National science association elects five Tech faculty as Fellows

Michael Hagearty
Institute Communications and Public Affairs

The membership of the American Association for the Advancement of Science (AAAS) has recognized five Georgia Tech faculty for their contributions to scientific understanding in naming them among the 2004 class of AAAS Fellows.

The AAAS Fellows were announced in the Oct. 29 issue of the journal “Science” and will be inducted during the organization’s annual meeting in February.

“This is a well-deserved honor for each of these gentlemen, and I congratulate them on their accomplishment,” said Provost Jean-Lou Chameau. “Georgia Tech’s increasing representation in prestigious scientific and research organizations is a further indication that our research enterprise is internationally known.”

Nominees are considered based upon their contributions to the body of scientific knowledge. Georgia Tech’s new Fellows and their noteworthy achievements are:

• Richard DeMillo. The John P. Imlay Dean and Distinguished Professor of Computing, was elected for distinguished contributions to the fields of computer security, software engineering, and algorithmic complexity.

DeMillo

Hernandez

Hesketh

McDonald

Schuster

Fellows continued, page 3

Technology Square receives international award for excellence in land use

David Terraso
Institute Communications and Public Affairs

The Urban Land Institute (ULI) has recognized Technology Square as one of 10 winners of its 2004 Awards for Excellence competition. The award is widely recognized as the land use industry’s most prestigious recognition program. ULI Chairman Harry Frampton announced the Awards for Excellence winners at the organization’s fall meeting in New York City. “The Awards for Excellence program is as much about celebrating the people who make the developments a reality as the developments themselves,” Frampton said. “Behind every great project is an individual who is passionate about the project and dedicated to seeing it through from start to finish.”

Designed by Thompson, Ventulett, Stainback and Associates, Technology Square has reestablished Tech’s connection with Midtown by turning 13 abandoned acres of property into 1.1 million square feet of education and commercial interest.

Projects were evaluated on the basis of financial viability, the resourceful use of land, design, relevance to contemporary issues, and sensitivity to the community and environment. Each contributes to a live-work-play environment and is designed to complement and enhance the greater community.

Other projects honored this year include the Walt Disney Concert Hall in Los Angeles and MIT’s University Park.

Techn Square continued, page 3

A parent’s pledge to support women students

Beverly Kitaoka was honored last week in a ceremony held by the Women’s Resource Center for her support and leadership of women in science and technology. Earlier this year, Kitaoka — a corporate executive with an engineering background — made a financial commitment to Georgia Tech with the intent of increasing female representation in those fields.

Kitaoka, whose daughter is an undergraduate in the College of Computing, will also endow a scholarship for women in computing and has joined the College’s Diversity Advisory Board.

WWW.WHISTLE.GATECH.EDU
VentureLab bridging innovation with commercialization

Member companies use resources to seek investors

T.J. Becker
Research News

Technology transfer may be a bumpy road, but Georgia Tech’s VentureLab program provides a smoother lane for faculty and students to move lab research into commercial markets.

A unit within the Office of Economic Development and Technology Ventures (EDTV), VentureLab was piloted in 2001 by the Advanced Technology Development Center (ATDC), Tech’s incubator for high-growth technology companies.

“Faculty members either weren’t pursuing commercialization or weren’t able to build companies to a point that they were ready to move into ATDC,” says Wayne Hodges, vice provost for Economic Development and Technology Ventures. “We believed that the earlier we could get involved, the greater the chance that faculty start-ups would be sustainable.”

Although VentureLab is still in its infancy, success stories are emerging. This summer, four companies — GTronix, Jacket Micro Devices, Stheno and Orthonics — together received more than $6 million in venture capital. Three have already been admitted to the ATDC.

Real-world filter

“We have one foot in academia and one foot in the marketplace,” says Steve Derezinski, VentureLab’s director. “We meet with faculty and graduate students on a regular basis so they understand what’s required to form a company. And we look at the marketplace to determine if there’s real potential for the technology.”

That business filter is critical because not all innovations translate into commercial successes — or warrant the formation of a new company. It may be better to license a technology to an existing company than go through the expense and rigor associated with a start-up.

Professional management makes a big difference in a company’s growth, says Madhavan Swaminathan, a professor in the School of Electrical and Computer Engineering. Swaminathan and four other researchers in the Microsystems Packaging Research Center are commercializing an integration technology for radio-frequency passive components used in wireless telecommunications products such as mobile phones. With help from VentureLab, they formed Jacket Micro Devices (JMD) in 2002.

The company gained significant funding when VentureLab Fellow Jim Stratigos joined as CEO in February.

“We are technologists, and venture capitalists invest in a business, not a technology,” Swaminathan adds. “Jim helped us strategize better and convey our strategy to investors. That made all the difference.”

Beyond bootstrapping

Formed in December 2003, Orthonics is developing novel biomaterials for spinal disc repair and regeneration, which incorporate several Georgia Tech technologies including research from the lab of Barbara Boyan, a professor of biomedical engineering and Georgia Research Alliance Eminent Scholar.

Launching any new company is difficult, but biotech start-ups have particular challenges. “It takes a long time to get to market — and a lot of money,” says Steve Kennedy, a VentureLab Fellow who now serves as Orthonics’ chief executive.

Indeed, commercializing a medical device — the classification that the Orthonics materials fall under — typically takes a minimum of three to five years and $25 million in funding.

That means traditional bootstrapping isn’t a possibility. Yet proof of concept is required before a start-up can even hope to attract investors.

“One of the biggest services VentureLab performs is providing seed capital that allows you to prove your technology and be taken seriously by investors,” Kennedy says. “Orthonics received two VentureLab grants, which led to funding from a New York-based venture capital firm that focuses on the musculoskeletal and orthopedics industry. The VentureLab grants also enabled Orthonics to successfully compete for a grant from the National Institutes of Health. Studies funded by this grant will provide additional information for development of the spinal disc prosthesis.”

Resource for resources

Stheno Corp., a company developing chemical-detection solutions to find impurities in pharmaceutical processing, graduated from VentureLab in summer 2004 and was admitted to ATDC.

Proximity to other entrepreneurs at ATDC’s Biosciences Center has helped solve a number of problems, says Bill Edens. Stheno’s CEO. For example, when a machine shop delayed Stheno’s order for a month, putting project deadlines in jeopardy, another ATDC member suggested an alternative supplier — one that specialized in smaller orders.

Stheno came onto VentureLab’s radar screen when Edens, completing a master’s degree at Georgia Tech, won second place in a business-plan competition sponsored by the College of Management. The award prompted a chain of support: Acceptance into the VentureLab program helped Stheno secure a Small Business Innovation Research grant from the National Science Foundation, which prompted William Oakes, one of the competition’s judges, to become an early investor in Stheno.

Launching a new company requires a wide variety of resources, Edens says: “It’s not simply a matter of assembling pieces, for you must first find those pieces. Georgia Tech has made it possible to get the resources we needed.”
Engineering announces its annual alumni awards

Megan McRainey
Institute Communications and Public Affairs

The College of Engineering announced its annual Alumni Awards at an induction ceremony on Nov. 5. New members were inducted into Georgia Tech’s Engineering Hall of Fame, the Academy of Distinguished Engineering Alumni and the Council of Outstanding Young Engineering Alumni.

“Each of these alumni exemplifies the essence of Georgia Tech — a strong technological foundation, a competitive spirit and a drive for excellence. Their accomplishments, as well as their dedication to their professions, their communities, and especially to Georgia Tech, have earned them a place in Georgia Tech history,” said President Wayne Clough.

The 14 inductees into the Hall of Fame received the highest honor that can be bestowed on alumni in the College of Engineering. Inductees included Roger Webb, who received his doctoral degree in electrical engineering from Tech in 1964 and currently occupies the Steve W. Chaddick School Chair in the School of Electrical and Computer Engineering. The Academy of Distinguished Engineering Alumni recognized 12 alumni who have made significant contributions to their profession, the Institute, or society at large. The four alumni inducted into the Council of Outstanding Young Engineering Alumni were alumni under 40 years of age who have already demonstrated outstanding professional achievements.

For more information, visit www.facultysenate.gatech.edu.

IN BRIEF:

Change to fall commencement

With a graduating class estimated to include more than 1,200 students, next month’s commencement ceremony will be split into two events — one for undergraduates and one for graduates — to ensure a free and open event for attendees.

John Salley, a retired professional basketball player and Tech graduate, will be the keynote speaker for the undergraduate ceremony, scheduled for Dec. 11 at 9 a.m. in Alexander Memorial Coliseum. Morehouse College President Walter Massey will speak during the 5 p.m. graduate ceremony.

For more information, visit www.gatech.edu/commencement.

Call for nominations

Facilitators for some of the annual staff awards have issued a call for nominations. Winners will be announced at the Faculty and Staff Honors Luncheon, set for Wednesday, April 13, 2005.

• Administrative Service Award: Each year the Administrative Service Award is given to honor an individual for making an extraordinary contribution to the academic enterprise. This award complements teaching and research awards given to faculty members. The recipient will be presented with a $2,500 award and a plaque.

• Outstanding Staff Performance Award: These awards are intended to recognize classified staff members who render outstanding performance in support of instructional, research, or administrative activity. Five recipients will receive $1,000 awards and plaques.

Nominations must be submitted no later than January 28, 2005, to Gerri Naramore, OIT Enterprise Information Systems, mail code 0185. Questions regarding these awards can be directed to George at 894-8887 or by e-mail to george.smedberg@oit.gatech.edu.

Management plans new executive MBA

With international business experience becoming more desirable among employers, Georgia Tech’s College of Management has announced an executive degree program that will touch three continents.

The 18-month GlobalTeam MBA Program is a collaboration with two technical schools: the ICN Ecole de management in Nancy, France, and the Instituto Tecnologico de Buenos Aires in Argentina. Students from all three campuses will attend classes, visit companies and attend cultural events in each country, while working to build truly international student teams.

Students earn degrees from Georgia Tech as well as from the technical schools.

According to Nate Bennett, senior associate dean of the College of Management, the first class of the GlobalTeam MBA Program is planned for fall 2005. For more information, call 894-5990 or e-mail nate.bennett@mgt.gatech.edu.

Tech Square, cont’d from page 1

participate in the Midtown renaissance. It has helped create a visible technology corridor for Atlanta, with beautiful new facilities replacing the vacant lots and derelict buildings that once filled the area. It also has created a new home for Georgia Tech’s business school and economic outreach activities. We are very proud of what has been done and of the fantastic team that made this dream come true,” he said.

The competition was established in 1979 and recognizes the full development process of a project, not just architecture or design. The criteria for the awards include leadership, contribution to the community, innovations, public/private partnership, environmental protection and enhancement, response to societal needs and financial success.

The fall meeting of the Academic Senate combined with the General Faculty will be on Tuesday, November 30, at 3 p.m. in the Student Center Theater. An agenda is posted at www.facultysenate.gatech.edu. For more information, e-mail said.abdelkhalik@me.gatech.edu.

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**Arts & Culture**

**Nov. 18**
Poetry at Tech welcomes Georgia poets Blake Leenard, Sharan Strange, and Ralph Tejeda Wilson, at 4:30 p.m. in the Clary Theater. For more information, visit [www.iac.gatech.edu/poetry.html](http://www.iac.gatech.edu/poetry.html).

**Nov. 23**
The Music Department presents its fall choral concert at Clary State College and University Spivey Hall. The 7 p.m. performance is entitled “Fare Ye Well! Songs of Transition” and will include performances from both the chamber choir and the chorale. For tickets, call 770-960-4200.

**Brown Bags/Conferences/Lectures**

**Nov. 16**
The School of Electrical and Computer Engineering hosts a presentation by University of Michigan Professor Gabriel Rebeiz on “RF MEMS Implications,” at 6 p.m. in the Auditorium of the Technology Square Research Center.

**Nov. 16**
The School of Chemical and Biomolecular Engineering’s Silas Symposium on Ethics and Leadership welcomes Lynn Ebenhans, president and CEO of Shell Oil Products, on “Corporate Ethics: Straight Talk, Hard Truths,” at 4 p.m. in room L1025, ES&T Building.

**Nov. 16**
The School of Materials Science and Engineering welcomes The Ohio State University Professor Michael Mills on “Connecting Dislocation Fine Structure and the Creep Properties of Metallic Alloys,” at 3 p.m. in room 1185, Love Building.

**Nov. 17**
The School of Modern Languages sponsors “Globalization, Militarization and Human Rights: What We Can Learn from Chipas, Mexico,” at 6 p.m. in the Clary Theater. For more information, e-mail vichl.galloway@modlangs.gatech.edu.

**Nov. 17**
The College of Management’s IMPACT Speaker Series welcomes Nancy Sousa, president of Given Imaging, at 4:30 p.m. in the LeCraw Auditorium.

**Nov. 18**
The School of Mechanical Engineering’s Woodruff Colloquia Series welcomes University of California at San Diego Professor Frank Talke on “Mechanics and Tribology Problems in Magnetic Recording Technology,” at 11 a.m. in the MARC Building Auditorium. For more information, call 894-5176 or e-mail richard.salant@me.gatech.edu.

**Nov. 22**
The School of Electrical and Computer Engineering and IJEE welcomes Swiss Institute of Technology Lausanne Professor Eric Vittor on “A Fundamental Property of MOS Transistors and its Circuits Implications,” at 6:30 p.m. in the Van Leer Auditorium.

**Nov. 23**
The Materials Council’s seminar series hosts University of Massachusetts Dartmouth Professor Paul Calvert on “Printing of Materials as a Pimic of Biological Growth,” at 5 p.m. in room 183, Love Building. For more information, call 894-2823.

**Dec. 3**
The Program in Cognitive Science welcomes Gary Hardcastle, assistant professor of philosophy at Bloomsburg University, on “A Problem Solving Account of Scientific Explanation,” at noon in room 152, Whitaker Building. For more information, e-mail charmon@cc.gatech.edu.

**Miscellaneous**

**Nov. 19**
The Georgia Tech Women’s Forum hosts a silent auction from 11:30 a.m. - 1 p.m. in the Student Center Ballroom. Proceeds benefit the GTWF Scholarship Fund.

**Nov. 29 - Dec. 3**
The campus bookstore will hold its semi-annual customer appreciation sale for faculty and staff. For more information, visit [gatech bkstore.com](http://gatech bkstore.com).

**Dec. 7**
The Georgia Tech Faculty Women’s Club hosts its annual wine and cheese party for all faculty and guests from 5 - 7 p.m. in the Global Learning and Conference Center Atrium.

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**Classifieds**

**Appliances**

Whirlpool microwave hood, model MH1150XM, black-on-black, 1.5 cu. ft. capacity, multiple microwave, two-speed ventilation hood. Brand new, open box, $180. Call 678-596-1748 or e-mail preethi@coe.gatech.edu.

**Autobrokes**

1993 Mazda Protege, good daily, economical driver, $1,500 OBO. E-mail shoba.king@coe.gatech.edu or call 385-2382.

1999 Mitsubishi Mirage, green, 42K miles, excellent condition, impeccably maintained. $3,800 OBO. Call Maria at 404-372-7697.

2000 Ford Mustang coupe. Manual, V-6, black, leather, 1/4 CDPowers everything, dual air bags, alloy wheels. One owner, all records, 51K miles. $9,500. Call 894-0266 or e-mail stephanie.allen@gti@gatech.edu.

**Real Estate/Roofmates**

2BR/2BA for sale in Smyrna/Vinings area. Multi-level deck, hardwoods throughout, new roof, new paint and carpet, large private lot, fenced in yard, 15 minutes to GT. $199,900. Call Alicia, 885-3555. 1BR/1BA apartment for rent, off of Peachtree Industrial Road in Dunwoody area. $600/month. Call Prineth, 404-216-5077.

$980/2.5 BA condo in Vinings, 2,500 square feet, 2-car enclosed garage, fireplace, wet bar, deck, Unit by pool on cul-de-sac. Just inside I-85, $1,500/month. Call 404-350-0064.

Views of Piedmont Park from the 29th floor at the Mayfair Renaissance. 2BR/2.5BA, 2-story brick townhouse, 2 windshields and Yoshi exhaust, $8,500 OBO. Photos upon request. Call 404-8863518 or e-mail avital@bellsouth.net.

**Furniture**

King headboard and metal frame, excellent condition. $75. Call 770-944-6240 or e-mail susan.longarrepe@biology.gatech.edu.

Modern style, fruitwood dining room table with leaves, pads and 6 upholstered, caned-back chairs, $450 OBO. Traditional medium-tone wood china cabinet, glass doors, $400. E-mail kris@cc.gatech.edu.

Contemporary glass-topped dining room table round, 4 feet in diameter with 4 matching chairs (stainless steel curved backs and light-gray microfiber cushions). Furniture is 2.5 years old, looks brand new. Call 894-9862 or e-mail jc450@gatech.edu for pictures.

**Miscellaneous**

Free yellow jacket/wasp nest removal. Nests to be used for marketing purposes. Call 894-1000.

Litter/Trash automatic cat litter box. New, includes 12 litter trays and sanitized. Asking $70 OBO. Call 894-0065 or e-mail eileengram@juno.com.

Baby boy clothes: 3 - 12 months. Go to www.csa.gatech.edu/jtc/clothes for pictures and contact information.

Beautiful 9-foot Fraser Christmas tree. Will bring to campus. Paid $350, sell for $225. Photos upon request. Used for 2 years. Looked smaller in the store! Call 894-4888 or e-mail becky.flitzgbibon@arch.gatech.edu.

Free yellow jacket/wasp nest removal. Nests to be used for research at Georgia Tech. Call 385-6311 or e-mail michael.good@biomembrane.gatech.edu.

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

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