



# INTRODUCTION

AFRICA.

ASIA/PACIFIC.

LATIN AMERICA.

US/CANADA. PAN-EUROPE. International.





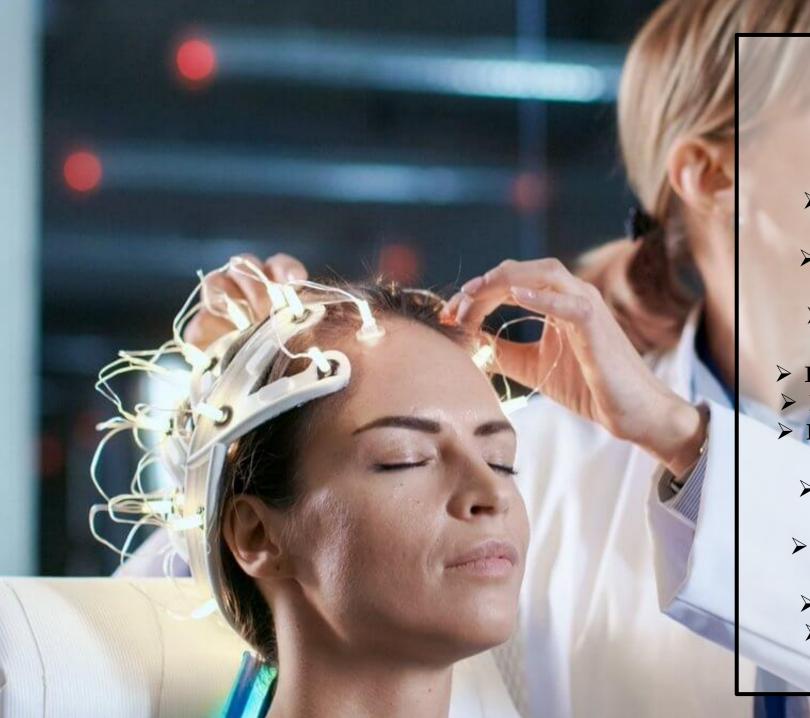
#### ASIA/PACIFIC

- > Australasian Neuroscience Society
- Beijing Society for Neuroscience
- Federation of Asian-Oceanian Neuroscience Societies
  - ➤ Hong Kong Society of Neurosciences
    - > Indian Academy of Neurosciences
      - ➤ Iranian Neuroscience Society
      - > Japan Neuroscience Society
      - **Korea Brain Research Institute**
- > Korean Society for Brain and Neural Science
  - > Malaysian Society of Neuroscince
  - Mongolian Neuroscience Society
  - Neuroscience Society of Nepal
  - Pakistan Society of Basic & Applied Neuroscinces
  - > Philippine Society for Neuroscience
  - > Singapore Neuroscience Association

#### Latin America

- Academia de Ciencias de América Latina (ACAL)
- Sociedad Argentina de Investigacion en Neurociencias
- Sociedade Brasileira de Neurociencias e Comportmento
  - Sociedad Chilena de Neurociencia
- > Colegio Colombiano de Neurociencias
  - > CONICET
  - > Cuban Neuroscience Society
- Federation of Neuroscience Societies of Latin America and the Caribbean
  - Sociedad Mexicana de Ciencias Fisiológicas
  - Society for Neuroscience of Peru (SONEP)
- > Sociedad de Neurociencia del Uruguay
  - Sociedad Venezolana de Ciencias Fisiológicas





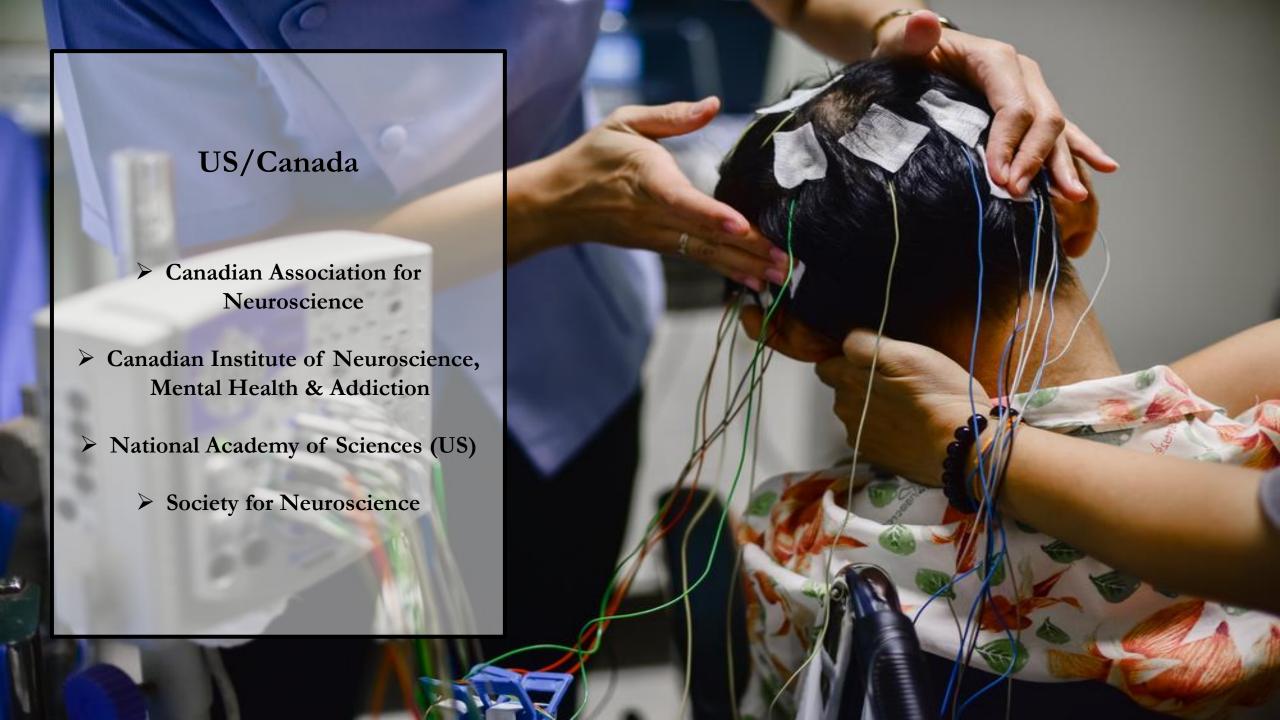
#### Europe

- > Armenian IBRO Association
- > Austrian Academy of Sciences
- **British Neuroscience Association**
- Bulgarian Neuroscience Society
- Croatian Society for Neuroscience
  - **Czech Neuroscience Society**
- Danish Society for Neuroscience
  - > Dutch Neurofederation
- European Brain and Behaviour Society
- European Society for Neurochemistry
- > Federation of European Neuroscience Societies
  - Brain Research Society of Finland
    - Société des Neurosciences
  - ➤ Georgian Neuroscience Association
    - ➤ German Neuroscience Society
  - ➤ Hellenic Society for Neuroscience
  - > Hungarian Neuroscience Society

#### Europe

- Italian Association of NeuroImmunology
  - ► Italian Society for Neuroscience
  - Lithuanian Neuroscience Association
  - Mediterranean Neuroscience Society
    - Neuroscience Ireland
    - Norwegian Neuroscience Society
      - Polish Neuroscience Society
- Sociedade Portuguesa de Neurociencias
- National Neuroscience Society of Romania
  - Russian Academy of Sciences
  - Serbian Neuroscience Society
  - ➤ Slovak Academy of Sciences
  - Slovak Society for Neuroscience
  - > Slovenian Neuroscience Association
  - Sociedad Española de Neurociencia
  - Royal Swedish Academy of Sciences
    - Swiss Society for Neuroscience
    - > Brain Research Society (BARD)
- ➤ Neuroscience Society of Turkey (TUBAS)
- > National Academy of Sciences of Ukraine

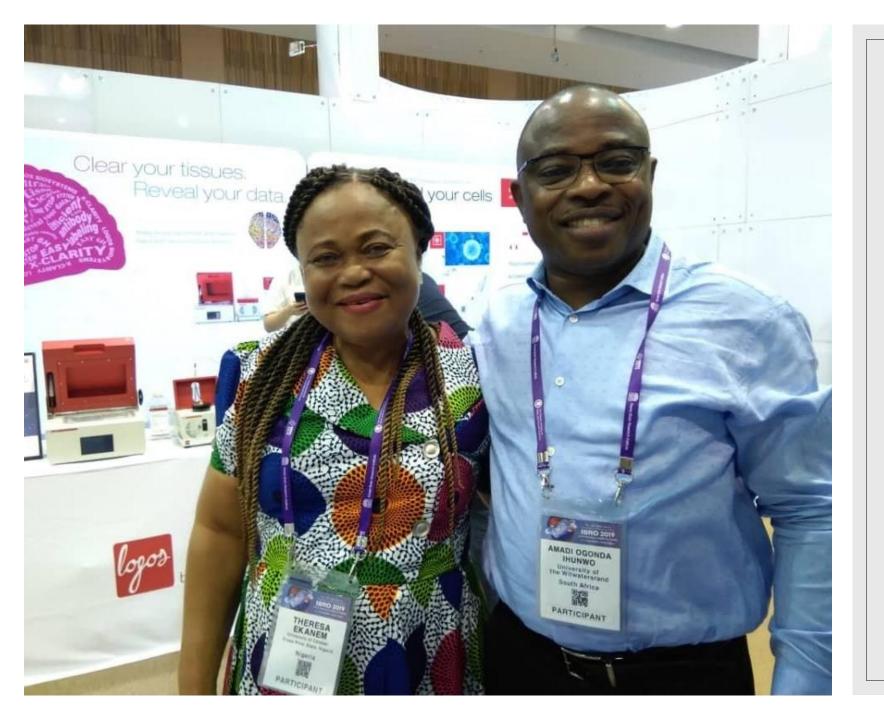






#### International

- ➤ The Dana Foundation
- International Behavioral Neuroscience Society
  - International League Against Epilepsy
    - > International Neuroethics Society
- International Neuroinformatics Coordinating Facility
  - ➤ International Regulatory Peptide Society
  - International Society of Neuropathology
    - > International Society of Psychoneuroendocrinology
    - ➤ International Society of Psychoneuroendocrinology
- International Society for Neuroregulation & Research (ISNR)
- The Association for Applied Psychophysiology and Biofeedback (aapb)
- Biofeedback Certification International Alliance (ISNR)
  - Biofeedback Federation of Europe (BFE)



#### **SONA**

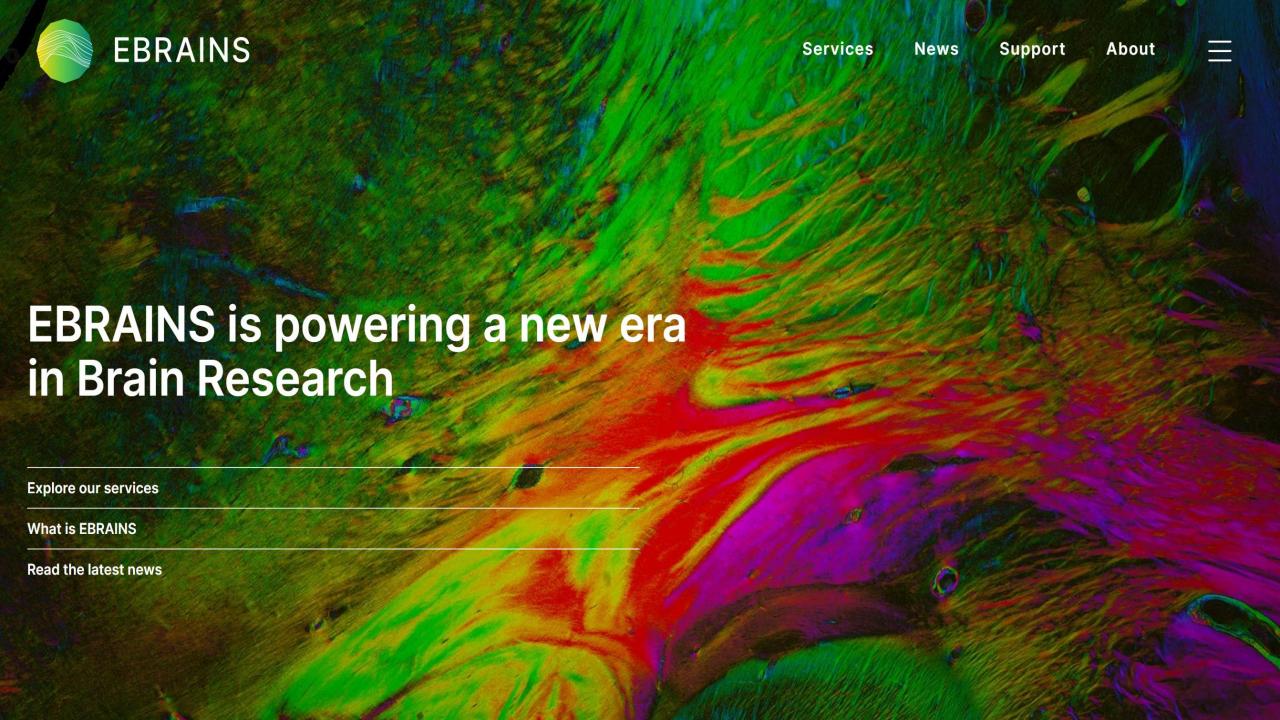
SONA is The Society of Neuroscientists of Africa.

- •It is a non-profit organisation registered in Nairobi, Kenya in 1993
- •Functions as the umbrella organisation for the regional and national neuroscience societies and groups in Africa
- •A member society of the International Brain Research Organization (IBRO)
- •Aim is to promote research, teaching and advocacy in Neuroscience in Africa and a an International conference every two years.



#### **EBRAINS**

EBRAINS is a new digital research infrastructure for brain research. A platform providing tools and services which can be used to address challenges in brain research and brain-inspired technology development. Its components are designed with, by, and for researchers. The tools assist scientists to collect, analyse, share, and integrate brain data, and to perform modelling and simulation of brain function. You can find out more about the EBRAINS services via the EBRAINS web platform (https://ebrains.eu/).

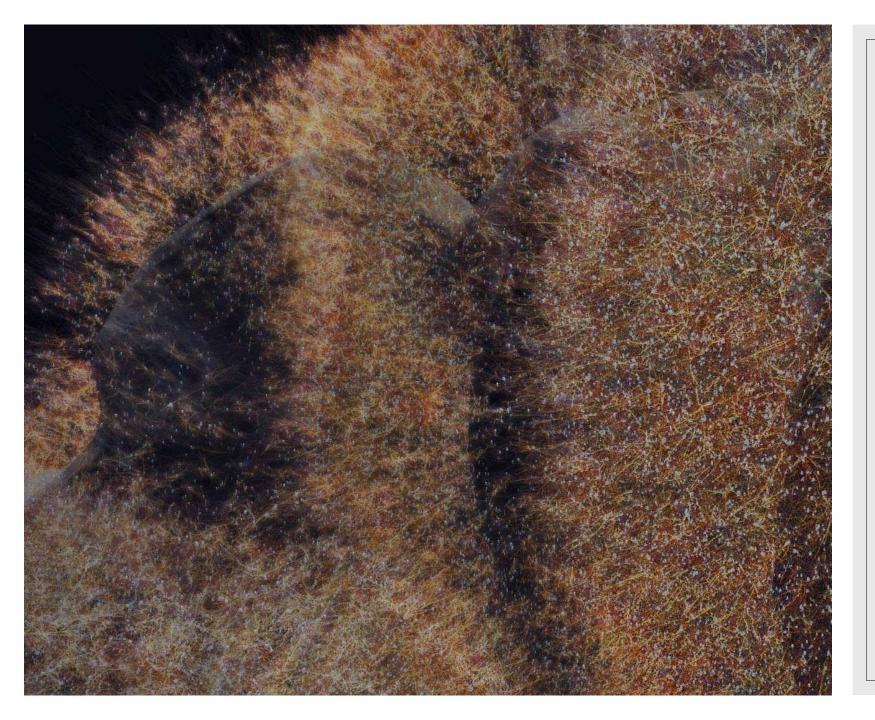




#### **Simulation**

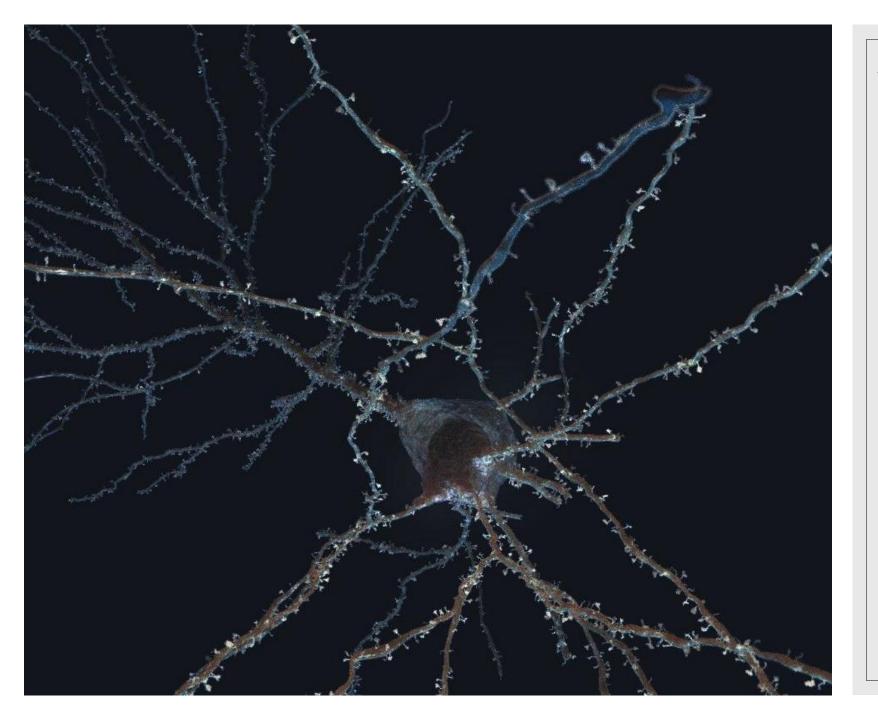
EBRAINS Simulation services offer technical solutions for brain researchers to conduct sustainable simulation studies and build upon prior work, and the means to share their results. The services provide integrated workflows for model creation, simulation and validation, including data analysis and visualisation. The simulation engines cover the entire spectrum of levels of description ranging from cellular to network to whole brain level.

- Cellular level simulation
- Network level simulation
- Whole-brain level simulation
- Data analysis & visualisation



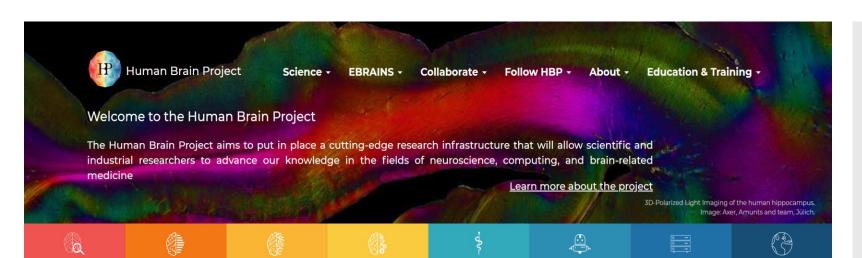
## Data & Knowledge

EBRAINS Data and Knowledge services facilitate neuroscience research and discovery by providing online solutions to facilitate sharing of and access to research data, computational models and software. These services revolve around an expert-driven Knowledge Graph which combines metadata ingestion pipelines, human user input and multiple quality assurance processes, to help contributors and users by ensuring data consistency and quality. Neuroscientists looking to share their data and and models FAIRly (Findable, Accessible, Interoperable, and Re-usable) can apply for user support to have their data and models curated and annotated with standardised metadata, to facilitate discovery and reuse by other researchers.



### brain-inspired tools

EBRAINS offers brain-inspired tools and services to understand and leverage the computational capabilities of spiking neural networks. Unlike standard deep neural networks, which require considerable amounts of energy and data, spiking neural networks are key to understanding the human brain's ability to learn continuously and implement higher cognitive functions



Medicine

Robots

Explore

the Brain

Brain

Simulation

# Human Brain Project

EBRAINS' goal is to accelerate the effort to understand human brain function and disease.

Social,

Ethical,

Reflective

Massive

Computing

This EBRAINS research infrastructure is the entry point for researchers to discover EBRAINS services. The services are being developed and powered by the EU-funded Human Brain Project.

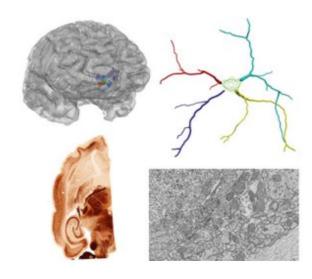


The Big Brain >

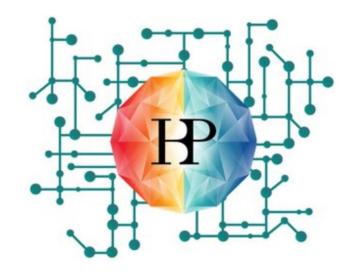
#### **SHARE** data

#### **FIND** data

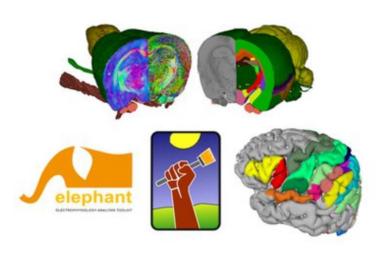
#### **USE** data



HBP offers a comprehensive management and validation of all data and metadata before it is uploaded and made available in the Knowledge Graph search.



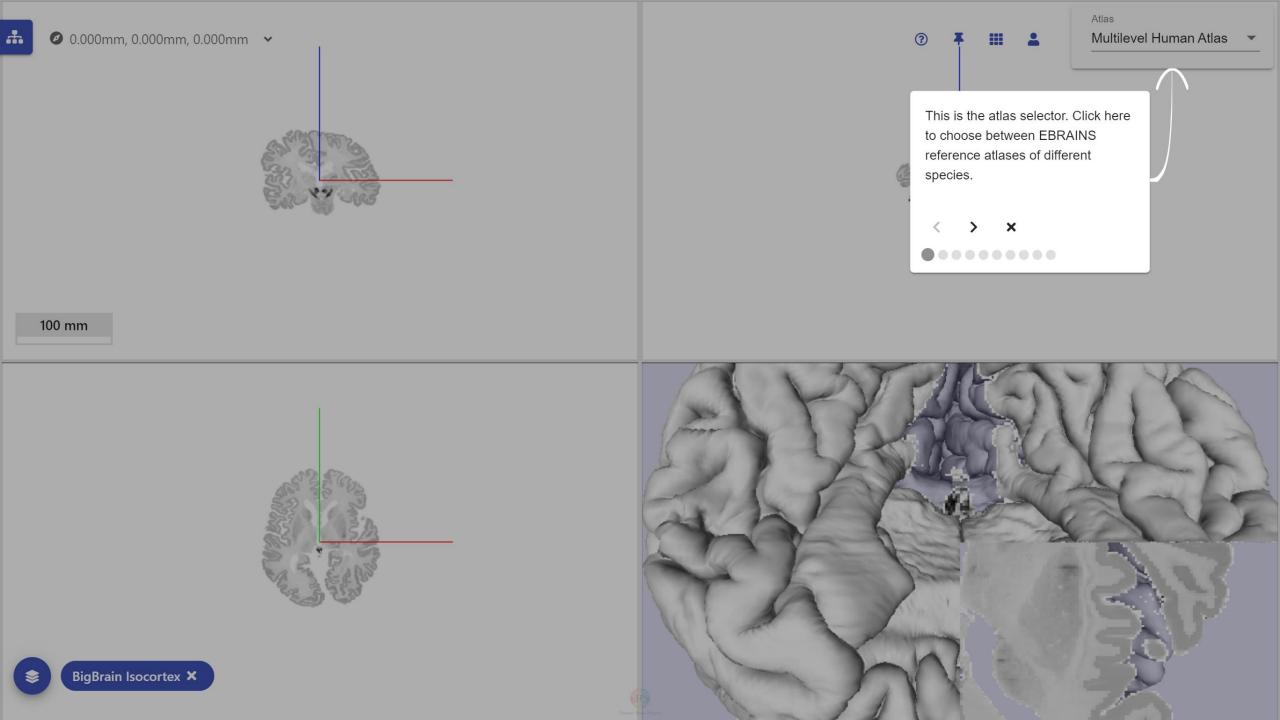
Explore neuroscience datasets shared through HBP's Knowledge Graph data sharing repository.



Browse through a collection of HBP supported tools (reference atlases, elephant, ilastik) to visualise, combine and investigate data.

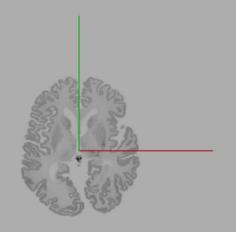
Share Data

How to use our data





100 mm



The planar views allow you to zoom in to full resolution (mouse wheel), pan the view (click+drag), and select oblique sections (shift+click+drag). You can doubleclick brain regions to select them.



