



The HBP Calls for Expression of Interest for SGA3 “Rodent microcircuits”

Call Text

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Total Call Budget:	EUR 900,000. Maximum funding per proposal: EUR 900,000		
More information:	info@opencalls.humanbrainproject.eu		

The goal of this Call for Expression of Interest (CEoI) is to attract leaders in the field of rodent microcircuit modelling to generate a full-brain model of the mouse at the microcircuit and point neuron level. The design of neurons and microcircuits should be multiscale, biologically-realistic (i.e. neurons should be generated through a precise simplification pipeline, maintaining salient biological features), subjected to biological validation, and should address brain architectures involved in motor and cognitive control.

This project will have to make critical, substantial contributions to the science of HBP and to include specification of the data and/or tools, which will be distributed through the European Brain ReseArch INfrastructureS (EBRAIN) to the scientific community.

The project has to demonstrate a clear potential for real-world applications (e.g. in software, atlas of brain data, robotics and neuromorphic computing) and has to generate workflows for functional simulations to be applied to the investigation of brain dynamics e.g. in The Virtual Brain environment, in robotic control systems and in neuromorphic computing systems.

The full-brain mouse model needs to bridge and integrate the activities of two or more HBP Scientific WPs and EBRAINS. Vouchers should be used to implement and refine specific functionalities of the microcircuits to be connected to the main full-brain model that require specific expertise.