



National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230

NSF 13-031

Dear Colleague Letter: Recompetition of the Management of the Gemini Observatory

Date: January 10, 2013

Consistent with the National Science Board Resolution on Competition and Recompetition of National Science Foundation (NSF) Awards ([NSB-08-12](#)), NSF will compete the next cooperative agreement for the management and operation of the Gemini Observatory through an open, merit-based review process. The Division of Astronomical Sciences (AST) of the Directorate for Mathematical and Physical Sciences (MPS) is currently preparing the program solicitation, which is expected to lead to the award of a 6-year cooperative agreement for the management and operation of the Gemini Observatory following the expiration of the current cooperative agreement at the end of 2015.

This letter provides general information regarding the upcoming competition and invites potential proposing organizations to meet with NSF and identify any information needed for proposal preparation.

ELIGIBILITY INFORMATION

The competition for the management and operation of the Gemini Observatory will be open to the following types of organizations or consortia of organizations: academic institutions, other not-for-profit or nonprofit organizations, and any industrial firm operating as an autonomous organization or as an identifiable, separate operating unit of a parent organization. NSF will consider proposals from consortia including international partnerships, but an international partnership will likely involve a subaward or subcontract, as NSF funds may be awarded only to U.S. organizations.

The Gemini Observatory must be managed with objectivity and independence, free from organizational conflicts of interest, and with full disclosure of its affairs to NSF, which is the Executive Agency for the international partnership that supports and utilizes the facility. Acting on behalf of the partnership, NSF will have overall responsibility for award oversight, including administering funds provided by all of the partner countries as well as monitoring the technical, programmatic, financial, and administrative performance of the awardee(s).

PROGRAM DESCRIPTION

Beginning in 2016, the international partnership that funds and utilizes Gemini Observatory is anticipated to consist of four countries: U.S., Canada, Brazil, and Argentina, with the U.S. as the majority partner¹. As hosts, Chile and the University of Hawaii are also granted a share of the observing time on the local telescope and participate in Observatory governance. The mission of the Observatory is to serve the diverse scientific communities of this partnership by enabling forefront astronomical research into the Universe at optical/infrared wavelengths. An important scientific facility for each of the partner countries, the Gemini Observatory (1) provides all-sky access with twin state-of-the-art 8-m optical/infrared telescopes at the premier sites of Mauna Kea, Hawaii, and Cerro Pachón, Chile, as well as world-leading instrumentation and supporting expertise; (2) works with colleges and universities to train the next

generation of scientists and engineers; and (3) promotes astronomy to foster a more scientifically literate society.

The Gemini Observatory annually schedules about 250 independent observing programs on the two telescopes, with time apportioned within the collaboration according to partner funding share. Observing time is available on a competitive basis after evaluation of research proposals according to scientific merit, the capability of the instruments to do the work, and the availability of the telescope during the requested time. Observations are largely executed through a scheduling queue that is highly responsive to local observing conditions and time-sensitive programs, and currently some 80% of nights on each telescope address multiple science programs and utilize at least two instruments. In addition, the Gemini Observatory supports both formal and informal education and public outreach programs for teachers, students and the general public, in Hilo, Hawaii, and La Serena, Chile, as well as research and training programs for undergraduate and graduate students and postdoctoral scholars.

The queue mode of observing is enabled by up to three distinct instruments plus an adaptive optics module mounted simultaneously on each of the telescopes. On Mauna Kea, the current instrumentation suite allows optical imaging/multi-object spectroscopy, infrared imaging/integral-field unit spectroscopy, and laser-guide star adaptive optics, while a new capability for high-resolution optical spectroscopy is under development. The facility on Cerro Pachón also features optical imaging/multi-object spectroscopy and infrared imaging/multi-object spectroscopy, infrared coronagraphic imaging, plus a state-of-the-art multi-conjugate laser adaptive optics system that achieves high-quality correction for atmospheric distortions over an unusually wide field of view. The capability of accommodating a small selection of visitor instruments at each telescope is currently being developed.

SPONSOR'S CONCEPT OF GEMINI OBSERVATORY OPERATIONS

By international agreement ², governance of the Gemini Observatory is provided by the Gemini Board, which consists of scientific and funding agency representatives from each of the partner countries. The Board is charged with scientific, budgetary, and policy oversight, guidance of the managing organization for the Gemini Observatory, and review and approval of the terms of the award between the NSF as Executive Agency and the managing organization.

As the selected managing organization(s), the awardee(s) will work closely with NSF and the Gemini Board to ensure that, within available resources, the Gemini Observatory supports, sustains and advances frontier science as enabled by the Observatory's unique research capabilities and as promoted through a culture of excellence. The awardee(s) must be responsive to the variety of needs and goals of the partner communities, and will be accountable for fulfilling the Observatory mission through visionary strategies that capitalize on the partners' investments to serve their scientific communities and to promote world-class research and education.

The awardee(s) will be responsible for the overall management and performance of the Gemini Observatory, including the infrastructure, instrumentation and distributed staff, and for maximizing the benefits to the international research communities through a strategically planned scope of activities. In discharging these responsibilities, the awardee(s) will ensure that the Gemini Observatory maintains its character with multidisciplinary and multi-user facilities that primarily enable first-rate visitor research.

In cooperation with NSF and within available resources, the Gemini Observatory will plan and execute a viable, coherent and inclusive program of research and education, consistent with the objectives and priorities of its collective scientific community. The awardee(s) will manage facilities and equipment provided by NSF, will provide additional facilities and equipment as necessary to fulfill the proposed programmatic scope, and will develop diverse and inclusive teams of expert support and technical personnel to manage the Observatory as a scientifically competitive research and education facility. Because the facility is a multi-user resource, a significant portion of the research and education

programs should be carried out in collaboration with the Observatory's stakeholder communities.

NSF intends that the Gemini Observatory should serve as an exemplar of management excellence. The awardee(s) will be expected to meet the highest standards for service and delivery to the scientific community and to demonstrate proactive and effective approaches to performance management. The awardee(s) will ensure that the Observatory operates with integrity and transparency, maintaining quality and responsiveness in administration and management.

ANTICIPATED COMPETITION SCHEDULE

This notice does not constitute a solicitation; therefore, no award of any kind will result from this notice. Although the competition is still in the planning stage, NSF anticipates that a program solicitation will be issued in the third quarter of calendar year 2013. The solicitation will specify program guidelines and proposal requirements, including budgetary information, review criteria, exceptions to [NSF Grant Proposal Guide](#) proposal preparation instructions, and a schedule for site visits and meetings for potential proposers. Also provided as part of the solicitation will be descriptions of the scope of the program, the physical and intellectual property, the expected level of service and expertise, and the nature of international agreements, property arrangements and leases, labor agreements, etc. Much of this will be included in a resource library to ensure equal access to all proposers.

It is anticipated that the program solicitation will call for the submission of required Letters of Intent, due 90 days after publication of the solicitation. The Letters are expected to provide a statement and documentation of the organization's capabilities to carry out the management and operation of the Gemini Observatory, as well as an outline of the organization's vision and design concept for its future. The Letters would be intended to provide an overview of the applicant's approach, and as such will be limited in length. The anticipated due date for full proposals in response to the program solicitation is six months following publication of the solicitation.

In keeping with current National Science Board guidelines, NSF expects that management competitions such as this will occur on a regular basis during the foreseeable future, with the process for Gemini Observatory likely recommencing in 2019 for an award starting in 2022.

REQUESTS FOR INFORMATION

All inquiries regarding this announcement and the competition for the management and operation of the Gemini Observatory should be directed to the Primary Contact listed below.

NSF invites requests for individual conferences with NSF from eligible organizations interested in this competition. At the conferences, organizations may request clarification of general aspects of the competition or identify to NSF any information needed for proposal preparation, however the program solicitation and accompanying FAQs shall serve as the ultimate reference. Requests should be submitted via email to the Primary Contact no later than 1 March 2013.

Sources of additional information:

National Science Foundation, Astronomical Sciences: <http://www.nsf.gov/div/index.jsp?org=AST>

The Gemini Observatory <http://www.gemini.edu>

Primary Contact:

Gary Schmidt
NSF Program Director
gemini-comp@nsf.gov

Sincerely,

James S. Ulvestad
Division Director, MPS/AST

¹Partner intentions are assessed every three years, a process which may result in the adjustment of partner shares or additional countries being invited to join the partnership.

²A copy of this agreement, as well as other public documents relating to the organizational structure and partnership, can be found at the Gemini Observatory website listed at the end of this letter.