NEW YORK SPACE GRANT – CONSORTIUM DESCRIPTION

The primary objectives of the New York Space Grant are to create, encourage, and enhance educational programs in science, technology, engineering, and math. These are accomplished through fellowships and scholarships, research opportunities, undergraduate and teacher training, K-12 outreach, and public education. Though reaching out to New York State’s population of 19 million people is daunting, the Space Grant works harder to include diverse people in our various programs.

The New York Space Grant is fortunate to count many dedicated affiliates among its consortium. These affiliates stretch across the state, from Barnard College in New York City to the State University of New York at Buffalo, from Clarkson University in Potsdam to Cornell University in Ithaca, from the City College of New York to the State University of New York at Geneseo. In 2005 we welcomed two new affiliates: York College and Medgar Evers College, both located in New York City. The collective strength of this group and the wide-ranging geographic placement ensures that the New York Space Grant is primed to meet the needs of various constituencies.

As a consortium, we are most proud of our assistance, mentorship, and encouragement of college undergraduate and graduate students. There is a great diversity in subject matter and in research programs throughout the state, but in each case, a student is given a unique opportunity to advance his/her knowledge of a specific subject. One of the best examples of our commitment to undergraduate education and research training is the Space Grant Intern program at Cornell University. It is a summer program that allows students to immerse themselves in research, working under the guidance of Cornell faculty. The program offers research projects in astronomy; aeronautical, mechanical and electrical engineering; and physics and geology. The program includes a twice-weekly lecture series, an end-of-summer symposium, and the composition of a scientific abstract and summary of work.

Graduate research is another important aspect of the program. In offering graduate students the valuable time to develop their own ideas and theories, we are nurturing the future scientific and technologic workforce. These students, as they enter the workforce, provide well-rounded, fully developed research talents. As New York strives to attract industry and build up a lagging economy, such talent is a valuable commodity. Many of the students we assist are quite likely to become leaders in tomorrow’s NASA workforce and in society at large.

In New York State, we strive for better schools and better teachers. The New York Space Grant seeks to excite K-12 students about science and technology. Numerous varied K-12 outreach programs are offered by the entire consortium – from seeing the stars at an observatory to a “magical” chemistry show. Consortium affiliate The Sciencenter in Ithaca, an informal K-12 education center, holds a radio broadcast called “Science Minutes.” This program encourages elementary and middle school students to formulate questions, research them thoroughly, and then write a succinct statement for the radio broadcast.

Students are not the only ones targeted in pre-college outreach – the consortium also offers teachers programs that encourage them to bring more excitement and knowledge into the classroom every day. SUNY-GeneSEO has a program for teachers to take part in radio-astronomy experiments, even from their own campus's computers. The impact of having well-educated teachers is obvious. It may be hard to measure, but is easily understood, the correlation between interested students and dynamic teachers.

This correlation is true of every study, for every student. The New York Space Grant seeks to make science, technology, and mathematics less of a daunting task and more of a wondrous experiment for all students, particularly for those minority groups who have long been overlooked in these areas. Our impact can be found in every student who has achieved a goal, be it a 10th grade science project or a PhD in physics, with help from the New York Space Grant Consortium.