HBP Research and Innovation JTC areas

While preparing the proposals, consortia are encouraged to contact EBRAINS High-Level Support Team (HLST) (flag-era2021@ebrains.eu) if it is of their interest to explore whether the services developed by EBRAINS (https://ebrains.eu/) offer potentially valuable solutions to fulfil their aim.

Relevant EBRAINS services in the context of JTC 2021 FLAG-ERA

The projects falling within the scientific scope of this call for proposals are invited to consider using the following EBRAINS resources (https://ebrains.eu):

The Data and Knowledge services for finding and publishing FAIR data
The Data and Knowledge services (https://ebrains.eu/services/data-knowledge) provide services for sharing and publishing of research data from human and rodent brains, and facilitate research, e.g., on case-control studies, cohort studies, as well as on models of disease mechanisms. Storage and computing resources are available through the FENIX high performance computing infrastructure. For all projects in the present call, EBRAINS offers to publish FAIR data through the EBRAINS Knowledge Graph https://kg.ebrains.eu/search), and to couple FAIR data with journal publications (https://ebrains.eu/services/data-knowledge/share-data), with FENIX high performance computing infrastructure (https://fenix-ri.eu/about-fenix), and the other EBRAINS services, (e.g., in the area of brain simulation, neuromorphic computing, and neuro-robotics, https://ebrains.eu).

The Brain Atlas services for integrating and combining data in atlases
The Brain Atlas services (https://ebrains.eu/services/atlases/) offers tools and resources for integrating multiple reference spaces and maps of the human, rodent and mouse brain into a common framework, and for exploring and analyzing data in the atlases. For all projects in the present call, tools are available for registration of new data to the atlases, and for exploring and analyzing data through the interactive Atlas Viewer and a range of analytical tools.

The Medical Informatics Platform (MIP)
The Medical Informatics Platform, MIP (https://mip.ebrains.eu/) is currently installed in 30 centers, including 28 hospitals, with 8 more hospitals having signed an installation agreement. Use-cases have been implemented in the field of dementia, traumatic brain injury, mental health and epilepsy. More than 20.000 patients' datasets have been processed in the MIPs, including more than 10.000 in the MIP Federation. Importantly, a significant number of MIP equipped hospitals are part of the European Reference Network (ERN) EpiCare, with which HBP has signed an official partnership. Discussions are ongoing regarding a similar partnership with ERN RND for rare neurological diseases. EpiCare and ERN-RND are the two brain diseases oriented ERNs.

Costs for using EBRAINS services.
The use of EBRAINS services will be free for the FLAG-ERA projects (with a few exceptions, see below). In particular, the Data and Knowledge service will give priority to requests for data curation at no cost from FLAG-ERA projects. Projects are encouraged 1) to follow one of the paths for combined journal publication and publication of data on EBRAINS (https://ebrains.eu/services/data-knowledge/share-data) and to describe in their proposal which path they are planning to follow, and 2) to use the "Curation request form" on EBRAINS Share Data to deliver information concerning the curation need.

For projects that will require development of significant new functionalities that go beyond present planning of EBRAINS services, applicants are advised to describe their needs and request information through the service email for the FLAG-ERA call: flag-era2021@ebrains.eu.

For projects with high demands for high-performance computing or large data storage, conditions for access can be found at https://fenix-ri.eu/access. More information can be requested through the service email for the FLAG-ERA call: flag-era2021@ebrains.eu.