

NATIONAL SCIENCE FOUNDATION 2415 EISENHOWER AVENUE ALEXANDRIA, VIRGINIA 22314

NSF 21-120

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

September 20, 2021

Dear Colleagues:

SCOPE

The U.S. National Science Foundation (NSF) and the French Agence Nationale de la Recherche (ANR) have signed an agreement on Research Cooperation. The agreement 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. The agreement is 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 agrees to accept the review. Based on the lead agency review of collaborative proposals, NSF and ANR will make joint funding decisions to support meritorious collaborative projects. The lead agency opportunity allows for reciprocal acceptance of merit review through unsolicited 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 and Division of Physics in the Directorate for Mathematical and Physical Sciences (NSF/BIO and NSF/PHY) and the ANR are pleased to announce topical areas associated with the lead agency opportunity. In FY 2022 (October 2021-September 2022), NSF will serve as the lead agency for all proposals. It is expected that NSF and ANR will alternate as lead agency in subsequent years.

FY 2022 NOTICE OF INTENTIONS

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/MCB, NSF/PHY and ANR. In FY 2022,

proposals will be accepted for U.S.-France collaborative projects in the areas of intersection between NSF/MCB, NSF/PHY and some of the research themes covered by the ANR's Generic call for proposals, 2022 edition G, as set out in this Dear Colleague Letter.

Proposals must address the priorities of each of the participating entities: ANR, NSF/MCB and NSF/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 priority 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/MCB, NSF/PHY and ANR.

Proposals relevant to the following priority areas and agency programs are eligible to apply for the lead agency opportunity in FY 2022.

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, subcellular and cellular 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 and projects that focus on tissue or organismal level problems are not appropriate for NSF/MCB and, therefore, would not be appropriate for this lead agency opportunity.

PROPOSAL PREPARATION AND SUBMISSION

 Proposers submit a research proposal in accordance with the proposal preparation requirements of NSF: NSF Proposal & Award Policies & Procedures Guide (PAPPG). Proposals should be submitted to: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects. The deadline for proposals is December 14, 2021. While proposals are submitted to NSF/PHY, they will be jointly reviewed by PHY and MCB.

- 2. The proposal should include a description of the full proposed research program and research team. 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.
- 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.
- 4. The proposal should indicate that the proposal is to be considered under this Lead Agency Opportunity by prefacing the title with "NSF-ANR".
- 5. If the proposal is arranged as separate submission from multiple U.S. organizations, the title of the proposal should begin with "Collaborative Research:" followed by "NSF-ANR". Do not check "Collaborative" proposal unless more than one U.S.-based organization will be submitting the same proposal for separate funding (i.e., the "Collaborative" check box only applies if there is more than one collaborating organization on the U.S. side, each submitting the same proposal).
- 6. French investigators should not be listed as co-PIs on the NSF Cover Sheet; French personnel should instead be listed as "non-NSF funded Collaborators". This listing is for administrative purposes and is not intended to characterize the level or value of 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 Support Not required.
 - d. Results of Prior Research Not required.
- 7. The French institution must 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 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 2022 Generic call for proposals must comply (see AAPG 2022 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 (description of the scientific panels is available in the AAPG 2022 text). Please note: this choice cannot be changed once the closing date and time has passed.
- 8. Proposals that are inappropriate for funding by NSF or ANR or are not responsive to this funding opportunity will be returned without review. Proposers should review the Introduction section of the PAPPG for a general description of research topics normally outside the scope of NSF funding, such as disease, clinical, or drug related or other biomedically related research.

MERIT REVIEW & AWARDS

Merit Review

- 1. Proposals will be reviewed in competition with other unsolicited proposals or with proposals received in response to a specific call by the lead funding agency (that is, proposals submitted to the Lead Agency Opportunity will not undergo a special review process).
- 2. Proposals will be reviewed in accordance with the lead agency's review criteria, in this case NSF's merit review criteria. While not identical, the NSF/PHY, NSF/MCB and ANR ask reviewers to evaluate the proposed project on both its scientific or intellectual merit as well as its broader or societal impacts. A description of the NSF merit review process is provided on the NSF merit review website at:

http://www.nsf.gov/bfa/dias/policy/merit_review/index.jsp. A description of the ANR assessment process is provided in the Generic Call for proposals text and its Guide as well as in the annex dedicated to the ANR - NSF/PHY, NSF/MCB collaboration.

Funding Decision

- 1. After the reviews are received, program directors from the lead and non-lead agencies will discuss the potential outcomes. Afterwards, the lead agency will use its usual internal procedures to determine whether a proposal will be awarded or declined. In the case of NSF, an award requires a formal recommendation by the Program Officer and then concurrence by the cognizant Division Director. NSF's Division of Grants and Agreements will review the proposal from a business and financial perspective. NSF funding decisions are subject to the availability of funds. Only the NSF Grants Officer can make commitments on behalf of the Foundation or authorize the expenditure of funds. In the case of the ANR, funding recommendations from Panels are received by Research Council Officers who, taking into account the availability of funds, will fund those proposals recommended for funding in the order identified by the Panel.
- 2. Proposers will be advised whether their proposal has been recommended for funding or will be declined by the lead funding agency. Proposers will receive copies of the unattributed reviewers' comments and, where applicable, a panel summary.
- 3. Once a proposer has been notified of a pending award, the non-lead researcher(s) associated with the project must submit a copy of the proposal to the non-lead agency so that each agency has complete documentation of the overall proposed research project.
- 4. If a proposal is recommended for funding, the U.S. organization(s) will be supported by NSF/PHY and/or NSF/MCB, and the French organization(s) will be supported by ANR. NSF/PHY, NSF/MCB and ANR staff will review budgets to ensure that there are no duplications in funding.
- 5. Because the participating organizations have different funding cycles, it is possible that some projects will have delayed start dates in order to wait until funds become available.

Award Conditions and Reporting Requirements

- 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 ANR -NSF/PHY/MCB Lead Agency activity.
- 2. Awardees will be expected to comply with the award conditions and reporting requirements of the agencies from which they receive funding.
- 3. Researchers will be required to acknowledge both NSF and ANR in any reports or publications arising from the grant.

4. Requests for extensions will be considered by the funding agency using standard procedures. Requests for changes to awards will be discussed with other involved funding agencies before a mutual decision is reached.

Timeline for Submissions Full proposals

NSF/PHY December 14, 2021 (due by 5 p.m. submitter's local time)

ANR Registration December 15, 2021 (due by 5 p.m. Paris time)

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