



Graduate Student Position Available Cognitive Neuroscience of Memory and Aging

McGill University, Montreal, QC, Canada

The laboratory of Dr. Maria Natasha Rajah, Departments of Psychiatry and Psychology, McGill University (Montreal, Canada) is currently seeking a graduate student.

About the lab:

Dr. Rajah is an Associate Professor at McGill University and the Director of the Douglas Institute's Brain Imaging Centre, which houses a 3T Siemens Prisma-fit MRI and 7T Bruker Biospec MRI. Her research program uses behavioral and neuroimaging (primarily MRI) methods to study the cognitive neuroscience of memory, aging and Alzheimer's Disease prevention.

Current projects:

- Investigating the brain networks supporting episodic memory for spatial and contextual details using multivariate, connectivity, machine learning and variability methods
- Exploring the linear and non-linear affect of age on brain structure, function and memory in the adult lifespan, with a focus on middle-aged adults;
- Understanding the role of cognitive reserve and compensation in successful cognitive aging;
- Studying brain function and cognition in middle aged and older adults with genetic risk factors for late-onset AD (i.e. an apolipoprotein E e4 allele)
- Investigating sex differences in brain aging & Exploring how sex hormone levels and menopausal transition impact episodic memory and brain structure/function in women with vs. without an apolipoprotein E e4 allele

To learn more about the lab please visit our website: <http://www.rajahlab.com>.

Lab Environment & Training Opportunities

Our lab consists of diverse, open-minded and motivated individuals who thrive on working collaboratively in a supportive and fun environment. Graduate trainees will have the opportunity to learn:

- About theories of learning and memory, cognitive aging, dementia and brain organization.
- How to design, conduct, analyse and interpret multimodal MRI studies (i.e. structural MRI, task & resting state fMRI, DWI) of memory and aging using a variety of image analysis methods
- How to communicate your research finding through manuscript publication and conference presentations

Application Details

Starting date: September 2019

Duration: Funding is available for 2yrs of Master's (M.Sc.) training, followed by 3yrs of Ph.D. training for two graduate students. Transition from M.Sc. to the PhD program will depend on the students' research progress. Accepted students must remain in good academic standing and meet the course work requirement for the Graduate Program in Neurosciences at McGill University.

Requirements: B.Sc./B.A. with major in Psychology, or Neuroscience, or Biology with strong GPA (cumulative GPA > 3.5 or last 2 yrs GPA > 3.7). Must have basic neuroanatomical knowledge and have a keen interest in cognitive neuroscience of memory and/or aging. Laboratory experience would be an asset. Having conducted an undergraduate honours thesis/independent research project is an asset.

Skills: Must be comfortable using MS Office (Word, Excel, Powerpoint) and have basic training in statistics. Must have strong communication skills in English (spoken and written), and have good interpersonal skills. Communication skills in French are an asset. Having knowledge of Matlab, SPSS and prior experience with MRI data analysis is an asset.

Required documents & Application Deadlines: See applications requirements for Graduate Program in Integrated Neuroscience (IPN; <http://www.mcgill.ca/ipn/prospective>) or Graduate Program in Psychology (<https://www.mcgill.ca/psychology/graduate>) at McGill University.

To send enquiries or express interest in this position please contact Dr. Rajah at:
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