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WHISTLE

FACULTY/STAFF NEWSPAPER

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THE GEORGIA INSTITUTE OF TECHNOLOGY

Student learns about life in Antarctica

David Terraso Institute Communications and Public Affairs

hile the rest of Georgia Tech has been in the throes of basketball fever, mechanical engineering sophomore Bradford Range has been breaking the ice with researchers in Antarctica. Range has spent the past eight months working on various research teams as part of the Antarctic Scout program, a joint venture between the Boy Scouts of America and the National Science Foundation. His last venture before he returns home in May is a voyage on an ice breaker conducting a sonar profile of the continental shelf.

"It's opened my eyes that there are many more opportunities to get out and see the world and use the engineering skills I've developed as a gateway to do that," he said during one of several interviews over the course of his stay.

Every few years, the Boy Scouts of America chooses an Eagle Scout to assist researchers in science and engineering projects across the continent. Range is the 11th scout and the second Georgia Tech student to take the trip.

While on the frozen continent, he has studied stratospheric ozone levels, fish that live in sub-zero waters and glacial ablation among other things. One of his more recent expeditions has been taking part in an aerial survey of the Transantarctic Mountains to test a theory that east Antarctica once abutted North America.

One of his favorite research projects involved studying the physiology of Emperor penguins. The penguins can dive up to 500 meters, a depth that would collapse the lungs of most land-dwelling creatures. Range and the researchers attached instruments to the backs of the penguins and monitored their movements to figure out how they can survive such extreme conditions.

Antarctica continued, page 2

Breaking ground on 'a place for solutions'





Special effects and virtual models of the Georgia Tech campus were part of the College of Computing's recent "virtual groundbreaking." Chris Klaus, the building's namesake and benefactor, wears a head-mounted display set while putting the newly constructed Advanced Computing Building in place. At right, he stands with Tom Noonan, alumnus and chief executive officer of Internet Security Systems, the company Klaus founded in 1994.

The 414,000-square-foot facility will include underground parking for 500 cars, and preserves nearly 50 percent of the site for green space. Construction plans also call for a number of sustainable initiatives, such as stormwater collection and energy conservation.

Running for a cure

Teams of volunteers camped out at Stamps Field on April 3, taking turns running in the Relay for Life, a charity event for cancer research

David Prophitt, who directs the Mobilizing Opportunities for Volunteer Experience (MOVE) Office, emceed the event, which raised \$95,000 for the American Cancer Society.



"I don't envision the microneedle replacing the hypodermic needled in all cases, only in certain cases. The microneedle doesn't hit the blood vessels; it goes shallow into skin (to capillaries). It's not suitable for putting a large amount of drug rapidly into the body."

-Mark Prausnitz, an associate professor in the School of Chemical and Biomolecular Engineering, on the practical applications of his research. (Tampa Tribune)

"So congratulations to this team for bringing us a joyful spring and putting Atlanta on the college basketball map. It was a well-engineered feat that should pay dividends in fame and recruits --- not just ballplayers, but also more of the excellent students who are Tech's trademark."

-Excerpted from an April 7, 2004 editorial in the Atlanta Journal-Constitution. Antarctica, cont'd from page 1

He's also putting his engineering skills to good use, helping a team build an 800-mile road from McMurdo Station to the South Pole. "We used ground penetrating radar to discern the depth of snow layers and detect crevices so big a tractor could disappear into them," he said.

The sub-freezing temperatures have meant Range has had to make a lot of adjustments. "On days when I'm out in the field, I have to eat an enormous amount. You have to eat well," he said, "because you've got to sustain yourself in an environment where you can't get into a warm area quickly."

The coldest temperature he's endured was minus 42 degrees Fahrenheit with a wind chill of minus 87. He wore six layers of clothes and still got frostbitten.

He also experienced a white out, where he couldn't tell which way was up or down. "I was out at a fish hut in the middle of the Ross Ice Shelf. It was so thick I put my hand all the way in front of me and I couldn't see it," he said.

But for the most part, Range said, he's taking the cold temperatures in stride. "I'm getting tolerant to it. I can wear a t-shirt outside, even though it hasn't been above freezing," he said.



One of the many research projects Range is involved in concerns the physiology of penguins. Here he assists a diver in New Harbor, Antarctica.

Eager to share his experience, Range has kept in contact with several elementary school classrooms, answering questions about everything from his research to his love life. "I have a collection of Flat Stanleys to take pictures of at the South Pole," he said, referring to the children's book character kids send in envelopes to exotic places.

The trip has been the opportunity of a lifetime, said Range. "It's been a life changing experience, this place. It has a beauty all of its own that's impossible to describe to someone who hasn't been there. I would come back in a heartbeat."



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Copies/5,900

When the Whistle Blows

Students, Faculty, and Staff

Kevin Brennan Professor, Electrical and Computer Engineering

Barry Crouse Institute of Paper Science and Technology

Terrell Farmer Warehouse Supervisor, Facilities

Justin Fisher Major: Psychology

Robert Fulton Professor, Mechanical Engineering

Ramon Garcia Research Scientist II, Sustainable Technology and Development Douglas Holley Director, Development

Terry Huff Maintenance, Facilities

Kevin Kahn Ph.D. student, Mathematics

Robert MacKay Major: International Affairs

George McDougal Principal Researcher, GTRI

Joshua Page Major: Mechanical Engineering

le Jerry Wilson Research Engineer II, ATDC

Hubert Youngblood Sr. Custodian, Facilities

Wednesday, April 15, 2004 7:00 p.m.

Tech Tower Lawn adjacent to North Avenue
Speaker: President Wayne Clough
Honored Guests: Family and Friends of the Deceased
Rain Location: Clary Theatre, Bill Moore Student Success Center



A remembrance

ast week's Faculty/Staff Honors Luncheon offered an opportunity to recognize not only those award winners listed below, but also the 186 members of the Tech community who marked their 10-year anniversary, and another 75 who reached the 25-year plateau.

The Whistle extends its congratulations to the honorees.

2004 STAFF TUITION REIMBURSEMENT ASSISTANCE PROGRAM (STRAP) GRADUATES

Keith Jordan, Undergraduate Admission Earl Babbitt, Civil and Environmental Engineering Robert Rose, Microelectronics Research Center

DON BRATCHER HUMAN RELATIONS AWARD
Billiee Pendleton-Parker, assistant director, Center for the
Enhancement of Teaching and Learning

ADMINISTRATIVE SERVICE AWARD
Sonny Monfort, project director, Information Technology

Georgia Tech Chapter Sigma Xi Awards

YOUNG FACULTY AWARDS

Andrei Fedorov, assistant professor, Mechanical Engineering

Tim Lieuwen, assistant professor, Aerospace Engineering

FACULTY BEST PAPER AWARDS

Cheng Zhu, professor, Biomedical and Mechanical Engineering

Min Zhou, associate professor, Mechanical Engineering

SUSTAINED RESEARCH AWARD
Chris Summers, professor, Materials Science

Faculty Awards

and Engineering

OUTSTANDING DOCTORAL THESIS ADVISOR Arthur Fisk, professor, Psychology

OUTSTANDING ACHIEVEMENT IN RESEARCH PROGRAM DEVELOPMENT Uzi Landman, Regents' Professor, Physics C. J. Summers, professor, Materials Science and Engineering

OUTSTANDING FACULTY RESEARCH AUTHOR Ian F. Akyildiz, professor, Electrical and Computer Engineering

Aerospace Engineering

Outstanding Faculty Leadership for the Development of Graduate Research Assistants Dimitri Mavris, associate professor,

ANAK AWARD

Richard Barke, associate dean, Ivan Allen College

The E. Roe Stamps Excellence in Teaching Awards

SENIOR FACULTY AWARD
Bettina Cothran, professor, Modern Languages

JUNIOR FACULTY AWARDS
Sylvia Maier, assistant professor, International Affairs
William Winders, assistant professor,
History, Technology, and Society

OUTSTANDING STAFF PERFORMANCE AWARDS
Lynda Buescher, assistant director, Electrical and
Computer Engineering

Cas D'Angelo, department manager, Information Technology

Jay Forrest, information associate, Library and Information Center

Brian Hanlon, construction worker, Georgia Tech Research Institute

Dan Looby, systems analyst, Information Technology

CETL/BP JUNIOR FACULTY TEACHING EXCELLENCE AWARDS Christopher Jones, assistant professor, Chemical and Biomolecular Engineering

Harish Radhakrishna, assistant professor, Biology

EDUCATIONAL PARTNERSHIP AWARD

William Singhose, assistant professor, Mechanical Engineering

Michael Robertson, Ph.D. student, Mechanical Engineering

Michael Pastirik, science teacher, Cedar Grove High School

Academic Advisor Awards

Outstanding Undergraduate Research Mentor (Faculty) Awards

Gary May, professor, Electrical and Computer Engineering

Mary Lynn Realff, associate professor, Polymer, Textile, and Fiber Engineering

OUTSTANDING ACADEMIC ADVISOR AWARD — STAFF ADVISOR Jennifer Gillespie, academic assistant, Computing

OUTSTANDING ACADEMIC ADVISOR AWARD — FACULTY ADVISOR Carol Senf, associate professor, Literature, Communication, and Culture

Faculty Honors Committee Awards

W. ROANE BEARD OUTSTANDING TEACHER AWARD Deborah Turner, associate professor, Management

W. HOWARD ECTOR OUTSTANDING TEACHER AWARD Richard Catrambone, associate professor, Psychology

OUTSTANDING SERVICE AWARD

Jorge Vanegas, associate professor, Civil and Environmental Engineering

Outstanding Innovative Use of Education Technology Award

Joel Jackson, assistant professor, Electrical and Computer Engineering

OUTSTANDING INTERDISCIPLINARY ACTIVITY AWARD George Vachtsevanos, professor, Electrical and Computer Engineering

DISTINGUISHED PROFESSOR AWARD

C. P. Wong, Regents' Professor, Materials Science and Engineering

IN BRIEF:

Departmental reorganization

The Graduate Studies and Research office is now a part of Enrollment Services. The office, which previously reported to Vice Provost for Research and Graduate Studies Charlie Liotta, will now fall under the purview of Deborah Smith, associate vice provost of Enrollment Services. Graduate financial aid is also moving to become part of the Office of Student Financial Planning and Services, while the graduate co-op program will join the undergraduate co-op program in the Division of Professional Practice

GTPD announces Campus Safety Committee

The Georgia Tech Police Department is starting a Campus Safety Committee, open to faculty, staff, students, parents and neighbors of Tech. The committee meets a few times each semester and will serve as a forum for members to discuss safety issues on campus. Interested individuals should call 894-1288 or e-mail carla.gartner@police.gatech.edu.

Used books get new life

For the second time this academic year, Georgia Tech will be partnering with Campus Community Outreach and Books for Africa to donate no-value textbooks to help promote education and literacy in Africa. Instead of throwing books away or turning them into pulp, donating books benefits Third World countries, where the ratio of students to books is seven to one.

Bins will be placed at convenient locations around campus for students, faculty and staff to deposit unwanted books during the week of April 26-30. A complete listing of locations is available at **www.move.gatech.edu**.

MOVE first started the Books for Africa drive at Georgia Tech in fall 2003 and collected more than 400 books in its inaugural campaign. For more information, refer to

www.booksforafrica.org, or e-mail Jennifer Wu at gtg445a@mail.gatech.edu.

A summer camp where the bugs don't bite

Emagination Computer Camps is opening its newest camp at Georgia Tech in June. Children aged 8-17 choose from more than 25 workshops in topics such as video game design, web design, 3-D animation, digital photography, programming languages and how to build a computer. Swimming and sports programs will be held in the Campus Recreation Center, and workshops will take place on campus.

The camp runs both day and overnight programs and is offering a \$200 discount to children of Georgia Tech faculty and employees. Emagination has operated computer camps since 1982 and has additional locations in Massachusetts and Illinois.

More information is available at **www.computercamps.com** or 888-226-6733.

E E M P U N A

Arts & Culture

Apr. 16
The Ferst Center for the Arts welcomes Mark O'Connor's Hot Swing Trio with Jane Monheit at 8 p.m. Faculty and staff receive a 10 percent discount. For tickets, call 894-9600.

Apr. 16
The bookstore welcomes local author Bill York, who will be signing copies of his latest work, "The Valley of Silent Drums," at 7 p.m. For more information, visit gatech.bkstore.com.

Apr. 17
The Ferst Center for the Arts welcomes gospel singer Mavis Staples at 8 p.m. Faculty and staff receive a 10 percent discount. For tickets, call 894-9600.

Apr. 18
The Music Department presents a spring choral concert in the First Presbyterian Church of Atlanta (next to the High Museum of Art) at 5 p.m., featuring the chamber choir and chorale. This is a free event. For more information, call 894-8992.

Brown Bags/Conferences/Lectures

Apr. 14

The School of Psychology's Colloquium Series welcomes Susan Goldin-Meadow, professor of psychology at the University of Chicago, on "How Our Hands Help Us Think," at 3:30 p.m. in room 250, Coon Building. For more information, e-mail christopher.herzog@psych.gatech.edu.

Apr. 15

The School of Mechanical Engineering's Woodruff Colloquium Series welcomes Steven Vogel, professor of biology at Duke University, on "Cambered Wings and Chain Saw Cutters: When Have We Managed to Copy Nature's Mechanical Devices?" at 11 a.m. in the MaRC Auditorium. For more information, e-mail ari.glezer@me.gatech.edu or call 894-3266.

Apr. 21

The School of Psychology Colloquium Series welcomes Peter Killeen, professor of behavioral systems at Arizona State University, on "Greek Mind/Geek Mind: Chaos, Complementarity and Consciousness," at 3:30 p.m. in room 250, Coon Building, For more information, e-mail christopher.herzog@psych.gatech.edu.

Apr. 22

The Center for International Business Education and Research (CIBER) hosts the 10th Georgia Tech Global Business Forum on "Brazil and Its Markets: Opportunities for U.S. Firms," at GCATT. Students attend free; pre-registration required. To register, visit www.mgt.gatech.edu or e-mail mark.ballam@mgt.gatech.edu.

Apr. 29

The School of Industrial and Systems Engineering's Natural Systems Speaker Series welcomes Karl Henrik Rober, founder of The Natural Step and author of "The Natural Step Story: Seeding A Quiet Revolution," at 5:30 p.m. in the Ferst Center for the Arts.

Miscellaneous

Apr. 19-23
The bookstore holds a campus appreciation sale, giving faculty, students and staff a 20 percent discount on general merchandise, trade books, school supplies, cafe items, music and DVDs. A valid BuzzCard is required. For more details, visit www.gatech.bkstore.com.

Apr. 20

A called meeting of the General Faculty and the Academic Senate, and the annual meeting of the Academic Faculty will be from 3 - 5 p.m. in the Student Center Theater. An agenda is posted on the faculty governance Web site: www.facultysenate.gatech.edu. For more information, e-mail said.abdelkhalik@me.gatech.edu.

Apr. 21

The Georgia Tech Women's Forum welcomes Police Chief Teresa Crocker, who will report on campus crime statistics during a lunch meeting in room 319 of the Student Center. To attend, e-mail suwana.murchison@gtri.gatech.edu.

Apr. 23

Georgia Tech's Seventh Annual Earth Day Celebration Festival takes place 10 a.m. to 2 p.m. at the Skiles Walkway, featuring live music, prize giveaways, demonstrations of alternative-fuel vehicles, and an interactive trivia maze.

APPLIANCES

Microwave, full size, stainless steel, Emerson, less than 2 years old, \$50. E-mail Louis at gtg515k@mail.gatech.edu.

White Amana cooktop, gas. Kenmore digital built-in oven, white. Both in good condition. \$100 for both. Call 770-844-0852.

White Jenn-Air downdraft cooktop. Two fixed burners, swappable burner module/grill/griddle. \$200 OBO. E-mail bleahy@cc.gatech.edu.

AUTOMOBILES

1988 Chevrolet Blazer. Red, 2-door, automatic, PW, PL, CD player. Clean title. \$1,000 OBO. Call 404-219-2204.

1991 Chevrolet Cavalier. Black, 2door. Must sell. \$800 OBO. Call 402 219-2204.

1993 Mazda MPV. Good transportation and gas mileage. Clean inside & out. Clear title. \$1,500 OBO. Call 404-219-2204.

1995 Accord LX. Great shape, many new things, 5-speed, 188K miles. \$3,900. E-mail bill.halabi@facilities.gatech.edu.

1997 Geo Prizm. Automatic, beige leather interior, dual front air bags, CD player, 4-cylinder, 83K miles, \$3,750. Call Robert, 678-641-2380.

Bedroom set, maple finish, queen headboard, 7-drawer dresser w/large mirror, 2 night stands w/2 drawers each. Lots of storage. Good condition. \$300. Call 385-4901.

Steel-bunked futon, couch/bed on bottom, twin mattress capable on top. Red, sturdy, great condition, wonderful design. \$130. Call 404-894-2753.

Queen-size oak waterbed frame, headboard, and mattress with matching chest and dresser with mirror, \$500. Call 385-0042 or e-mail chris.hamlin@oit.gatech.edu.

White solid maple baby bed and matof 4 drawers, contemporary style, \$75. White tubular twin bed, no mattress, \$45. Solid wood port-a-crib with mattress, \$45. Call 770-923-

Teen bedroom set, white/yellow, queen-size headboard/footboard w/railings, 2 dressers with lots of storage, vanity with mirror, matching chair and hutch. \$300. Call 770-825-0087 or e-mail kemp6735@aol.com.

REAL ESTATE/ROOMMATES

House for Sale/Vinings: approx. 5,500 sq. ft. finished living space. 6BR/4.5BA. Bright, open floor plan. Wooded back yard. 20 mins. to campus. \$600,000. See: http://homescenesusa.com, use ID# 892684.

For rent: 1BR apartment at 1219 Francis St. Downstairs of charming, light-filled home w/deep lot on quiet street. W/D; ample closets. \$900. Call 404-816-8370.

For sale, 1035 Curran Street, \$249,900: Totally renovated 3BR/2BA bungalow in Home Park, Gorgeous hardwoods, new Berber, new kitchen, new bathrooms. Call 404-664-2471 or virtual tour at www.showing247.com/ 1035curran.

3BR/2.5BA home for sale in Convers 2-story, LR, DR, den, fenced, great schools. \$126,900. Do MLS Home Search for ID # 1455486 at www.raesellsatlanta.com or call Maria at 678-207-7316.

1BR/1BA Midtown condo shows like a model. Hardwoods, building with the pool and parking. The largest of the one bedroom units with two storage units. All appliances. FMLS# 901284. E-mail paul.miceli@gtri.gatech.edu.

Bedroom for rent on Panola Road, one minute from I-20. Private bath, use of kitchen, \$400 month. Call 770-593-

3BR/2BA brick ranch in Douglasville on corner lot, one street from I-20. Huge back yard. Two-car garage with remote openers, all appliances, fireplace, very spacious. Available mid-April. \$1,200/month. Call 404-931-5001 or e-mail jamcgruder@aol.com.

2BR/1BA Buckhead townhome for sale. Huge master w/2 closets, hardwoods, new bathroom, roommate floorplan, loads of upgrades! End unit on wooded lot. Six miles from campus, \$155,900. Call 894-0766.

MISCELLANEOUS

1977 Kawasaki KE100 motorcycle. Only 953 miles, trail and street lega bike. It has high fender flaps but also lights, blinkers, etc. \$400. Call 894-7185 or e-mail aist26gt@earthlink.net.

Five-stone diamond ring. 1 carat total, 14kt. yellow gold, \$500. Call 894-0870 or e-mail marie.mcvay@icpa.gatech.edu.

Free black and gray lab/terrier mix, five years old, spayed, very sweet. E-mail xaunda@hotmail.com or call 678-612-1198.