

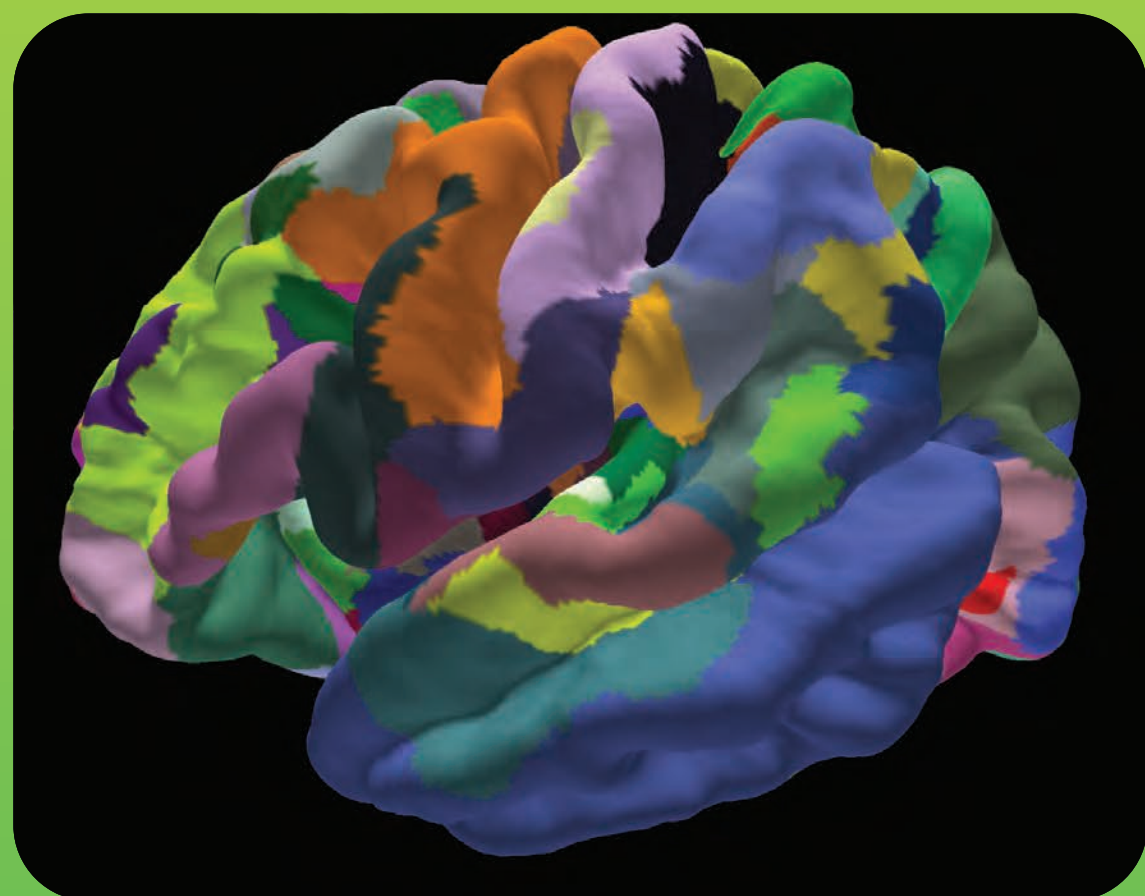


EBRAINS

An integrative, collaborative, digital research infrastructure for FAIR neuroscience

Lyuba Zehl¹, Caroline Ernould¹, Camelia Vasile¹, Evan Hancock², Jan G. Bjaalie³

¹EBRAINS AISBL, Brussels, Belgium | ²Lausanne University Hospital, Switzerland | ³Norwegian EBRAINS Node, University of Oslo, Oslo, Norway

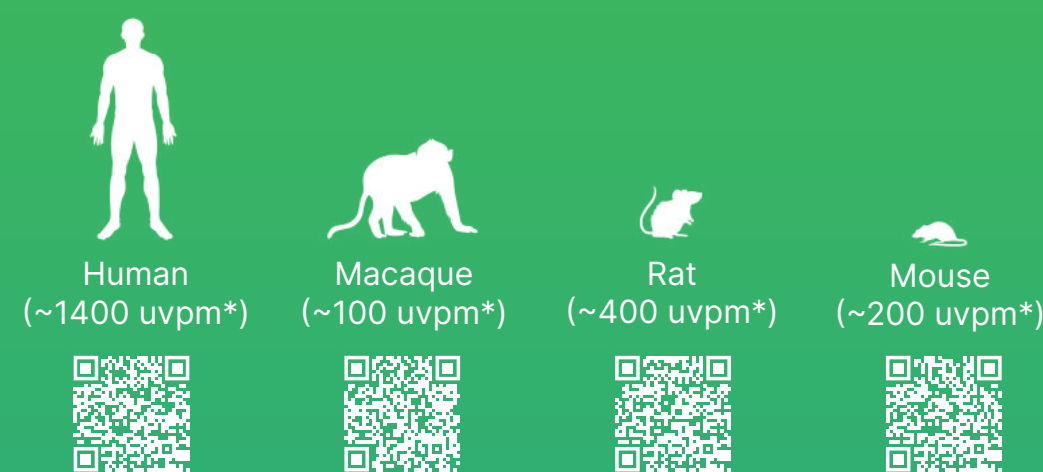


Brain Atlases



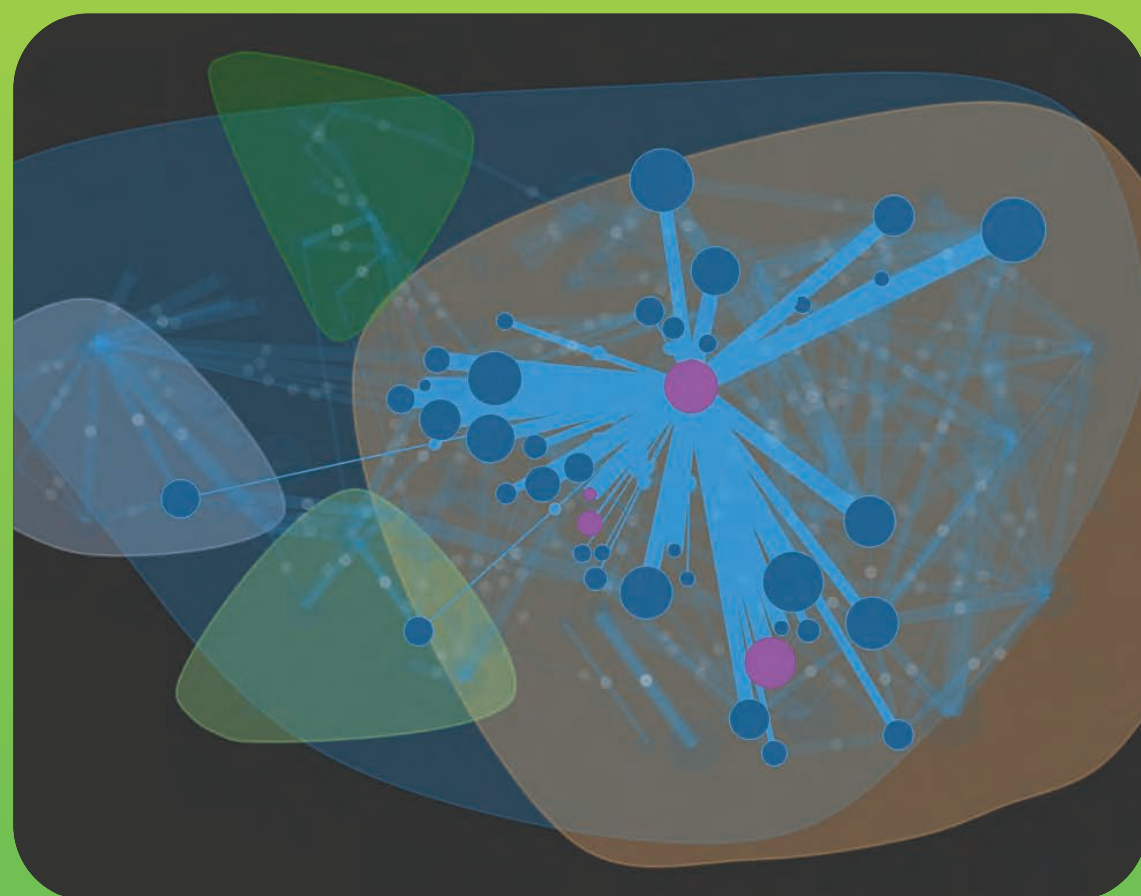
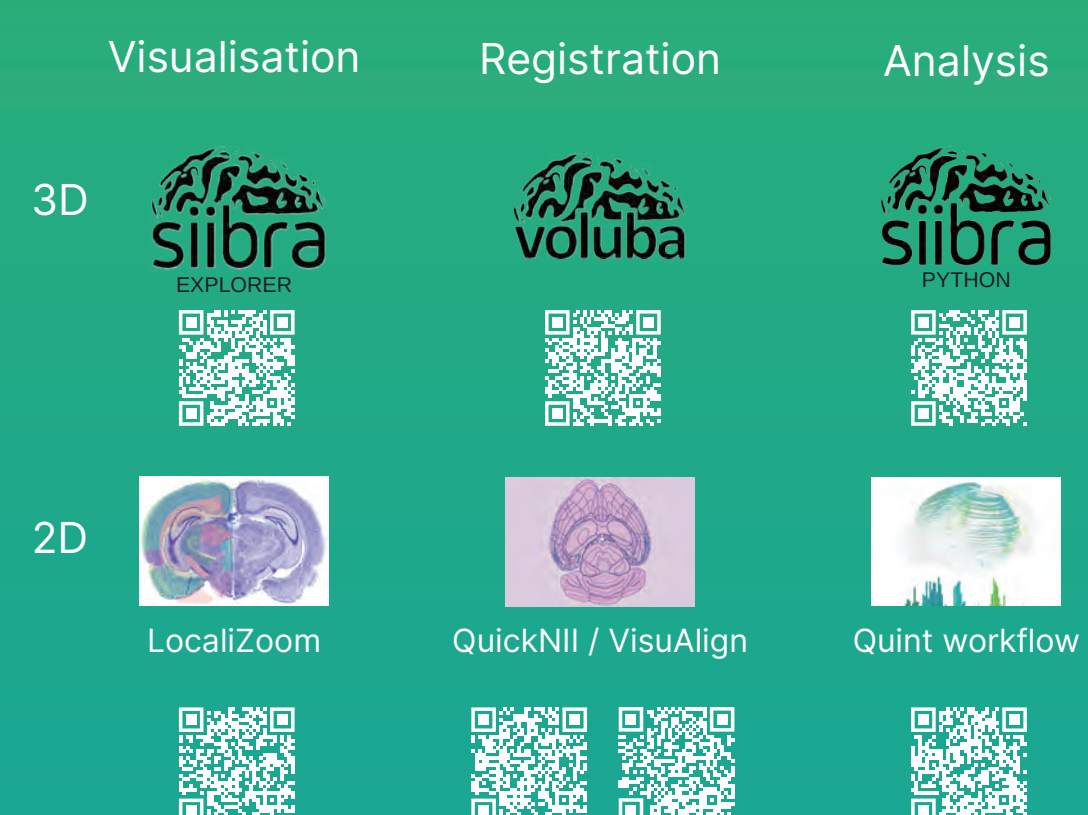
Explore the interactive brain atlas viewers
Integrate your data into multilevel brain atlases
Analyse multimodal brain data

Available Brain Atlases for Species:



*uvpm = unique visitors per month

Atlas driven technology for:



FAIR Data & Knowledge



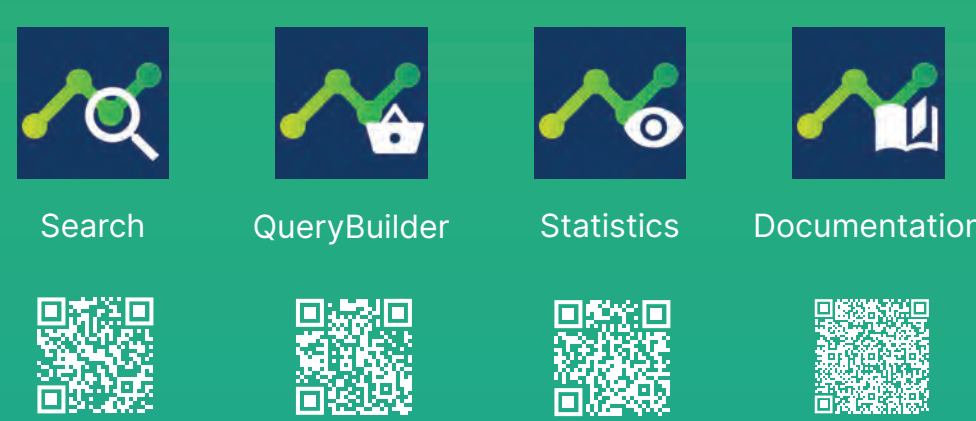
Query truly integrated data & knowledge
Share your data with help from our curation team
Conduct meta-analysis across data modalities

Available Versioned Research Products:

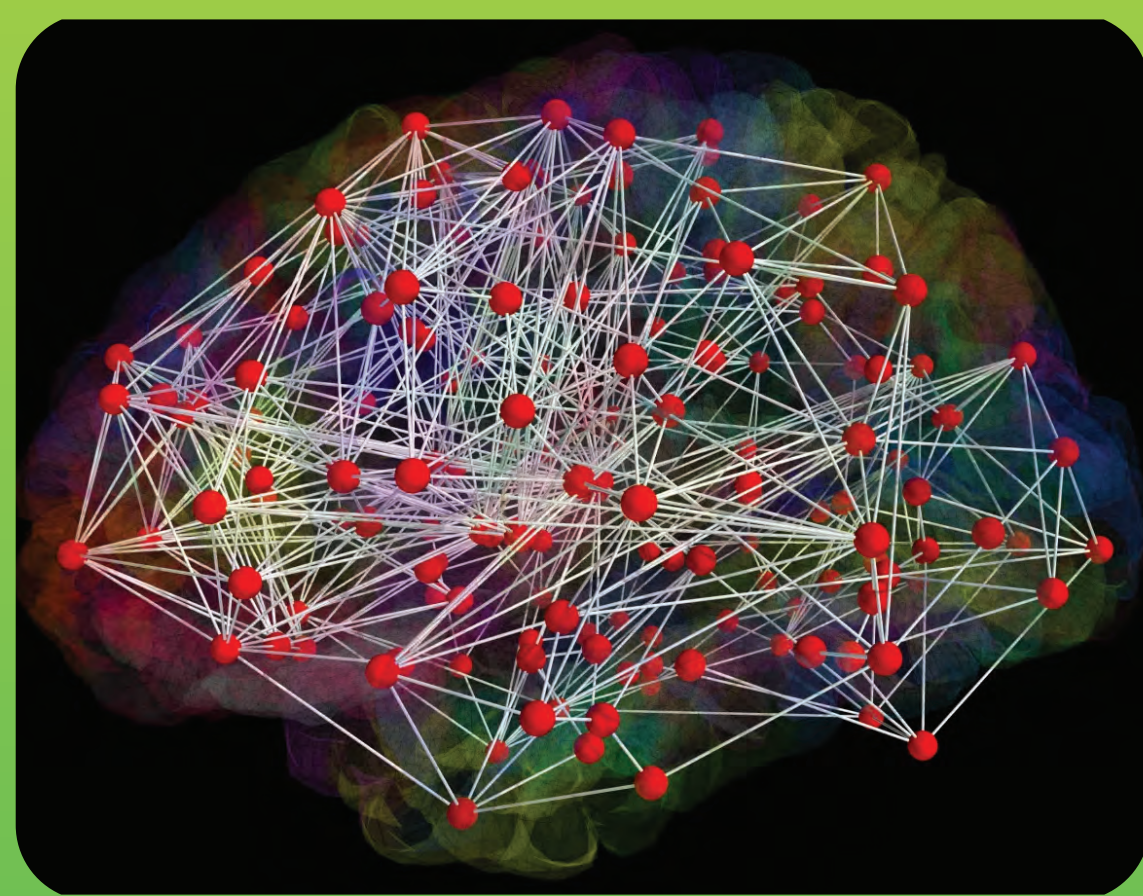
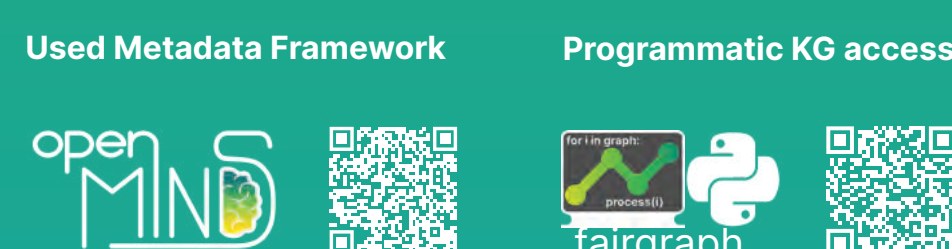


Exemplary well-integrated research products.

EBRAINS Knowledge Graph ecosystem:



For a description of the complete ecosystem, consult the documentation.

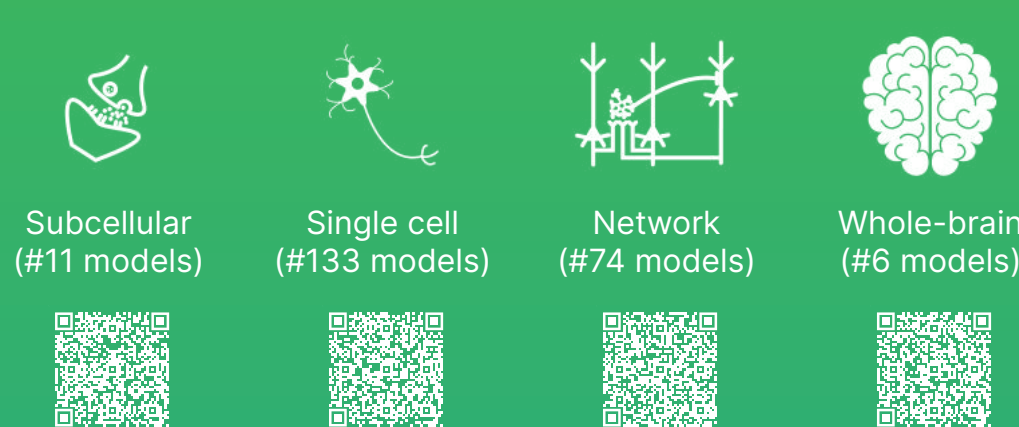


Model & Simulation



Execute workflows of computational models
Make use of interoperable simulator ecosystem
Test and validate your computational models

Available Scopes for Models & Simulation:



Exemplary shared computational models for each scope.

EBRAINS simulator ecosystem:



Virtual Brain Twin for Personalised Treatment of Psychiatric Disorders Project:



Storage



Get long-term storage for your data publication
Create personal or collaborative workspaces
Design your personal EBRAINS dashboard

Partnering Trusted Research Environments



Code collaboratively on the EBRAINS JupyterLab
Utilise the EBRAINS Cloud, HPC and NMC systems
Contribute to EBRAINS software packages

Computation



Selection of Used Technologies:



The EBRAINS Network



Join EBRAINS!
+10,000 account holders
+2,000 contributors to research products
+2,900 monthly visitors to brain atlases

Full members



Associate members

1. Medizinische Universität Innsbruck, Austria
2. Ghent University, Belgium
3. Katholieke Universiteit Leuven, Belgium
4. Universiteit Antwerpen, Belgium
5. University of Louvain, Belgium
6. Université de Mons, Belgium
7. Université Libre de Bruxelles, Belgium
8. University of Liege, Belgium
9. Vrije Universiteit Brussel, Belgium
10. Aix-Marseille Université, France
11. Centre national de la recherche scientifique, France
12. Fonds de Dotation Clinatex, France
13. Inserm, France
14. Institut du Cerveau et de la Moelle épinière, France
15. Université de Bordeaux, France
16. Université de Mons, France
17. Université Grenoble Alpes, France
18. Sorbonne Université, France
19. Centre national de la recherche scientifique, France
20. Bernstein Network Computational Neuroscience, Germany
21. Charité – Universitätsmedizin Berlin, Germany
22. Heidelberger Institut für Theoretische Studien, Germany
23. Universität Heidelberg, Germany
24. Zentralinstitut für Seelische Gesundheit, Germany
25. Athena Research Centre, Greece
26. Global Brain Health Institute, Ireland
27. CINECA Consorzio Interuniversitario, Italy
28. European Brain Research Institute Rita Levi-Montalcini, Italy
29. IRCCS SYNLAB SDN, Italy
30. Politecnico di Milano, Italy
31. Scuola Internazionale Superiore di Studi Avanzati, Italy
32. Università degli studi di Modena e Reggio Emilia, Italy
33. University of Pavia, Italy
34. Lietuvos sveikatos mokslų universitetas, Lithuania
35. Delft University of Technology, The Netherlands
36. INESC TEC, Portugal
37. Bitbrain Technologies, Spain
38. Consejo Superior de Investigaciones Científicas, Spain
39. Fundación de Investigación HM Hospitales, Spain
40. Fundació Institut de Bioenginyeria de Catalunya, Spain
41. Institut de Recerca Sant Joan de Déu, Spain
42. Institute for Research in Biomedicine, Spain
43. Instituto De Salud Carlos III, Spain
44. FRCB-IDIBAPS, Spain
45. Quirónsalud, Spain
46. Universidad de Granada, Spain
47. Universidad Rey Juan Carlos, Spain
48. Karolinska Institutet, Sweden
49. Mittuniversitetet, Sweden
50. Stockholms universitet, Sweden
51. Umeå Universitet, Sweden
52. Nencki Institute of Neurobiology, Poland
53. Ecole Polytechnique Fédérale de Lausanne, Switzerland
54. Oslo University Hospital, Norway

EBRAINS is listed on the ESFRI roadmap.

Co-funded by the European Union

