

Postdoctoral Position/PhD Student Position in Computational Genomics Laboratory

The laboratories of Claudia Kleinman at McGill University and Rameen Beroukhim at the Dana- Farber Cancer Institute/Broad Institute and Harvard seek a computationally focused postdoctoral fellow or PhD student to be co-supervised by both Drs. Kleinman and Beroukhim. The successful applicant will join an international and interdisciplinary team of scientists that use computational genomics to investigate pathological mechanisms of gene expression.

This postdoctoral fellow/PhD student will gain deep experience in both cancer genetics and epigenetics, with a focus on the regulation of chromatin structure of a variety of aggressive pediatric brain tumors, and how this interacts with genetic alterations in these tumors. Projects will include analyses of large genome-wide, multidimensional datasets and the development of new computational methods to perform such integrative genomic analyses. We anticipate that the postdoctoral fellow/PhD student will gain expertise in the analysis of a variety of cutting-edge technologies, including Hi-C and scMethyl-seq, and large multimodal datasets generated from clinical samples, mouse and cell culture models.

Some examples of our recent work:

- Jessa et al, Nature Genetics 2022 (DOI: [10.1038/s41588-022-01205-w](https://doi.org/10.1038/s41588-022-01205-w))
- Shih et al, Nature 2023 (DOI: [10.1038/s41586-023-06266-3](https://doi.org/10.1038/s41586-023-06266-3))
- Chen et al, Cell 2020 (DOI: [10.1016/j.cell.2020.11.012](https://doi.org/10.1016/j.cell.2020.11.012))
- Khazaei et al, Cell 2023 (DOI: [10.1016/j.cell.2023.02.023](https://doi.org/10.1016/j.cell.2023.02.023))

We are seeking candidates who have:

- A doctoral degree in Biomedical sciences with a proven track record in computational biology, or a degree in Math, Statistics, Computer Sciences, Bioinformatics or other- related field (for postdoctoral position).
- A degree in Math, Statistics, Computer Sciences, Bioinformatics, Molecular Biology, or other-related field (for PhD student position).
- Strong research background in computational biology, neuroscience, epigenetics, or cancer biology.
- Highly motivated and able to work as part of a large multidisciplinary team of clinicians, scientists, and students.
- Excellent communication, written and interpersonal skills.

The postdoctoral fellow or PhD student will be based in Montreal, with affiliations with both McGill University and the Dana-Farber Cancer Institute/Broad Institute and frequent remote and in-person interactions with both laboratories.

Our laboratories are committed to the resolution of racial, ethnic, and socioeconomic inequalities in the sciences. As such, we encourage applications from individuals from underrepresented minority groups and individuals who may not have had access to equal educational or research opportunities due to their circumstances such as obligations to family or work. A robust exchange of ideas in a safe environment is central to our culture and we welcome the opinions of all individuals, irrespective of positions held by others. We also recognize that the application processes for college and early research positions do not always take into consideration the disadvantages some students face can lead to further disparity in research experience or perceived qualifications between applicants. Our labs aim to resolve some of this disparity by selecting applicants not based solely on their resume, but on their commitment to their studies, passion for science, and perseverance either in research or other aspects of their lives. To that end, please highlight significant obstacles you may have faced so that we may take them into account.

To apply please contact claudia.kleinman@mcgill.ca and/or Rameen_Beroukhim@dfci.harvard.edu