Project EBRAINS-Italy - Mission 4, Component 2, Line of Investment 3.1 RRNP Funded by the European Union – NextGeneration EU
(CUP B51E22000150006) www.ebrains-italy.eu

Index

Project EBRAINS-Italy - Mission 4, Component 2, Line of Investment 3.1 RRNP Funded by the European Union – NextGeneration EU
(CUP B51E22000150006) www.ebrains-italy.eu

EBRAINS-Italy Trans-National Access

EBRAINS-Italy supports Trans-National Access (T-NA) to facilities offered by top-class neuroscience research Institutions in Italy. EBRAINS-Italy T-NA services aim to provide coordinated open, physical and/or virtual access to facilities and services in the neuroscience field. This involves national and international stakeholders in advanced research, technology, innovation, and data services.

Three types of T-NA provided:

- **Virtual Access:**
  - Free access provided through communication networks.
  - Services or resources can be used simultaneously by an unlimited number of Users without selection.
  - Access to data and digital tools through the website ebrains-Italy.eu.
- **Physical Access:**
  - "Hands-on" access where the user physically visits the infrastructure /facility.
  - Services or resources are limited and their use requires a competitive process through the "Call for T-NA access of EBRAINS-Italy".
- **Remote Access:**
  - Remote access to resources and services offered by the RI (no physical presence at the infrastructure/facility is required).

Eligibility for T-NA

EBRAINS-Italy welcomes a diverse ensemble of stakeholders, including:

1. **Researchers:** Academic and industry researchers interested in enhancing research performance.
2. **Private:** Industries, SMEs, start-ups, incubators, accelerators, innovators, and professionals.
3. **Students & Early Careers:** Opportunities for students and early-stage researchers, young scientists (e.g., master or PhD students), managers, and technical operators interested in gaining skills and experience for their career development.
4. **Decision Makers:** Policymakers and local, regional, and national authorities, aiming at optimizing national investments in research infrastructures and coordinated access to data and services. National and regional agencies for health and life sciences.
5. **Educators & Society:** Access to educational material on neuroscience (e.g., online courses, webinars, documentation).
6. **Clinical research services**: Hospitals, health care facilities, labs.
7. **Developers:** incubation/acceleration services for spin-offs and start-ups interested in EBRAINS-Italy facilities for research at the exascale level.
8. **Research Infrastructures:** Organizations enabling the research community to use specific facilities, resources, and services to accelerate scientific achievements and promote sustainable research. EBRAINS-Italy encourages and promotes agreements with other Research Infrastructures.

Proposal criteria

Proposals to access EBRAINS-Italy services are eligible if they meet the following criteria:

- **Trans-Nationality:** The project PI and the majority of project user members must work in an EU or EU-affiliated Country.
- **Affiliation:** Users must be affiliated with an organisation in the European Union. Applications from groups with a majority of users working outside the EU are eligible but limited.
- **Dissemination:** User groups must be willing to disseminate knowledge generated in the project's framework; special conditions can be applied for the private sector.

Young scientists are particularly welcome. EBRAINS-Italy promotes gender equality in scientific research, specifically encouraging applications from women.

T-NA Coverage

The access time is facility-based and discussed with the specific facility's Operative Unit-Principal Investigator (OU-PI) before proposal submission. Financial support for travel expenses will be decided case-by-case by the OU-PI. Administration related to a T-NA access, including expense reimbursement, is handled locally by each T-NA site. Questions concerning T-NA visits should be addressed to the local contact.

Virtual Access is free of charge to use the basic facilities' features through navigation of the www.ebrains-italy.eu website.

Physical and Remote access are based on an "Open Access Token" granted by the OU-PI (see below for the different types of access token). Operative Units indicated with "*YES- No refund is provided*" provide open access to the facility without budget for reimbursement.

EBRAINS-Italy Access Token

The EBRAINS-Italy Access Token has specific characteristics tailored to the facility, as defined by the OU-PI. This token is time and facility-based, encompassing logistical, technological, and scientific details necessary to use the various levels of services offered by the facility.

Types of Access Tokens include:

- **Basic Access Token:** Free token. The procedures to obtain this are described in the Open Call. Details can be requested to the OU-PI facility.
- **Premium Access Token:** Pay-for-access token. Value-added services, also known as premium services, are fee-based offerings. Each Principal Investigator (PI) sets rates according to the guidelines established by the corresponding Institution and in accordance with the National Recovery and Resilience Plan (NRRP).

EBRAINS-Italy T-NA Facilities and Resources

EBRAINS-Italy supports neuroscience-related research (computational, experimental, industrial, etc.). EBRAINS-Italy T-NA provides services operated by top-class researchers with identified expertise supported by highly qualified technical personnel (see below for a list of currently accessible facilities).

Data, models, and analyses are made available through the EBRAINS-Italy platform and its partnerships. Instrumentation adheres to EU and national guidelines, with a particular emphasis on the "Do No Significant Harm" (DNSH) principles.

Virtual access to High-Performance Computing (HPC) resources is provided through the CINECA's Galileo100 Scalable, Interactive, Cloud and Storage resources via the **EBRAINS-Italy Resources (EIR) Allocation Program.** All neuroscience researchers are eligible to apply: Principal Investigators must be affiliated with an Italian public or private institution/organization and can have a maximum of 2 approved projects running in the same period (other stakeholders may also be considered). Collaborators do not have any limitation in terms of approved projects they are members of.

Acknowledgment and dissemination of EBRAINS-Italy access activities are fundamental components of any access.

Operative Unit (OU)	Facility	Location	OU-PI
CNR IBF(a, c)	Cellular level Simulation of the rat, mouse, and human Hippocampus under physiological and pathological conditions	**Palermo**	rosanna.migliore@cnr.it, michele.migliore@cnr.it
CNR- IBFa (in house provider CINECA)	EBRAINS-Italy Resources (EIR) Allocation Program. HPC Resources on Galileo 100- CINECA- Submission form for open-science project proposals	**Palermo**	rosanna.migliore@cnr.it, michele.migliore@cnr.it

Project EBRAINS-Italy - Mission 4, Component 2, Line of Investment 3.1 RRNP Funded by the European Union – NextGeneration EU
(CUP B51E22000150006) www.ebrains-italy.eu

Operative Unit (OU)	Facility	Location	OU-PI
CNR IBF(b)	Proteins production and characterization; identification of small molecules/drugs; extracellular vesicles engineering and production for drug delivery	**Milan Palermo**	eloise.mastrangelo@ibf.cnr.it mauro.manno@ibf.cnr.it
CNR- ISASI	Magnetoencephalography (MEG) system integrated for biomedical applications	**Naples**	giuseppe.sorrentino@uniparthenope.it
INO (a)	Technologies and expertise for neuro-functional imaging	**Florence**	giacomo.mazzamuto@ino.cnr.it
INO (b)	Brain dynamics for in-silico simulations interfaced with structural imaging data	**Rome**	s.filippi@unicampus.it
CNR-ISTC	ETIC - EBRAINS Training and Innovation Centre	**Rome**	gianluca.baldassarre@istc.cnr.it
CNR-ISTC + ALL	EBRAINS-Italy Advanced School in Computational Neuroscience and Neurorobotics	**Rome**	gianluca.baldassarre@istc.cnr.it
CNR-ISTC	EBRAINS-Italy: Innovation Pitches for Companies	**Rome**	gianluca.baldassarre@istc.cnr.it
CNR-ISTC	EBRAINS-Italy: Model-based machine-learning pipeline for probing executive functions and automatic data analysis.	**Roma**	giovanni.granato@istc.cnr.it
CNR-IN	Datasets on motor and cognitive processes in both human and animal models	**Pisa**	pietro.avanzini@cnr.it
INFN	Software tools and pipelines for the analysis and comparison of experimental and simulated brain activity	**Roma**	pier.paolucci@roma1.infn.it giulia.debonis@roma1.infn.it
ISS	Data-driven large-scale models of cortical networks	**Roma**	maurizio.mattia@iss.it gianni.vinci@iss.it cristiano.capone@iss.it
POLIMI	Spiking neural network models and neurorobotics	**Milan**	alberto.antonietti@polimi.it alessandra.pedrocchi@polimi.it
POLITO	Neuromorphic Computing Lab	**Torino**	gianvito.urgese@polito.it
SISSA	Intracellular and multi-site extracellular recordings from human tissue	**Trieste, Modena**	michele.giugliano@sissa.it
SNS	Synactive toolbox, nanobody platform and electrophysiological facility	**Pisa**	francesco.raimondi@sns.it, gabriele.ugolini@sns.it, laboratorio.biologia@sns.it
SSSA	SSSA BRAIR Lab (BRAin-Inspired Robotics Laboratory) carries out research on brain models for motor control, sensory-motor coordination, and cognition in autonomous robots	**Pisa**	egidio.falotico@santannapisa.it, ugo.albanese@santannapisa.it
UNIFI	Advanced Biological Sensing	**Florence**	francesco.pavone@unifi.it
UNIMI	Analysis and acquisition of EEG, TMS-EEG and Stereo-EEG data for the study of connectivity and excitability of human brain	**Milan**	marcello.massimini@unimi.it, andrea.pigorini@unimi.it
UNIMORE	Brain morphological and functional data by multiphoton imaging	**Modena**	jonathan.mapelli@unimore.it
UNINA	Mathematical models for complexity reduction of large-scale neuronal networks	**Naples**	marasco@unina.it
UNIPD	Experiments on the neural mechanisms of human attention using Positron Emission Tomography (PET). Novel methods for studying the functional organisation of the brain using functional connectivity MRI, magnetoencephalography (MEG), and electro-corticography (EcoG).	**Padua**	maurizio.corbetta@unipd.it
UNIPV	Brain Scaffold Builder, Virtual Brain, Digital Brain Twins	**Pavia**	egidiougo.dangelo@unipv.it
UNISS	Full-scale model of a human hippocampus	**Sassari**	smgsolinas@uniss.it
UNIROMA1a	Tools development for investigating neural network dynamics at the population scale	**Rome**	stefano.ferraina@uniroma1.it ; giampiero.bardella@uniroma1.it
UNIROMA1b	Electrophysiological characterization of neuronal excitability and synaptic transmission	**Rome**	massimiliano.renzi@uniroma1.it

Project EBRAINS-Italy - Mission 4, Component 2, Line of Investment 3.1 RRNP Funded by the European Union – NextGeneration EU
(CUP B51E22000150006) www.ebrains-italy.eu

EBRAINS-Italy T-NA Application Process

The EBRAINS-Italy T-NA call is open **from July 29, 2024, 12:00 CET to September 30, 2025, 17:00 CET.** Each Host Institution, represented by the OU-PI, manages access autonomously, respecting the facility's access policies ***under the EBRAINS-Italy acknowledgement***.

The list of available facilities will be continuously updated on the EBRAINS-Italy website by the EBRAINS-Italy Scientific Coordination.

Contacting the OU-PI before application is mandatory to request/discuss the project and specific T-NA access policies. Following the T-NA Application Form submission, if the project is approved, the PI will send a copy to the Scientific Coordinator.

Steps to Apply to the EBRAINS-Italy T-NA Programme

1. Explore the available facilities and start your application today!
2. Contact the OU-PI for information and access modality
3. Fill the T-NA Application Form and send it to the OU-PI
4. If the proposal is eligible and positively approved by the OU-PI, start your exciting experience with EBRAINS-Italy

To get EBRAINS-Italy HPC resources, fill the **EIR Allocation Program Application** form available at the following link: https://www.ebrains-italy.eu/survey. Once the registration is completed, you will be provided with UserDb credentials associated with a Project Account (HPC resources). In the following phase, you will receive credentials for accessing the HPC facilities.

Note: Before submitting the request for access to HPC resources, an email from an institutional address to the OU-PI must be sent, briefly explaining the motivation for the request.

Evaluation Process

Eligible proposals are selected through a fast, first-come-first-served process coordinated by the Facility Host-PI, based on:

- **Scientific Excellence:** Scientific and technical value, originality, novelty, relevance, and impact.
- **Dissemination Impact:** Capability to promote the EBRAINS-Italy Research Infrastructure and contribute to stakeholder training (users, providers, etc.).
- **Innovation and Market-Driven Aspects:** innovation potential, technological developments, market developments, and economic impacts (especially for private sector users).

The evaluation and selection of T-NA requests are completed within 3 weeks from the application. Once the evaluation is complete, the facility OU-PI will inform the applicant on the final decision and the amount of financial support (EBRAINS-Italy Voucher) and will send a copy to the EBRAINS-Italy Scientific Coordinator.

Companies (IRCCS, private labs, start-ups, pharma industry, hospitals, other RIs, etc.) are particularly welcome.

The EBRAINS-Italy T-NA program for private sectors offers access to advanced neuroscientific research facilities in Italy. Access topics and modalities are unrestricted. If you are from an industry (especially SMEs), this call provides innovation and knowledge transfer opportunities, tailored support and services, unique insights into new or existing products, and support for solving technical uncertainties.

Project EBRAINS-Italy - Mission 4, Component 2, Line of Investment 3.1 RRNP Funded by the European Union – NextGeneration EU
(CUP B51E22000150006) www.ebrains-italy.eu

Users' Commitment before access

By applying, the user accepts the T-NA access policy of the host institution and the following conditions:

- Data resulting from the T-NA are made available to and through the EBRAINS-Italy Infrastructure.
- No double financing.
- Compliance with post-access requirements.

Users' Commitment after access

- A "Confirmation of Access" document, issued by the Facility Host PI and reporting the granted resources, must be signed before the first access.
- An Activity Report presenting the TNA preliminary results or other documentation concerning the T-NA activity is delivered within 4 weeks from the project's expiration date.

- Acknowledgement of the project and EU-PNRR support: "We acknowledge a contribution from the Italian National Recovery and Resilience Plan (PNRR), M4C2, funded by the European Union – NextGenerationEU (Project IR0000011, CUP B51E22000150006, "EBRAINS-Italy") within a TNA Activity."

Rosanna Migliore

EBRAINS-Italy Scientific Coordinator