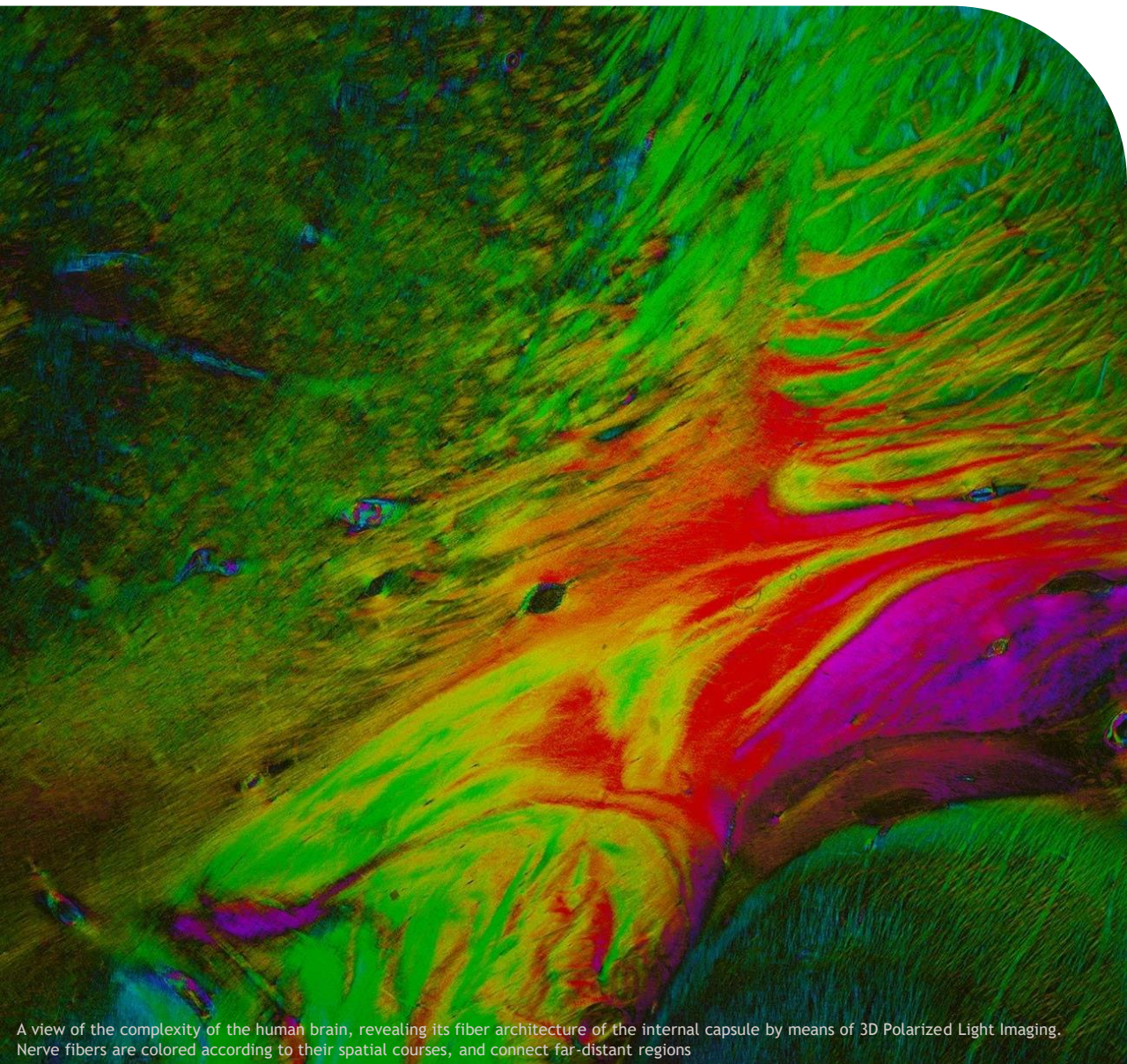




# EBRAINS

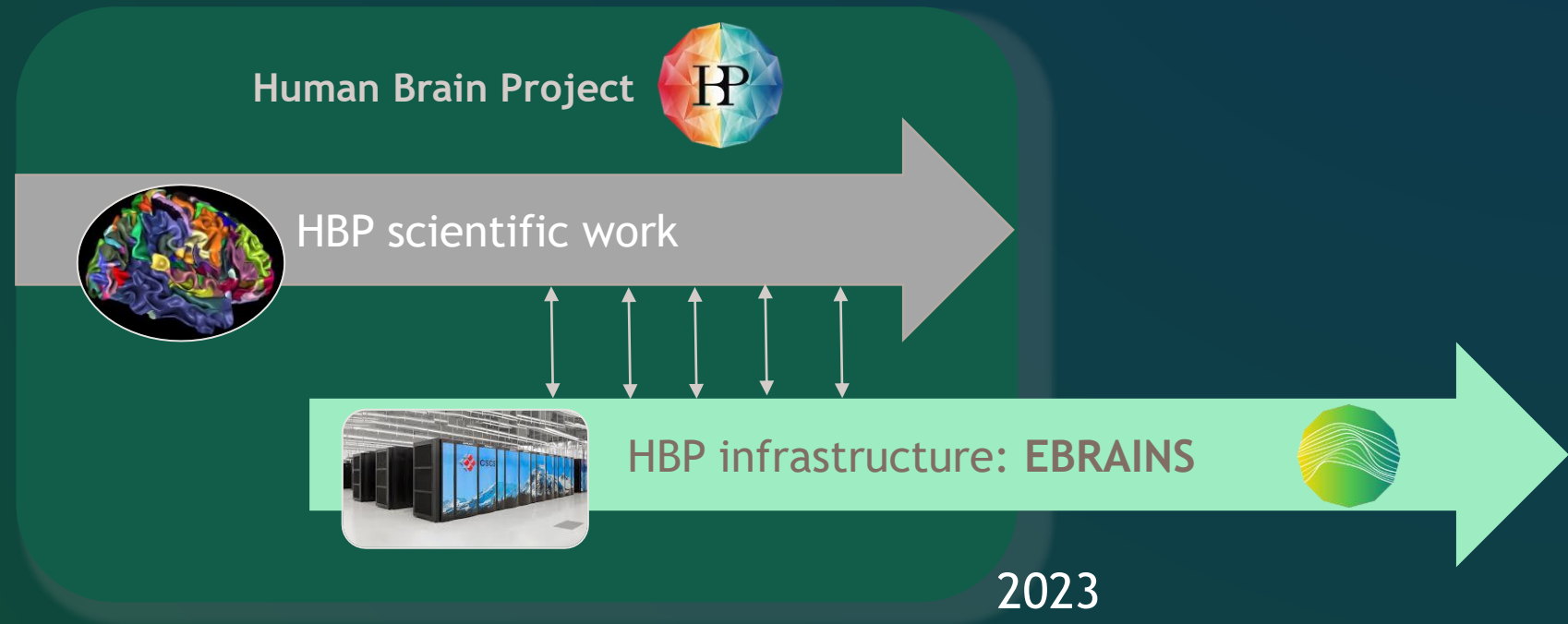
**A key enabler to advance brain science**



France Nivelles  
EBRAINS - Human Brain Project  
Chief Communications and Content Officer

# EBRAINS' mission: Enabling brain research advances and innovation

It builds on the work of the Human Brain Project and takes it to the next level



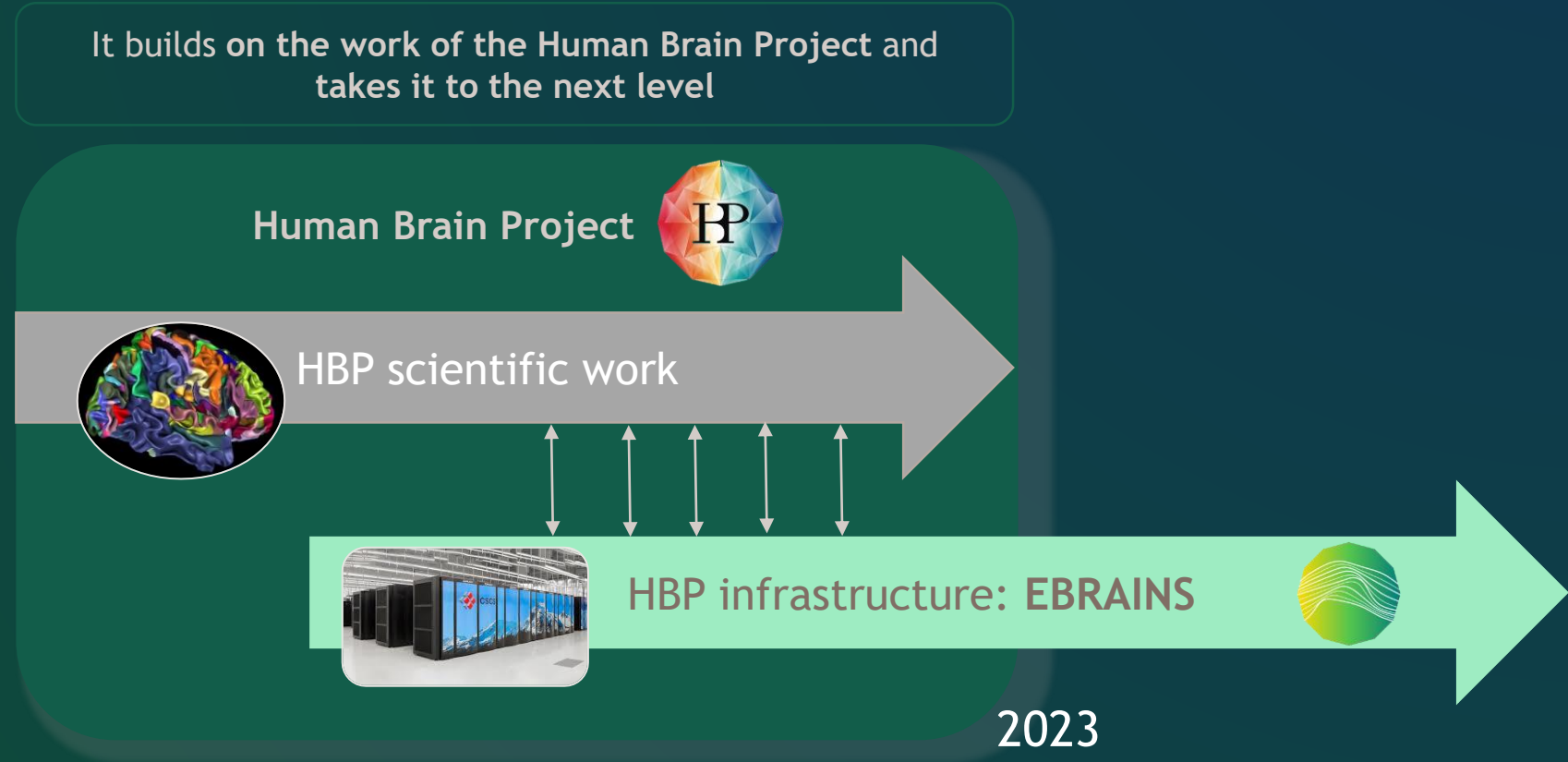
2023

# EBRAINS' mission: Enabling brain research advances and innovation

It builds on the work of the Human Brain Project and takes it to the next level

EBRAINS offers the science community **state-of-the art**

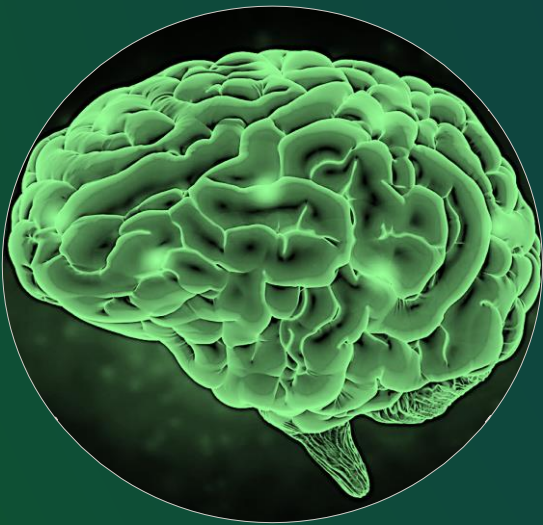
- Brain data and atlases
- Simulation and modelling tools
- Access to (super) computing resources



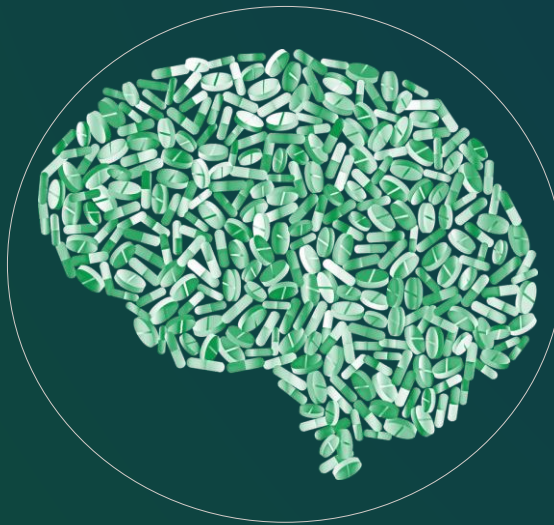


# EBRAINS Focus areas

Neuroscience



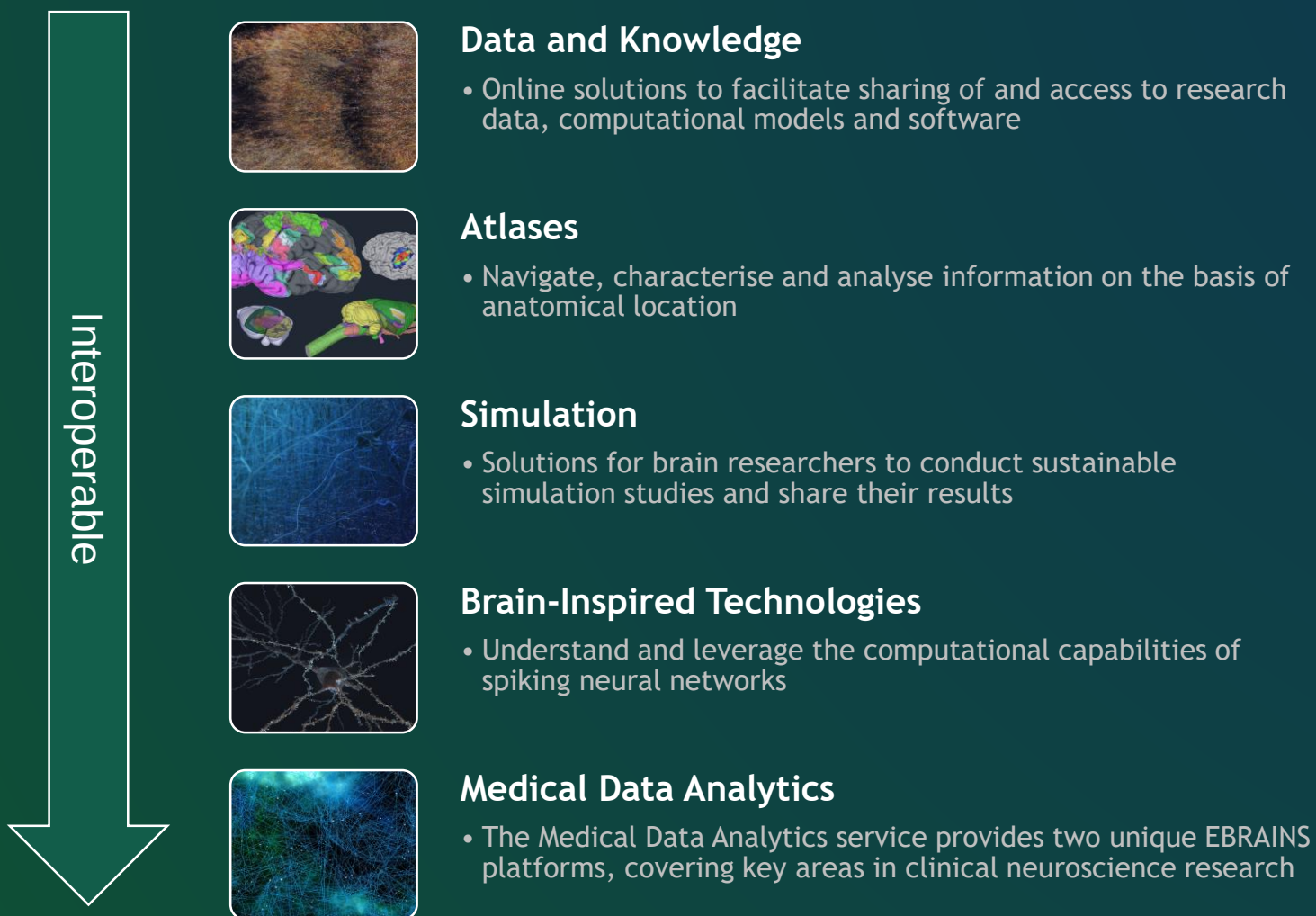
Brain Medicine



Brain-inspired technologies

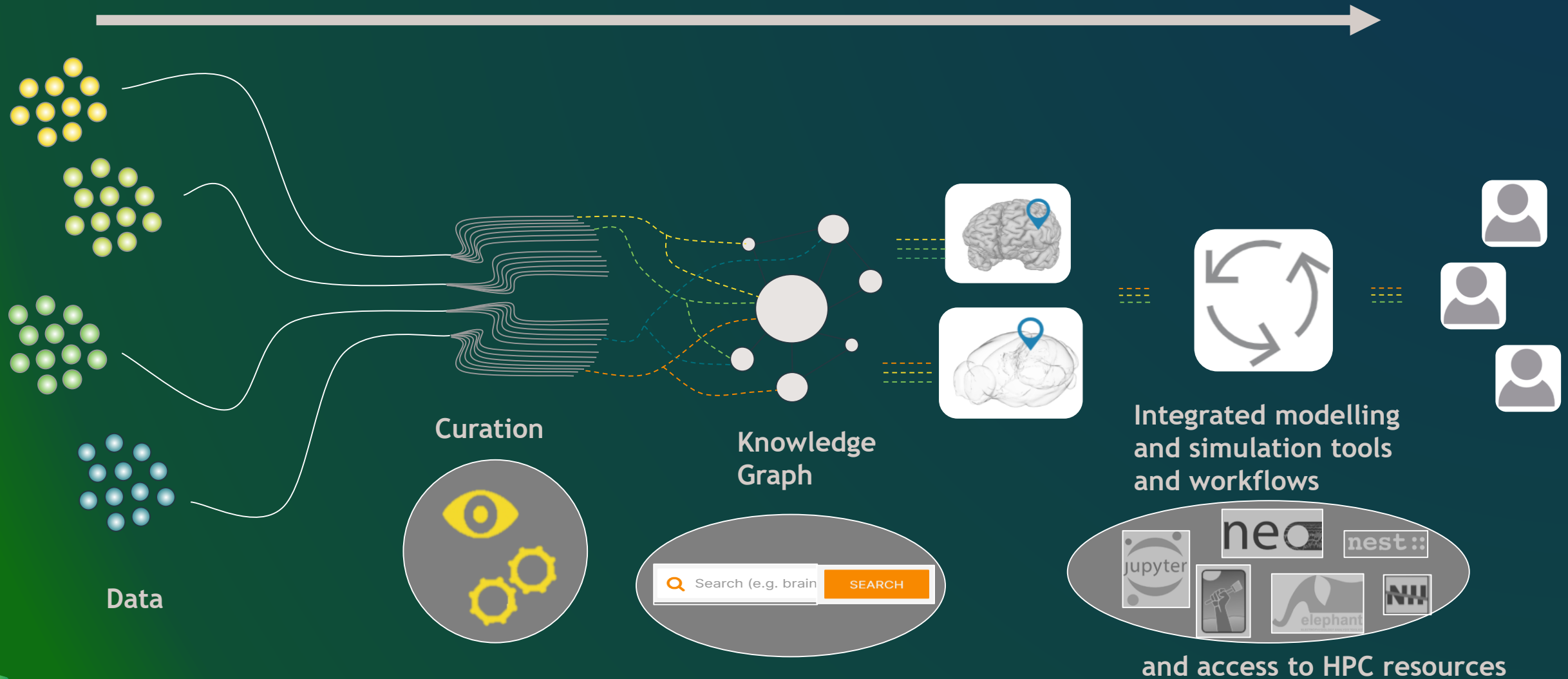


# What EBRAINS brings to the scientific community



Co-developed by  
and with  
researchers

# An integrated platform with cutting-edge workflows



# Ensuring the best service for the communities

## Three key elements



Supporting projects with data management and modelling tools and offering compute and storage solutions



Accompanying researchers in addressing scientific questions



Developing specific customized solutions



# Example of support: providing researchers with data sharing facilities

DATA AND KNOWLEDGE

## Share Data, Models and Software

Make an impact by sharing your neuroscience data, models and software on EBRAINS

---

[Publish a dataset alongside a journal publication](#)

---

[Leverage EBRAINS to help create your data paper](#)

---

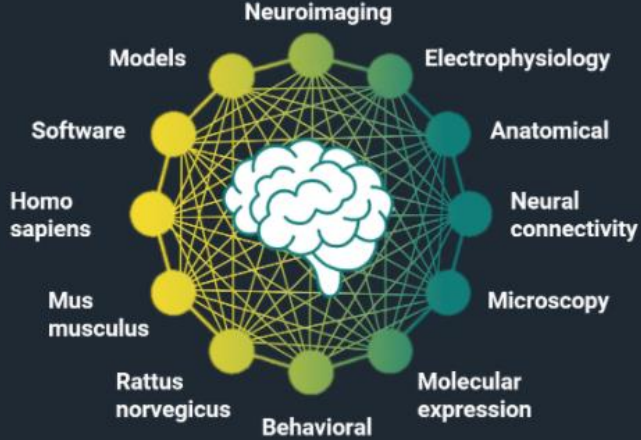
[How to share your data](#)

---

[Background](#)

---

[Our community](#)



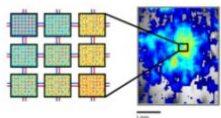
The diagram illustrates the EBRAINS Knowledge Graph, a network of interconnected nodes representing various neuroscience domains. At the center is a white brain icon. Surrounding it are nodes for different fields: Neuroimaging, Electrophysiology, Anatomical, Neural connectivity, Microscopy, Molecular expression, Behavioral, Rattus norvegicus, Mus musculus, Homo sapiens, Software, and Models. These nodes are connected by a dense web of lines, indicating the integration and sharing of data across these diverse areas of research.

Publish your datasets, computational models or software (all of which are referred to below as "data") with the help of the EBRAINS Curation Service. Workflows, documentation and professional support ensure that anything you share is annotated with standardised metadata tailored for neuroscience use; facilitating discovery and reuse of your data by the broader research community via the EBRAINS Knowledge Graph. Increase the visibility of your work and receive credit for it by using citable DOIs. EBRAINS offers long-term data storage and provides clearly defined terms of use, responsible compliance with data regulations, data protection and governance.

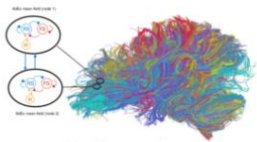
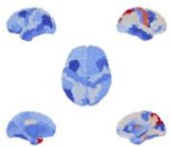




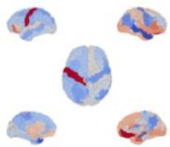
# Examples of customized solutions



Synchronized slow waves

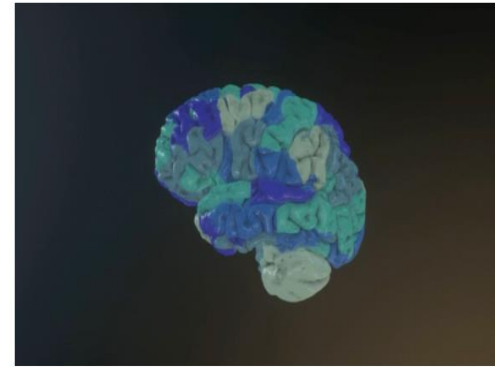


Asynchronous state



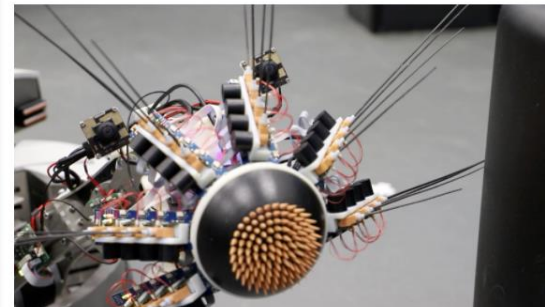
EBRAINS powers brain simulations to give insight into consciousness and its disorders

The European research infrastructure EBRAINS powers a new approach to understand the brain mechanisms underlying consciousness



New EBRAINS-enabled tool to help guide surgery in drug-resistant epilepsy patients

Ultra-high definition predictive brain tool seeks to give surgeons a sharp eye to spot epilepsy in a patient's brain

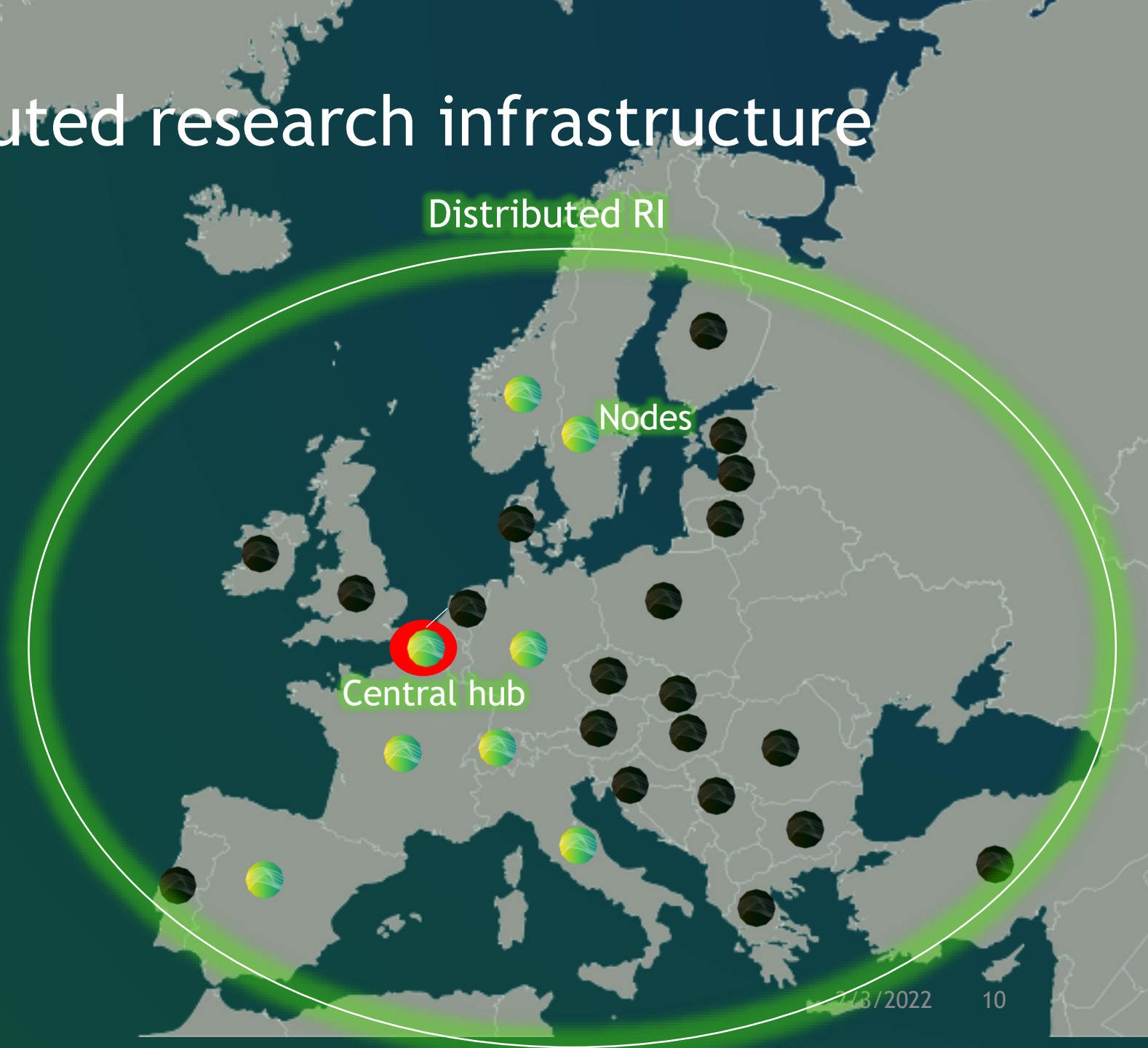


A robot on EBRAINS has learned to combine vision and touch

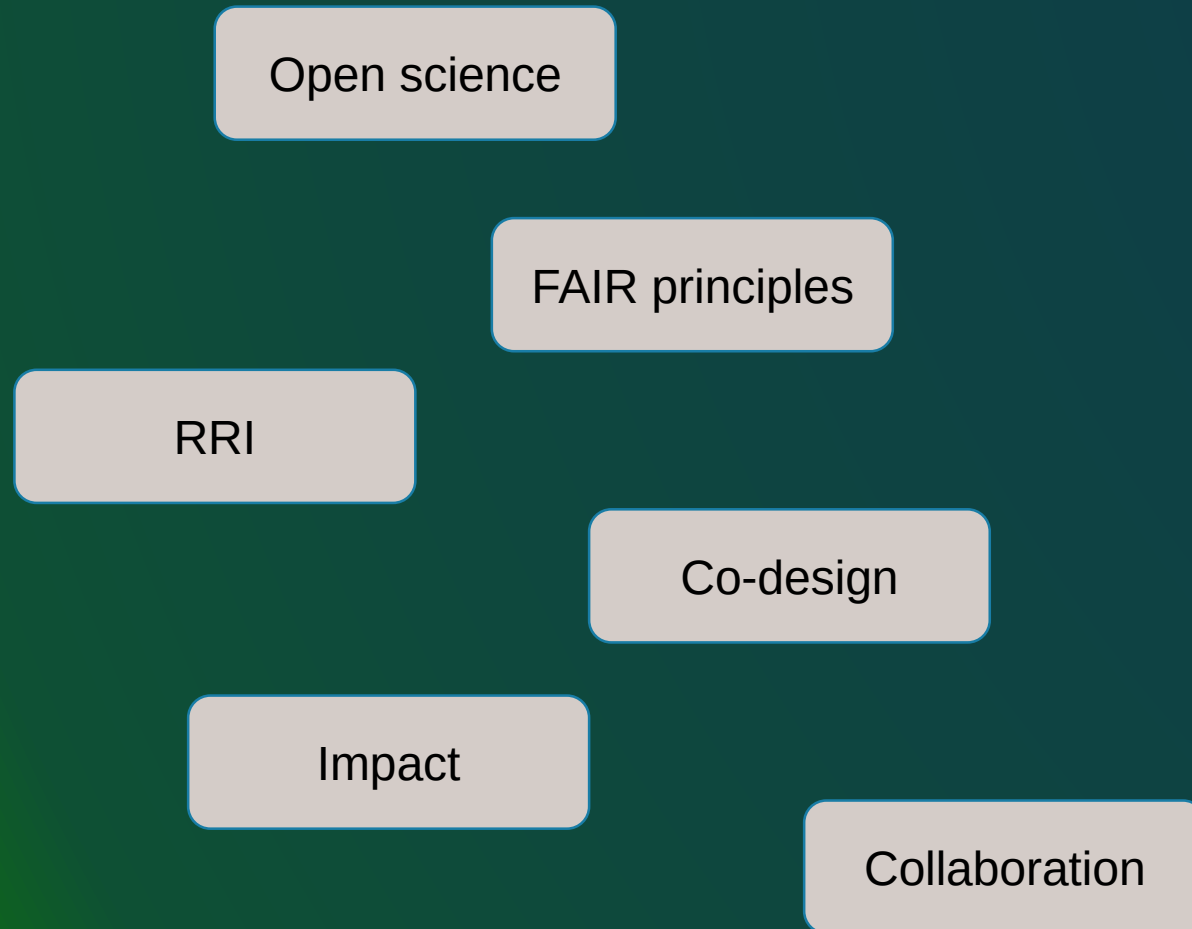
Brain models are helping to discover better robot navigation methods

# EBRAINS: a distributed research infrastructure

EBRAINS services are provided by best-in-class academic centers across Europe and are coordinated by a central hub



# EBRAINS commitment



# EBRAINS commitment

Open science

Excellence

FAIR principles

RRI



Co-design

ESFRI

Impact

Collaboration



# Our presence in the digital space



EBRAINS

[www.ebrains.eu](http://www.ebrains.eu)

[Discover EBRAINS](#)



[linkedin.com/company/ebrains-eu](https://linkedin.com/company/ebrains-eu)



[twitter.com/EBRAINS\\_eu](https://twitter.com/EBRAINS_eu)



[facebook.com/Ebrains\\_eu-112559066821827](https://facebook.com/Ebrains_eu-112559066821827)



[instagram.com/ebrains\\_eu](https://instagram.com/ebrains_eu)



EBRAINS