



## Post-doctoral Position Available Cognitive Neuroscience of Memory and Aging

McGill University, Montreal, QC, Canada

The laboratory of Dr. Maria Natasha Rajah, Department of Psychiatry, McGill University (Montreal, Canada) is currently seeking a talented and motivated post-doctoral researcher interested in examining the impact of biological sex, hormones and Alzheimer's Disease risk factors on brain aging and episodic memory.

### **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>.

**Starting date:** Flexible

**Duration:** Funding is available for 2yrs (salary commiserate with experience) with possibility of extension.

**Academic Requirements:** The successful candidate must have: 1) a Ph.D. in Psychology, Neuroscience, or related discipline; 2) expertise in aging and/or memory research OR expertise in structural and functional MRI multivariate and connectivity analyses; and 3) peer reviewed publications and a track record of research excellence. The candidate should have a keen interest in the topics of sex differences, brain aging, neural networks and memory function.

**Skills:** The successful candidate must have experience working in both Windows and Linux environments, and using the following software: MSOffice, SPSS or R, and Matlab. Experience using SPM, FSL, ANTs, PLS and/or AFNI or similar image analysis software is required. Excellent communication skills in English are a must, and the ability to communicate in French is an asset. Programming skills are an asset.

**Required documents:** You must be eligible to work in Canada. McGill University is an Equal Opportunity/Affirmative Action Employer. See: <https://www.mcgill.ca/gps/postdocsapplication> for details on working as a postdoctoral fellow at McGill University.

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