



Postdoctoral Scholar position

Area: Neuroscience

Duration: Minimum 2 years

Start date: Jan 2024 (negotiable)

Salary: TBD, plus medical benefits

The project:

The Kurrasch Lab currently has three open postdoctoral positions (fully funded):

Project 1: Maternal microbiome and mechanistic impacts on the developing brain. This goal of this project is to define the mechanistic events that link adverse changes in the maternal gut to neurodevelopmental disorders in the offspring, using mice as a model system.

Project 2: Embryonic neural sex differentiation. The goal of this project is to determine the programs driving sex dimorphic development of the hypothalamus in mice.

Project 3: Comparative study of adult hypothalamic plasticity. The goal of this project is to determine the role of immature neurons in the adult hypothalamic parenchyma across small and large-brained species.

All projects employ a variety of cutting-edge techniques: single cell 'omics, advanced microscopy (including iDISCO), in utero electroporation, live cell imaging, behavioral monitoring, human brain organoids (where relevant). Responsibilities include generating, analyzing, graphing, and presenting results, as well as writing and submitting manuscripts. The postdoctoral fellow will be expected to generate new ideas in collaboration with the Principal Investigator. Daily the scholar will interact with other laboratory personnel, including helping to train graduate and undergraduates.

The postdoctoral fellow will join Dr Deborah Kurrasch's laboratory in the **Hotchkiss Brain Institute** and **Alberta Children's Hospital Research Institute** in the **Cumming School of Medicine** at the University of Calgary. Each position is fully funded.

Qualifications:

Candidate must have a recent PhD (within 3 years of graduation) in Neuroscience, Developmental Biology, or a related discipline. Experience working with mice required, as well as technical expertise in molecular and cellular neuroscience and imaging. Experience in single cell technologies and bioinformatics an asset but not required. The candidate must also have a track record of academic success as evidenced by peer-reviewed publications, awards, and scholarships.

Application details:

Interested applicants please provide: 1) a cover letter with statement of research experience and interests, 2) curriculum vitae, 3) the names and contact information for three persons who have agreed to provide

references. Deadline for application is October 31, 2023. Submit applications via email directly to Deborah Kurrasch, kurrasch@ucalgary.ca. Please indicate **PDF application** in the subject line.

About the University of Calgary

The University of Calgary is a leading Canadian university located in the nation's most enterprising city. The university has a clear strategic direction to become one of Canada's top five research universities, where innovative teaching and groundbreaking research go hand in hand, and where we fully engage the communities we both serve and lead. The strategy is called *Eyes High*, inspired by our Gaelic motto, which translates to 'I will lift up my eyes.'

About Calgary

Named a cultural capital of Canada and #7 best place to live in the world for multiple years, Calgary is a city of leaders – in business, community, philanthropy and volunteerism. Calgarians benefit from the strongest economy in the nation and enjoy more days of sunshine per year than any other major Canadian city. Calgary is less than an hour's drive from the majestic Rocky Mountains and boasts the most extensive urban pathway and bikeway network in North America.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. The University of Calgary respects, appreciates, and encourages diversity.