Postdoctoral position in Hominoid Brain Microstructural Imaging

A postdoc position is available in the Department of Neurophysics (Director: N. Weiskopf) at the Max Planck Institute for Human Cognitive and Brain Sciences (MPI-CBS) in Leipzig, Germany.

The successful candidate will work in a multidisciplinary team studying connectomics and microstructure of the hominid brain using advanced Magnetic Resonance Imaging (MRI) and histology techniques. This is part of the collaborative project entitled “Evolution of Brain Connectomics” between MPI-CBS, the Max Planck Institute for Evolutionary Anthropology (MPI-EVA), the Paul Flechsig Institute for Brain Research, and the Institute of Cognitive Sciences, CNRS in Lyon. The project aims to establish and explore a unique hominid brain bank of wild and captive apes and monkeys. We rely on an ethically sustainable and ecological brain collection pipeline that combines non-invasive behavioural research, advanced neuroimaging and multimodal histology performed on primates, that have died of natural causes.

The candidate will build and analyse a unique multimodal dataset containing ultra-high resolution quantitative, multi-contrast 7T and 3T MRI as well as histology of post mortem primate brains. They will characterize cortical and white matter microstructure, and brain connectomics across hominid species. Complemented by cutting-edge diffusion weighted imaging (DWI), computational anatomy, and advanced histology, this project will provide unique insights into hominid brain anatomy.

The postdoc will work in a unique world-class research environment and have access to the latest cutting-edge MRI hardware including: 7T, 9.4T, the only 3T Connectom (300 mT/m gradient) in Continental Europe (all equipped with tailored RF coils), as well as advanced histological methods including state-of-the-art 3D optical microscopy facilities. The candidate will be part of a leading multidisciplinary team and work closely together with team members of MPI-EVA, MPI-CBS and Institute of Cognitive Sciences, CNRS. The postdoc will benefit from an international, friendly, and highly supportive interdisciplinary environment (working language English), in an internationally leading neuroimaging centre within the renowned Max Planck Society.

Applicants must have a PhD in physics, biology, neuroscience, computer science, mathematics, image processing, biomedical engineering, or a comparable subject. If not already held, the PhD must be obtained by the agreed start date. A strong background in anatomical image processing methods and MRI is essential. Significant experience in basic neuroscience, image analysis, comparative neuroscience, and work in interdisciplinary projects are highly desirable. Applicants must be specialists in at least one of the following areas: MRI anatomical imaging; computational neuroanatomy; developmental neuroscience; SPM, FSL, CBS-Tools or FreeSurfer; primate imaging; comparative neuroanatomy; high resolution post mortem imaging; microstructural imaging; advanced software development. The applicant should be able to demonstrate a consistently outstanding academic record, including publications.

The position is available now and the starting date is as soon as possible. It is funded for two years. Remuneration is based on the pay scale of the Max Planck Society. The Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals. International applicants are strongly encouraged to apply. Furthermore, Max Planck Society strives for gender equity and welcomes applications from all backgrounds.

To apply, please submit a single PDF file containing a full CV (inc. publication list, evidence for software development such as a Github profile, open science activities), personal statement (describing your personal qualifications, research interests, and motivation for applying), two of
your key publications, contact information of three referees, and academic certificates (PhD, Diploma/Master, Bachelor).

Application is via our online system at https://recruitingapp-5218.de.umantis.com/Vacancies/373/Application/New/?lang=eng (subject heading: “PD 17/22”). Closing date for applications is 30th June 2022. Interviews of shortlisted candidates are planned for the 13th of July 2022.

Leipzig is a vibrant city that has been called “Germany’s new cultural hot spot” by the Guardian and listed as one of the 52 places to go in 2020 by the New York Times. It has a long-standing history of classical music, academic education, and—more recently—modern arts. With its many parks, forests, canals, and lakes, Leipzig is a perfect place for recreation, sports, and leisure time. It is located a one-hour train ride south of Berlin.

Contact for informal enquiries regarding the post: Prof. Dr. Nikolaus Weiskopf (weiskopf@cbs.mpg.de). For more information: http://www.cbs.mpg.de/departments/neurophysics/