# Postdoctoral Position in Computational Biology

The Ramsey Lab at Oregon State University, an interdisciplinary group at the interface of systems biology and bioinformatics, seeks to recruit a talented, accomplished, and motivated postdoctoral researcher in the area of computational biology.

#### About the job

You will have a key role in the lab's research in gene regulatory networks in innate immune cells, developing integrative algorithms and applying them to analyze genomic, epigenomic, and transcriptomic data. The job is an exciting opportunity to combine state-of-the-art methods in machine learning and statistical network inference to improve our molecular network understanding of the innate immune system and its roles in diseases. More broadly, our research program aims to develop new methods for integrating "omics" datasets with an emphasis on high-impact applications in biomedicine. Our lab's diverse research activities reflect our commitment to both methodological innovation (see articles in Bioinformatics, PLoS Computational Biology, JBCB, and PNAS on our website) and life sciences collaborations (see articles in Nature Genetics, Nature Immunology, Journal of Experimental Medicine, EMBO Molecular Medicine, and Biophysical Journal). Our lab bridges the Department of Biomedical Sciences and the School of Electrical Engineering and Computer Science at OSU, providing an environment that is rich in interactions across disciplines. Your research will be powered by the bioinformatics computing cluster in the Center for Genome Research and Biocomputing and the 16 TFLOPS high-performance computing system in the College of Engineering. You will interact with highly motivated and talented OSU students and a network of outstanding collaborators at OSU and across the United States. We are looking to fill the position immediately, but the start date is negotiable.

#### About Corvallis

You will work at the OSU campus in Corvallis, a dynamic, intellectually rich, and bikefriendly university community in the beautiful Willamette Valley of Oregon. Corvallis is renowned for its access to outdoor recreation and for its high quality-of-life. In addition to the thriving social environment and cultural/university amenities in OSU and Corvallis, the city of Eugene (which hosts the University of Oregon) is only 50 minutes away, and Portland (which hosts both Oregon Health and Sciences University and Portland State University) is only 90 minutes away. Beyond the wonderful outdoor recreation options in the vicinity of Corvallis, the ocean and the mountains are both only an hour away.

**Oregon State** 

lab.saramsey.org Systems biology & bioinformatics

# Requirements

- a PhD (or equivalent) in computational biology, bioinformatics, or one of the traditional quantitative disciplines (e.g., computer science, applied mathematics, physics, or electrical engineering) with demonstrated life sciences research experience.
- · demonstrated ability to first-author articles in computational biology or bioinformatics,
- a strong quantitative, statistical, and applied computational background
- · solid writing and communication skills
- ability to code in R, MATLAB, or Python
- familiarity with bioinformatics toolkits for mammalian genomics and epigenomics

## Preferred

- understanding of network analysis algorithms
- · knowledge of machine-learning algorithms
- familiarity with genetic epidemiology, GWAS, and QTL studies
- familiarity with distributed computing frameworks like MapReduce, Hadoop, & Hbase
- · familiarity with utility computing platforms like EC2 / AWS or Google Cloud

#### Salary

The position has a competitive salary and benefits package. The salary will be commensurate with experience.

#### We value diversity

Oregon State University is an Equal Opportunity Employer.

## To apply

Please email the PI (Stephen Ramsey, <u>stephen.ramsey@oregonstate.edu</u>) with your CV, a brief statement explaining your research and career interests and highlighting how your past research experiences and training would relate to this position (no more than two pages, please), and contact information for three references. The PI's full contact information is available on the lab website (<u>lab.saramsey.org</u>).

## Potential students:

We are also looking for graduate students: for inquiries, please see the lab website.

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