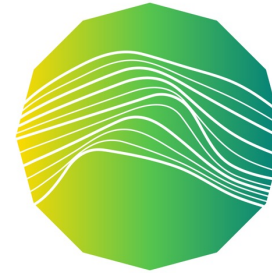


EBRAINS' ambition is to provide the scientific community at large with an **open, state-of-the-art and distributed** capability that fosters **collaborative** brain science, opens the way to groundbreaking discovery and aims to secure Europe's leading position in the dynamically growing field of **multidisciplinary brain research** for the benefit of **patients, neuroscience, industry and society**



# EBRAINS

## ESFRI Roadmap 2021 Launch

7 December 2021

Paweł Świeboda  
CEO EBRAINS AISBL  
Director General, Human Brain Project

A view of the complexity of the human brain, revealing its fiber architecture of the internal capsule by means of 3D Polarized Light Imaging. Nerve fibers are colored according to their spatial courses, and connect far-distant regions

# EBRAINS: a distributed Research Infrastructure

## Central Hub

Brussels



## National Nodes

Seven emerging Nodes in France (Lead Country), Germany, Sweden, Norway, Switzerland, Italy and Spain



Local institutions

- Best-in-class resources and services
- Scientific excellence
- Synergy potential
- National scientific development

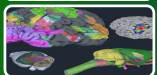
## Offering a deep range of services



Data and Knowledge



Brain-Inspired Technologies



Atlases



Medical Data Analytics

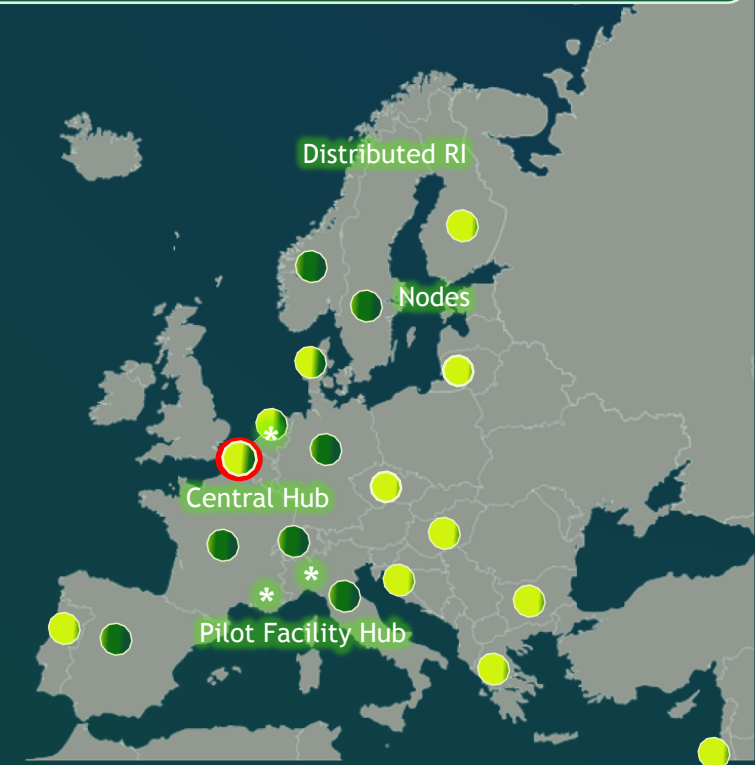


Simulation

## EBRAINS ESFRI supporters

\* 12 letters of political support

128 letters of institutional support from 18 countries



# Strategy for maximizing socio-economic impact

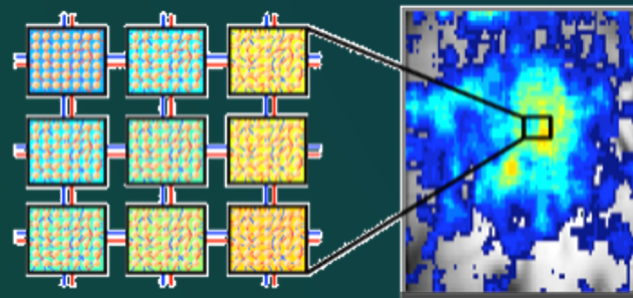
Enabled by EBRAINS

Brain health



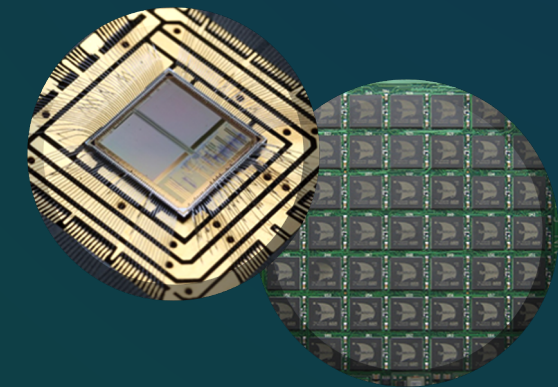
- Personalised medicine solutions (epilepsy - EPINOV trial ongoing)
- Data: step-change in access (EBRAINS Health Data Solution)

Neurotechnology



- Network of neuro-engineering platforms (Clnatec at CEA in Grenoble, Center for Neuroprosthetics at EPFL in Lausanne, etc.)
- Medical devices, e.g. for improved consciousness monitoring (e.g. coma patients)

Neuromorphics and AI



- Neuromorphic computing (BrainScales, SpiNNaker)
- Future of AI: self-learning algorithms