

NATIONAL SCIENCE FOUNDATION 2415 EISENHOWER AVENUE ALEXANDRIA, VIRGINIA 22314

NSF 22-129

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

October 3, 2022

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 (NSF/MCB), the NSF Division of Physics in the Directorate for Mathematical and Physical Sciences (NSF/PHY) and the ANR are pleased to announce topical areas associated with the lead agency opportunity. In FY 2023 (October 2022-September 2023), ANR 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 2023 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 2023,

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, 2023 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 2023.

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 or 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

In FY 2023, proposals in response to this lead agency agreement should be submitted to ANR as part of their Generic call for proposals (Appel à Projets Générique 2023 (AAPG 2023)). Proposers should submit one proposal only to ANR. ANR will share proposal and review information with NSF.

The due date for the submission of a registration file (dossier) is November 7, 2022 (5 pm Paris time). Invitations to submit a full proposal are expected early in February 2023. Full

proposals will be evaluated only via the second stage of the ANR AAPG review process. The expected submission deadline for full proposals is late March 2023. Further information about due dates for full proposal submission will be communicated to applicants who have submitted qualified letters of intent and are invited for full proposal submission.

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

- At the time of submission of the registration file (dossier) to ANR, investigators should submit a copy of the dossier to NSF via the email address ANRNSFphybio@nsf.gov. Included in the email should be a synopsis of the proposal, names of US and French investigators, and an estimated bottom (direct plus indirect costs) line budget for both the U.S. and French portions of the project, with the US budget in dollars and the French budget in euros. This document should not exceed two pages.
- 2. CVs for the U.S. PIs must be included in the full proposal submission to ANR.
- 3. Proposals that are inappropriate for funding by NSF or ANR or are not responsive to this funding opportunity will not be invited for full submission or 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 ANR's generic call for proposals. While not identical, the NSF/MCB, NSF/PHY 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. 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/MCB-NSF/PHY collaboration.

Funding Decision

 After the reviews are received, program directors from the lead and non-lead agencies will discuss the 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 the ANR, funding recommendations from Panels are received by Research Council Officers who, considering the availability of funds, will fund those proposals recommended for funding in the order identified by the Panel. 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.

- 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/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.
- 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

- 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 ANR NSF/MCB/PHY 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

- November 7, 2022: Deadline for the registration file (dossier) with ANR
- February 2023: Invitations to submit full proposals
- March 2023: Deadline for the full proposal submissions to ANR
- April/June 2023: Merit review
- September-October 2023: ANR/NSF decision and publication of results January 2024:

possible commencement of projects

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