### Inside:

# WHISTLE

FACULTY/STAFF NEWSPAPER

3 · 1885 ·

VOLUME 25, NUMBER 42 • DECEMBER 17, 2001

THE GEORGIA INSTITUTE OF TECHNOLOGY

# Clough named to national science and technology council

Bob Harty Institute Communications and Public Affairs

ast week, President George W. Bush appointed Georgia Tech President Wayne Clough to his Presidential Committee on Science and Technology. He will be one of 24 members of the prestigious board and the first Tech representative to serve on the Council. Another Atlantan joining Clough on the Council is Walter J. Massey, president of Morehouse College. The president made the announcement in the Roosevelt Room of the White House.

"It's a wonderful honor for Georgia Tech and very exciting for me professionally," said Clough. "We talk a great deal about the growing role that Georgia Tech has in shaping the technological future of our nation and the world. This committee affords me a unique opportunity to help represent our views in addressing the policies that set the national agenda. The issues we've been asked to address have never been more important at this time in our nation's history. I'm very appreciative of the faith that President Bush has placed in this committee, and I look forward to doing all I can to contribute."

Clough also noted the importance of having two Atlanta representatives on the Council. "Walter Massey is highly regarded in Washington and has been instrumental in shaping national policy for years. Our ability to focus on the issue of research and technology transfer — through examples like the Georgia Research Alliance, Yamacraw and the Cancer Initiative — will help us underscore the importance of research funding

Council continued, page 2

#### Will Roper wins Rhodes Scholarship; Tech's first in 50 years

David Terraso Institute Communications and Public Affairs

hen Will Roper saw that kids at a local middle school needed homework help, he didn't just offer to tutor them. He started a tutoring program. Now, the program Roper began when he was still in high school has spread across the state and next year it could go national. But Roper's love for education doesn't end there. He's continuing his dream of being the country's top educator the best way he knows how: by becoming a Rhodes Scholar.

On Dec. 8, the 22-year-old Tech graduate student became one of 32 Americans selected to travel to England to study at Oxford University next fall, making him the first Tech student in 50 years to be chosen as a Rhodes Scholar. S. Alton Brown won the Rhodes Scholarship in 1951.

"There were a lot of feelings,"
Roper said about his reaction. "There
was some relief and some joy. I
could actually see the Tech campus



In addition to a stellar academic and service record, Roper is also a member of Tech's Chamber Choir and a black belt in tae kwon do.

out the windows when they announced it. I was very proud of Tech and for Tech."

The Rhodes Scholarships pay for two or three years of study at Oxford University, just outside of London. The oldest international fellowships in the world, they were established after the death of British statesman Cecil Rhodes in 1902. This year, students from 19 countries are being chosen for their academic

Roper continued, page 2

# First GTREP class walks at Fall Commencement

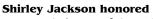
Shirley Jackson

David Terraso Institute Communications and Public Affairs

urrounded by popping flashbulbs and throngs of exuberant friends and family, nearly 1,050 students walked across the stage this past Saturday to shake

hands with President Wayne Clough and receive their degree. The ceremony was one for the history books as the Georgia Tech Regional Engineering Program (GTREP) graduated its first class and Georgia Tech Lorraine celebrated its 10th anniversary. In addition to those milestones, Tech awarded commencement speaker Shirley Jackson with an hon-

orary Ph.D. and presented Atlanta developer Julian Adams LeCraw Sr. with a distinguished alumnus award. Tech also awarded a posthumous degree to Mollie Newton, an economics student who died last spring.



Former chairman of the U.S. Nuclear Regulatory Commission and now president of Rensselaer Polytechnic

Institute, Jackson urged the new graduates to think globally about their careers and meet the challenges of the September 11 terrorist attacks. As graduates of one of the best technological schools in the country, she told them, they are in a unique position to make the world safer through technology.

#### First GTREP class

The ceremony was a first for GTREP as eight graduates had the distinction of becoming the program's first alumni. The program's director, David Frost, said the ceremony was a chance for his students to show the Atlanta campus that they bleed white and gold too. "We told the students they could

walk in the ceremony at their own campus, in Atlanta, or both," he said. "Every one of them wanted to walk in Atlanta, underscoring the fact that they know, believe and recognize that they are Tech students."

GTREP was established in 1999 to allow students in southeast Georgia to earn a Tech degree by attending

classes at three partner institutions.

# Lorraine marks 10th Delegates from Georgia Tech Lorraine in Metz, France, were on hand to celebrate their campus' 10th anniversary. Metz's Deputy Mayor, Nathalie Griesbeck, and Vice President of the Lorraine Regional Council Andre Ferrari were among the 17 del-

egates to the ceremony. Tech's first international campus, GT

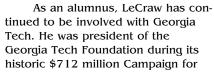
Lorraine is located at Technopole Metz 2000, a technological park housing several higher education institutions, in addition to communication and software companies and trade, conference and retail centers.

GT Lorraine President Hans Püttgen said, "With the vital assistance of Deputy Mayor Greisbeck, Vice President Ferrari, the city of Metz and the Lorraine region, we are pro-

> viding a unique engineering and research program targeted at both American and European students."

#### Alumni Award

Tech also awarded Atlanta developer Julian Adams LeCraw Sr. with the Joseph Mayo Pettit Alumni Distinguished Service Award. The award is the highest honor given by the Georgia Tech Alumni Association.



Graduation continued, page 3



Julian LeCraw

"Robots can learn and plan and communicate. They are probably the best model we have right now for controlled experiments on social systems."

—Tucker Balch, an assistant professor in the College of Computing, on his research of contrasting collective versus independent robot behavior. (New York Times)

"This could be a very powerful clinical tool for cancer diagnosis. If there are mutations in the cell, the beacons should find them. Cancer diagnosis based on molecular beacons should be much faster than any technique now available." —Gang Bao, an associate professor of biomedical engineering, on his lab's development of molecular "beacons" that seek out and bind to mutated genetic material, producing a fluorescence visible microscopically. (Machine Design)

#### National society rates engineering program as best in country

Larry Bowie Institute Communications and Public Affairs

eorgia Tech's graduate program in engineering is the top choice among the 10,000 student and professional members of the National Society of Black Engineers (NSBE), according to a recent survey conducted by the organization.

Administered during NSBE's national convention in April, the survey touched on a variety of professional and academic issues, including preferred graduate schools. Georgia Tech is the clear leader among NSBE members, followed by Massachusetts Institute of Technology and Stanford University, according to an article in the November/December 2001 edition

of NSBE Magazine, which is published by the organization.

"This good news is evidence that Georgia Tech's many outreach efforts and supportive environment do indeed pay off," said Gary May, associate chair in the School of Electrical and Computer Engineering and chair of NSBE's National Advisory Board. "In terms of awarding engineering degrees to underrepresented students, Georgia Tech is in a class by itself."

Earlier this year, Black Issues in Higher Education named Georgia Tech the nation's top producer of African-American engineers, marking the first time a university that is not a historically black institution produced the most black engineers in bachelor's, master's and doctoral degree programs.

Georgia Tech's location in Atlanta

— the home of several historically black academic institutions and an attractive location for young, professional African-Americans — is a factor in Tech's top ranking, according to the report.

Georgia Tech has a long-standing series of diversity programs that approach minority recruitment on a number of fronts from elementary to graduate school, said Robert Haley, director of special projects in Tech's College of Engineering.

"Both campus administrative offices, such as the Office of Minority Education Development: Educational Services, and campus organizations such as the Georgia Tech chapter of NSBE, have served vital roles in the mentoring and retention of African-American students," May said.

Council, cont'd from page 1

for economic development. There may be no greater economic stimulus than federal investment in research and knowledge, and Dr. Massey and I will be able to relate Georgia's successes to a national audience."

The Council met for the first time last week in the White House Conference Center before meeting with President Bush, who has asked the Council to address four specific issues: the science and technology of combating terrorism; improving energy efficiency; federal investment in science and technology and its economic benefits; and infrastructure for the 21st century.

The panel will be co-chaired by John H. Marbuger III, director of the White House Office of Science and Technology Policy, and E. Floyd Kvamme, a partner in the high tech venture capital firm of Kleiner Perkins Caufield & Byers.

## Some other members of the President's Council on Science and Technology

Norman R. Augustine Former Chairman & CEO Lockheed Martin Corporation

Michael S. Dell Chairman & CEO Dell Computer Corporation

Marye Anne Fox Chancellor North Carolina State University

Martha Gilliland Chancellor University of Missouri-Kansas City

Ralph Gomory President Alfred P. Sloan Foundation Bernadine Healy President The American Red Cross

Robert J. Herbold Executive Vice President Microsoft Corporation

Gordon E. Moore Chairman Emeritus Intel Corporation George Scalise President

Semiconductor Industry Association

Charles M. Vest President

Massachusetts Institute of Technology



#### WHISTLE

Editor: Michael Hagearty

Published by Institute Communications and Public Affairs.

Publication is weekly throughout the academic year and biweekly throughout the summer.

The Whistle can be accessed electronically through the Georgia Tech web page, or directly at www.whistle.gatech.edu.

E-mail Whistle submissions to michael.hagearty@icpa.gatech.edu, or fax to Michael at 404-894-7214 at least 10 days prior to desired publication date. For more information, call 404-894-8324.

Cost/\$675

Copies/5,200

Institute Communications and Public Affairs Wardlaw Center 177 North Avenue Atlanta, Georgia 30332-0181

Georgia Tech is a unit of the University System of Georgia.

Roper, continued from page 1

achievement, personal integrity and potential for leadership to become Rhodes Scholars.

In addition to the excellent education the scholarship affords him, Roper said he's excited about the opportunity to live in another culture. "It's as much for the experience of broadening my horizons and experiencing completely new and different cultures. I'm looking forward to living in one continuous captivating experience."

Roper credits Tech's curriculum and nearly 30 faculty and staff members for helping him win the scholarship. He said he is especially grateful to Paul Hurst, Tech's director of Special Programs. "Paul believed in me the whole time. I wavered on a weekly basis, but he always thought I was going to get it. It's as much his scholarship as it is mine." he said

Tech's School of Physics and the Georgia Tech Research Institute also deserve credit, Roper said, for teaching him how to navigate difficult situations and perform important and exciting research.

After getting his master's in physics from Tech in May, Roper will travel to Oxford in the fall to begin work on his Master of Science and Master of Research degree in mathematics. He expects to live in England for two years and then return to America to get his Ph.D. in physics. After that he wants to teach.

"I love education and I think there are a lot of problems with math education. My absolute dream job is to become the U.S. Secretary of Education. Having a Rhodes will give me a chance. Maybe it will open a few doors," he said.

Roper admits it's a lofty goal, and one that he may not accomplish, but believes it's important for him to try.

"One thing that we really don't say too often in this country is that it's OK to try. You need to try. Sometimes when you try and you work hard, there are fortunate things that happen that let things go your way," Roper said.

The proof is in his results. GUIDE (Guiding Underclassmen in Directions of Excellence), the tutoring program that Roper started in

high school, is being considered by the U.S. Department of Education for use nationwide. And GRADS, a national program he helped start to help inner-city kids prepare for college, is currently being funded by Coca-Cola.

In addition to winning a Rhodes Scholarship this year, Roper is the only student in the state to win a 2001 Truman Scholarship, a \$30,000 award for students with outstanding leadership potential, communication skills, academic achievement and a commitment to public service.

But as exciting as winning the scholarships are, it's his wedding to Tech graduate student Marti Moore that will top his list of accomplishments for this year. Her support, he said, has been critical to his success.

"She has borne the stress of going through this with me. She was able to do it in a way that I feel like I'm not doing this on my own ... knowing that at least one person wouldn't be disappointed with me if things didn't go my way," he said.

### Search committee looks for O'Leary's successor

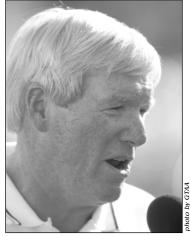
Michael Hagearty Institute Communications and Public Affairs

n Dec. 2, George
O'Leary resigned as
head football coach last
week to take a similar position
at the University of Notre Dame.
Five days later, he resigned
from Notre Dame amid allegations of inconsistencies about
both his academic and athletic
background.

After seven seasons as head coach, O'Leary compiled a 52-33 record. His team's fifth straight bowl invitation was the longest such streak in more than four decades.

He was the Atlantic Coast Conference coach of the year in 1998 and 2000, and he received the Bobby Dodd National Coach of the Year Award in 2000. He signed a sixyear, rollover deal worth nearly \$1.1 million annually last year. This season, the team went 7-5.

O'Leary worked at Syracuse University as defensive line coach in 1980. Arriving at Tech in 1987, he worked as defensive coordinator under Bobby Ross during Tech's 1991 national championship season. He then followed Ross to southern California when Ross was hired as coach of the San Diego Chargers. In 1992-93, O'Leary coached the Chargers'



Expected to be a Top 10 team this season, O'Leary's squad limped to a 7-5 record, going 4-4 in the ACC.

defensive line. He came back to Georgia Tech as defensive coordinator in 1994, and was named interim coach when Bill Lewis was fired with three games left in the season. After going 11-11 in his first two full seasons, O'Leary guided the Yellow Jackets to one of the most successful runs in school history.

With both Ralph Friedgen of Maryland and Tom O'Brien of Boston College out of the running, speculation has turned to Maryland offensive coordinator Charlie Taaffe, a Tech assistant coach in 1974 and former head coach at The Citadel. Also President Clough announced the appointment of a six-member search committee, to be chaired by Athletic Director Dave Braine:

- George Nemhauser Institute Professor in Industrial and Systems Engineering and member of the Georgia Tech Athletic Association (GTAA) Board of Directors.
- Chris Kavanaugh undergraduate student body president and member of the GTAA Board.
- Jim Terry vice president of national sales at Coca-Cola and an alumni member of the GTAA Board.
- Mark Smith professor of electrical and computer engineering and former member of the GTAA Board.
- Joe Irwin executive director of the Alumni Association.

receiving consideration is Jimmy Robinson, a New York Giants wide receivers coach and former Tech wide receiver. Tech Assistant Head Coach Mac McWhorter has also expressed interest in the job.

Georgia Tech plays Stanford on Dec. 27 in the inaugural Seattle Bowl. McWhorter will serve as interim head coach for the bowl game. Braine will chair an appointed search committee to recommend a replacement.

## IN BRIEF:

#### Habla Español?

Realizing that many of Tech's recently hired Spanish-speaking employees come to work with limited English language skills, the Office of Organizational Development has created a **Workplace Spanish** class. As part of the Workplace Education program, the class was developed to facilitate communication between supervisors and employees directly involved with Tech's growing Spanish-speaking campus population. The instructor, a former adjunct faculty member, customized his class with an objective of providing basic Spanish communication skills.

Jamie Davis, who directs the course, said, "I was moved by the enthusiasm with which my students embraced this class and recognized the need to dismantle language barriers. The university employees know that with a basic knowledge of Spanish at their command, they will be able to do their jobs more productively and confidently in our multicultural workforce."

Initially marketed to those departments with the greatest needs, enrollment will now be open to all employees. In order to provide adequate instruction and practice, the Workplace Spanish class meets two hours per day, two days per week for a total of 11 weeks. The cost of the course is \$200 per person. This class is offered four times each year. The next class will begin on January 8 and end on March 21. To register, go to www.training.gatech.edu.

#### Seaborg Medal goes to professor

Weston Stacey, a Regents' professor and Callaway Professor of Nuclear Engineering at Tech, was honored by the American Nuclear Society last month with its top award for research, the Seaborg Medal, given "for outstanding accomplishments in furthering nuclear knowledge and the progress of mankind." Stacey's notation was "in recognition of his major contributions to nuclear reactor physics, fusion plasma physics and fusion reactor conceptual design," the basis for his research career.

Wong wins IEEE achievement award
Last month, Ching-Ping Wong won the 2001
Educational Activities Board (EAB) Meritorious
Achievement Award in Continuing Education,
given annually by the Institute of Electrical and
Electronics Engineers (IEEE). Wong, a Regents'
professor in the School of Materials Science and
Engineering and research director at the
National Science Foundation Packaging
Research Center (PRC), was cited "for exemplary
and sustained contributions to continuing education in polymer materials for electronics packaging and interconnection worldwide."

Realtors applaud Tech's growth
Georgia Tech was recognized by the Atlanta

Commercial Board of Realtors last week as the recipient of the Henry H. Robinson Award, given each year to the individual, institution or firm that has done the most for real estate in Atlanta during the calendar year. The Board cited Tech's "insight and ability to transform their vision into real estate reality" through the initiation of the \$180 million Technology Square project, which broke ground in September. Overall, the ACBR noted that "(In) playing the role of catalyst, Georgia Tech has fit Technology Square into the forefront of other announced projects in the area including Tech's Advanced Technology Development Center (ATDC) and the state's Yamacraw Design Center."

#### \$5 million grant to promote universal access to technology

Larry Bowie Institute Communications and Public Affairs

he Georgia Centers for Advanced Telecommunications
Technology (GCATT), Georgia
Tech, and Shepherd Center have received a \$5 million, five-year federal grant to develop applications of wireless technologies to enhance the independence of people with physical and cognitive disabilities.

The grant from the National Institute for Disability and Rehabilitation Research (NIDRR) — a branch of the U.S. Department of Education — creates a national Rehabilitation Engineering Research Center (RERC) located on the Tech campus.

"We have a strong team that brings together diverse expertise to address critical policy, research and development of mobile wireless technologies that will definitely contribute to the independence and autonomy of persons with disabilities," said Helena Mitchell, principal investigator and director for the new RERC.

Georgia Tech participants include the Biomedical Interactive Technology Center (BITC), the Interactive Media Technology Center (IMTC), the



From left to right: Mike Jones, Helena Mitchell, and John Peifer.

Center for Assistive Technology and Environmental Access (CATEA), the Georgia Tech Research Institute (GTRI), and Graphics, Visualization and Usability Center (GVU).

"Wireless technologies will improve access to communication, information, control and health monitoring services," said John Peifer, co-director of the RERC. "These applications will expand the model of independent living into the community."

Mike Jones, vice president of research and technology at Shepherd Center, said: "The emphasis for research is on universal access; products and services that are easy for everyone to use and that increase independence and safety. The possibilities are endless and include anything related to a two-way exchange of information."

Graduation, cont'd from page 1

Georgia Tech. He has also served on the National Campaign Steering Committee and on the DuPree College of Management Advisory Board.

**Posthumous degree**In an emotional moment, Tech

freshman Katie Newton accepted a posthumous degree in economics for her sister, Mollie. Mollie Newton was only 15 credit hours shy of receiving her bachelor's degree when she was killed in an auto accident last May. She was 21 years old.

During her four years at Tech, Newton's contributions to

the Institute were both academic and social. A regular on the Dean's List, she was also a coxswain on the rowing team as well as a batsperson for the baseball team. In addition, she was a recruiter for Campus Christian Fellowship and a member of the athletic recruiting program Solid Gold.