

Research on mental health

A better understanding of the interaction between brain and body

Our brain interacts with the body through various nerves, hormones or the immune system. The exact way in which these interactions work is still largely unknown. It is suspected that in psychological illness, the brain's perception and/or control of these interactions is impaired, leading in turn to undesirable feedback.



Accelerating innovations in
neuromodelling

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Our goal

At the Translational Neuromodeling Unit (TNU), a joint professorship of the University of Zurich and ETH Zurich, research is conducted into the perception and control of bodily states by the brain.

To strengthen this, a new assistant professorship is to be established: the professorship for "Computational Modelling of Brain-Body Interactions". In addition to mathematical modelling, the main emphasis will be on the application of a unique measurement method, the Optically Pumped Magnetometry (OPM). This enables the investigation of human brain activity with the highest temporal resolution.

The aim is to uncover fundamental mechanisms that are relevant for many mental and neurological disorders and, based on this, to develop innovative diagnostic methods.

Your support enables

- the new assistant professorship for “Computational Modelling of Brain-Body Interactions” at the University of Zurich and ETH Zurich;
- the research and measurement of fundamental mechanisms responsible for psychological and neurological disorders;
- the further development of current diagnostic tools and thus the rapid transfer of findings into practice.



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