

Research Position in Computational Epigenomics and Immunology

A research position in Computational Epigenomics and Immunology is available immediately at the Department of Molecular Biology, Massachusetts General Hospital. This is a joint appointment between the groups of Drs. Marjorie Oettinger and Michael Tolstorukov. The successful candidate will use methods of computational biology and bioinformatics to study the role of epigenetic regulation and chromatin structure in guiding DNA recombination during the development of the immune response in mammals. In addition to excellent research opportunities, the unique placement of the position will allow the candidate to acquire the experience of working in a multidisciplinary team bridging experimental and computational research.

Recent advances in high-throughput technologies, including next generation sequencing, have opened access to many aspects of genome organization, ranging from precise mapping of nucleosome positioning and transcription factor binding, to analysis of three-dimensional chromosome conformation. Due to the large amount of the data produced in such experiments, they involve intensive computational analysis. The successful candidate will take responsibility for the analysis of multiple types of sequencing data, including ChIP-Seq, RNA-Seq, etc. Most of the projects will require integration of data from epigenetic, expression, and other studies, both publicly available and newly generated. The candidate will join in a number of the projects already ongoing in the group and will participate in the planning and carrying out of new projects.

The level of the position will be determined based on the candidate's qualifications, and is expected to be at the level of Postdoctoral Researcher. Initial appointment will be for one year with the possibility of extension based on progress evaluation.

The ideal candidate will have:

- ✓ A Ph.D. or M.S. in Bioinformatics, Computational Biology or a related field
- ✓ Substantial experience in the analysis of genomic data
- ✓ Experience in biochemistry or molecular biology (a plus, but not required)
- ✓ Track record of publications in peer-reviewed journals
- ✓ Extensive scientific programming skills: working knowledge of R and Perl is essential; proficiency in C/C++ and Java is a plus
- ✓ Experience with UNIX/Linux operating systems
- ✓ Excellent communication skills and willingness to work in a multidisciplinary team

Massachusetts General Hospital, which is a teaching affiliate of Harvard Medical School, provides an outstanding environment for biomedical research. The successful candidate will have ample opportunities to work with the top scientists in the field.

Please send your CV, a brief statement of research interests, your best paper(s) in PDF format (no more than three), and contact information for three references to oettinger@molbio.mgh.harvard.edu and tolstorukov@molbio.mgh.harvard.edu