

POTENTIAL SOURCES OF SUPPORT FOR ARCHAEOLOGICAL RESEARCH AND GRADUATE STUDENT EDUCATION WITHIN THE NATIONAL SCIENCE FOUNDATION

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The purpose of this document is to provide guidance to potential applicants to the National Science Foundation (NSF) for funds to pursue either an archaeologically related graduate degree or archaeologically relevant research. Although a Ph.D. is not required for individuals in the latter category, almost always, such is the case. While many US based archaeologists are familiar with the Archaeology Program and the several competitions which it administers, there are multiple other potential sources of support within NSF. Because these can change over time as new competitions emerge and older ones are retired, it is useful to consult the NSF web site, www.nsf.gov for up-to-date information. Specific instructions for most of the individual competitions discussed below are contained in the form of solicitations which can be accessed on the web site. In addition, potential applicants may wish to consult the NSF [Grant Proposal Guide](#)—also available on the web—which describes the grant preparation and application process.

The organization of NSF programs and competitions may best be conceived as a matrix. Arrayed along one axis are programs/competitions which are disciplined-based. These include, for example, Programs in Archaeology, Sedimentary Geology and Paleobiology, Geography and Spatial Sciences, Ecosystem Science and dozens more. Central to each is the advancement of fundamental knowledge within the intellectual domain under consideration. Crosscutting these are competitions/programs which either pursue more “structural” goals or which are inherently broadly interdisciplinary in their nature. National Graduate Fellowships and the Coupled Human—Natural Systems competitions provide examples of the former and latter respectively.

Although the intent of the list below is to describe potential sources of NSF support, given the range of competitions within NSF as well as the variety of archaeologically relevant activities a researcher might perform, a complete and definitive set is not possible. Thus it can be useful to search through the NSF website and explore. The summaries below are intended as “thumbnail sketches” and potential applicants should consult the relevant section of the NSF website for a more complete description and relevant rules and limitations which apply.

Potential applicants should feel free to contact John Yellen, Archaeology Program Director: (jyellen@nsf.gov; 703-292-8759)

GRADUATE STUDENT RELEVANT

NSF Graduate Research Fellowship Program

(Solicitation 13-584)

The NSF Graduate Research Fellowship Program (GRFP) provides fellowships to individuals selected early in their graduate careers based on their demonstrated potential for significant achievements in science and engineering. An award provides three years of support for graduate study that is in a field within NSF's mission and leads to a research-based master's or

doctoral degree. The Graduate Research Fellowship stipend is currently \$32,000 for a 12-month tenure period, prorated in whole month increments of \$2,666. A \$12,000 per year cost of education allowance is provided to the institution. During tenure, the institution is required to exempt Fellows from paying tuition and fees normally charged to students of similar academic standing, unless such charges are optional or are refundable. Grantees must attend an institution which has a campus located in the United States and that grants a graduate degree in an NSF-supported field. The student must also be United States citizen, national, or permanent resident of the United States by the application deadline.

Archaeology Program Doctoral Dissertation Improvement Grants

(Solicitation 14-566)

The Archaeology Program administers a competition which provides awards to graduate students (of any nationality) enrolled in a Ph.D. program in a US university for the purpose of conducting doctoral dissertation research. While salary is not permitted most other field and analytic expenses, including per diem during periods away from a home institution are eligible costs. The maximum award is \$20,000 in direct costs plus allowable university indirect cost overhead. The applicant must justify the significance of the research within an *anthropologically relevant* archaeological context. Proposals may be submitted at any time. Informal notification of outcome is normally provided within ca. 3 months.

ARCHAEOLOGICALLY RELEVANT COMPETITIONS ADMINISTERED BY THE ARCHAEOLOGY PROGRAM

“Senior Research Awards”

The Archaeology Program holds a twice yearly competition to provide support for senior investigator *anthropologically relevant* archaeological research. Proposals are evaluated by both specialists selected specifically for expertise in the applicant’s subject area and by a broadly composed panel of anthropological archaeologists. There are no priorities either by topic, geographic region or time period. Both field and laboratory work is supported. Grants normally are two to three years in duration. In the US Government fiscal year 2014 (FY14) the average award (including both direct and indirect costs) was approximately \$178,000 with individual grants ranging from \$48,872 to \$349,964 in size.

Archaeometry Awards

The Archaeology Program conducts an annual “archaeometry” competition to fund projects either to develop/refine *anthropologically relevant* archaeometric techniques and/or support laboratories which provide relevant services. Examples of the former include the development of methods to identify specific types of organic residues on ceramics and pre-treatment of samples for radiocarbon analysis. Service laboratories such as the University of Missouri nuclear reactor and the University of Arizona dendrochronology facility provide examples of the latter. Awards in this competition are normally for two to three years and in FY14 ranged in size from \$89,868 to \$207,879 in size. The average grant was ca. \$179,120 in size.

High Risk Research in Biological Anthropology and Archaeology (HRRBAA)

(Solicitation 08-523)

This program is designed to permit the submission of high-risk, exploratory proposals that can lead to significant new anthropological knowledge. Because of a highly competitive environment, proposals that have both a high risk of failure and the potential for significant payoffs are less able to compete with standard research proposals. This program is designed to provide a mechanism whereby risky proposals with a great potential for advancement of the discipline can compete for funding. The risk involved in such endeavors must significantly exceed that associated with regular archaeology research projects. "Risk" in this context refers to risk of project failure and not risk of site destruction. The competition is also not intended to provide "startup" grants. Maximum awards are limited to \$35,000 in total cost and proposals may be submitted at any time.

ARCHAEOLOGICALLY RELEVANT COMPETITIONS ADMINISTERED BY OTHER NSF UNITS

Arctic Social Sciences Program

(Solicitation 13-592)

The Arctic Social Sciences Program funds both doctoral dissertation and senior level research across the broad range of NSF supported social sciences. The focus, as the name implies, is on the Arctic. Both doctoral dissertation and "senior" grants are provided and the types of research, both doctoral and senior, which are supported by the Archaeology Program can also be considered through Arctic Social Sciences. The two Programs often jointly review proposals.

Interdisciplinary Behavioral and Social Science Research (IBSS)

(Solicitation 12-614)

The Interdisciplinary Behavioral and Social Science Research (IBSS) competition promotes the conduct of interdisciplinary research by teams of investigators in the social and behavioral sciences. Emphasis is placed on support for research that involves researchers from multiple disciplinary fields, that integrates scientific theoretical approaches and methodologies from multiple disciplinary fields, and that is likely to yield generalizable insights and information that will advance basic knowledge and capabilities across multiple disciplinary fields. The competition, held in FY13 and 14 has a once yearly deadline and has a number of specific eligibility rules. It provides two sizes of awards, one to large interdisciplinary teams with a maximum, award size of \$1,000,000 and a smaller maximum award of \$250,000 for Interdisciplinary Team Exploratory Projects. Projects which include archaeologists and biological anthropologists, cultural anthropologists or geographers provide several examples of what would fit well within the IBSS framework.

Dynamics of Coupled Natural and Human Systems (CNH)

(Solicitation 10-612)

The Dynamics of Coupled Natural and Human Systems (CNH) Program supports basic research and related activities that enhance fundamental understanding of the complex interactions within and among natural and human systems. CNH focuses on the complex interactions among

human and natural systems at diverse spatial, temporal, and organizational scales. CNH seeks to advance basic knowledge about the system dynamics—the processes through which systems function and interact with other systems. CNH-supported projects must examine relevant natural AND human systems. Proposals cannot focus solely or largely on one or the other. Projects also must examine the full range of coupled interactions and feedbacks among relevant systems. Proposals are considered within three categories: “Large Interdisciplinary Research Projects”: \$500,000 - \$1,500,000; “Interdisciplinary Team Exploratory Projects: \$150,000 - \$250,000; Research Coordination networks \$250,000 - \$500,000. A number of archaeologists have been funded through this competition and the NSF web site contains a list of awards.

Major Research Instrumentation (MRI)

(Solicitation 13-517)

MRI is an NSF-wide once yearly competition which provides instrumentation which falls beyond the financial range of that normally supported by regular research awards. There are multiple competition specific rules regarding proposal types, number of allowable submissions per institution, allowable costs and institutional matching funds. Thus it is important to consult the solicitation. Awards are made to purchase a single instrument or tightly integrated instrument system. Archaeologists and biological anthropologists have received support through this competition for the purchase of large instruments such as mass spectrometers.

Research Experiences for Undergraduates – Sites (REU-Sites)

(Solicitation 13-542)

The REU competition has two components: supplements to active awards and “Sites.” The REU program, through both Sites and Supplements, aims to provide educational experiences for undergraduate students through participation in research. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program. “Sites” requests are based on independent proposals to initiate and conduct projects that engage a number of students in research. Proposals may be based in a single discipline or academic department or may offer interdisciplinary or multi-department research opportunities with a coherent intellectual theme. REU Sites proposals within the social and behavioral sciences are evaluated together and compete for funds as a single group in an annual competition; individual disciplinary programs (such as Archaeology) do not play a role in the process. Archaeology field schools have been funded through this completion since they can provide an excellent context for hands on research and education. Within this context it is the educational contribution rather than the direct contribution to archaeological knowledge which is of prime importance. As for many other competitions there are a series of competition-specific rules and it is important to read the solicitation carefully.

NSF International Science and Engineering (ISE) Section

(On the NSF home page, click “Quick links”, “Organization List”, “Office of International and Integrative Activities”, “International Science and Engineering (ISE)”)

NSF recognizes that international collaboration is crucial for the long term advancement of science and through a range of activities conducted either solely through ISE or in cooperation

with other NSF programs, it provides support to encourage both graduate students and senior researchers to participate at an international level. The ISE home page contains a listing of a number of opportunities, many of which are potentially relevant to archaeologists.

Advancing Informal STEM Learning

(Solicitation 14-555)

NSF provides funding to improve methods for informal science education and practical examples - as long as they can be justified within the context of method improvement - are eligible for consideration. Such examples might include museum exhibits. To be successful it would be important to include not only a substantive component—what the viewer would learn about a specific site or culture—but also a more theoretically oriented educational component. This often necessitates collaboration with an education specialist. Potential applicants should consult the “Advancing Informal STEM Learning (AISL) web site on the NSF web site. It contains links to webinars and award lists.