PhD Position (65%, TV-L 13)
in
Functional integration of iPSC-based neuronal transplants

Transplantation of human neurons derived from induced pluripotent stem cells (iPSC) is rapidly advancing, with first approaches entering clinical application. Yet, many aspects of how grafted neurons functionally integrate into a mammalian brain remain unknown. Our project aims at using novel functional activity reporters previously established in the mouse field to study integration of iPSC-derived neurons into the mouse brain. Key components of the project encompass transcription factor-based programming of iPSC into defined neuronal subtypes, AAV-based insertion of optical reporters, stereotaxic neurotransplantation, high-end functional imaging as well as post hoc conventional and super-resolution expansion microscopy.

The PhD project is part of the H2020 consortial project “Novel Strategies for Cell-based Neural Reconstruction (NSC-REC)” and will be integrated into the BIGS Neuroscience PhD Program at the University of Bonn. This PhD program is embedded in a vibrant and collaborative research environment including the Faculty of Medicine, the Faculty of Natural Sciences and Mathematics, and high-profile research institutes such as the Caesar Research Institute of the Max Planck Association and the German Center for Neurodegenerative Diseases.

The ideal candidate is a highly motivated, team-oriented young scientist with a strong interest in CNS repair, iPSC technology and neuronal function. Experience in molecular biology, animal experimentation and microscopy is advantageous.

Candidates should hold a diploma or a master’s or equivalent degree in the biosciences, medicine, physics, or related fields. The University of Bonn is an equal opportunity employer. Preference will be given to suitably qualified women or applicants with disabilities, all other considerations being equal.

The position is available for 3 years, with the possibility of extension.

Please send your application quoting the reference number 41_2022 along with your bibliography, reprints of your most relevant publications and the names of 3 references to:

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