Measurement of spectrotemporal receptive fields in rodent auditory cortex.

The internship would allow the student to learn current techniques for measureing spectrotemporal receptive fields of neurons in auditory cortex of the Mongolian gerbil, a well established species in auditory reserach. This technique is a basic tool for neurophysiologists and computational neuroscientists to characterize the functional properties of cortical cells, and a prerequisite for further studies as currently conducted in the multidisciplinary research project DIRAC. As an application, measured STRF estimates would be assessed with respect to their ability to allow predictions of neurons to various sounds, including speech sounds and unexpected auditory events.

Location: Leibniz Institute for Neurobiology, Magdeburg, Germany