

The **German Institute of Human Nutrition Potsdam-Rehbrücke** invites applications for a

PhD student position (3 years)

to join the **Psychophysiology of Food Perception** group (K. Ohla). The group investigates the psychophysiological foundations of taste perception and the interaction of taste with other senses relevant to food perception and hedonic valuation (palatability) of food in humans. The research project will be embedded in the Competence Cluster of Nutritional Research Berlin/Potsdam and address how the peripheral taste signal is used by the central nervous system to encode taste features such as quality, intensity and valence (hedonic value) in humans with a focus on the neural network dynamics.

Work environment

The group offers a stimulating and collaborative research environment and excellent working conditions. The lab hosts a high-density EEG system and state-of-the art taste stimulation systems suitable for EEG, behavioral and fMRI studies. Several imaging facilities are available in the area.

The institute is located in the metropolitan area of Berlin/Potsdam and allows access to a multitude of seminars, lectures and stimulating meetings at the surrounding institutes, e.g. Charité, Humboldt-University, University of Potsdam, Technical University Berlin etc..

Responsibilities

- Investigation of the neural network dynamics underlying gustatory perception and gratification in humans using EEG and possibly also fMRI
- Acquisition and analysis of behavioral, electrophysiological and neuroimaging data
- Implementation of analysis algorithms (multivariate pattern analysis, machine learning and connectivity analyses)
- Presentation and publication of the results
- Interaction with team members and collaborators from various disciplines

Requirements

- university degree (Diploma/Master) in Computational Neuroscience, Psychology, Biomedical Engineering or a related field
- solid programming skills (preferably in Matlab or Python)
- keen interest in psychology and cognitive/systems neuroscience
- strong analytical and creative problem solving skills
- experience in computational modeling and machine learning (ideally of neuroscientific data) and/or experience with EEG and/or fMRI will be advantageous
- good command of English

The position is available starting July 1st 2015 or later and is available for 3 years. It will be paid according to the terms of the civil service collective bargaining act (TV-L 50 % of level E13).

To apply, please email a letter stating your motivation, CV, certificates and contact information for 1-2 references (preferably as a single PDF file) to Kathrin.Ohla@dife.de (for inquires simply email)

For a related publication see:

Crouzet, Busch & Ohla (2015). Taste quality decoding parallels taste sensations. *Current Biology*, 7:890-896.