

APPLYING TO AN NSF POSTDOCTORAL FELLOWSHIP?

If your academic interest includes topics in ecological or environmental systems, and if you are eager to delve into the data science methods that produce some of the most innovative research in these fields, then the National Center for Ecological Analysis & Synthesis may be the host site for you.

CONSIDER NCEAS AS YOUR HOST INSTITUTION

FREQUENTLY ASKED QUESTIONS

WHO AT NCEAS WOULD PROVIDE THE “LETTER OF SUPPORT” FOR MY APPLICATION?

NCEAS Director Ben Halpern can write Letters of Support for Postdoctoral Fellowship applicants.

WHAT MENTOR OPTIONS DOES NCEAS PROVIDE?

Candidates applying to be based at NCEAS should determine which center researcher (e.g. Director [Ben Halpern](#) or one of the center’s [Senior Fellows](#)) may be a suitable mentor, and should contact that researcher to describe their research plan. In addition to a mentor relationship, NCEAS provides trainings and other resources to develop skills in synthesis and data science, data management, and science communication. UCSB also provides helpful resources related to the creation of a [mentorship plan](#) and for [prospective scholars](#).

WHAT COMPUTING INFRASTRUCTURE DOES NCEAS PROVIDE?

Resident postdocs gain access to NCEAS’ analytical servers (44 CPUs, 384GB of memory) that run many popular scientific software packages, such as R, RStudio, Python, Matlab, and SAS. Our servers tend to be more robust than those provided by most university or academic departments, and far surpass the analytical capabilities of personal computers in memory, storage, CPU-speed, and ability to run many simultaneous “jobs” or queue them up for execution. NCEAS also has on-site technical support staff who will meet your day-to-day support needs and provide occasional technical trainings.

CAN I DO FIELDWORK WHILE HOSTED AT NCEAS?


Yes, some field work could be a great complement to the core research activities done at NCEAS. However, since NCEAS’ core strengths include its on-site infrastructure and its support for synthesis science (which entails the use of existing datasets), we encourage Fellows to do most of their work at the center, and will favor candidates who can capitalize on our resources.

CAN I ESTABLISH A FORMAL RESEARCH RELATIONSHIP WITH A LAB ON THE UCSB CAMPUS?

UCSB’s extensive community of researchers and labs can be a great resource for Fellows based at NCEAS. We encourage Fellows to establish relationships with this community, but Fellows should plan to spend most of their time based at NCEAS.

HOW WOULD I PREPARE FOR MY MOVE TO SANTA BARBARA?

NCEAS’ current postdocs created and manage [this resource](#) to help incoming postdocs learn about the center, its location, and how to prepare for the experience. The postdoc community at NCEAS is strong, supportive and sociable, and will help make your transition to life in Santa Barbara an easy one!



MORE ABOUT NCEAS

Founded in 1995 as the first synthesis science research center | NCEAS remains the premier such center in the world | Has an H-index score of 242 | Has supported research leading to at least 2,418 publications | Its top 10 cited papers have received over 27,000 citations total | Catalyzed a cultural shift in environmental sciences, as researchers have embraced data sharing and re-use, synthesis science | Over 130 resident postdoc fellows have taken part in the above since 1996 (with ~50% gender parity)

FAQ CONTINUED

IF I AM APPLYING TO THE NSF POSTDOCTORAL FELLOWSHIP IN BIOLOGY, WHAT ADDITIONAL CONSIDERATIONS SHOULD I BE AWARE OF?

NCEAS could be a great host site for applicants of Competitive Areas 1 and 2 (“Broadening Participation of Groups Under-represented in Biology” and “Research Using Biological Collections”). For Area 2, NCEAS does not have collections on-site but can offer great support for such work, especially if/when a Fellow plans to synthesize information from collections from multiple museums and disciplines.

If you have not done so already, please read through the full NSF [administrative guidelines](#) and instructions about [how to complete](#) the application for the NSF Postdoctoral Fellowship in Biology. If you would like NCEAS to be your host site, please establish a relationship with a prospective mentor (see FAQ above) and work with her/him to help complete the application materials.

CAN NCEAS BE MY HOST SITE IF I AM APPLYING FOR A UC PRESIDENTIAL FELLOWSHIP?

Yes! NCEAS is a research center of the University of California, Santa Barbara, and as such is fully qualified to host UC Presidential Fellows.

NCEAS WORKING GROUP MODEL

NCEAS fosters collaborative [synthesis research](#) – it assembles interdisciplinary teams (“working groups”) to distill existing data, ideas, theories, or methods drawn from many sources, across multiple fields of inquiry, to accelerate the generation of new scientific knowledge at a broad scale.

Many sociological research projects have shown how the working group model effectively generates group commitment & creativity, an increased velocity of idea generation, serendipitous breakthroughs, and crucial peer review on-the-fly. Ecological scientists broadly acknowledge that NCEAS significantly changed how their science is done -- it has made it more collaborative, open, integrative, relevant, and technologically informed.

When a working group’s research aligns with your interests, and with agreement from working group PIs, you may have the option to join the group. Involvement with working groups will help you develop skills in data science and data management, synthesis science, group research leadership, research coordination, publishing, and more.



POSTDOC COMMUNITY

NCEAS is made up of a diverse research community composed of scientists at many career stages, including Senior Fellows, Visiting Fellows, informatics specialists, data analysts, early career researchers, and graduate student interns.

NCEAS tends to attract exceptional postdocs with strong interest in synthesis and environmental data science. The community is supportive and fun, and regularly organizes happy hours, trivia nights, and other after-work events.

TRAININGS

NCEAS has committed itself to increasing the scientific community's ability to conduct data-intensive ecological research through state-of-the-art technology. Trainings typically focus on developing skills in the methods and tools of synthesis science, including the technologies that facilitate data access, analysis, collaborative workflows, and visualization.

NCEAS provides its scientists with consultation services in programming, analysis and informatics, as well as general technical support. A **Scientific Computing Knowledge Base** serves as a portal for cataloging general approaches to computing in ecology.

NCEAS OFFERS A VARIETY OF TRAINING OPPORTUNITIES, INCLUDING:

- The **Open Science for Synthesis**: a 3-week intensive workshop that offers participants hands-on experience in the technical and conceptual grounding of successful synthesis and collaboration.
- Scientific communication trainings
- Workshops and roundtables
- Trainings, workshops and roundtables are supported by NCEAS' **Informatics** and **Scientific Computing staff**. These experts also present at workshops, conferences, and training sessions around the world, helping to build the knowledge base and human capacity for advancing synthetic collaborative science.