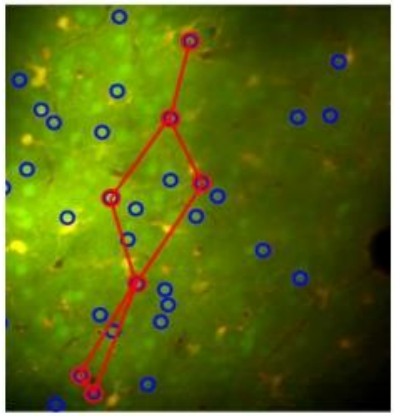
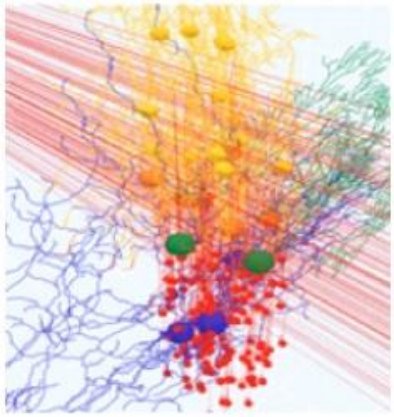
First Human Brain Project Facility Hub pilots are open for users

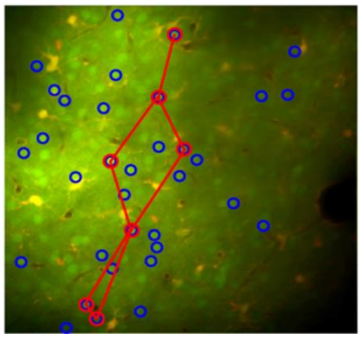
The Human Brain Project Facility Hubs will allow users from academia and industry around the world to use the state-of-the-art facilities and resources of HBP partner institutions, to foster collaboration and carry out cutting-edge scientific research. The first Facility Hub pilots are set to be operational by the end of May 2021. Additional Hubs are planned to follow.





The Facility Hubs are contributions from HBP partners to the new EBRAINS research infrastructure, and complement the EBRAINS services currently on offer. The FENIX supercomputing network - which delivers the computational power behind EBRAINS - will support the Facility Hubs by providing access to computing resources for data storage, analysis, and simulation, through its five centres; BSC in Spain, CEA in France, CINECA in Italy, CSCS in Switzerland, and JSC in Germany.

Two-photon functional imaging Hub



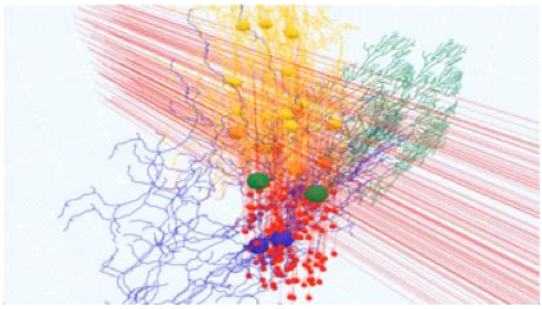
The University of Amsterdam Facility Hub will offer users access to a high-speed two-photon scanner, which allows imaging of living tissue up to approximately one millimetre in thickness. It will also provide access to high-density ensemble recording setups, which are capable of recording activity from hundreds of individual neurons simultaneously. These resources can help to further our understanding of how cognitive, perceptual, and motor functions originate from the behaviour of large, cooperating populations of neurons.

The Virtual Brain Hub

The Virtual Brain Facility Hub at Aix-Marseille University will provide expert support for activities linked to the use of The Virtual Brain, a platform for constructing and simulating personalised brain network models. The Hub aims to increase the capacity of neuroscientists to use ICT tools, such as The Virtual Brain and EBRAINS, in order to advance scientific knowledge and facilitate the translation of research into clinical applications.

Cerebellar Modelling Hub

The University of Pavia Facility Hub performs multiscale modelling, spanning from neurons and microcircuits to large-scale networks and the whole brain. The hub will allow researchers with different interests, backgrounds, and levels of expertise to develop their own computational models and transform them into various kinds of applications. The facility expects to make substantial contributions to brain-inspired technologies and treatments for brain diseases.



The Facility Hubs look forward to receiving applications. Further information can be found on the Facility Hubs page.

Contact:

Email: facilityhubs@humanbrainproject.eu

ABOUT THE HBP

Human Brain Project

The Human Brain Project (HBP) is the largest brain science project in Europe and stands among the biggest research projects ever funded by the European Union. At the interface of neuroscience and information technology, the HBP investigates the brain and its diseases with the help of highly advanced methods from computing, neuroinformatics and artificial intelligence, and drives innovation in fields like brain-inspired computing and neurorobotics.

ABOUT EBRAINS

EBRAINS

EBRAINS is a **new digital research infrastructure**, created by the EU-funded Human Brain Project, to foster brain-related research and to help translate the latest scientific discoveries into innovation in medicine and industry, for the benefit of patients and society.

It draws on cutting-edge neuroscience and offers an extensive range of brain **data** sets, a multilevel brain **atlas**, **modelling and simulation** tools, easy access to **high-performance computing** resources and to **robotics** and **neuromorphic** platforms.

All academic researchers have **open access** to EBRAINS' state-of-the art services. **Industry researchers** are also very welcome to use the platform under specific agreements. For more information about EBRAINS, please contact us at info@ebrains.eu or visit www.ebrains.eu.