Positions available at the Multisensory Lab, Israel under the ERC grant titled "'Seeing' with the ears, hands and bionic eyes: from theories about brain organization to visual rehabilitation"

Post-doctoral position

At Prof. Amedi’s Multisensory Lab (http://brain.huji.ac.il), we are seeking a highly motivated postdoctoral fellow to work in the area of cognitive neuroscience, under an ERC grant. Our research mainly focuses on the visual system: its development, its capabilities, and its rehabilitation. We develop a suite of sensory-substitution devices which are routinely used in the lab to probe the multisensory nature of the brain, in both sighted and blind individuals, with a focus on how this information can be applied in rehabilitation. Our interdisciplinary research group addresses questions regarding brain organization and plasticity, multisensory perception and motor control, bridging disciplinary approaches from engineering, neuroscience and psychology. The overall goal of our research is to understand the development of the visual system, and apply this information for the rehabilitation of vision.

Our lab has access to state-of-the-art neuroimaging facilities, including a research-only 3T MRI scanner and TMS, as well as behavioral tracking and motion tracking systems. Our lab is currently supported by European Research Council (ERC), The Charitable Gatsby Foundation, The James S. McDonnell Foundation, The Israel Science Foundation, The Edmond and Lily Safra Center for Brain Sciences (ELSC). For more information visit our website.

Applicants should have a PhD in Neuroscience, Psychology, Bioinformatics, Medicine, Engineering, Physics or Computer Science. They should demonstrate an academic record of scientific excellence, independent research, and a strong interest in an interdisciplinary approach to brain research. Expertise in at least one of the following fields is an advantage: fMRI (design & analysis), TMS, computational neuroscience, motor control. Experience in programming is expected (e.g., Matlab). The applicant is expected to get involved in existing research projects, as well as initiate new lines of research. Part of the work might be undertaken in Europe as part of a cross-laboratory collaboration.

The Multisensory Lab is located in the Department of Medical Neurobiology at The Hebrew University in Jerusalem, and is part of the Institute for Medical Research Israel-Canada (IMRIC), and the Edmond and Lily Safra Center for Brain Sciences (ELSC).

Knowledge of the Hebrew language is not required, as English is the main language of scientific interaction here. However, it can help.

The commitment is for one year, with the possibility of extending it up to three years, depending on progress. The salary is at a competitive European level as defined by ERC, depending upon qualifications and experience.
Starting date is flexible, and applications will be considered until the position is filled. Informal inquiries are welcome.

Applicants should submit a curriculum vita, along with a list of publications, a short statement of research interests and three letters of recommendation to:

Amir.amedi@ekmd.huji.ac.il

Graduate student position

We are currently seeking a highly qualified graduate student to join our research in the Multisensory Lab on brain organization, plasticity and visual rehabilitation. Our research focuses on blindness, ranging from basic science, querying brain plasticity and sensory integration, to technological developments. We are developing several innovative sensory-substitution devices (SSDs) which encode the most crucial aspects of vision, increasing their accessibility to the Blind population. We use these SSDs to perform research on brain development, plasticity, and organization, and use these insights to advance visual rehabilitation approaches.

Our lab has access to state-of-the-art neuroimaging facilities, including a research-only 3T MRI scanner and TMS, as well as behavioral tracking and motion tracking systems. Part of the work might be undertaken in Europe as part of a cross-laboratory collaboration. Student applicants from a variety of backgrounds are well suited to pursue our interdisciplinary research: degrees can include neuroscience, medical science, engineering, psychology, physics and computer science.

Applicants should have a bachelor’s or an M.S. degree in Neuroscience, Psychology, Bioinformatics, Medicine, Engineering, Physics or Computer Science. We especially encourage applicants from Computer Science and Engineering

Applicants should submit a grades transcript, with a short statement of research interests to: Amir.amedi@ekmd.huji.ac.il

Keywords: Cognitive neuroimaging, artificial vision, multisensory integration, brain plasticity, topographical mapping, vision, audition, touch, clinical rehabilitation, accessibility, virtual environments, mobility, navigation, computer-vision, scene segmentation, object identification, visual rehabilitation, bionic eyes, visual prostheses sensory-modality-independence, sensory integration, adult brain plasticity.

Lab Manager staff position

We are seeking a dedicated, highly motivated and resourceful individual to fill a part-time or a full-time position as a lab/office manager and personal administrative assistant
in the Amedi Lab. The initial contract is for 1-5 years with option for extension based on success. People skills, high level of English, and experience working with Office are a must. Prior experience an advantage.

Applicants should submit a short résumé to: Amir.amedi@ekmd.huji.ac.il