

Inside:

Community, Accolades . . . 2

People, Sustainability . . . 3

Research . . . . . 4

Campus Events . . . . . 4



# THE WHISTLE

FACULTY/STAFF NEWSPAPER

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THE GEORGIA INSTITUTE OF TECHNOLOGY

## 2008: Institute Year in Review



Members of the Tech community will look back on 2008 with a mixture of emotions.

President G. Wayne Clough, a fixture at Tech for 14 years, left Georgia Tech in July to become secretary of the Smithsonian Institution.

Almost as Provost Gary B. Schuster was named interim president, the Institute—along with the other 34 University System of Georgia institutions—faced an 8 percent budget cut.

In spite of these challenges, Tech proudly lays claim to numerous superlatives from the previous year, from its people, community and research to its commitment to sustainability and accolades.

A new year has begun, and—as is tradition—The Whistle presents an overview of the top stories from the past year. But, some traditions change. Starting with this issue, the Whistle will be printed in color.

And, in the coming weeks, we will update the look, too.

In the meantime, enjoy the annual round-up, which is by no means a comprehensive list.

Did we miss something? Feel free to drop us a line at [editor@comm.gatech.edu](mailto:editor@comm.gatech.edu).

### The year in pictures



**Above:** Center for Music Technology Director Gil Weinberg (left) examines School of Psychology Associate Professor Bruce Walker's sonification research, which attempts to interpret aquariums and other exhibit-driven facilities for the visually impaired. Graduates leave cutouts for President G. Wayne Clough at his final commencement as Tech President.

**Below:** Tech's band marches in the Macy's Thanksgiving Day Parade; Associate Professor Ayanna Howard works with a SnoMote, designed to gather data in icy environments; the Student Center Food Court goes trayless, saving water and resources.





## “QUOTE— UNQUOTE”

“I would say that Georgia Tech students, whether they are undergrads or MBAs, have the reputation of being very hardworking problem solvers. They typically don’t have that stereotypical MBA attitude, and they’re willing to get in and get their hands dirty even if they’re not engineers. We try to teach students how to think like engineers, teaching them how to pay attention to detail and how to be problem solvers.”

—MBA Admissions Director Paula Wilson when asked what type of person would fit into the College of Management’s MBA program. (BusinessWeek)



### THE WHISTLE

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

## Community

The Institute’s GT SMART (Students Managing Alcohol Risk at Tech) began its outreach initiatives in its final year.

School of Modern Languages Assistant Professor Kelly Comfort offered Spanish 4813: Service Learning in the Hispanic Community. The course was based upon the volunteer student organization GLASSS (Gringos y Latinos: Atlanta’s Spanish Service Society), founded by Comfort and five students.

The Institute raised nearly \$300,000 for 1,000 state-based charities. Gov. Sonny Perdue awarded Tech the Governor’s Award for largest increase in contributions and the Governor’s Cup.

Tech’s Center for Assistive Technology and Environmental Access (CATEA) and the Center for Education Integrating Science, Mathematics and Computing (CEISMC) offer SciTrain, an online instructional tool-set to help high school educators teach all students science, technology, engineering and mathematics classes.



In July, Senior Vice Provost for Academic Affairs Anderson Smith announced that biomedical engineering Professor Gilda Barabino will serve as Tech’s first vice provost for Academic Diversity.



G. Wayne Clough, right, Tech’s 10th president, resigned in July to become secretary of the Smithsonian Institution. Provost Gary B. Schuster, center, was named interim president by University System of Georgia Chancellor Erroll Davis Jr.

where students learned about the history and challenges of the community due west of campus.

Georgia Tech partnered with two leading Italian universities, the Politecnico di Torino and the University of Trento, to offer dual master’s degrees in electrical and computer engineering and computer science.

The Institute’s proposed undergraduate learning commons was officially named the G. Wayne Clough Undergraduate Learning Commons in honor of Tech’s 10th president.

Founded by the late Louis Zahn, professor emeritus of Modern Languages, Tech’s Language Institute celebrated half a century of being an English-as-a-second-language resource for international professionals and students seeking to improve their skills.

The College of Architecture celebrates 100 years of architecture at Georgia Tech. Former dean of the School of Architecture at Rensselaer Polytechnic

The Alumni Association celebrates its centennial—A Century of Impact—with podcast interviews of Tech alumni.

Andrea Ashmore, director of Institute Partnerships, and Professor Greg Nobles, director of the Georgia Tech Honors Program, offer Semester in the City: Engaging English Avenue,

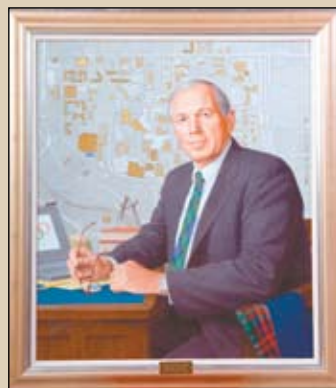
Institute Alan Balfour became dean of the college July 1.

The College of Engineering, in collaboration with the Leadership Education and Development program, hosted the Summer Engineering Institute, which works with high school students to increase enrollment of diverse populations in engineering programs.

Tech’s fall enrollment of graduate and undergraduate students topped 19,000. The Women’s Resource Center, begun by students to offer women a sense of community on campus, marked its 10-year anniversary in October.

Interim President and Provost Gary B. Schuster presented the 2008 State of the Institute address, titled “A Legacy of Strategic Growth.”

Georgia Tech hosted nearly 160 high school girls attending the Engineering and Computing Career Conference (ECC), sponsored by the Institute’s Women in Engineering (WIE) program.



John Patrick Crecine, Tech’s ninth president, died in April.

College of Computing Interim Dean James Foley expanded the college’s associate dean positions to four: Research—Regents’ Professor Ronald Arkin; Faculty Affairs—Professor Mary Jean Harrold, Undergraduate Affairs—Associate Professor Charles Isbell Jr., and Strategic Planning and Initiatives—GVU Center Director and Associate Professor Elizabeth Mynatt.

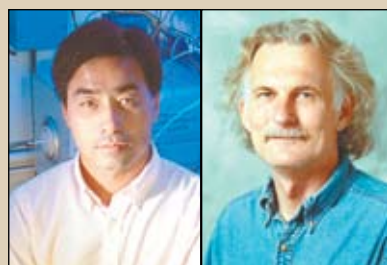
The University System of Georgia Board of Regents, which originally had cut the system’s operating budget for fiscal year 2009 by 6 percent, expanded the cuts to 8 percent in December in light of state revenue projections.

## Accolades

Tech students were nationally recognized for their scholarly endeavors. Mathematics graduate student Adam Tart received the George J. Mitchell Scholarship; biomedical engineering major Inn Inn Chen was named a Marshall Scholar; chemical engineering student Andrew Marin was named a Gates Cambridge Scholar; and School of Industrial and Systems Engineering graduate student Jessica Heier was one of 14 young engineers featured in USA Today.

College of Computing Assistant Professors Adam Kalai and Nick Feamster, along with School of Biology Associate Professor King Jordan, were named 2008 Sloan Research Fellows. Sam Nunn School of International Affairs Assistant Professor Dan Breznitz—currently in China—was awarded one of five 2008 Sloan Industry Studies Fellowships.

The Corporation for National and Community Service named Tech to the 2007 President’s Higher Education Community Service Honor Roll, which recognizes post-secondary institutions that place a heavy emphasis of support on innovative community service and service-learning programs.



Materials Science & Engineering Professor Meilin Liu, left, and Physics Professor Walter A. de Heer, known respectively for their research in advanced fuel cells and nanoscience, were named Regents’ Professors by the University System of Georgia.

Richard “Reeve” Ingle, a Georgia Tech Division of Professional Practice (DoPP) co-op student, was named 2007 Student of the Year by the American Society of Engineering Education.

In its graduate program rankings, U.S. News & World Report ranked Tech’s College of Engineering among the elite, retaining them in the top 5, and the Computer Science program moved into the top 10. Tech ranked seventh nationally among public universities for undergraduates.

Hispanic Business Magazine ranked Tech the top engineering graduate school.

Tech was honored in its first year of applying for the University System of Georgia Chancellor’s Customer Service Awards.

The Institute ranked eighth on the list of the world’s top universities in engineering and information technology prepared by the Times Higher Education Supplement—QS, and Tech also garnered the eighth spot on the list of the top 100 world universities in engineering/technology and computer sciences, according to Shanghai Jiao Tong University’s Academic Ranking of World Universities (ARWU).

## People



**Steven G. Swant, right, was named executive vice president for Administration and Finance when Robert K. Thompson retired April 1. Thompson worked 40 years in higher education.**

Vice Provost for International Initiatives Steve McLaughlin traveled with Gov. Sonny Perdue and a delegation from Georgia to establish an economic development office in Beijing for the state of Georgia.

Tech named Nelson C. Baker vice provost for Distance Learning and Professional Education (DLPE). He served as interim vice provost following Professor William Wepfer's appointment as chair of the Woodruff School of Mechanical Engineering.

Tech employee Arthur Hughes, retired from active military service, solicited Georgia 13th District U.S. Rep. David Scott to include Father's Day in the U.S. flag code.

College of Computing Distinguished Professor Richard A. DeMillo stepped down as dean in November. Distinguished Professor in Interactive Computing James Foley was named interim dean.

The Fulbright Program named Institute of Paper Science and Technology

at Georgia Tech Professor Arthur J. Ragauskas the first recipient of the newly created Fulbright Distinguished Chair in Alternative Energy Technology. The position will be located at Chalmers University of Technology in Gothenburg, Sweden.

Darrell Scott Jones was named Tech's new director of Design and Construction in the Facilities Department in July.

In August, School of Economics Associate Professor Willie Belton and Assistant Professor Ruth Uwaiwo Oyelere answered a Whistle Q&A regarding the economic downturn.

Robert Knotts was named interim director for the Institute's Federal Relations Office in Washington, D.C., in September. Former Director Patricia Bartlett accepted a position with the Smithsonian Institution.

Bernard Amadei, founder of Engineers Without Borders-USA, delivered the Annual Distinguished Lecture sponsored by the Woodruff School of Mechanical Engineering to a large crowd of students in the First Center for the Arts in September.

The American Political Science Association awarded Sam Nunn School of International Affairs Assistant Professor Dan Breznitz the 2008 Don K.



**Construction project manager Steven Johnson (above) and utilities analyst Susan Wardrobe coordinate a network of volunteers who keep feral cats on campus at a sustainable level.**

Price Award for Best Book in Science and Technology Politics for his book, "Innovation and the State: Political Choice and Strategies for Growth in Israel, Taiwan and Ireland."

Sam Nunn School of International Affairs Assistant Professor Margaret E. Kosal was a lead author of the "WMD Terror Report Card," which graded the government's performance in preventing the spread of weapons of mass destruction.

The U.S. Department of State selected Electrical and Computer Engineering Professor Robert Butera as one of seven Jefferson Science Fellows for 2008-2009. Since the program's inception in 2003, Butera is Georgia Tech's first professor chosen as a Fellow.

Tech employees Ruthie Beck and Dot Whitaker were honored for 50 years of service to the Institute.

Sam Nunn School of International Affairs Associate Professor Adam Stulberg provided The Whistle's readers with some insight into the conflict between Georgia and Russia.

Ian Mayberry was named Tech's new crime prevention officer.



**Mostafa El-Sayed, Regents' Professor in the School of Chemistry and Biochemistry, was awarded the 2007 National Medal of Science, the nation's highest honor in the field.**

John C. Crittenden joined Tech as a GRA Eminent Scholar in Sustainable Systems with the Brook Byers Institute for Sustainable Systems, and Philippe Van Cappellen is the Georgia Power GRA Eminent Scholar in Global Climate Studies in Georgia Tech's School of Earth and Atmospheric Sciences.

College of Management Professor and Area Coordinator for Finance Narayanan Jayaraman answered a Whistle Q&A concerning the federal "bail out" bill in November.

The annual Women's Leadership Conference named Amelia Gambino, assistant vice president of Communications & Marketing; undergraduate student Andrea Trillo; graduate student Joanna Hass, Electrical and Computer Engineering Associate Professor Ayanna Howard and Tech alumna Patrise Perkins-Hooker its 2008 Women of Distinction.

The Carnegie Foundation and the Council for Advancement and Support of Education (CASE) named Sam Nunn School of International Affairs Associate Professor Kirk Bowman a state winner in its U.S. Professors of the Year Awards Program.

The National Association of College Auxiliary Services named Georgia Tech Auxiliary Services Associate Vice President Rosalind R. Meyers recipient of the Robert F. Newton Award for Distinguished Service.

Tech named former John L. and Genevieve H. McCain Chair of Engineering at Penn State Vigor Yang as chair of the Daniel Guggenheim School of Aerospace Engineering. Professor Robert Loewy retired after 15 years as chair.

School of Chemistry and Biochemistry Professor David Collard and School of Mathematics Professor Doron Lubinsky were named Eichholz Faculty Teaching Award winners for 2008.

## Sustainability

Parking and Transportation offers a variety of commuting assistance alternatives, including access to carpools, mass transit, gas cards, monthly transit passes and reduced campus parking fees.

The Institute's Green Cleaning program is recognized nationally by the U.S. Green Cleaning Council and the Association for the Advancement of Sustainability in Higher Education.

The Tech community celebrated its commitment to environmental awareness and campus sustainability with Think Green Week, which culminates in the 11th annual Earth Day Celebration, themed "Take Action: Code Green."

Tommy Little, manager of Building Services in Facilities, received the Environmental Leadership Award at Tech's 2008 Earth Day celebration. School of Earth and Atmospheric Sciences Assistant



**In March, Office of Solid Waste Management and Recycling Manager Cindy Jackson received the American Forest & Paper Association's College & University Recycling Award. Tech was the sole winner for the College and University group.**

The National Wildlife Federation recognized Tech as an exemplary campus as part of its initiative, "Campus Environment 2008: A National Report Card on

Professor Kim Cobb instructed students in her interdisciplinary Honors Program course, Energy, the Environment and Society. The class introduced a semester-long reduction challenge, encouraging students to reduce carbon emissions in their own lives or affecting change elsewhere.

Tech was one of 11 universities to receive a top score of 99 for green efforts from the Princeton Review.

Tech's Office of Capital Planning and Space Management registered eight upcoming campus projects with the U.S. Green Building Council (USGBC) to pursue Leadership in Energy and Environmental Design (LEED) certification.

Sustainability in Higher Education—Trends and New Developments in Leadership, Academics and Operations."

The Sustainable Endowment Institute awarded Georgia Tech an overall grade of "B" on its 2009 College Sustainability Report Card of 300 leading schools. Up from a "C" given the previous year, the grade moves Tech into the Campus Sustainability Leader category.

Georgia Tech won the National Recycling Coalition's "Outstanding College or University Program" annual award at the organization's annual Congress & Expo.

The Arbor Day Foundation designated Tech a Tree Campus USA in November.



**The U.S. Green Building Council awarded a Leadership in Energy and Environmental Design (LEED) Gold certification to the Christopher W. Klaus Advanced Computing Building.**



## Research



**DETECT, a result of Georgia Tech and Emory University research, gives individuals a roughly 10-minute test designed to gauge functions that, when impaired are associated with the earliest stages of Alzheimer's disease.**

Tech will offer the nation's first interdisciplinary doctoral degree in robotics, involving the schools of Mechanical Engineering, Electrical and Computer Engineering, Biomedical Engineering, Aerospace Engineering and the College of Computing.

Georgia Tech Research Institute researchers developed a sensor system, worn in the pockets of a vest, that continuously monitors the air around persons prone to asthma attacks.

Using tiny gold particles embedded with dyes, researchers at the Coulter Department of Biomedical Engineering

identified tumors under the skin of a living animal, which may allow doctors to detect and diagnose cancer earlier and less invasively.

The Institute's High Tech Indicators study suggests China may soon rival the United States as the principal driver of the world's economy.

Researchers at Tech and the University of Kentucky demonstrate that patches coated on one side with microscopic needles can deliver clinically relevant doses of a drug that normally cannot pass through the skin.

Tech created the Integrative BioSystems Institute to explore new technologies and methods to collect and analyze biological information in order to form a more complete picture of how life works and how the environment affects living things.

The Georgia Tech Research Institute's Huntsville Research Laboratory celebrated



**Combining the skills of engineering with medical and biological sciences, the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory University (BME) celebrated its 10th anniversary in April.**

College of Sciences Dean Paul Houston appointed former chair of the School of Chemistry and Biochemistry Thomas Orlando to help organize the college's efforts in Institute-wide energy research.

Institute researchers developed models to show how a flu pandemic would spread.

three decades of research at Redstone Arsenal.

Industrial and Systems Engineering Professors Joel Sokol, Paul Kvam and George Nemhauser created a computer ranking system that consistently predicts NCAA basketball rankings more accurately than polls, formulas, other computer models and even the tournament seeds themselves.

Tech researchers developed a liquid rocket engine simulator and imaging techniques that can help identify the cause of explosive sound waves and bring scientists a little closer to understanding and preventing them.

The new Georgia Tech Laboratory for New Electronic Materials will focus its efforts on the development of new materials to serve as the successors to silicon in the semiconductor industry.

In October, Tech launched the new Center for Music Technology with more than 20 researchers from the arts, sciences and engineering.

*For more on groundbreaking research occurring at Georgia Tech, visit [www.gatech.edu/newsroom](http://www.gatech.edu/newsroom).*



**Robot El-E autonomously moves to an item selected with a green laser pointer, picks up the item and then delivers it to the user, another person or a selected location such as a table.**

## C A M P U S E V E N T S

### Arts & Culture

#### Through February 13

The Robert C. Williams Paper Museum displays the works of a renowned paper engineer and book artist with "The Paper Engineer: The Art of Carol Barton." Museum hours are 9 a.m. to 5 p.m. weekdays. For more information, visit [www.ipst.gatech.edu](http://www.ipst.gatech.edu).

### Conferences & Lectures

#### January 7

Manuel Cadrecha, an alumnus of the College of Architecture and a design principal at Perkins + Will, will continue the college's Centennial Lecture series from 6 to 7 p.m. in the College of Architecture auditorium. For more information, visit [www.coa.gatech.edu](http://www.coa.gatech.edu).

### Faculty/Staff Development

#### Ongoing

Georgia Tech Training Services offers a Web-based tutorial on using a state purchasing card. For more information, visit [www.training.gatech.edu](http://www.training.gatech.edu).

Georgia Tech Training Services offers the Emergency Preparedness Certificate, which consists of several smaller courses, including "Fire Safety," "Facilities Hazard Training" and "Basic First Aid/Adult CPR/AED." For more information, visit [www.training.gatech.edu](http://www.training.gatech.edu).

### Miscellaneous

#### Ongoing

Georgia Tech Faculty Women's Club offers scholarships to Tech undergraduates who are children

of faculty or staff. Up to five \$1,000 scholarships will be offered, based on financial need and academic achievement. Applications are due by March 1. For more information, e-mail Marjan Van Ittersum at [vanittersum@bellsouth.net](mailto:vanittersum@bellsouth.net) or visit [www.gtfwc.gatech.edu](http://www.gtfwc.gatech.edu).

#### January 8

The Georgia Tech Observatory holds its Public Night, from 7 to 10 p.m., in the observatory atop the Howey Physics Building. Public Night is contingent on weather. For more information, visit [www.astronomy.gatech.edu](http://www.astronomy.gatech.edu).

#### Ongoing

Techmasters, Georgia Tech's division of Toastmasters, meets each Thursday from 7:30 to 9 a.m. in room 102 of the Petit Microelectronics Research Center. For more information, visit [www.techmasters.gatech.edu](http://www.techmasters.gatech.edu).

## C L A S S I F I E D S

### AUTOMOBILES/MOTORCYCLES

2001 Toyota Camry, 114K miles, good cond. \$4,500. Call 770-493-4027 or e-mail [sa8@mail.gatech.edu](mailto:sa8@mail.gatech.edu).

### REAL ESTATE/ROOMMATES

For rent: 2 BR/1BA renovated duplex in Grant Park. Central heat/air, washer/dryer, dishwasher & microwave, fenced back yard. Less than 4 miles from campus, convenient to MARTA. Pets OK. \$975/mo. (incl. water & yard maint.). Call: 404-806-6096.

320 sq. ft. in beautifully renovated office condo in a Neil Reid building in Poncey-Highland. Northern light, shared kitchen, dedicated parking space. Clean well-

lighted space for \$800 per month; call 404-374-4760 or e-mail [lucie.andre@coa.gatech.edu](mailto:lucie.andre@coa.gatech.edu).

For rent: 3BR/2.5BA in Avondale Estates on cul-de-sac. Near I-285, Hwy 78 and MARTA. Close to Decatur, Emory, CDC. Washer/dryer included; private deck; fireplace. Pets welcome. \$1,550/month. Call Clare at 404-377-9550.

For rent: 1BR/1BA, 945 sq. ft. on Peachtree St. at 6th. Renovated in 2002; walk to Tech, Publix, MARTA, Tech Square. 4th floor, HW floors, tile kitchen & bath, granite. \$35 application fee, 1 mo. security deposit. Call 404-353-5888 or e-mail Ralph at [ralplwil@gmail.com](mailto:ralplwil@gmail.com).

gmail.com. Visit [www.condo.com/PropertyDetails.aspx?ID=3087509](http://www.condo.com/PropertyDetails.aspx?ID=3087509).

For Lease: Ideal for visiting professor or grad student. On bus route to Tech, charming, fully furnished house for short-term lease (6-12 months) starting Jan. 2009: 2BR/2BA, 2 dens, living room, dining room, kitchen, fenced back yard. Please call 404-292-4990.

### FURNITURE

Cherry wood dinette set. Table and 4 chairs. Chairs have beige padded bottoms covered in plastic. Great condition. Paid \$275, selling for \$195. Also: 15-speed black Huffy bike, good cond. \$50. 3 stone texture coffee table/

end table bottoms: need 2 glass top replacements. \$125. 2 gold lamps/shades: \$40. Black bar stool: \$15. E-mail [dellmo4u@hotmail.com](mailto:dellmo4u@hotmail.com).

8-foot, light oak Brunswick pool table with protective covers, racks, cues and balls. The table is in perfect condition. The buyer is responsible for moving/dissassembling the table. \$1,100, cash only. E-mail Tanah at [tanahb@gatech.edu](mailto:tanahb@gatech.edu).

### MISCELLANEOUS

Four tickets needed for the Georgia Tech/Duke basketball game on Jan. 14. E-mail [albertsheffer@earthlink.net](mailto:albertsheffer@earthlink.net).

Metropolitan bar tool seven-piece set, never used, 18/10

stainless. A Crate & Barrel exclusive. Set includes bar knife, strainer, double jigger, corkscrew, ice tongs, bottle/can opener, and mixing spoon. Originally \$30, will sell for \$12. E-mail troy [whyte@coa.gatech.edu](mailto:whyte@coa.gatech.edu) for more info.

Pearl 7-piece drum set for sale. Best offer (\$300 min). Call Desai at 404-351-7882 or 678-862-9258 or e-mail [vibhadesai@hotmail.com](mailto:vibhadesai@hotmail.com).

More ads are available at [www.whistle.gatech.edu](http://www.whistle.gatech.edu). Ads appear and run for three weeks in the order in which they are received. E-mail submissions to [editor@comm.gatech.edu](mailto:editor@comm.gatech.edu).