

NATIONAL SCIENCE FOUNDATION 2415 EISENHOWER AVENUE ALEXANDRIA, VIRGINIA 22314

## NSF 24-015

# Dear Colleague Letter: ANR - NSF/MCB/PHY Lead Agency Opportunity at the Molecular and Cellular Biosciences - Physics Interface

October 23, 2023

Dear Colleague:

The U.S. National Science Foundation (NSF) and the French Agence Nationale de la Recherche (ANR) have signed a Memorandum of Understanding (MOU) for Research Cooperation. The MOU provides an overarching framework to encourage collaboration between U.S. and French research communities and sets out the principles by which jointly supported activities might be developed. This Dear Colleague Letter announces a lead agency opportunity whereby collaborative proposals between U.S. and French researchers are submitted to only the lead agency for review, and the partner agency accepts that review. Based on the lead agency review of collaborative proposals, NSF and ANR will make funding decisions to support meritorious collaborative projects. The lead agency opportunity allows for reciprocal acceptance of merit review through standard proposal submission mechanisms with the goal of reducing some of the current barriers to international collaborations.

The NSF Division of Molecular and Cellular Biosciences in the Directorate for Biological Sciences (NSF/BIO/MCB), the NSF Division of Physics in the Directorate for Mathematical and Physical Sciences (NSF/MPS/PHY) and ANR are pleased to announce topical areas associated with the lead agency opportunity. In FY 2024 (October 2023-September 2024), NSF will serve as the lead agency for all proposals.

The lead agency opportunity allows U.S. and French researchers to submit a single proposal describing a project involving U.S. and French researchers that will undergo a single review process by the lead agency, on behalf of NSF/BIO/MCB, NSF/MPS/PHY and ANR.

Proposals must address topics that fall within the scope of science funded by each of the participating entities: ANR (Generic call for proposals, 2024 edition G), NSF/BIO/MCB and NSF/MPS/PHY. Proposers must provide a clear rationale for the need for a U.S.-France collaboration, including the unique expertise and synergy that the collaborating groups will

bring to the project. Proposers should note that the lead agency opportunity does not represent a new source of funding. Proposals will be assessed in competition with all others submitted to the areas and agency programs identified in this DCL, and outcomes will be subject to both success in merit review and the availability of funds from NSF/BIO/MCB, NSF/MPS/PHY and ANR.

Proposals relevant to the following area and agency programs are eligible for submission under this lead agency opportunity in FY 2024.

# PHYSICS FROM MOLECULES TO CELLS

The emergence, evolution, dynamics, and function of self-organized cellular systems stem from the interaction of biological components and the environment to yield robust, resilient, and adaptive living systems. Through this DCL, NSF and ANR seek proposals that use multidisciplinary approaches that emphasize quantitative, predictive and theory-driven science aimed at understanding mechanisms underlying these essential life processes at the molecular, sub-cellular, cellular scales and tissue scales. We are seeking proposals that integrate approaches from theoretical and experimental physics and biology to develop testable and quantitative understanding of biological questions. Projects providing innovative methodological or conceptual approaches to a biological question together with a strong theoretical physics component are strongly encouraged. Purely descriptive projects without predictive quantitative components are of low priority. Projects that leverage unique resources and capabilities of partners in the U.S. and France will be given priority. Projects that focus on the etiology and pathogenesis of disease or projects that focus on organismal level problems are not appropriate for NSF/BIO/MCB and, therefore, would not be appropriate for this lead agency opportunity.

# PROPOSAL PREPARATION AND SUBMISSION

In FY 2024, proposals in response to this lead agency agreement should be submitted to NSF 23-615, Division of Physics: Investigator-Initiated Research Projects program solicitation in accordance with the proposal preparation and submission instructions contained in the solicitation and this DCL. The deadline for proposals is December 12, 2023. While proposals are submitted to NSF/MPS/PHY, they will be jointly reviewed by PHY and MCB.

Special instructions associated with submission of ANR-NSF/MCB/PHY proposals:

- Eligibility to submit proposals is subject to each agency's respective eligibility requirements and policies, as spelled out in the NSF Proposal and Award Policies and Procedures Guide (PAPPG) and/or the NSF solicitation to which a proposal will be submitted, and ANR's regulations and guidelines.
- 2. Proposers must comply with the proposal preparation requirements outlined in NSF's PAPPG and submit the proposal through Research.gov

(https://www.research.gov/research-web/) or Grants.gov (https://www.grants.gov/). Proposers should follow all requirements outlined in this DCL as well as the specific funding opportunity to which the proposal is submitted.

- 3. By submitting, PIs and their organizations agree that NSF may share proposals, unattributed reviews and information pertaining to the review process with ANR.
- 4. The proposal should include a description of the full proposed research program and research team, as well as the total U.S. and French resources that will be part of the project. The Project Summary and Project Description of the proposal must include a description of the collaboration, including an explanation of the role(s) of the French collaborator(s) and an explanation of how the team will work together. The duration of projects should be no more than 48 months and appropriate for the scope of the proposed work.
- 5. The proposal must describe the intellectual merit of the proposed research, including the value of the international collaboration, and the anticipated broader impacts of the effort. As broader impacts are a review requirement for both NSF and ANR, the proposal should include the relevant societal benefits.
- 6. NSF proposers should indicate only the U.S. expenses on the NSF budget form. Expenses for the French collaborator should be included in the "Supplementary Document" section of the NSF proposal. The ANR budget form should be used for the French budget and budget justification. The Budget Justification section of the NSF proposal should clearly differentiate the U.S. budget from any similar funds requested by the French team and justify the full U.S. project budget. Proposals that request duplicative funding may be returned without review.
- 7. The proposal should indicate that the proposal is to be considered under this Lead Agency Opportunity by prefacing the title with "NSF-ANR MCB/PHY".
- 8. French investigators should be listed in the Overview section of the Project Summary as "non-NSF funded collaborators". This listing is for administrative purposes and is not intended to characterize the level or value of the contribution of French personnel to the project. Guidance on information to provide for "non-NSF funded collaborators" is below.
  - a. Biographical Sketch Required. The biographical information must be clearly identified as "non-NSF funded collaborators" biographical information and uploaded as a single PDF file in the Other Supplementary Documents section of the proposal. Use of a specific format is not required.
  - b. Collaborators and Other Affiliations (COA) Information Optional but requested. The COA information should be provided through the use of the COA template, identified as "non-NSF funded collaborators" COA information and uploaded as a PDF file in the Single Copy Documents section of the proposal.
  - c. Current and Pending (Other) Support Not required.
  - d. Results of Prior Research Not required.
- 9. The French institution **must** simultaneously submit a proposal with the identical Project

Description, with any required additional information to ANR, via the ANR submission system (https://anr.fr/fr/appels/).

- a. The submission to ANR must include the same scientific project proposal as that submitted to NSF, in the same format. The French coordinator is subject to the rules (in particular of eligibility) to which all national scientific coordinators of the 2024 Generic call for proposals must comply (see AAPG 2024 Guide, § B.5.2. Eligibility of full proposals). Please note, the acronym and title of the project provided to each agency must be the same.
- b. The administrative and funding information linked to both French and foreign partners must be filled in on the submission site's online form. The minimum information expected concerning foreign partners is: the name of the Institute, its category (private/public), and the information concerning the foreign coordinator (country referent). Only the amount of requested funding by foreign partners must be stated in the online form (via simplified entry only). Detailed information is expected from the French partners.
- c. A scientific panel responsible for the scientific monitoring of the project in case of success must be selected (description of the scientific panels is available in the AAPG 2024 text). Please note: this choice cannot be changed once the closing date and time has passed.
- 10. A post-doctoral mentoring plan is not needed if funding for postdocs is requested only from ANR. Including one, however, is allowed.
- 11. Proposals that are inappropriate for funding by NSF or ANR or are not responsive to this DCL will be returned without review. Proposers should review the Introduction section of the NSF Proposal & Award Policies & Procedures Guide (PAPPG) for a general description of research topics normally outside the scope of NSF funding, such as disease, clinical, or drug related or other bio-medically related research.

## MERIT REVIEW & AWARDS

#### MERIT REVIEW

- 1. Proposals will be reviewed in competition with other unsolicited proposals (that is, proposals submitted to the Lead Agency Opportunity will not undergo a special review process).
- 2. Proposals will be evaluated in accordance with the NSF's merit review criteria.

#### FUNDING DECISION

1. After the reviews are received, NSF, as the lead agency, will use its usual internal procedures to determine whether a proposal will be awarded or declined. All potential award decisions will be discussed with the ANR.

- 2. NSF will advise all proposers whether their proposal has been recommended for funding or will be declined. Proposers will receive copies of the unattributed reviewers' comments and, where applicable, a panel summary.
- If a proposal is recommended for funding, the U.S. organization(s) will be supported by NSF/MCB and/or NSF/PHY, and the French organization(s) will be supported by ANR. NSF/MCB, NSF/PHY, and ANR staff will review budgets to ensure that there are no duplications in funding.
- 4. NSF and ANR will coordinate timing of awards as much as possible. Because of potential differences in funding cycles, it is possible that some projects will have delayed start dates to allow time for funds to become available and/or all pre-award requirements to be met. Wherever possible, NSF and ANR will endeavor to hold to standard turnaround times for each participating agency, but in exceptional circumstances outcomes could be delayed.
- 5. The number of U.S.-French projects selected for funding and the total amount to be allocated will depend on the number and quality of the submitted projects and the available funding for each funding agency.

# AWARD CONDITIONS AND REPORTING REQUIREMENTS

- 1. NSF and ANR will clearly state in award notices and any related documents that awards resulting from this activity were made possible by funding from this Lead Agency activity.
- 2. Recipients will be expected to comply with the award conditions and reporting requirements of the agencies from which they receive funding.
- 3. Recipients will be required to acknowledge both NSF and ANR in any reports or publications resulting from the award.
- 4. Requests for extensions will be considered by the funding agency using standard procedures. Requests for changes to awards will be discussed with the other involved funding agency before a mutual decision is reached.

## TIMELINE FOR SUBMISSIONS

- December 12, 2023 (due by 5 p.m. submitter's local time): Deadline for proposal submission to NSF/PHY
- December 13, 2023 (due by 1 p.m. Paris time): Deadline for ANR registration

## DATA PROTECTION CONSIDERATIONS

NSF and ANR will share relevant information and data whether in connection with the proposal and award process, or thereafter during the post award process. Data are expected to be shared between NSF and ANR to enable the secure and efficient processing of full

proposals for this Lead Agency Opportunity. Data shared may include Expressions of Interest submitted to NSF, full proposals including proposal attachments, unattributed peer reviews, and unattributed panel summaries. Data are to be shared via a secure means of transfer. NSF and ANR are committed to maintaining data confidentiality, protection, and privacy and intend to fully abide by their own applicable laws and policies concerning the sharing of data in collaborative activities.

#### CONTACTS

Wilson Francisco, wfrancis@nsf.gov Angel E. Garcia, aegarcia@nsf.gov

Susan Marqusee, Ph.D. Assistant Director Directorate for Biological Sciences

C. Denise Caldwell, Ph.D. Acting Assistant Director Directorate for Mathematical and Physical Sciences