Neural mapping using transcranial magnetic temporal interference stimulation







PRINCIPAL INVESTIGATORS: Khaled Nasr, Prof. Dr. Surjo Soekadar, Prof. Dr. Andreas Heinz Charité



MedTech



Neurology

SUMMARY

Deep brain stimulation has provided dramatic benefit for a variety of clinical conditions. However, current noninvasive technology allows only superficial stimulation of the brain. The only possible ways of reaching deeper brain regions require invasive approaches.

This project aims at developing a medical device that enables non-invasive stimulation of deep brain areas at millimeter precision to enable the treatment of neurological and psychiatric disorders such as depression or OCD.

PROJECT GOALS

- Develop and build prototype
- · In vivo testing
- Preparation for CE certification

LONG-TERM GOALS

- Phase I clinical study
- Implementation of the solution in the clinical workflow by licensing to Medtech company or startup foundation.