the nation's most beautiful and livable cities, Seattle boasts an array of cultural activities, parks, and restaurants, and serves as the gateway to National Parks and Forests, as well as boating, skiing and hiking areas.

Interested applicants should submit a CV, a brief (2-3 paragraphs) statement of her/his research interests and experience, and contact information of three references to Prof. Elhanan Borenstein (elbo@uw.edu).