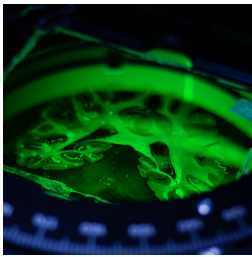




EBRAINS

EBRAINS 2.0

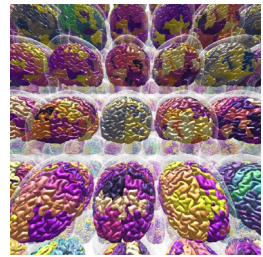
EBRAINS is a **digital research infrastructure** that provides open access to computational modelling, brain atlases, shared analysis tools and open data to advance brain research and medicine, and to enable large-scale collaboration.



Brain section being imaged with polarized light to visualize fiber tracts.



Magnetic resonance imaging can be used to produce detailed images of the brain.



Computational models of the brain can be personalised for individual patients.

Through EBRAINS, scientists can perform complex analyses, access supercomputers, and store large amounts of data. These capabilities not only **accelerate research** but also **benefit medical applications**, like:

- Improved diagnostics and treatments for neuro-psychiatric disorders;
- The development of new drugs and preventative measures;
- The creation of digital twins of the brain, offering personalised insights into brain health.

EBRAINS was built in a collaborative effort by labs across Europe in the Flagship initiative Human Brain Project (2013-2023).

Now, the **EU co-funded EBRAINS 2.0 project is taking this digital research infrastructure to the next level**. EBRAINS 2.0 is running from 2024 to 2026.

The Scope of EBRAINS 2.0: Transforming Research and Medicine with Shared Infrastructure

The EBRAINS 2.0 project fosters a deeper understanding of brain structure and function with user-friendly software tools.

The project furthers the development and provision of the infrastructure's research technologies to the scientific community.

It aims to establish a new standard for **brain atlases**, gather and connect **multimodal neuroscientific and clinical data**, and push forward the development of **digital twin** approaches.

Nerve fibres mapped in high resolution via the Polarised Light Imaging (PLI) method and computational support from EBRAINS

EBRAINS 2.0 Work Packages

EBRAINS 2.0 is structured into eight **Work Packages**, each addressing specific aspects of the project's objectives.

Work Package 1 • Led by Timo Dickscheid (Forschungszentrum Jülich)

Brain Atlases from the Micro- to the Macro-Scale

Work Package 2 • Led by Maurizio Corbetta (University of Padua)

Link New Multi-Scale Human Datasets and Connectomes to Atlases and Models

Work Package 3 • Led by Viktor Jirsa (Aix-Marseille University)

Create Digital Twins through Modelling and Simulation

Work Package 4 • Led by Jan Bjaalie (University of Oslo)

Services for FAIR Neuroscience Data and Data Processing

Work Package 5 • Led by Yannis Ioannidis (Athena Research Center)

Platform Services

Work Package 6 • Led by Lena Oden (Forschungszentrum Jülich)

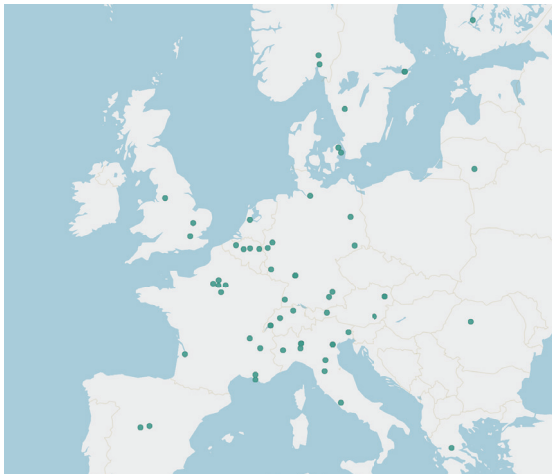
Base Infrastructure

Work Package 7 • Led by Francesco Pavone (European Laboratory for Non-Linear Spectroscopy, Florence)

Community Involvement, Education, Innovation and Interoperability

Work Package 8 • Led by Katrin Amunts (EBRAINS AISBL)

Management, Coordination and Communication



Map showing EBRANS 2.0 consortium partners across Europe.
Created using OpenMapTiles.

About EBRAINS 2.0

Programme

HORIZON-INFRA-2022-SERV-B-01

Coordination

EBRAINS AISBL

Consortium

59 partners in 16 countries

Total funding

€ 38M

Duration

January 2024 - December 2026



Members of the EBRAINS 2.0 consortium. From left to right: Trygve Leergaard, Jan Bjaalie, Timo Dickscheid, Maurizio Corbetta, Viktor Jirsa, Katrin Amunts, Yannis Ioannidis, Lena Oden, Lyuba Zehl, Victoria Barygina, Julia Kämpfer, Camelia Vasile.



Co-funded by
the European Union

EBRAINS 2.0 has received funding from the European Union's Research and Innovation Program Horizon Europe under Grant Agreement No. 101147319