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Postdoctoral Fellow and Project Scientist Positions in Functional and Structural MRI

University of California Los Angeles, Los Angeles

We would like to invite applications from bright researchers for two-year one Postdoctoral Fellow and one Project Scientist position starting from August 2024, with possibility for two more years' extension, based on satisfactory performance.

Project details

Functional and structural MRI procedures have become non-invasive ways to examine task-specific brain activity and quantify functional connectivity at resting stage, and brain tissue integrity, respectively. The primary goals of this project is to develop, optimize existing tools in the lab, and apply them to model whole-brain functional connectivity, based on resting state fMRI data, examine brain fMRI signal responses to autonomic and other challenges, and assess brain metabolites, cerebral blood flow, and brain tissue integrity using data collected from patients with heart failure, obstructive sleep apnea (adults and pediatrics), Type 2 Diabetes, and congenital heart disease (adolescents and pediatrics).

Qualifications

- PhD in mathematics, biomedical engineering, electrical engineering, neuroscience, or related field.
- Research experience in functional and structural MRI in humans.
- Experience in Functional, MRS, and structural MRI data processing.
- Good knowledge of MATLAB-based programming.
- Excellent communication/writing skills in English.
- Experience in MRI data acquisition and study design is also desirable.

Environment

Our lab is part of neuroscience community at UCLA (<https://bri.ucla.edu/people/rajesh-kumar/>), the largest neuroscience community in the nation, host a large number of neuroscientists (>500), who provide a resource for neuroanatomic, neuropathologic, neurophysiologic, neuropsychologic, and analytic support. The laboratory is immediately adjacent to the Ahmanson-Lovelace Brain Mapping Center, which provides a significant resource in neuroimaging faculty (>28 faculty, both basic and clinical), software, and analytic support, and there are ample of opportunities to interact with those scientists. Our lab uses a 3.0-Tesla (Siemens, Prisma) MRI scanner, located in the proximal Department of Radiology Research Laboratory, a unit devoted to research studies with on-site Ph.D.-level Siemens engineers.

Appointment Terms and Salary

The initial appointment would be for two years, with the possibility for two more years' extension, based on satisfactory performance. Salary and benefits would be based on UCLA norms with research experience.

Application Procedure and Deadline

UCLA is an equal opportunity and affirmative action employer (<http://www.mednet.ucla.edu/>), and all qualified individuals are encouraged to apply. Applications will be accepted until positions are filled. To be considered for this position, please send your CV and a cover letter to:

Rajesh Kumar, PhD

Email: rkumar@mednet.ucla.edu<https://kumarlab.dgsom.ucla.edu/people/rajesh-kumar-phd>