From the Dean’s Desk
January 28, 2010

CSAT STEM Clubs Hosts Mathemagician Tonight - Abby Field ‘10

"Mathemagician" Art Benjamin will be performing tonight, January 28, at 7 p.m. in McGuffey, room 203. The event is free and open to the public.

Benjamin is a professor of Mathematics at Harvey Mudd College in Claremont, Calif., as well as a magician. By combining his two loves, Benjamin’s show wows his audience with making mental calculations faster than using a calculator in addition to other feats of mathematical skill. He has appeared on numerous television and radio programs including The Today Show, CNN, Amazing Discoveries! and NPR. He has also been profiled in The New York Times, Los Angeles Times, USA Today, Scientific American, Discover Magazine and Reader’s Digest.

“Dr. Benjamin’s presentation ranks among the very best. He is able to entertain, motivate, stimulate, and educate simultaneously, a rare ability that helps to bring the joy of math and science into the lives of his audiences,” says Dr. Steven Murov, Director of Modesto Area Partners in Science.

For more information about Benjamin, visit his website at www.math.hmc.edu/~benjamin/mathemagics.htm.

CSAT Hosts Alumni Career and Pre-Med Panel - Abby Field ‘10

The College of Science and Technology is hosting a day devoted to strengthening relationships between the college and its students—past and present, and offering students a chance to meet and learn from successful alumni. The CSAT will host its Alumni Day on Friday, February 5.

The day begins with the CSAT Alumni Advisory Council meeting at 2 p.m. The council meeting’s purpose is to begin a conversation to learn about the current science, technology and math professions from successful alumni who are leaders in their fields and ask their opinions about the new skills and knowledge that students will need to succeed. Department chairs, school director and program coordinators are invited to attend the council meeting.

The CSAT Alumni Advisory Council includes Dr. Racquel Collins-Underwood (Biology), Mark Hanna (Chemistry, Biology, Math), Dr. Earnest Paylor (Geology), Joshua Brown (Computer Science, Database), Kat Ward (Anthropological Sciences), Mike Mullen (Geography), Michael Hurt (Mathematics/Statistics) and Robin VanDyke Brown (Physics). At 3 p.m., council members will participate in the Alumni Career Panel in Hurlburt Auditorium. All students interested in health professions are encouraged to attend and ask questions of the panelists.

After both panel discussions, faculty, alumni and students are invited to attend a reception in Hurlburt 249 and 250 where students and faculty will have the opportunity further the discussions started during the alumni panels. Refreshments will be served.
Mathematics Faculty Receive $200,000 Grant  - Ross Gillette ‘10

Radford University mathematics faculty members Agida Manizade and Laura Spielman received a $207,242 grant from the Virginia Department of Education to fund a math program dedicated to help high school math teachers improve mathematical content knowledge, and focus on material addressed in the Virginia Standards of Learning Test.

The program will include 40 teachers who will attend two three credit-hour graduate mathematics courses Algebra for Teachers and Applied Statistics for Teachers, a graduate Educational Technology course focused on algebra and statistics, and a one credit-hour seminar. Participants will have the choice of attending classes at Radford University, or taking the courses via distant learning centers in Abingdon, Roanoke, and Martinsville. Participating teachers will receive scholarships to cover tuition and books.

STEM Club to Host RU Science Exploration Day - Ross Gillette ‘10

On March 27 from 8:30 a.m. – 4 p.m., the College of Science and Technology STEM Club will host 190 Boy Scouts and Girls Scouts interested in science, technology and mathematics. Participants will choose from one of eight classes, where they will spend their day learning from CSAT expert faculty volunteers including Francis Webster, Rhett Herman, John McGee, Laura Spielman, Joe Chase and RU Director for Emergency Preparedness Dennis Templeton. Melissa Chase, Dawn Barnes and Celia Hayhoe, guest instructors from the Virginia Cooperative Extension, will also offer programming for the scouts.

Of the eight classes being offered during RU Science Exploration Day, students will be able to choose from Math, Maps and More, Space Exploration, Emergency Preparedness, Weather, Computers, Personal Management, Astronomy and Chemistry.

At the end of the day, the CSAT will offer planetarium shows and tours through the greenhouse, the Museum of the Earth Sciences and campus.

If you would like to volunteer to help during the RU Science Exploration Day, contact Ann Brown at abrown238@radford.edu

Dean’s Office Welcomes Student Interns - Ross Gillette ‘10

The Dean’s Office welcomes Abby Field and Ross Gillette as interns for the spring semester. Abby and Ross are communication majors, with an emphasis in public relations.

Working under the Assistant to the Dean Ann Brown, the interns will be required to write articles for the College of Science and Technology (CSAT) newsletter From the Dean’s Desk, develop and improve content for the CSAT website, and aid in the planning and organizing of special events including the Radford University Science Exploration Day, the Academic Achievement Banquet and the annual Summer Bridge Program.

Field, who will graduate in May, enjoys keeping bees with her dad and is looking forward to marrying “the love of her life” in January. When asked what she hopes to gain from the internship, she replied “I hope to strengthen my writing abilities, and build my portfolio so that I have something to offer future employers.” – Abby Field, CSAT PR Intern

Born in Japan, Ross has lived in eight different states. In his free time, Ross enjoys sports, reading anything he can get his hands on, and playing with his eight-year-old sister. When asked what lured him to the internship opportunity, he said “I want to learn as much as I can, while gaining the skills needed to flourish outside academia.”
CSAT Will Host Science Summer Camp for Youngsters - Abby Field ‘10

The CSAT will once again host Camp Invention, a one-week day camp for rising first through fifth graders, from June 21-25, 2010 on RU’s campus. The summer enrichment camp reinforces the traditional school year with science, technology, engineering, and math activities with inquiry-based, hands-on activities. Students will have the chance to power robots through different types of energy, create their own inventions, discover math in art, and learn about different cultures throughout history by the games these societies played.

In addition to the daily curriculum, CST will offer tours of its Museum of the Earth Sciences and Greenhouse and a special RU Planetarium show for its campers and their families.

For more information and to register, visit www.campinvention.org or email CSAT Assistant to the Dean Ann Brown at abrown238@radford.edu.

Physics Club and CSAT STEM Club Travel To Green Bank - Ross Gillette ‘10

On Friday, January 22, members of the CSAT STEM Club joined members of the Physics Club on a two-day trip to the National Radio Astronomy Observatory in Green Bank, WV. When the group of ten students and one faculty member arrived at the site at 10 p.m., they were provided a diesel Ford Expedition, since driving a typical car near the observatory is prohibited because typical cars with spark plugs would quickly swamp the faint incoming radio signals to the observatory. Then, the students and physics professor Rhett Herman made their way to their lodging.

During their stay, students received a tour of the observatory by Sue Ann Heatherly, the Green Bank education officer, along with instructions on how to operate the Observatory’s 40-foot telescope. The Green Bank Telescope (GBT) is the world’s largest fully steerable structure on land, the GBT is over 500 feet tall, about the height of the Washington Monument, and over 8,000 tons of metal. The scope was state of the art in 1960, when it was designed to look for atomic hydrogen in interstellar space. The control room was partly underground so electronic noise wouldn’t interfere with the signal to the 40-foot antenna. After proper instruction, the students were allowed to control and use the giant scope to collect data. In all, the group took 30 scans to examine more than 20 distinct objects or locations in the galaxy.

“You can see our calculations right on these scan sheets, just like the original discoverers did back in the 1960s. I just doesn’t get any better than this — no show and tell trip, this is hands-on at its finest,” says Herman. Some of the students who traveled to Green Bank will present their data at the Radford University Undergraduate/Graduate Forum in April.

“It was a trip like nothing else. We looked both inside and outside of our galaxy with that 40-foot diameter scope, listening for what the universe whispered to us, and recording it forever in the old ways,” adds Herman.

MES Presents Spring Lecture Series - Ross Gillette ‘10

The Museum of the Earth Sciences will open its Spring 2010 Public Lecture Series on Tuesday, Feb. 2 at 7 p.m. Paul Marinos, a professor of engineering geology in the School of Civil Engineering at the National Technical University of Athens, Greece, will discuss a case of urban geology for land use, construction of major engineering structures, hazard assessment and sustainable development.

The lecture series will continue on Tuesday, March 2 with Virginia Tech professor Madeline Schreiber offering an overview of the environmental effects of arsenic. She will be using case studies to demonstrate the different ways arsenic is released into water, and how knowledge gained from research can aid in protection of water supplies from arsenic contamination.

The lecture series will come to a close on April 6 with RU geologist Parvinder Sethi. All lectures are free and open to the public.
Student Spotlight

CSAT STEM
Activities and Upcoming Events
By Arielle Reynolds

Four members of CSAT STEM Club went on the trip to the observatory in West Virginia. They had a blast!

The club is very excited to host Art Benjamin, the Mathemagician, tonight at 7 p.m. in McGuffey Hall, room 203.

Biology professor Judy Guinan will be giving a talk on Thursday, February 11 at 5:30 p.m. The location for this event is yet to be determined. Also, Paul Marinos from the National Technical University of Athens is coming to give a presentation on Tuesday, February 2 at 7 p.m. in Hurlburt Auditorium. He will present the case of urban geology for land use, construction of major engineering structures, hazard assessment, and sustainable development.

The club will have a table set up for the Spring Mini Fair on February 12 in Peters Hall. We have planned a trip to the Smithsonian on March 20. Club members have been asked to volunteer at the Super MACC competition on March 22 and participate as teacher assistants for the RU Science Exploration Day for Boy Scouts and Girl Scouts on March 27.

The club will be very busy these next couple of months. We invite all students interested in science, technology and math to join us!

A Message from the Student Government Association
By Clarissa Clark, CSAT SGA Representative

My name is Clarissa Clarke, and as your CSAT Senator to the Student Government Association, it is my job to make sure the voice of the CSAT students is being heard on campus. Please do not hesitate to contact me at crclarke@radford.edu to get information or assistance with RU policies. I hope the updates that I provide in this column will encourage more CSAT students to become involved in shaping our university.

SGA recently submitted a letter to the City of Radford in support of a new public transit system, and with the help of many others from RU, the city has decided to move forward with these plans.

SGA and other student groups are hosting RU’s Centennial Kickoff Celebration through Feb. 6, with events ranging from a Battle of the Bands and CD Recycling Drive on Feb. 4 at 8 p.m. in Preston to a Homecoming Bonfire and Tailgate on Feb. 6 at 5:30 p.m. outside the Dedmon Center. Other events include decade-themed dress up days.

A full schedule of events is available at www.radford.edu/sga.

Clarissa Clarke, SGA representative for CSAT