Postdoctoral Fellowship Program 2018

Deadline:
Dec 01, 2017

- Deadlines
- Overview
- Choosing a Collaborating Mentor
- What is Socio-Environmental Synthesis?
- What is the Socio-Environmental Immersion Program?
- The Application Process
- Selection Criteria
- Postdoctoral Support
- Components of an Application
- Questions?

Deadlines

**Please note: late applications will not be accepted.**

Pre-screening application deadline: **October 27, 2017, 5 p.m. Eastern Time (ET).**

Collaborating Mentor application deadline for Mentor Registry: **October 27, 2017, 5 p.m. ET.**

*Please note: pre-screening applications and collaborating mentor applications are approved on a rolling basis and should be submitted as soon as possible.*

Collaborating Mentor selection and commitment deadline: **November 17, 2017, 5 p.m. ET.**

Applicant-recruited Collaborating Mentor applications must be submitted by the Collaborating Mentor selection and commitment deadline.

Fellowship application (proposal, two letters of recommendation, and Collaborating Mentor commitment letter) deadline: **December 1, 2017, 5 p.m. ET.** (Link for uploading applications will be provided to successfully prescreened applicants.)

Overview

The National Socio-Environmental Synthesis Center (SESYNC), located in Annapolis, Maryland, invites applications from early career scholars (≤ four years post PhD) for two-year postdoctoral fellowships that begin August 2018. Each fellow works with a Collaborating Mentor (scholar) of their choosing that extends the fellow’s current network of collaborators; the mentor may be affiliated with any organization or institution. Fellows are in residence at SESYNC full time but are provided travel funds
Successful candidates will use synthesis methods to address a problem arising from, or associated with, the relationship between humans and the environment. Projects should have the potential to advance understanding of socio-environmental systems, but the information synthesized may be primarily social or environmental in nature, or some mix.

SESYNC has ~ 15 postdoctoral scholars in residence whose expertise spans the social sciences and natural sciences; approximately six – eight new fellows join the program as a cohort each fall. In addition to undertaking a synthesis research project, Postdoctoral Fellows participate in the SESYNC Socio-Environmental Immersion Program. The program is designed to advance their understanding of theories and methods foundational to research on socio-environmental systems and to advance their understanding of the science-policy nexus. Successful candidates will have made clear in their applications how progress on their proposed projects may benefit from participation in the Immersion program and/or how the program aligns with their specific career objectives.

Prospective fellows who propose the use of advanced theoretical, computational, and/or mathematical approaches to explore, characterize, and understand the structure and dynamics of socio-environmental systems are particularly encouraged to apply. Applicants who believe their project fits within the description of “Computational Synthesis” projects (see below), should designate their project as such by putting the words Computational Synthesis at the beginning of their project title. Applicants for Computational Synthesis projects will receive special consideration, may be eligible for additional funds, and will be evaluated based on additional criteria listed below.

SESYNC also encourages applications from candidates who will take advantage of long term data sets, ongoing experiments, or modeling results from LTER sites. The current LTER sites collect long-term data in five core areas [1]. These data are ripe for data discovery, analysis, visualization, and synthesis. Applicants may wish to combine LTER data with other forms of data from outside the LTER network. Applicants who believe their project fits within the description of “LTER” projects (see below), should designate their project as such by putting the word LTER at the beginning of their project title. Proposals for LTER projects will receive special consideration and will be evaluated based on additional criteria listed below.

Choosing a Collaborating Mentor

Applicants should choose a project idea and work with a prospective Collaborating Mentor, who will function as a project mentor, to co-develop the project proposal and research. Applicants are responsible for initiating and developing the relationship with a Collaborating Mentor. To facilitate this process, SESYNC will provide a list of scholars (Mentor Registry) who have expressed interest in working with SESYNC postdocs to all successfully pre-screened prospective applicants. Alternatively, applicants may recruit their own Collaborating Mentor. All potential Collaborating Mentors must submit an application (see application details below), and SESYNC must approve all potential Collaborating Mentors to ensure they understand the commitment they are making to your progress and success. Applications for Collaborating Mentors to be included in the Mentor Registry are due by October 27, 2017, 5 p.m. ET. Applicants must finalize commitments with Collaborating Mentors to work together in developing a proposal for the fellowship application by November 17, 2017 (no official notification to SESYNC is required at this stage). Collaborating Mentors recruited by potenti
postdocs do not need to be included in the Mentor Registry, but applications are still required by November 17, 2017 to formally assume this role.

**What is Socio-Environmental Synthesis?**

Synthesis is a research approach that accelerates knowledge production by distilling or integrating existing data, ideas, theories, and/or methods to draw more reliable or generalizable conclusions and to reveal novel areas of study. Socio-environmental synthesis often involves merging large and/or heterogeneous data sets from multiple sources, researchers, or fields of inquiry, as well as critical analysis in evaluating arguments and interpreting evidence. It can employ a diverse array of theoretical and methodological approaches (e.g., statistical/mathematical, structured case studies comparison, cultural analytics, scenario studies, game theory, ethnographic studies, organizational theory, simulation/computational modeling, etc.). Regardless of approach, fellows’ projects take advantage of existing data/information; **SESYNC does not fund fellows to collect new field or survey data.**

**What is the Socio-Environmental Immersion Program?**

Unique among environmental postdoctoral programs, a learning component of the SESYNC postdoctoral program will steep Fellows in theory foundational to understanding socio-environmental systems. The core of this experience is engagement with material and people from diverse disciplines that are relevant to research on socio-environmental systems. This takes the form of interactive workshops and lectures by visiting scholars and policy-makers, discussions motivated by videos or thought-exercises, and activities or projects designed or requested by the fellows. The 2018-2019 Immersion Program will include a series of five multi-day workshops. SESYNC’s weekly seminar series also provides additional opportunities to engage with visiting scholars.

Fellows have the additional opportunity to participate in a wealth of Center activities as observers or as active participants. These include working groups analyzing novel databases and writing papers on areas as diverse as: tropical reforestation, sustainable governance of resistance evolution, fisheries and food security, participatory modeling, and socio-spatial ecology of bed bugs.

Regardless of disciplinary background, the SESYNC Postdoctoral Socio-Environmental Immersion Program provides the freedom and support to do cutting-edge synthesis research while increasing capacity to collaborate across disciplinary divides. It provides opportunities to help Fellows chart their own academic and professional path in a vibrant environment focused on actionable science for a more sustainable future.

**The Application Process**

**Preliminary Screening Application Deadline: October 27, 2017 5 p.m. ET**

All interested candidates must first submit a pre-screening application via the online submission site [here](#). Requirements to pass pre-screening are: 1) applicant background and interests are an appropriate match for SESYNC; 2) applicant must have received their PhD within the past four years: no earlier than June 15, 2014 and no later than July 1, 2018. Applicants that have not yet received their PhD are required to submit a letter from their graduate advisor or a committee member during the pre-screening process and with the final application. The letter should verify expectations for date of degree completion. Candidates who are offered a fellowship but do not complete their PhD by July 1, 2018 will have to reapply. **Because pre-screening is done on a rolling basis, we strongly encourage pre-screening applications be submitted as soon as possible.** Applicants are notified rapidly of the outcome and are given access to the Mentor Registry,
a list of potential Collaborating Mentors. New Collaborating Mentors will be added to the Registry until November 3, 2017.

Proposal Co-Development with Collaborating Mentor

Upon receiving the link to the SESYNC Registry of Collaborating Mentors, successfully pre-screened applicants should initiate contact with potential Mentors with whom they might be interested in co-developing a synthesis research project. The Mentor Registry will include preliminary project ideas, short bios, and contact information. If the prospective Fellow and Collaborating Mentors mutually agree to work together on a proposal for this fellowship, the prospective Fellow should take the lead in writing and developing the proposal. **Prospective Fellows are also invited to recruit their own Collaborating Mentors. However, all potential collaborators must submit an application to formally assume this role.** Applicants should keep in mind that mentors cannot be current or former advisors, dissertation committee members, or individuals with whom the candidate has published. All proposals must be co-developed with a Collaborating Mentor.

Co-Mentors are permitted provided: 1) co-mentors both agree to contribute to the project and mentor the applicant equally, 2) there are no more than two co-mentors, and 3) co-mentors agree to share the travel funds and honorarium. Applications for Collaborating Mentors are due by the deadline for selecting Collaborating Mentors: November 17, 2017, 5 p.m. ET. Co-Mentors should jointly submit a single Collaborating Mentor application [3].

Final proposals must be submitted via the online submission site (application link forthcoming); only prospective Fellows who have been approved via the pre-screening application will be able to submit a proposal. Required components of the application are described below. **Fellowship applications are due by December 1, 2017, 5 p.m. ET.**

Selection Criteria

Postdoctoral applications will be evaluated by the following criteria. Each is taken seriously by the review panel:

- Explanation of how the proposed research will advance understanding of socio-environmental systems or the potential for the project to contribute to the solution of socio-environmental problems
- Novelty, creativity, and/or urgency of proposed activities
- Feasibility of producing meaningful synthetic research within a two-year time frame, including identifying and showing ability to access appropriate data and methods
- Applicant qualifications and experience
- Clear delineation of the value of the collaboration and the respective roles for the Fellow and Collaborating Mentor in the project
- Potential to contribute to and benefit from other research activities at the Center
- Explanation of how progress on their proposed projects may benefit from participation in the Immersion program or how the applicant’s specific career objectives align with the program

**If invited, candidates must be available for Skype interviews and in-person interviews in the spring (mid-February through early April). Exact dates forthcoming.**

Additional Criteria for Computational Synthesis Applicants

Successful candidates will lead strongly quantitative research efforts that synthesize understanding at the interface of the social and environmental sciences via computationally intensive analyses of socio-environmental systems (and their feedbacks). Key elements of successful applications will be: 1)
the identification of specific research questions, 2) clear articulation of why such questions cannot be addressed without computationally intensive approaches, and 3) evidence that proposed projects are innovative. To be considered innovative, they must meet at least two of the following criteria:

- Proposed computational technique is novel to the domain and/or problem application;
- Computational techniques are chosen specifically to take advantage of new volume, velocity, and/or variety of data sources relevant to the research problem;
- Proposed computational work is rooted in cutting-edge analytical techniques (e.g., network and information theory, sentiment analysis of social media data, advanced machine learning);
- Proposed computational work uses established data and/or computationally-intensive methods in novel ways.

Additional Criteria for LTER Applicants

Key elements of successful LTER applications will be: 1) the identification of specific research questions, 2) an explanation of the synthesis-based methods used to address these questions with long-term data, and 3) identification of the sources and accessibility of each existing data set to be used. Priority will be given to projects that have the potential to advance understanding of socio-environmental systems, but the information synthesized may be primarily social or environmental in nature, or some mix. Additionally, priority will be given to projects that utilize LTER and other long-term data from multiple sites.

Postdoctoral Support

Appointments will be through the University of Maryland, and fellowship awardees must be based full-time at SESYNC’s facilities in Annapolis, Maryland. Depending on their research interests, Fellows may have the opportunity to spend part of their time at the offices of our partner organization, Resources for the Future, located in Washington, D.C. The fellowship provides an annual stipend, full University of Maryland employee benefits, and a small annual travel allowance to attend meetings or to meet with collaborators. Postdoctoral fellowships are awarded for a maximum of two years and include structured mentoring programs through and beyond the Immersion program, as well as opportunities to participate in ongoing Center activities. SESYNC Collaborating Mentors will also receive support to travel to SESYNC to work with the Fellow.

Components of an Application

Include the following as a single PDF, using single spacing, 12-pt type fonts, and one-inch margins. Applications that do not submit the correct components will not be sent for review. Applications, as well as reference letters and Collaborating Mentor letter, must be received by SESYNC by December 1, 2017, 5 p.m. ET.

[1] Cover Sheet (1 page)

- Descriptive title
- Short title (25 characters max)
- Name and contact information
- Date of PhD defense: Candidates who are not expected to complete their PhD by July 1, 2018 will be removed from competition.
- SESYNC Research Collaborator name, title, and affiliation
- Project summary (250 words), appropriate for the public and to be posted on the SESYNC website
- Keywords (up to five keywords different from those used in the title)
- Potential conflicts of interest with members of the SESYNC Scientific Review Committee [5] or
Leadership Team [6](A conflict of interest will not disadvantage your application. Rather, we need this information to follow proper review protocol)

[2] Research Proposal (five pages max, including references)

- Problem statement: Clear and concise statement of the project goals including specific research questions and how the project will advance understanding of socio-environmental systems
- Methods to be used for the synthesis project. For computational synthesis proposals, it is particularly important to describe why proposed computationally-intensive methods are necessary to investigate the research topic. For LTER proposals, please articulate why the long-term data you propose to use is necessary for the proposed research, and the current status of the data.
- Description of prospective Fellow’s and Research Collaborator’s respective roles in the project and plans for maintaining communication throughout the project.

[3] Status of Synthesis Material (one page max)

- Type of material (datasets, models, case studies, theories, etc.)
- Location and accessibility of material


If applicable, briefly describe any anticipated needs for cyberinfrastructure support. This information should include descriptions of data sets to be used during this project; new data sets or software/databases to be developed; high performance computing needs; required data aggregation or fusion; and visualization software needs. Applicants should review SESYNC’s Cyberinfrastructure Support Information & Policies [7] and are encouraged to contact SESYNC cyberinfrastructure staff [8] prior to submission if the project’s needs are beyond the scope of services outlined in these documents.

[5] Interdisciplinary Goals (~1/2 page)

In a paragraph of 300 words max, describe how progress on the proposed project may benefit from participation in the Immersion program or how the applicant’s specific career objectives align with the program (i.e., strengthening potential for interdisciplinary collaboration). Be specific by providing, for example, one or two topics and/or methods outside your area of expertise about which you think would enhance your proposed or future work. One of SESYNC’s strengths is its diverse interdisciplinary culture, which provides many opportunities for such growth. For example, an ecologist proposing a project on nutrient dynamics in marine reserves could learn social network theory and techniques to illuminate relationships among people using reserves. Past and current postdocs have learned about development economics, agent-based modeling, and qualitative case study analysis, to name a few.

[6] Full CV of the Applicant

Letters of Recommendation

Please arrange for each reference to provide a letter of recommendation regarding your:

- Background
- Ability to carry out the independent research as proposed
- Ability to engage in collaborative research as part of the SESYNC community

Letters should be sent via the online submission system [2]. The applicant must send a request to the
letter writer via a link in the online submission system (you should send the email request to your letter writer prior to submitting your application); the letter writer will then receive a link for submitting their letter. Only two letters of recommendation are required.

**Letter of Commitment from Collaborating Mentor**

Please also arrange for a letter of commitment from your SESYNC Collaborating Mentor describing the following:

- Their expected role in the project
- Their view of and enthusiasm for the proposed collaboration
- How they envision staying engaged with you and the project
- Endorsement of the proposed project and your ability to conduct the proposed research

If you have Co-Mentors, please ask them to jointly submit one letter of commitment. These letters should also be submitted via the online submission system (link forthcoming). The applicant must send a request to the letter writer via a link in the online submission system (you should send the email request to your letter writer prior to submitting your application); the letter writer will then receive a link for submitting their letter. All letters must be submitted by the application deadline of December 1, 2017, 5 p.m. ET.

**Application & Submission Process**

*Access to the Mentor Registry and the URL for the application webform will be emailed to all applicants who have been approved via the pre-screening application process.*

Applications must be submitted as a single PDF file with all sections in the following order:

1. Cover Sheet
2. Research Proposal
3. Status of Synthesis Material
4. Anticipated Cyberinfrastructure Needs
5. Interdisciplinary Goals
6. Full CV of the Applicant

International applicants should review visa requirements before applying.

The deadline for applications for fellowships beginning August 2018 is December 1, 2017, 5 p.m. ET.

Please submit your application on the webform [here](#).

**Questions?**

Please contact SESYNC at: postdoc.application@sesync.org

SESYNC encourages applications from groups underrepresented in SESYNC research, including scholars from developing countries, participants from underrepresented U.S. minorities (African Americans, American Indians including Native Alaskans, Hispanics, and Native Pacific Islanders), and persons with disabilities (for more information on such efforts: [www.nsf.gov/od/broadeningparticipation/bp_portfolio_dynamic.jsp](http://www.nsf.gov/od/broadeningparticipation/bp_portfolio_dynamic.jsp)).
The University of Maryland is an Equal Opportunity Employer
Minorities and Women Are Encouraged to Apply

Source URL:
https://www.sesync.org/opportunities/research-fellowships-postdoctoral-fellowships/postdoctoral-fellowship-program-2018

Links
[1] https://lternet.edu/research/core-areas
[8] mailto:cyberhelp@sesync.org
[9] mailto:postdoc.application@sesync.org