### **PSL University – Major Research Programs**

TERRAE - Transition Environnementale par la Recherche, la Recherche-Action et l'Enseignement

First Call for Projects « TERRAE ECLAIREURS »
Opening February 14, 2025
Deadline for submission: April 28, 2025 at 11:59pm CEST.
Results June 2.

It is widely recognized that transition pathways toward a more environmentally and socially resilient world are urgently needed. The TERRAE program specifically aims to consolidate, amplify and structure research at PSL for the design and implementation of social and ecological transition pathways, relying on all the research sectors within PSL including Geosciences, Biodiversity Sciences, Health sciences as well as Social and Human sciences. One of the aims of this program is to create a research community within PSL that is capable of working on the ecological and social transition in an interdisciplinary way and in collaboration with non-academic stakeholders.

This is a call for transdisciplinary research proposals on the design and implementation of social and ecological transition pathways to advance the TERRAE program objectives. The selected projects will receive up to 150,000 euros to support one or more of the following within budget constraints: a doctoral student (three-year scholarship), a fourth-year PhD student, a research assistant, or a postdoctoral scientist. The funding may also cover mobility and dissemination of results (visits to research collaborators and stakeholders, fieldwork, participation in conferences, publication, and community engagement). Selected projects will be involved in TERRAE's crossing seminars organised by TERRAE community.

Hereafter we provide information regarding 1. The TERRAE program objectives; 2. Application eligibility; 3. Proposal preparation; 4. Proposal submission; 5. Proposal evaluation and selection; 6. Post-award process; 7. Inquiries.

# 1. OVERVIEW OF THE TERRAE PROGRAM OBJECTIVES

The five PSL institutions supporting TERRAE, with a community of more than 150 researchers, offer a platform to address the pressing challenges of climate change, biodiversity loss, resources management, fair transition, social equity, and related issues. Achieving meaningful impact requires a systemic understanding of transition challenges, given the complex interconnections among societal, natural, and physical systems. This is necessary to avoid incomplete solutions that might even lead to unintended negative consequences. This requires understanding the constraints, interactions, and feedback loops between system components. Time is also of the essence, as the transition must be viewed as a dynamic trajectory with various patterns and effects, such as resilience, robustness, tipping points, and sensitivity to parameters and initial conditions. Both interdisciplinarity and transdisciplinarity are essential for this research. Transdisciplinarity is particularly critical, as sustained engagement and dialogue with transition stakeholders significantly increase the likelihood of research making a strong impact.

Given the need for a **systemic** approach to transitions and a **rapid** implementation of transition strategies, **TERRAE** seeks to:

- (Goal 1) Connect and coordinate research groups across PSL University that focus on environmental processes, global change and transition solutions, with the aim of uniting diverse disciplinary backgrounds.
- (Goal 2) Foster strong-impact, transition-oriented research accelerating the social and ecological transition, TERRAE intends to promote research that has a strong impact on society and the environment.

(Goal 3) Engage non academic stakeholders from the outset of each project to serve as a source of
research questions and challenges and to act as partners and advocates in implementation and
dissemination.

#### 2. APPLICATION ELIGIBILITY

A TERRAE "Eclaireur Project" proposal must be led by three co-Principal Investigators (PI): two members (or associated members) of PSL-affiliated laboratories, preferentially in two different research teams of PSL, and one stakeholder who will be closely involved in the design and implementation of the project.

The two academic co-PIs must represent two distinct disciplines, preferentially one in human sciences and one in STEM (science, technology, engineering, and mathematics). At least one academic co-PI needs to be permanent member of a French, public research institution (and affiliated or associated to a PSL-affiliated laboratory).

Co-PIs can be more than three if necessary. An academic co-PI can not be involved in more than one application. If funding is requested to support a doctoral student, one of the two faculty co-PIs must be certified for doctoral advising (HDR). The doctoral student or postdoctoral scientist to be funded by the project does not need to be identified at the time of proposal submission.

## 3. GUIDELINES FOR PROPOSAL PREPARATION

The proposal can be written in French or English. The 150-word summary will be provided both in French and English.

The proposal must consist of the following parts. There is a strict **5-page limit,** not including the title page(s), the list of bibliographical references and the biosketch for each faculty co-PI.

**Title page** – *This part is not included in the 5-page limit.* It should provide the following:

Project title

Project acronym

For each faculty co-PI:

Last name, First name

Title and employer

Host institution

Laboratory (full name, acronym, code, postal address)

CNU section (number and full name)

Up to five keywords describing expertise

**Email** 

For the stakeholder co-PI:

Last name, First name

Title and employer

Postal address

Up to five keywords describing expertise

Fmai

Project summary. Provide a French version and an English version, each with a 150-word limit.

**Background and proposed research.** Explain what aspects of the transition the Eclaireur project addresses. Summarize the state of the art. Explain the specific goals of the project and why it would substantially advance the transition. Explain the main steps and methods to be used to achieve the goals of the project. What are the expected deliverables? Include a timetable. Provide sufficient information on other potential sources of funding to document the feasibility of the proposed research. If the project raises ethical issues or requires special permitting, please describe them and how they will be addressed.

**Team presentation.** Explain the role of each team member in the project, how their respective expertise and experience complement each other, and in particular, how faculty and stakeholders will work together towards the common project's goals. Explain the role of the doctoral student or postdoctoral scientist to be funded by the project, and how they will interact with the co-PIs. Explain how the research products will eventually be used by the stakeholder. Document the scientific merit of the faculty team members as well as the past achievements and ambitions of the stakeholders in transition research and action. Is there a

history of collaboration between the team members? If so please include indicators of collaborative success.

**Budget and budget justification (150 000 euros max).** Indicate the amounts requested in terms of personnel (salary of a PhD student or post-doctoral scientist or engineer), functioning, services and describe the associated objectives.

**Bibliographical references** – This part is not included in the 5-page limit.

**Biosketches** – *This part is not included in the 5-page limit.* Please include a 2-page max. biosketch for each faculty co-PI, including: current title and position, professional preparation, past and current appointments, list of 5 publications most relevant to this project, list of 5 other publications, list of up to 5 synergistic activities.

#### 4. PROPOSAL SUBMISSION

The proposal must be submitted as **one single PDF file** named "TERRAE-Eclaireur-Uno-acronym" and sent to blandine.lathuilliere@ens.psl.eu by **April 28, 2025 at 11:59PM CEST.** 

## 5. PROPOSALS EVALUATION AND SELECTION

Proposals will be evaluated and ranked by the TERRAE Steering Committee, advised by external experts as needed, based on the following criteria:

- Relevance of the project topic to the three main goals of TERRAE (see section 1 above).
- Scientific quality, originality, and feasibility of the project.
- Scientific merit of the team members and potential for new interdisciplinary synergies and new synergies between academic partners and stakeholders.
- Capacity of the research to translate into action that will speed up the transition.
- Feasibility of the project in relation to the requested budget, i.e. financial adequacy.

Award decisions will be made at the end of May 2025 and co-PIs will be notified individually.

### 6. POST-AWARD PROCESS

Project start-up date (preferred): between September and December 2025.

Selected projects involving the recruitment of a doctoral student will be funded for three years. Selected projects involving the recruitment of a postdoctoral scientist will be preferentially funded for two years. Selected teams will have to follow hiring procedures of the host institution. If a doctoral student is recruited, the student must start their doctoral contract in Fall 2025.

Selected projects must participate in the annual TERRAE conference to report on their progress as well as in TERRAE topical workshops.

At the middle and at the end of the funding period, co-PIs will prepare a written report of the project achievements. The steering committee will provide guidelines for the preparation of the reports so that this work will not be too time-consuming for the project leaders.

All the available relevant elements must be transmitted to the TERRAE's steering committee. The reports will review the strategic elements of the project design and implementation, the co-production of the research between faculty and stakeholders, and what plans have been developed to amplify the research and its impact for transition solutions.

### 7. INQUIRIES

Inquiries regarding this call should be directed to Blandine LATHUILLIÈRE: <u>blandine.lathuilliere@ens.psl.eu</u> (CERES, 45 rue d'Ulm, 75005 Paris).

More information on the TERRAE program is available at <u>website TERRAE</u> and will be updated regularly, particularly if needed to facilitate the identification of potential partners.