



PhD opportunity in Computational Neuroscience at Jülich Research Center contingent on successful grant application

In the context of an existing CRCNS (Collaborative Research in Computational Neuroscience) project between the Allen Institute (PI: Stefan Mihalas) and the Jülich Research Center (PIs: Markus Diesmann and Sacha van Albada), the German ministry BMFTR offers candidates from the USA an opportunity for a 'Hop-On Fellowship' to do a PhD at the Jülich Research Center. This entails a grant proposal written by the German partner along with resumes and letters of intent from candidates who have studied or done research in the USA at least for the past three years.

The CRCNS project concerns the development of multi-area models of the mouse thalamocortical visual system, bringing together biological fidelity and visual function. To this end, the rich anatomical and physiological datasets from the Allen Institute are combined with expertise on modeling large-scale spiking neural network models from the Jülich partner, and functional properties are incorporated using advanced methods for training neural networks. The closely related PhD project (contingent upon the awarding of the Hop-On Fellowship) will take a top-down approach to enhance the biological realism of a functional model of the mouse visual cortex and gain insight into relationships between cortical structure, dynamics, and function. The candidate would be embedded in the Institute for Advanced Simulation (IAS-6, Computational and Systems Neuroscience, <https://www.fz-juelich.de/en/ias/ias-6>) at the Jülich Research Center and would have the opportunity to work together with the PIs and postdocs in the USA and Germany.

The fellowship covers not only the salary of the PhD candidate but also travel costs to and from Germany. During the PhD, it is possible to work from the USA for up to five months in total (max. two months a year). A contribution to childcare costs in Germany of up to 150 euro a month is also available.

To apply, please send your CV, copies of your Bachelor's and Master's transcripts, and a short motivation letter to Prof. Sacha van Albada, s.van.albada@fz-juelich.de by August 10th, 2026.