Neurosciences research has a long tradition in Freiburg and includes studies on:
- nervous system development
- mechanisms of synaptic transmission
- the role of GABAergic interneurons in network dynamics
- voltage-activated calcium channels
- network activity and neuropathological changes accompanying epileptic disorders (Clinical Neurocenter)
- neuroimmunology in central nervous system (CNS) inflammation and neurodegeneration
- myeloid cells in CNS diseases
- network organization and dynamics ( Bernstein Center Freiburg BCF, Cluster of Excellence BrainLinks - BrainTools BL-BT and Bernstein Focus: Neurotechnology Freiburg/Tübingen BFNT )
- brain-machine interfacing BMI

We participate in the Collaborative Research Centers and Training Groups such as " Functional specificity by coupling and modification of proteins" SFB 746.

To find information on the principal investigators in this area please click here.
gyrus transfected with AAV encoding Parvalbumin-expressing basket cells in the hippocampal dentate