The College of Science and Technology was awarded a NSF S-STEM grant for $597,427 to provide approximately 20 scholarships per year, averaging $2800 each for incoming freshmen in science, information technology and math, renewable up to four years.

This grant proposal titled “Bridges and Pipelines to Success and Leadership” was a collaborative effort between Laura Spielman and Jean Mistele in the Mathematics and Statistics Department, Ian Barland and Prem Uppuluri in the Information Technology Department and Orion Rogers in the CSAT Deans Office.

Several scholarships are set aside for students who have participated in related pre-college partner programs, including RU’s Summer Bridge Program, Project Discovery, Appalachian Arts and Studies in the Schools [AASIS], 4-H Organizations in Southwest Virginia and New River/Mount Rogers Workforce Investment Board Youth Council.

Scholarship students will receive individual attention from project staff with advising, academic support, social support and career counseling. Scholarship students will participate in Radford University’s Leadership Program, in which they will take the Emerging Leadership (LEAD 110) course, as well as three other leadership-related courses within the College of Science and Technology (CSAT).

They will also participate in one intensive experiential learning event, such as an internship. In addition, scholarship students will take Counselor Education 260, a two-credit seminar in career development, participate in the college’s CSAT Club, and have the opportunity to take field trips and attend talks.

To learn more about the program, visit www.radford.edu/sstem.

Super MACC Coming to RU

CSAT, in partnership with Radford City High School, will be hosting the high school academic championship tournament Super MACC (Mountain Academic Competition Conference) on Monday, March 16 in Preston Auditorium. Academic achievers from high schools in Southwest Virginia will compete by answering questions in English, mathematics, science and social studies.

High schools involved in the conference include:
- Bland H.S.
- Carroll County H.S.
- Fort Chiswell H.S.
- Galax H.S.
- George Wythe H.S.
- Grayson County H.S.
- Pulaski County H.S.
- Rocky Gap H.S.
- Rural Retreat H.S.
- Auburn H.S.
- Blacksburg H.S.
- Christiansburg H.S.
- Eastern Montgomery H.S.
- Floyd County H.S.
- Giles H.S.
- Narrows H.S.
- Radford H.S.

Volunteer judges in science and mathematics are needed for the tournament. The Dean’s Office is asking any faculty members who are interested in representing the college as a judge for the tournament to please contact Ann Brown at abrown238@radford.edu.
CSAT Hosts Homecoming Alumni Panels

The CSAT “Careers in Science, Technology and Math” and the pre-med program panels scheduled for Friday, Feb. 27 are in the final planning stages. The pre-med panel will be at 2 p.m. in Reed Hall, room 206 and the “Careers” panel will be at 3 p.m. in Reed Hall, room 201. An alumni and student reception will follow in Reed Hall, room 206, in which students and alumni will be able to further the discussions started during the panels.

The “Careers” panel will include alumni from each discipline within the college, and the pre-med panel will include alumni currently working in a healthcare profession. Nuclear physicist Andrew Kirby, dentist Andre Lewis, pharmacist Terra Hosp-Price, chemist Donita Brady and senior software engineer Seth Peery are among those participating in the panel presentations. Faculty members should encourage their students to attend these panel discussions.

Several of the alumni will be speaking to classes throughout the day. If you would like an alumni speaker to visit your class, please contact Ann Brown at abrown238@radford.edu.

More information about the alumni events will be available in the coming weeks.

I am thrilled that our alumni are taking the time out of their busy schedules to speak with our students about their experiences in their fields and in graduate schools. I know our students will learn a great deal from our successful alumni who were once sitting in these desks and learning from our outstanding faculty.

-J.O. Rogers, Dean

Summer Bridge on Tap for July

College of Science and Technology invites rising sophomore, junior and senior high school women interested in mathematics, information technology and science to participate in RU’s Summer Bridge Program 2009.

Summer Bridge Program 2009 is a week-long academic residential camp from Sunday, July 12 – Friday, July 17 hosted by RU’s College of Science and Technology.

During Summer Bridge 2009, Radford University professors will draw students in to the wonders of breaking secret codes using mathematical techniques, analyzing food to determine if it contains DNA from genetically modified organisms, using archaeological techniques to investigate mock crime scenes, and exploring the technological and social aspects of creating online communities. The program’s goal is to introduce female high school students to future educational and professional opportunities available to them in the mathematics, science and information technology fields.

Summer Bridge 2009 differs from previous years because the camp is almost entirely supported by scholarships provided by corporate donors.

Dominion Summer Bridge 2009 scholarships are available for a total of 31 students in Wise, Lee, Buchanan, Smyth, Washington,Dickenson, Russell, Scott and Tazewell Counties. Thanks to Dominion’s support, selected students will be offered free tuition, room and board during the week-long residential camp.

Polymer Solutions Summer Bridge 2009 scholarships are available for a total of two students in the New River Valley region. Thanks to Polymer Solutions’ support, the selected students will be offered free tuition, room and board during the week-long residential camp.

A Novozymes Biologicals, Inc. Summer Bridge 2009 scholarship is available for one student in the Roanoke Valley region including Roanoke County and the cities of Roanoke and Salem. Thanks to Novozymes’ support, the selected student will be offered free tuition, room and board during the week-long residential camp.
CSAT Will Host Summer Camp for Elementary School Students

CSAT will host a summer day-camp for rising first graders through sixth graders Monday, June 22—Friday, June 26 from 9:30 a.m.—3 p.m. in Reed/Curie Hall. Sponsored by the Camp Invention organization, the day-camp programming titled “Camp Create” includes modules such as Problem Solving on Planet ZAK which enhances problem solving and critical thinking while trying to figure out what to do after the students’ spaceship crash lands on Planet ZAK; Saving Sludge City in which the students rebuild a cleaner, more eco-friendly city; the physics involved in amusement park rides; a glimpse at what real inventors face during the process of creating new inventions; and recess remix which combines physical activity and creativity. These modules are aligned with state and national education standards.

The college will partner with local elementary school teachers who will teach the modules during the camp. Student recruitment will begin in the coming weeks. Visit www.campinvention.org for application materials, more information about the Camp Invention organization and the summer camp programming.

Physics Students Invited to Goddard Space Flight Center to Discuss Research

Thorsten Markus, head of Goddard Space Flight Center’s Cryospheric Sciences Branch, recently invited physics students Laura Sweat, Trevor Twyford and alumnus Jeremy McLaughlin to discuss their research in Barrow, Alaska, with scientists at the NASA facility. During RU’s spring break in March, Sweat, Twyford and McLaughlin will travel with faculty mentor Rhett Herman to Goddard’s facility in Greenbelt, Md.

While there, Markus will give the students an overview of the Cryospheric Sciences Branch, and the students will share their polar sea ice research with scientists at the facility.

The invitation came out of a conversation the students had with Markus during their poster presentation at the December meeting of the American Geophysical Union in San Diego. More than 16,000 scientist from across the globe attended the meeting.

They attracted interest from a number of people including people from the NASA Goddard Space Flight Center and the US Army’s Cold Regions Research and Engineering Labs (CRREL).

“I didn’t tell the students about who the interested CRREL scientist really was until they were finished speaking with him,” said Herman. “They were really glad to hear that we had a lot of data that we’re still analyzing from the Barrow trip in March 2008. When he left I finally told the students that he was just about the world’s #1 ice researcher. They were really stunned that this work had caught his attention,” said Herman.
Planetarium and Science Days Enjoy Record Year

The Radford University Planetarium set a new attendance record for overall planetarium attendance. During the last three years, from 2006 to 2008, the overall attendance numbers have gone from 2,216 visitors, 2,727 visitors and 2,760 visitors.

RU Science Days, during which area kindergarten through 12th grade students visit RU’s science facilities including the greenhouse, planetarium, Museum of Earth Sciences and science labs, have become even more successful over the last four calendar years. Thanks to the CSAT faculty who present science demonstrations and the program coordinator Rhett Herman, the calendar-year numbers have increased from 103 students to 1,052.

Science Museum of Western Va., CSAT Explore Partnership

Science Museum of Western Virginia director Nancy McCrickard will visit CSAT on Feb. 20 from 2—4 p.m. to meet with faculty and explore partnerships between the college and the museum. She will make a presentation in Reed Hall, room 206 about the museum and then lead a discussion about how the museum and college might partner in the future. Faculty interested in the possible partnership are encouraged to attend the presentation.