What and Where 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 implementation of radio astronomy instrumentation and telescopes; NRAO receivers are deployed from the South Pole to beyond the Moon. With administrative headquarters and the Central Development Laboratory (CDL) on the Grounds of the University of Virginia in Charlottesville, Virginia, the NRAO manages facilities and develops instrumentation for its research facilities in New Mexico, Arizona, West Virginia, and Virginia. The NRAO Very Large Array (VLA) and Very Long Baseline Array (VLBA) radio telescopes are both operated from Socorro, New Mexico. The Robert C. Byrd Green Bank Telescope operates in Green Bank, West Virginia. Additionally, NRAO is building, with its partner the European Southern Observatory and others, the Atacama Large Millimeter Array (ALMA), with ongoing activities in Tucson, Charlottesville, Socorro, and the ALMA site near San Pedro de Atacama, Chile.

Who is Eligible to be a Summer Student Research Assistant?

There are two types of Summer Student programs available at the NRAO. The same application form and selection process is used for both programs. Students who are interested in Astronomy and have a background in Astronomy, Physics, Engineering, Computer Science, and/or Math are preferred.

The NRAO Research Experiences for Undergraduates (REU) Program is for undergraduates who are U.S. citizens enrolled at a U.S. undergraduate institution, and is funded by the National Science Foundation Research Experiences for Undergraduates (REU) program; The NRAO Graduate Summer Research Program is for graduating seniors and first or second year graduate students enrolled at an accredited Graduate Program.

How do I Apply?

Applications are available at the NRAO Summer Student website at http://www.nrao.edu/education/students. Required application materials include the following:

1. Completed application form.
2. Letter from applicant giving educational background and goals, and scientific experience.
3. Official transcripts from all colleges or universities attended. A list of courses in progress should also be sent.
4. Letters of recommendation from three people who can evaluate the applicant’s ability, experience, and potential.

Application forms were included in this mailing. They are also available from the above web page or via anonymous ftp to ftp.cv.nrao.edu in directory /pub/forms. We prefer web-based applications, but will also accept paper applications sent via surface mail for students without web access. Forms can also be obtained by calling or writing to us at the address below:

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

What Type of Work Would I Do?

Each NRAO summer student will work closely with an NRAO supervisor at one of the four NRAO locations, on a project in the supervisor’s area of expertise. The project may involve any aspect of radio astronomy, including original research, instrumentation, telescope design, astronomical site evaluation or astronomical software development. Examples of past summer research projects are available at the Summer Student Website. Over the past decade, 46 publications in scientific journals have resulted from this research, as well as numerous senior theses. The program runs for 10–12 weeks over the summer. Financial support is available for students to present their summer research at a meeting of the American Astronomical Society, generally at the winter meeting following employment.

Besides their research, students participate in other activities, including social events and excursions, and a summer lecture series which covers various aspects of astronomical research, particularly radio astronomy. Students may collaborate to plan and implement their own observations on an NRAO instrument.

How much would I be paid, and where would I live?

The salaries in the 2003 Summer Student Program are $350 per week for undergraduates, and $385 per week for graduating seniors and graduate students. Students will additionally be paid a monthly housing allowance of $200-$350. For students based in Green Bank, on-site Observatory housing is available at reasonable rates; at other sites, students are expected to make their own arrangements for lodging with assistance from the NRAO. Travel expenses to and from the NRAO site will be reimbursed up to a maximum of $500.

When are the Applications Due?

The deadline for receipt of application forms for Summer 2003 will be January 24, 2003. Notice of the decision on each application will be sent by March 1, 2003.

National Radio Astronomy Observatory
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Charlotteville, VA
Green Bank, WV
Tucson, AZ
Socorro, NM