The DZNE site in Magdeburg concentrates on system perspectives of degenerative dementia. Brain functions are identified using flexible networks of nerve cells and this plasticity opens up new treatment opportunities. Despite the loss of nerve cells, cognitive performance can be improved and stabilised through targeted stimulation. In a multidisciplinary approach the combined resources of Magdeburg University and the Leibniz Institute are used to investigate the mechanisms and therapeutic opportunities of such neuromodulation. A key point of focus involves a comparison of humans and animals to develop functional biomarkers for the early diagnosis of degenerative dementia and to identify the effects of new cognitive-physiological treatments at molecular, cellular and system level. A further approach looks at ways of using direct electric brain stimulation to improve learning and memory ability. Building on this, a dementia model for the state of Saxony-Anhalt will be developed.

Contact and Map to DZNE Magdeburg