





# Priority Research Program and Equipment

## **Precision psychiatry programm**

## Call for projects 2025 : PhD fellowships

Deadline application 7th May 2025

Application address: app@pepr-propsy.fr

CALL FOR PROJECTS
26 mars 2025





### Preamble

Psychiatric disorders affect a significant proportion of the population and pose a major challenge to healthcare systems. Their management still largely relies on diagnostic and therapeutic approaches that struggle to account for the heterogeneity of disorders and patient trajectories. Advancing precision psychiatry, which integrates breakthroughs in neuroscience, genomics, artificial intelligence, and biomedicine, is essential for improving the prevention, diagnosis, and treatment of psychiatric conditions.

In this context, the Priority Research Program and Equipment (PEPR) PROPSY, funded by France 2030, aims to accelerate innovation in psychiatry and establish a French biomedical sector dedicated to mental health. A key component of this initiative is the support for early-career researchers through doctoral fellowships focused on precision psychiatry.

As part of this effort, the PEPR PROPSY will fund three doctoral fellowships in 2025 to support innovative research projects in precision psychiatry. A second wave of funding is planned for 2026, further expanding opportunities for young researchers and strengthening scientific progress in the field.

## Keywords:

Precision psychiatry, bipolar disorders, depression, schizophrenia, autism, deep phenotyping, biomarkers, transdiagnostic process, genomics, immunology, metabolism, brain imaging, biostatistics, artificial intelligence

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## **Closure of the Call for Applications**

Submission materials must be submitted electronically no later than:

May 7th, 2025, at 00:00pm (Paris time)

It is essential to carefully read this entire document and the instructions available on the submission website:

## Contacts

Scientific Director of the Program: Marion Leboyer

Program Manager: Marie-Hélène Soto

For any inquiries : <a href="mailto:aap@pepr-propsy.fr">aap@pepr-propsy.fr</a>





## 1) Context and Objectives of the Call for Projects

The Priority Research Program and Equipment (PEPR) PROPSY is a national program launched in 2022 and funded under the *France 2030* plan. It is led by **Inserm** and **CNRS**, with the support of the **FondaMental Foundation**. With a budget of €80 million over seven years, its goal is to transform the management of psychiatric disorders in France.

#### **Strategic Objectives of the PEPR PROPSY:**

- Refining the characterization of psychiatric disorders and their heterogeneity.
- Identifying new biomarkers and therapeutic targets.
- Developing innovative therapeutic strategies in precision psychiatry.
- Structuring a biomedical sector in mental health, fostering collaborations between public research, the pharmaceutical industry, medical technologies, and digital health.
- **Strengthening training and enhancing the attractiveness** of professions related to psychiatry and mental health research.

The **PEPR PROPSY** is based on an interdisciplinary approach that combines genomics, brain imaging, computational neuroscience, and artificial intelligence. It integrates existing databases and establishes large-scale cohorts, notably *French Minds*, to identify diagnostic and prognostic markers and optimize patient care.

Besides, psychiatric disorders constitute a major public health challenge due to their high prevalence, significant psychosocial impact, and economic burden. They are among the leading causes of disability and contribute to a reduction in life expectancy by 15 to 20 years due to somatic comorbidities and the risk of suicide.

Within this framework, this call for projects funds three doctoral fellowships for research aligned with the priorities of **PEPR PROPSY**.

## 2) Research topics of the Call and expected projects

Proposals must align with one of the following themes:

#### Stratification markers for dimensions and/or transdiagnostic clinical Forms

- Research and identification of clinical, cognitive, omics, environmental, imaging, EEG, and/or
  digital markers, using data from PEPR PROPSY, as well as existing or newly acquired national
  and international databases.
- Exploration of pathophysiological mechanisms (e.g., immune and immuno-metabolic processes) underlying biomarker abnormalities.

#### Modeling and Artificial Intelligence

- Development of learning algorithms (AI, machine learning, contrastive learning) based on multimodal databases.
- Utilization of multimodal databases to identify stratification algorithms for psychiatric disorders.





## 3) Eligibility

## 3.1. Requirements

- The candidate must hold a **Master's degree** (or equivalent) in neuroscience, psychiatry, artificial intelligence, biology, or related fields.
- The thesis must be conducted in a laboratory affiliated with a French higher education or research institution authorized to award doctoral degrees.
- The thesis supervisor must be identified and possess recognized expertise in the field.
- The thesis may be carried out under a joint supervision agreement with international laboratories (EU, USA, Canada), provided the doctoral candidate is enrolled in a French doctoral school. International co-funding may be considered.

#### 3.2. Assesment and Selection Criteria

#### The evaluation of applications will proceed in several stages:

- 1. Verification of eligibility and admissibility of applications: This stage will ensure that the applications meet the administrative and formal criteria defined in the call for projects.
- 2. Scientific evaluation of the applications: Each admissible application will be reviewed by a panel of external scientific experts. These experts will assess the scientific quality of the project, its originality, and its feasibility.
- 3. Based on the experts' evaluations, the COMEX of PEPR PROPSY will establish the final ranking of the selected applications.
- 4. The results will be officially announced by Inserm, the lead institution of PEPR PROPSY, which is responsible for managing these funding opportunities.

#### Applications will be evaluated based on the following criteria:

Criteria	Weighting
Scientific excellence of the project (quality, originality, feasibility)	50 %
Alignment with the objectives of PEPR PROPSY	30 %
Candidate's competencies (academic background, research experience)	15 %
Supervision and research environment (quality of the laboratory and collaborations)	5 %

## 3.3. Eligibility Criteria

The submission file for the AAC must be in an unprotected PDF format and must not exceed the specified page limit for each document (see section 5.1). Additionally, it must comply with the minimum font size requirement: 11, Arial. Any document exceeding the indicated page limit will automatically render the submission inadmissible.





All required documents must be written in English.

## 4) Funding terms

#### 4.1. Funding

The calls for funding under the PEPR are exceptional and distinguish themselves from the recurrent funding of academic or research institutions. The allocated funds represent additional resources intended for new initiatives. They may enable the launch of innovative research projects and fund, for example, the purchase of equipment, as well as personnel expenses specifically assigned to these projects and associated operational costs.

The funding provided under this call for projects aims to support the completion of doctoral theses in precision psychiatry. Each selected project will receive a grant covering the costs associated with recruiting a doctoral candidate and implementing the research project.

- Maximum grant amount per project: €153,400, including up to 18% for overheads
- **Co-funding**: Projects may incorporate co-funding, which must be detailed in the application, specifying its source and intended use.
- Funding duration: 3 years
- Eligible costs:
  - ✓ PhD salary in accordance with current funding guidelines
  - ✓ Operating costs directly associated with the research project, including consumables, database access, software, specialized computer equipment
  - ✓ Travel expenses for conferences and research missions
  - ✓ Contribution to doctoral student training costs

## 4.2. Contractual Arrangements

#### • General Terms

The doctoral candidates selected under this call for projects will be recruited by a French higher education or research institution (university, doctoral school, Inserm, CNRS, CEA, INRIA, INRAE, etc.), which will serve as the managing entity for the funding allocated by PEPR PROPSY through Inserm.

The doctoral candidate will be enrolled in a **French doctoral school**, which will oversee the administrative and academic progress of their thesis.

The doctoral contract will be established for a duration of three years, in accordance with the applicable legal provisions in France. The doctoral candidate will hold employee status and receive a salary based on the applicable funding guidelines.

• Specific Terms for International Joint Supervision





Doctoral theses may be conducted under joint supervision with international laboratories (EU, USA, Canada) subject to certain conditions:

- o Enrollment in a French doctoral school.
- A joint supervision agreement must be signed between the French institution and the foreign partner institution.

#### **Research Period Distribution**

The doctoral candidate may divide their time between the French and foreign laboratories according to a schedule established in the joint supervision agreement. A balance must be maintained to ensure joint scientific supervision by both institutions.

#### **Specific Funding Terms**

PEPR PROPSY will fund the doctoral candidate through the French institution. If international cofunding is considered, it must be detailed in the project proposal and validated by the relevant stakeholders.

#### **Supervision and Monitoring**

The doctoral candidate will receive dual supervision, with a thesis supervisor in France and a cosupervisor abroad. The thesis defense will follow the rules of the French institution, with the possibility of dual certification if stipulated in the joint supervision agreement.

#### 4.3. Commitments of the Awardees

#### **Publications and Dissemination**

The research outcomes from the funded theses must be published in open access, in accordance with the open science policies of the PEPR PROPSY (cf. 4.4).

#### **Participation in PEPR PROPSY Activities**

Doctoral candidates are required to participate in seminars, training sessions, and events organized within the framework of the program.

#### **Priority for PROPSY-EDU Actions**

Awardees will receive priority access to the actions established under the PROPSY-EDU program, dedicated to training and career development in precision psychiatry (PROPSY-EDU).

#### **Project Monitoring**

Awardees and their managing institution must submit an annual report detailing the progress of the work, the results achieved, and the use of the allocated funding.

## 4.4. Open science

As part of the ANR's contribution to promoting and implementing open science, and in connection with the French National Open Science Plan (PNSO) and Plan S at the international level, recipients of

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the France 2030 grant commit to ensuring immediate open access to peer-reviewed scientific publications and adopting a FAIR (Findable, Accessible, Interoperable, Reusable) approach for

research data, in line with the principle of "as open as possible, as closed as necessary." Therefore, all scientific publications resulting from projects funded under the PEPR will be made available in open access under the Creative Commons CC-BY license or an equivalent license, using one of the following three routes:

- Publication in a journal that is natively open access.
- Publication in a subscription-based journal that is part of a transforming agreement or transformative journal.<sup>1</sup>
- Publication in a subscription-based journal. The publisher's version or the accepted manuscript
  for publication will be deposited in the open archive HAL by the authors under a CC-BY
  license, in line with the Strategy of Non-Transfer of Rights (SNCD), as specified in the
  conditions of the funding decision or contract.

Moreover, the coordinating institution commits to ensuring that the full text of these scientific publications (accepted version or publisher's version) is deposited in the national open archive HAL, at the latest at the time of publication, and to referencing the ANR project number from which they originate.

The ANR encourages the deposit of preprints in open platforms or open archives and recommends using persistent or unique identifiers (such as DOI or HAL Id). Additionally, the ANR recommends prioritizing publication in journals or books that are natively open access.<sup>2</sup>

Finally, the coordinating institution commits to submitting a first version of the Data Management Plan (DMP) within 6 months of the program's start, as outlined in the grant agreement.

## 5) Application procedure

## 5.1 Contents of the submission package

The submission package must include:

- A CV of the candidate (1 page)
- A cover letter (1 page)
- A research project (cf. scientific template supplied)
- A letter of commitment from the thesis supervisor (1 page)
- A financial appendix detailing the projected expenses (cf. financial template supplied)

No additional documents will be accepted after the closure of the call for applications, the date and time of which are specified on page 2.

The submission package must be submitted to the address specified on page 2. The templates for the scientific and financial documents are available on the webpage of this call for applications (see address on page 2).

<sup>&</sup>lt;sup>1</sup> Definition of a <u>transformative</u> agreement or <u>transformative journal</u>: <u>https://www.coalition-s.org/faq-theme/publication-fees-costs-prices-business-models/</u>

<sup>&</sup>lt;sup>2</sup> The DOAJ <u>website</u> lists scientific journals that provide peer-reviewed articles and are freely accessible. Similarly, the DOAB <u>website</u> does the same for monographs.





The scientific document must be converted into an unprotected PDF for submission.

The financial document must be submitted in both Excel and PDF formats.

Any application that does not comply with the submission guidelines will be considered ineligible and will not be evaluated.

## 5.1. Submission of Applications

- Submission deadline: May 7, 2025
- Application packages must be sent via **email** to the following address: **aap@pepr-propsy.fr**
- An acknowledgment of receipt will be sent to candidates after the submission of the application.







Contact: <a href="mailto:aap@pepr-propsy.fr">aap@pepr-propsy.fr</a>

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