

## **Announcement of Opportunity**

### **Laser Launch Telescope**

#### **AURA, INC - Gemini Observatory**

The Association of Universities for Research in Astronomy, Inc. (AURA), on behalf of the Gemini Observatory, is soliciting a Request for Proposals (RFP) for five (5) Laser Launch Telescopes (LLTs) in support of the Gemini North Adaptive Optics facility (GNAO), a multi-conjugate adaptive optics system.

The selected firm(s) will provide the following services: design, analysis, procurement, fabrication, acceptance testing, packaging, transportation, delivery, and warranty of the LLTs as described in GNAO-LLT-RFP-002\_RevA, Specifications document.

#### **Background:**

The multi-faceted Gemini in the Era of Multi - Messenger Astronomy GEMMA program is designed to upgrade Gemini's instrumentation and operations in order to deliver essential capabilities for forefront astronomical research in the areas of high spatial resolution and rapid-response astronomy.

The major hardware deliverable to be provided by GEMMA will be a state-of-the-art multi-conjugate adaptive optics (MCAO) facility, a key technology for the era of extremely large telescopes (ELT) to be deployed at Gemini North; referred to as GNAO. As part of the GNAO project, Gemini will deliver five LLTs. The LLTs shall provide the following two main functions:

1. Project an enlarged circularly polarized beam of the 589nm input laser on to the mesospheric sodium layer;
2. Provide for steering of the beam over a patrol field large enough for both the MCAO and GLAO asterisms.

Funding for the procurement of the LLTs is being provided by the National Science Foundation.

AURA is seeking proposals from qualified firms who are interested in responding to the above effort. All documentation relating to this solicitation will be available for download at the [AURA Central Administrative Services website](#).

Parties not following the "Instructions to Proposers" or submitting incomplete packages may have their proposals summarily rejected.

**Point of Contact Information: Please direct all questions or requests for clarification of this proposal to the Contracts Officer at [GNAO\\_LL\\_T\\_RFP@gemini.edu](mailto:GNAO_LL_T_RFP@gemini.edu).**