

## Facilities and Other Resources:

**Laboratory:** Trainees have access to laboratories located in the Longwood Medical Area (which is comprised of Harvard Medical School (HMS), Harvard School of Public Health, the Dana-Farber Cancer Institute, Boston Children's Hospital, Beth Israel Deaconess Medical Center, Brigham and Women's Hospital, CBR Institute for Biomedical Research, Joslin Diabetes Center), the Harvard University Cambridge campus, McLean Hospital, New England Primate Research Center, Harvard Institute of Proteomics, Institute of Chemistry and Cell Biology, Harvard Center of Neurological Diseases, and laboratories at the Massachusetts General Hospital, including the Massachusetts Eye and Ear Infirmary. Major new research facilities include Harvard Medical School's 430,000 square foot New Research Building (NRB), the 295,000 square foot Karp Research Laboratories at Boston Children's Hospital, and the 705,000 square foot Center for Life Sciences building. The medical area laboratories are all within easy walking distance of each other. The lab of my advisor **Dr. Peter Kharchenko is located within the Center for Biomedical Informatics at HMS**. The Center for Biomedical Informatics (CBMI) promotes and facilitates collaborative activities in biomedical informatics among researchers at HMS and its affiliated institutions. Its core faculty members conduct research at the intersection of biomedicine and information sciences, including bioinformatics, functional genomics, translational medicine, and clinical knowledge management. The center also hosts the Bioinformatics & Integrative Genomics program (a graduate training program, sponsored by NHGRI) and the Biomedical Informatics Research Training program (a consortium of informatics laboratories at Harvard and MIT, sponsored by NLM). As such, CBMI provides an excellent environment to pursue computational biology investigations and collaborations with the HMS-affiliated institutions.

**Office:** CBMI has ample office space, including the desk space for all trainees and faculty. The PI has been given a spacious cubicle. The cubicle is fully networked with high-speed ethernet connected to the Harvard Medical School's backbone network. In addition, two conference rooms are adjacent to the lab, for small group project meetings, full weekly lab meetings, and weekly journal club meetings. Shared departmental administrative space is staffed by departmental support (Sponsored Research, Finance, Academic Appointments, etc.) and outfitted with computers, printers, fax, and photocopier.

**Computer:** WiFi service is broadly available on campus. Students have access to both Macs and PCs that are part of a school-wide network and provide online access to various biomedical databases, MEDLINE databases, and the Internet. The Research Computing Center (RCC) at HMS offers comprehensive bioinformatics training for Harvard students, faculty and staff. In addition, students have computer access to library holdings via such in-house programs as HOLLIS, Countway Plus, etc. HMS provides access to significant computing resources in the shared research cluster ("Orchestra"), which was recently expanded with a three million dollar ARRA grant. The cluster comprises more than 400 Linux compute nodes and 4500 cores. The cluster also provides access to 10TB of disk space on a high-performance Isilon storage cluster for ongoing computational tasks. Jobs are submitted to the shared cluster via Platform Computing's LSF resource management system. CBMI and HMS IT have a great track record of deploying research web applications and maintaining them over extended periods of time, far exceeding the funding periods.

**Other:** The Division of Medical Sciences offices are housed in the Medical Education Center to provide students with logistical and other support. In addition, each graduate program hosts staff dedicated to student advising. Students also receive supplementary travel funds from DMS to ensure their ability to travel to at least one scientific conference relevant to their area of research interest. The Division makes available staff and financial resources to support this training program. Through DMS, the Longwood Medical Area hosts a number of graduate programs. Hence, a vibrant student community is part of Harvard Medical School's campus. A wide variety of weekly journal clubs and seminar series provide opportunities for students to interact with peers, post-docs and faculty across disciplines. In addition, students have the opportunity to interact with the general public as teachers and mentors through outreach programs offered by the Office for Diversity Inclusion and Community Partnership.