

POSTDOCTORAL, PhD and MASTER STUDENT POSITIONS IN SYSTEMS NEUROSCIENCE

The Brain & Sound Lab is seeking ambitious, smart and self-driven scientists for open research positions at the postdoc, PhD, and master student levels.

Start date: Fall 2021.

Location: Basel University, Switzerland.

JOB DESCRIPTION

The projects have the broad goal of better understanding the neuronal circuits for auditory processing and perception, and include both experiments and data analysis. The successful candidates will have the opportunity to learn and apply several state-of-the-art systems neuroscience techniques such as in vivo extracellular recordings, functional imaging (2P calcium or voltage imaging), behavioral assays, optogenetics, in vivo patch-clamp recordings, viral neural tracing, or immunohistochemistry. The research questions will be chosen from a range of topics in auditory systems neuroscience. For more information about the specific projects at the different levels, please contact Tania Barkat (tania.barkat@unibas.ch)

YOU ARE OUR NEW LAB MEMBER IF YOU:

- have a background in neuroscience, physics, computer science, mathematics, biology, or engineering
- have a spirit of intellectual adventure as well as drive and eagerness
- can be creative and focused on a project at the same time
- have experience or interest in programming data analysis code
- run experiments methodically and are adept at troubleshooting and problem solving
- ambition to pursue a career in science
- enjoy working in a team and like to share ideas with colleagues.

HOW TO APPLY

To apply, please send a letter of motivation, a statement of research interest, and your CV to Tania Barkat, tania.barkat@unibas.ch.

ABOUT THE LAB

Our lab aims to understand the role of neural circuits in making sense of sounds. We use a systems neuroscience approach and combine in vivo electrophysiology, functional imaging, behavioral assays, and optogenetics to explore the functions of neuronal circuits in the mouse central auditory system.

Ongoing work in our group focuses on the following questions:

- How do auditory neuronal responses develop during adolescence and how do they influence function in a mature brain?
- What neural circuits are involved in specific sound features, and how can they influence perception?
- How do context and learning influence auditory function?
- How can neuroprosthetics be improved for hearing restoration?

The goal of our research is to give a new insight into the functions of the auditory system, with a particular focus on its high adaptability. We hope that our results will lead to new ways of reinstating normal connectivity in cases of abnormal signal processing.

For more information about our lab, please check www.brainsoundlab.com.