



POSITION DESCRIPTION

Job title: Postdoctoral Fellow (Miller Lab)

Employee Group: Faculty

Faculty: Medicine

Department: Pediatrics

FTE: Full time

This position is located within a health-care facility. Therefore, this position requires successful verification of full vaccination against Covid-19 provided prior to the start date, as required by the provincial health mandate.

Job Summary:

We are seeking a highly motivated and energetic postdoctoral position in neonatal brain development and cerebellum connectivity at The University of British Columbia-affiliated BC Children's Hospital Research Institute in Vancouver, Canada. Working with the Miller research team (<https://www.bcchr.ca/spmiller>), the successful applicant will lead new projects on quantifying cerebellum growth and connectivity in preterm children. Our lab utilizes advanced magnetic resonance (MR) techniques to study how early life brain injury and systemic illness affects brain development in critically ill newborns. Clinician researchers are encouraged to apply.

Organizational Status:

The successful candidate will report directly to Dr. Steven P. Miller, the principal investigator, and will work in a strongly collaborative and collegial fashion with cross-functional project team members to meet research goals and objectives.

Work Performed:

- Work with a multi-disciplinary team on exciting discovery and translational research projects focused on cerebellum connectivity.
- Conduct quantitative brain imaging analyses. Keep up-to-date on the literature in this field, methodologies and software analyses programs
- Foster research collaborations and work jointly with academic, clinical, industry, and other partners
- Scientifically document lab experiments, data analysis, interpretations
- Contribute to grant preparation, write manuscripts and present results at internal and external meetings
- Work with the PI, and laboratory staff to oversee and collaborate with trainees (medical students, undergraduate researchers) on specific research projects

Qualifications:

We are seeking an independent individual who has completed their PhD in the field of neuroscience, brain imaging science, or a related discipline within the last three years, or completed postgraduate medical training in Neurology, Pediatrics, or Pediatric Subspeciality, within the last three years, who has demonstrated expertise in quantitative brain imaging acquisition and analysis. The ideal candidate should possess:

- Advanced technical expertise in quantitative brain imaging (e.g. Diffusion tensor, volumetrics, functional MRI)
- Ability to independently lead complex projects both conceptually and technically.
- Technical expertise in complex data acquisition, in ensuring standardization and robustness of flow data acquisition and analysis.
- Strong written/verbal communication and interpersonal skills.
- Demonstrated ability to explore, understand and analyze novel patterns in complex research datasets.
- Strong data visualization, statistical analysis and presentation/writing skills of research findings
- Excellent communication, attention to detail and commitment to work in an inter-disciplinary research environment
- Additional experiences in computational analysis and brain development would be assets

Consequence of Error:

The successful applicant is expected to exercise a considerable amount of judgment, responsibility, and initiative in determining work procedures and methods. They must carefully observe and evaluate their work. All works are subjected to assessment by Dr. Miller. Consistent poor judgment decisions or errors can result in data loss, incorrect data interpretation and/or potential loss of funding.

Supervision Received:

The applicant is expected to work independently under the supervision of Dr. Miller, who will be available to provide consultation on research findings and project developments.

Supervision Given:

May assist with training graduate students and junior lab staff.

How to apply:

To apply, please send your cover letter and curriculum vitae, and contact information for three references to Dr. Steven P. Miller (steven.miller@cw.bc.ca) and cc Steven Ufkes (steven.ufkes@cw.bc.ca).

This offer is conditional upon successful completion of a Criminal Record Check.

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person. All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority.