IZN
Interdisziplinäres Zentrum für Neurowissenschaften der Ruprecht-Karls-Universität Heidelberg

UNIVERSITÄT HEIDELBERG ZUKUNFT SEIT 1386

Zentralinstitut für Seelische Gesundheit

The Department for Molecular and Cellular Cognition Research, at the Central Institute of Mental Health (Mannheim, Germany) offers a:

Postdoctoral position (m/f/d) in molecular mechanisms of memory persistence

Our laboratory investigates the molecular mechanisms that underlie the formation and maintenance of memory (www.oliveiralab.weebly.com) The successful candidate will work on the elucidation of DNA methylation-dependent mechanisms in memory persistence as well as in the context of psychiatric disorders. We will apply state-of-the-art methodology (engram tagging tools, chemogenetics, omics approaches and behavioral testing) to uncover the molecular and cellular processes that support the long-term storage of adaptive and maladaptive memories. The Heidelberg/Mannheim region is a scientific hub that houses several internationally renowned research institutes with research groups committed to study Neuroscience at various levels. This region further offers access to several state-of-the-art core facilities.

The candidate should be highly motivated and self-driven and must hold (or be close to complete) a Ph.D. in biology or a related field. The ideal candidate should have a strong interest in neurosciences and solid theoretical and practical background in neurobiology and molecular and cell biology. Candidates with prior experience in animal research and transcriptomic and epigenomic analysis are particularly encouraged to apply. Fluency in English (written and spoken) and the ability to work in an international environment is required.

Employment, payment and social benefits are according to the German salary scale TV-L E13 (100%). The position is for two years with the possibility of extending and is expected to start during **Fall 2022**.

Applications written in English including (1) a cover letter explaining your motivations and previous work, (2) a CV with a list of publications, and (3) contact details for two references (in one PDF document) should be sent to Dr. Ana M.M. Oliveira by e-mail (oliveira@nbio.uni-heidelberg.de). Deadline for application is **September 30th, 2022**.

Further reading:

Gulmez Karaca K, Kupke J, Brito DCV, Zeuch B, Thome C, Weichenhan D, Lutsik P, Plass C, Oliveira AMM (2020) Neuronal ensemble-specific DNA methylation strengthens engram stability. *Nature Communications*. 11(1):639

Brito DCV, Kupke J, Gulmez Karaca K, Zeuch B, Oliveira AMM (2020) Mimicking age associated Gadd45g dysregulation results in memory impairments in young adult mice. *Journal of Neuroscience*. 40(6):1197-1210

Oliveira AMM, Hemstedt TJ and Bading H (2012) Rescue of aging-associated decline in Dnmt3a2 restores cognitive abilities. *Nature Neuroscience* 15(8): 1111-1113

Gulmez Karaca K, Kupke J, Oliveira AMM (2021) Molecular and cellular mechanisms of engram allocation and maintenance. *Brain Research Bulletin*. 170:274-282 [Review]

Oliveira AMM (2016) DNA methylation: a permissive mark in memory formation and maintenance. *Learning and Memory* 23(10):587-593 [Review]