

The French Centre National de la Recherche Scientifique and the University of Arizona are leaders and long-time research partners on grand challenges raised by the social, biological, physical, and technological sciences of the global environment. To foster and expand research cooperation on these grand challenges, the two institutions are partnering as a new International Research Center (IRC) whose program is overseen by CNRS' National Institutes together with UArizona Vice Presidence for Research, Innovation and Impact, Vice Presidence for Global Environmental Futures, and multiple Colleges. This Call for Proposals sets the new IRC program in motion with strong support to outstanding collaborative projects.

Call for Proposals Graduate Student Fellowship Research Opportunity

The CNRS & University of Arizona new International Research Center (IRC) is issuing this call for proposals to support joint, collaborative research in areas including (and not limited to) social sciences and humanities, biodiversity and earth sciences, space sciences and high energy physics, material and optical sciences, and mathematical and information sciences. Each project will be co-directed by one CNRS team and one UArizona team and submitted jointly as one proposal. Selected projects will be awarded two graduate student (PhD) three-year fellowships, one granted by CNRS to the CNRS team, and one granted by UArizona to the UArizona team. In addition, each student supported by a fellowship will receive travel funds to visit the collaborators' team at the partner institution. Up to five collaborative projects will be selected through this call.

The CNRS-UArizona IRC is solliciting projects that demonstrate three qualities:

- Address a research grand challenge that the teams, by working together, are in a world leadership position to tackle.

- Focus on a specific goal or milestone that can be reached on a three-year timeline, and that can make a transformative contribution toward the grand challenge.

- Combine and integrate teams' expertise into an exceptional capacity that no single team could achieve, and that has potential to last and develop beyond the confines and terms of the project.

While we expect teams with a productive history of collaboration to be in a strong position to apply, projects involving new collaborations are also encouraged. CNRS and UArizona are committed to facilitate the emergence of such new collaborations. Teams interested in finding partner teams at the other institution to develop a full proposal may send a pre-submission enquiry (see contact information in Section 8 below) including a one paragraph description of their project concept and a short statement (two to three sentences) of the expertise they intend to partner with. To successfully facilitate these collaborations, enquiries must be submitted by February 18, 2021.

1. Award

Each selected project will receive a three-year doctoral fellowship from CNRS to support a doctoral student working in the CNRS team under the advising of a CNRS PI or co-PI (ca. 120,000 euros for three years), and a three-year PhD fellowship from UArizona President's Office to support a PhD student working in the UArizona team under the advising of a UArizona PI or co-PI (ca. 120,000 USD for three years). In addition, each student will receive up to 5,000 euros/USD per year over the three years of fellowship support to cover travel mobility costs between their home team and the partners' team.

2. Eligibility

A project must have at least one PI from UArizona and one PI from CNRS, and possibly co-PIs and "collaborators". In each team, the PI is responsible for the project and coordination with the other team. The PI or one of the co-PIs in each team will serve as Primary Advisor for the graduate student supported by the fellowship in that team.

A Principle or co-Principle Investigator must be either an Assistant, Associate or Full Professor at UArizona, or a tenured researcher working in a CNRS unit and certified for doctoral dissertation advising (i.e. awardee of the French "Habilitation à Diriger des Recherches").

A PI cannot submit more than one application, but the same individual may appear as "collaborator" on multiple proposals (not in a capacity to advise the graduate fellow).

3. Submission

PIs from France and UArizona will prepare one joint proposal for each project (see guideline below). Submissions will be handled by CNRS. The CNRS PI will submit the proposal in electronic format (PDF) and in English via the dedicated CNRS web platform at <u>www.cooperation.cnrs.fr</u>

4. Evaluation

Proposals will be evaluated and ranked by the IRC Steering Committee, advised by external experts, based on the scientific quality and originality of the project, scientific merit of the teams, synergy between the teams, and alignment with the strategic areas of mutual interest.

Successful recipients will be formally notified of the award and informed of funding procedure.

5. Reporting

Selected projects will participate in the annual IRC conference to report on their progress.

At the end of the funding period, PIs will provide references, preprints and other relevant products of the project, and prepare a written summary of the project achievements, explaining how the IRC support contributed to them. The summary will review the strategic elements of the cooperation, how the collaboration benefitted the graduate students supported by the award, and what plans have been developed to continue the cooperation between the teams.

6. Timeline

Call opening: February 4, 2021 **Submission deadline:** March 14, 2021 at midnight Paris time (4pm Arizona time). **Notification:** April 12, 2021

7. Proposal preparation

The proposal must consist of the following parts, in one single file (**up to 5 pages**, <u>not</u> including the title page, the list of bibliographical references and the two-page (maximum) biosketch for each CNRS and UArizona PI and co-PI).

TITLE PAGE

Header: CNRS-UArizona IRC Graduate Fellowship Program.

Title of the proposal, name of each principal investigator (potentially advising the graduate student in their team) with laboratory and institution, postal address, phone number, email adress, web page.

PART A. Project summary (maximum 150 words)

PART B. Background and proposed research

Explain what the grand challenge is. Summarize the state of the art. Explain the specific goal of the project and why it would substantially advance the field towards solving the grand challenge. Explain the main steps and methods to be used to achieve the goals of the project. What are the expected deliverables? Include a timetable for the 3-year implementation of the project.

PART C. Team presentation

For each team, list all PIs, co-PIs and collaborators with their field of expertise (using key words or phrases). Document the scientific merit of each team by using indicators of academic excellence (selected publications most relevant to this project, external funding, doctoral and post-doctoral training, team members' major scientific responsibilities and distinctions...).

Explain the role of each team in the project and how each team member will contribute to the project. Explain what funding (besides the IRC graduate fellowships and student mobility support) and other critical resources (access to technology, equipment...) is available to each team to carry out this project successfully. If applicable, specify current vs. pending funding. If the project raises ethical issues or requires special permitting, please describe them and how they will be addressed.

PART D. Team collaboration and involvement of graduate students

Explain how the two teams' expertise are complementary in this project and how the combination of both teams' expertise put the collaborative in a unique position to succeed and significantly advance research on the grand challenge.

Explain how both teams will work together and how they will coordinate their efforts. Explain how each doctoral student will be involved. Will the two students have to work directly together? How will they do this concretely? How much student mobility between teams is anticipated? Is there also faculty mobility planned? Why and how frequently? Are there other students and post-doctoral fellows involved?

Are there other related projects carried out in each team, or by these two teams together, that are relevant to this project? Are there other national or international collaborations involved that are relevant to this project?

If there is a history of collaboration between the teams, please include indicators of collaborative success: joint publications, external grants, co-advising of graduate students, mobility of faculty and students between the teams...

PART E. Perspectives

Explain how this collaboration may continue, what type of support would help develop it further, and what cooperation mechanisms and sources of funding the collaborative may pursue in the future.

PART F. Bibliographical references

This part is not included in the page limit.

PART G. Biosketches

This part is not included in the page limit. Please include a 2-page max. biosketch for each PI and 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 publication, list of up to 5 synergistic activities.

8. Enquiries

UArizona enquiries should be directed to Regis Ferriere, <u>regisf@arizona.edu</u> CNRS enquiries should be directed to Eudora Berniolles <u>eudora.berniolles@cnrs-dir.fr</u>