

**Centre of Behavioural and Cognitive Sciences
University of Allahabad**

**Workshop on Cognitive Neuroimaging: Experimental
design and analysis
March 16-19, 2023**

Venue:

National Neuroimaging Facility
Centre of Behavioural and Cognitive Sciences
Senate Hall Campus (Opposite Krishna Coaching)
University of Allahabad
Prayagraj – 211 002

About the workshop

Cognitive neuroimaging techniques such as functional MRI allow us to map the processes of perception, attention, emotion, memory and action on to the human brain. There are very few brain imaging facilities in India dedicated to research and the National Neuroimaging Facility (NNF) at CBCS, UoA, is one of them. This facility established with the support of the DST, was set up as a national resource for cognitive neuroscience research and is accessible to scholars across institutions. Currently, multiple fMRI studies are going on at NNF investigating the effect of various conditions like ageing, bilingualism, poverty, obesity, neuroaesthetics, on brain structure and function. Apart from this studies are being conducted investigating neural correlates and networks for various cognitive processes like perception of time, cognitive control, music cognition etc.

The goal of this 4-day workshop is to provide an opportunity to the young Faculty (Assistant/Associate level), Postdoctoral fellows, Senior PhD students with a thesis in the area of cognitive neuroscience, from different institutions in India to engage in brainstorming session on research questions and fMRI experimental designs in their respective areas of interest as well as gain hands-on experience with functional MRI (fMRI) experimental design, acquisition, and analysis. This workshop is primarily intended to facilitate researchers to use fMRI methodology to address their targeted research question(s). This workshop will cover fMRI experimental design strategies, acquisition of task-related fMRI data (a few participants data will be acquired during the workshop), discussion and development/design of specific studies. First two days of the workshop will focus on data acquisition, preprocessing and analysis with fMRI data. The next two days will focus on discussion and development of experimental designs for the research questions proposed by the participants. Overall, the workshop will focus on introducing and providing hands on experience with the fMRI methodology and the National Neuroimaging Facility with an emphasis on working out the details related to the hypothesis, experimental design, and setting up the fMRI protocol, to address the proposed research questions by each participant. The expected outcome of this workshop is to get one fMRI research proposal ready by each participating faculty (or lab if the faculty is participating with their postdoctoral fellow or PhD student), which they can submit for a research grant to various funding agencies (e.g. DST-CSRI, SERB) and conduct their research at NNF, CBCS. Allahabad. This workshop will also facilitate potential collaborations which the participants may explore and build during the workshop.

Resource persons

Prof. Bapi S. Raju, IIIT Hyderabad

Dr. Srikanth Padmala, Centre for Neuroscience, Indian Institute of Science, Bangalore

No. of seats: 25

Participants: Faculty (Assistant Professor and Associate Professor level), Postdoctoral fellows, senior PhD students with research interests in cognitive neuroimaging.

Registration fee:

Faculty: Rs 5000/-

Postdoctoral fellows: 3500/-

PhD scholars: 2500/-

Registration LINK: https://docs.google.com/forms/d/e/1FAIpQLSdIMCSsOq32It3am_u-LGu-yDhyS94tGseaVplzLDJcuYRGfQ/viewform

Accommodation will be provided.

Applicants are requested to submit the duly filled in google form latest by February 10, 2023. Participants will be notified about the acceptance of their participation by February 15, 2023.

Contact:

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