
Postdoctoral Fellow in Visuomotor Neuroscience

Toronto, Canada

Description of Position:

We are seeking an outstanding postdoctoral fellow to lead a *New Frontiers in Research* funded project investigating a new model of cerebellar function by applying non-invasive brain stimulation. We will use visuomotor adaptation experiments along with tDCS and TMS applied to the motor cortex and the lateral cerebellum, with the aim of disentangling the contributions of these two brain regions during motor learning. Our approach is interdisciplinary, blending the skill sets of the PIs: motor control and motor learning, brain stimulation, and mathematical modeling. Our research team includes graduate students who are applying control theory to model the computations in the cerebellum and M1, as well as students who perform visuomotor adaptation experiments. The postdoctoral fellow will interact with these groups.

Specific duties of the position include: conducting visuomotor adaptation experiments (with or without brain stimulation); formulation of new experimental paradigms to tease out the contributions of the cerebellum and M1; data collection and analysis; publication of journal papers; and dissemination of research findings at top neuroscience conferences. *Prior experience in applying non-invasive neuromodulation techniques is essential, but no prior background in visuomotor adaptation is expected.*

Principal Investigators and Collaborators:

- **Prof. Denise Henriques**
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- **Prof. Jean-Jacques Orban de Xivry**
Faculty of Movement and Rehabilitation Sciences
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<https://jjodx.github.io/index.html>
- **Prof. Joyce Chen**
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- **Prof. Mireille E. Broucke**
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Qualifications and Experience:

- PhD received within the last 3 years or graduating PhD candidate.
- Experience in applying non-invasive tDCS and TMS.
- Strong communication and organizational skills.
- Ability to work in a dynamic interdisciplinary team environment.

Application:

- This is a fully funded position. Salary is commensurate with experience and with CIHR/NIH stipend levels. The position is for one year, with the expectation of renewal. The start date is flexible.
- To apply for this position, please email a *cover letter* and *curriculum vitae* to: deniseh@yorku.ca . Your cover letter should include a statement of research interests and career objections. Please also include three references.
- We are strongly committed to diversity on our research team and especially welcome applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ2S+ persons, and others who may contribute to the further diversification of ideas.
- Application screening will continue until a suitable candidate is identified.