

The Max Planck Institute for Brain Research (MPI for Brain Research) in Frankfurt/Main is a vibrant research institution in the field of basic biological and medical research, with a focus on understanding the functions of the brain's circuits. Our institute has approx. 300 employees in three research departments and four research groups, as well as several service units.

The Barker Lab is looking for a

## Master Student (m/f/d)

interested in a HiWi job or pursuing a Master Thesis for 6 months or longer

The Barker Lab studies neural mechanisms for the processing and production of socially meaningful communication, with a particular focus on vocal communication. For more information visit the Barker Lab website (QR-code below).

## Your tasks:

You will be part of a team improving a machine learning pipeline for detecting vocalizations of naked mole-rats in their lab environment. Main tasks will revolve around:

- Applying advanced preprocessing steps to audio data
- Tuning the hyperparameters of the deep learning model (convolutional neural network)
- Expanding the data set from existing multi-channel audio recordings

## Your profile:

You should have experience with programming in python and machine learning. Specific experience with convolutional neural networks as well as audio data processing is desirable, but not required. You will work closely with the rest of the team, therefore we are looking for a candidate with good communication skills, and a good knowledge of English.

## We offer:

- High-Tech lab facilities, state-of-the-art methods in neuroscience and compute infrastructure
- A highly interactive atmosphere within an international, collaborative researcher team
- In house Cafeteria and Bistro
- Free parking on the institute's premises

Please send your full application, including a letter of motivation together with a full CV in English, and related certificates electronically to **julian.burger@brain.mpg.de**.







