



# Cluster of Excellence



## **The cluster of excellence Hearing4all:**

### **Models, Technology and Solutions for Diagnostics, Restoration and Support of Hearing**

at the Carl von Ossietzky Universität Oldenburg in collaboration with Medizinische Hochschule Hannover and Leibniz Universität Hannover is seeking to fill as soon as possible

## The position of a **research assistant** (65 %, German TV-L 13) in the field of optogenetic brain prostheses

in the Department of Neuroscience / Auditory Neuroscience laboratory led by Jannis Hildebrandt. The position is initially limited until 31 December 2018 and provides the opportunity to pursue a PhD.

### *Project*

The project aims to develop new stimulation strategies for optogenetic brain prosthesis. We are developing novel types of optical fibers that allow for multiple controlled outlets out of a single applicator. We will test these strategies in animal models for auditory midbrain implants. The project benefits from close collaboration between the laboratory at the University of Oldenburg (UOL), the laboratory of auditory neuroscience and neuroprostheses at the Medical School Hannover (MHH) led by Prof. Andrej Kral, and the biophotonics group of Prof. Alexander Heisterkamp at the Leibniz University Hannover (LUH).

### *Job description*

Experimental work will combine training animals in listening task and optogenetic stimulation. Testing and evaluation of viral expression strategies for light-sensitive channels will also be part of the position. The project will benefit from the diverse expertise of the collaboration partners, including light delivery to biological tissue (LUH), long-standing experience with auditory brain implants both in animal models and the clinic (MHH), and optogenetics combined with behavior (UOL). The position will be centered at Oldenburg, but provides the opportunity to take part in the work at both laboratories in Hannover. Thus, it offers an excellent opportunity to learn many aspects of state-of-the-art optogenetic technology in neural prosthetics, including behavioral testing, expression strategies, light delivery, and electrophysiological evaluation of stimulation.

### *Requirements*

Applicants must have an academic university degree (master or equivalent) in neuroscience, biology, cognitive sciences, or a related field. Prior experiences with animal behavior, optogenetics, or neurophysiology are highly desirable.

The University of Oldenburg strives to increase the percentage of women in science. Therefore, equally qualified female candidates will be given preference.

Applicants with disabilities will be preferentially considered in case of equal qualification.

Please send your application to Carl von Ossietzky University Oldenburg, Cluster of Excellence "Hearing4all", Jannis Hildebrandt, 26111 Oldenburg or email attachment to [jannis.hildebrandt@uni-oldenburg.de](mailto:jannis.hildebrandt@uni-oldenburg.de). Application by email is preferred. Informal enquiries about position and project are welcome.

Deadline for the application is **September 25<sup>th</sup> 2016**.