

2005 NRAO SUMMER STUDENT RESEARCH ASSISTANTSHIPS

WHAT IS THE NRAO?

The National Radio Astronomy Observatory (NRAO) provides state-of-the-art radio telescope facilities for use by scientists from around the world. We are also involved in cutting edge astronomical research, and in the design, development and manufacture of radio astronomy instrumentation and telescopes; NRAO receivers are deployed from the South Pole to beyond the Moon. The NRAO manages facilities for radio astronomical research in New Mexico, Arizona, West Virginia, and Virginia. Our site in Socorro, New Mexico, hosts the NRAO Very Large Array (VLA) and ALMA Test Interferometer, and is the operations center for the Very Long Baseline Array (VLBA). Green Bank, West Virginia, is the site of the Robert C. Byrd Green Bank Telescope (GBT), the world's largest fully steerable single aperture telescope. Charlottesville, Virginia, is the site for both the North American ALMA Science Center, located on the Grounds of the University of Virginia, and the NRAO Technological Center, which is heavily involved in radio instrumentation and radio telescope design.

WHO IS ELIGIBLE TO BE A SUMMER STUDENT RESEARCH ASSISTANT?

There are three types of Summer Student programs available at the NRAO:

- The **NRAO Research Experiences for Undergraduates (REU)** program is for *undergraduates* who are citizens or permanent residents of the United States or its possessions. It is funded by the National Science Foundation (NSF)'s Research Experiences for Undergraduates (REU) program.
- The **NRAO Undergraduate Summer Student Research Assistantship** program is for *undergraduate students or graduating seniors* who are citizens or permanent residents of the United States or its possessions or who are eligible for a Curriculum Practical Training (CPT) from an accredited U.S. Undergraduate Program. This program primarily supports students or research projects which do not meet the REU guidelines, such as graduating seniors, some foreign undergraduate students, or projects involving pure engineering or computer programming.
- The **NRAO Graduate Summer Student Research Assistantship** program is for *first or second year graduate students* who are citizens or permanent residents of the United States or its possessions or who are eligible for a Curriculum Practical Training (CPT) from an accredited U.S. Graduate Program.

Students who are interested in Astronomy and have a background in Astronomy, Physics, Engineering, Computer Science, and/or Math are preferred. The same application process is used for all three programs, and may be found at <http://www.nrao.edu/students/summer-students.shtml>.

WHAT TYPE OF WORK WOULD I DO?

Each NRAO summer student conducts research under the supervision of an NRAO staff member at one of three NRAO sites (Socorro, NM; Green Bank, WV; Charlottesville, VA), on a project in the supervisor's area of expertise. The project may involve any aspect of astronomy, including original research, instrumentation, telescope design, or astronomical software development. The program runs from 10-12 weeks over the summer, from early June until mid-August. Financial support is available for students to present their summer research at a meeting of the American Astronomical Society, generally the winter meeting following their appointment.

Besides their research, students take part in a number of social events and excursions, and an extensive summer lecture series which covers aspects of radio astronomy and astronomical research. Students also collaborate on their own observational projects using the VLA, VLBA, and/or GBT.

HOW MUCH WOULD I BE PAID, AND WHERE WOULD I LIVE?

The stipends for the 2005 Summer Student Program are **\$460 per week** for undergraduates, and **\$490 per week** for graduating seniors and graduate students. Students based in Green Bank live in on-site Observatory housing. At the other sites, students are expected to arrange their own lodging, with assistance from the NRAO if needed. Travel expenses to and from the NRAO site will be reimbursed, up to a maximum of \$500.

HOW DO I APPLY?

Required application materials include the following:

1. A completed application using the on-line application form at <http://www.nrao.edu/students/summer-students.shtml>.
2. Copies of Official transcripts from all colleges or universities you attended. Your school's guidance office may forward a copy of your educational transcripts to us at the address below.
3. Letters of recommendation from three people who can evaluate your ability, experience, and potential using the form at http://www.nrao.edu/students/NRAOstudents_references.shtml.

WHEN ARE THE APPLICATIONS DUE?

The deadline for receipt of application materials for Summer 2005 will be **January 24, 2005**. Initial offers of appointments will be made around March 1, 2005.

For further information on the NRAO Summer Student programs, please contact us at:

Summer Student Program Director
National Radio Astronomy Observatory
520 Edgemont Road
Charlottesville, VA 22903-2475
Email: ssstudents@nrao.edu
Telephone: (434) 296-0225
<http://www.nrao.edu/students/>

VISIT THE NRAO WEBSITE AT WWW.NRAO.EDU

Charlottesville, VA



Green Bank, WV



Socorro, NM

