

Postdoctoral Position

— Neurobiology of Thermal Homeostasis —

Laboratory of Jan Siemens @Heidelberg University, Germany

If you are familiar with electrophysiological recording techniques and have an interest—or can imagine to gain interest—in understanding neuronal mechanisms regulating body homeostasis, in particular body temperature, consider to apply.

The ability to regulate body temperature is essential to maintain homeostasis. Even slight deviations from 37°Celsius can affect a wide range of biological processes.

In vertebrates, the central thermostat that regulates body temperature has been found to reside in the preoptic area and the anterior part of the hypothalamus. This brain region is also concerned with regulating other bodily functions that are connected to temperature homeostasis, such as circadian cycle, fever and energy metabolism/feeding.

Using the mouse as a model system and multidisciplinary *ex vivo* and *in vivo* approaches — including brain slice electrophysiology, opto- and chemogenetics, intravital calcium-imaging, slice electrophysiology, (single-cell) RNAseq, deep brain temperature stimulation— we are interested in understanding central mechanisms that orchestrate thermal homeostasis.

Additionally, we have started to dissect central mechanisms mediating heat acclimation, an area of research that receives renewed medical interest due to the increase in global temperatures.

If you are excited about neurophysiology, interested in homeostatic pathways, have some experience in animal research and envision for yourself to work in an international research group then send your CV, brief description of research background & interests and names of two or three referees to:

jes@pharma.uni-heidelberg.de

For more information on the ERC funded Siemens-lab see: <http://www.siemenslab.de/>

Twitter: @jansiemens2

Starting Date: flexible, preferentially within the first half of 2023

The position is fully funded and the initial contract duration is 2 years

