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THE WHISTLE

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THE GEORGIA INSTITUTE OF TECHNOLOGY

Candidate field for dean of engineering narrows to three

Larry Bowie
*Institute Communications
 and Public Affairs*

A search committee charged with finding a new dean for the College of Engineering has identified three candidates and is now conducting interviews with each on campus.

The three candidates are: David H. Auston of Case Western Reserve University; W. Kent Fuchs of Purdue University; and Don P. Giddens of Georgia Tech.

"The search committee is very pleased with the caliber of the

candidates who have emerged from our search so far," said Professor Ronald Schafer, who co-chairs the search committee with Professor David McDowell. "We feel very confident that any of the individuals that have been invited for interviews would provide outstanding leadership for the College of Engineering."

Each candidate is scheduled to visit the campus for two days. Fuchs was interviewed on Jan. 24 and 25, and Auston on Jan. 28 and 29, while Giddens will interview on Feb. 4 and 5. Each candidate will meet with administrators, alumni, faculty, staff and students.

The candidates:

David H. Auston served as president of Case Western Reserve University from 1999-2001. He received a B.A.Sc. and M.A.Sc. from the University of Toronto and a Ph.D. in electrical engineering from the University of California at Berkeley.

From 1994-1999 Auston served as provost and a professor of engineering at Rice University. From 1990-1994 he was dean of the School of Engineering and Applied Science, and professor of engineering at Columbia University. Prior to this, he had an 18-year-career as a department head and member of technical staff in the

physics research division of AT&T Bell Laboratories. While there he pioneered the development of the field of ultrafast optoelectronics, which is based on the use of high-speed lasers to measure the properties of electronic materials and devices with a time resolution less than 1 picosecond (one-trillionth of a second). He is the author of more than 100 papers, one book, and eight patents.

Auston is a member of both the National Academy of Science and the National Academy of Engineering and he is a fellow of the American

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Professor April Brown announces departure from Tech

Executive assistant to take job at Duke

Michael Hagearty
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 and Public Affairs*

April Brown, the Joseph M. Pettit Professor in Microelectronics and the executive assistant to the president, announced last week that she will be accepting a position with Duke University as chair of the Department of Electrical and Computer Engineering (ECE).

As executive assistant, Brown was President Clough's chief liaison, serving as a link to and providing feedback from the numerous constituencies on and off campus. She thanked the faculty and administration for their support.

"I am extremely appreciative of the collaboration and leadership I have had at Tech," she said. "The environment has given me the opportunity to grow in many ways,

and my recent experience in the President's Office has significantly broadened my perspective. The new opportunity at Duke builds on my experience here at Tech and presents new and exciting challenges."

President Wayne Clough said, "It has been a pleasure to work with April even if for a short time. She is a talented professional who has made substantial contributions to Georgia Tech and will continue to do so until she departs campus for her new job.

"She has a wonderful professional opportunity ahead of her at Duke," he added. "We wish her the best for the future."

Prior to her work for the president, Brown acted as associate dean for the College of Engineering, focusing

on faculty development programs and implementing strategic initiatives for the College while pursuing her teaching and research activities in ECE concurrently.

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photo by Stanley Leary

Brown will be Duke's new chair in electrical and computer engineering.

Tech undergrad wins National Co-op Student of the Year award

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When Brian Rugg signed up to work for ChoicePoint as part of Georgia Tech's

Cooperative Education program, he had no idea he'd be helping to find lost and kidnapped children. But in his last semester working for the company, Rugg and computer science undergraduate John Matson — another co-op student — designed a system that allows photographs to be broadcast over two-way pagers. Under Rugg's direction, the company gave the system to the National Center for Missing and Exploited Children. They used it to send photographs and biographies of missing kids to agents in the field. In its first year using the system, the center found 18 kids who were lost, kidnapped or had run away.

It's achievements like this that helped Rugg win the National Cooperative Education Student of the Year award.

The award is given out by the Cooperative Education Division of the American Society for Engineering Education and the Cooperative



photo by Ken Little

Brian Rugg, above, graduated with a degree in industrial and systems engineering.

Education and Internship Association. Students are judged on their achievements in academia and as a co-op employee, as well as leadership, character and community involvement. Rugg will receive \$1,000, a plaque, plus an all-expense

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“QUOTE— UNQUOTE”

“Public utilities and some manufacturing companies are doing all right. So far this semester, the number of employers coming in to interview students has been about normal. We’ve been greatly encouraged by that.”

—Tom Akins, director of Tech’s Cooperative Division, on the gradual recovery of the number of co-op positions being offered to students, down more than 11 percent over the past 12 months. Roughly one-third of Tech’s undergraduates participate in the five-year program.

(Atlanta Business Chronicle)

“With any significant distributed file-sharing system, policing the content is nearly impossible. You can only make things difficult to download.”

—Jason Brotherton, a graduate student in the College of Computing, on the problem of protecting intellectual property on the Internet.

(Atlanta Journal-Constitution)

U.S. presidential advisory council taps Clough

Advising Bush on terrorism, federal investment

President Clough has learned on which of the four panels he will serve as he prepares to participate in the President’s Council of Advisors on Science and Technology (PCAST). As one of 24 members of the prestigious board — and the first Tech representative to serve on the Council — Clough will be offering policy advice on issues related to terrorism as well as chairing a committee on federal investment in science and technology.

“This committee affords me a unique opportunity to help represent our views in addressing the policies that set the national agenda,” he said. “The issues we’ve been asked to address have never been more important than at this time in our nation’s history.”

In recent years, the country has

been subjected to numerous forms of terrorism: hijacking, anthrax and the bombing of federal and commercial properties around the globe. The goal of the panel on “The Science and Technology of Combating Terrorism” will be to catalog the potential weapons of terrorists and identify technologies or fields of research that could yield technologies to address these threats.

Clough’s other assignment involves how federal research dollars are managed. Flowing through a broad number of areas — defense, medicine and biotechnology, and basic research — these monies directly benefit student development and support research at universities, national laboratories, private industry and small businesses. For its planning purposes, President Bush is seeking a view of the value of federal research.

As chairperson of the panel on “Federal Investment in Science and Technology and Its Economic Benefits,” Clough and the seven other members are responsible for

reviewing the federal government’s research portfolio. Technology transfer mechanisms that encourage commercial development will be reviewed and policy recommendations made to ensure maximum benefit from research spending.

“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 underscore the importance of research funding for economic development. There may be no greater economic stimulus than federal investment in research and knowledge,” Clough said.

The remaining two panels will be concerned with improving energy efficiency and infrastructure for the 21st century.

For more information...

President’s Council of Advisors on
Science and Technology
www.ostp.gov/PCAST/pcast.html

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Academy of Arts and Sciences, American Physical Society, Institute of Electrical and Electronic Engineers, and the Optical Society of America. Austin serves on many boards and committees at the national level.

W. Kent Fuchs is head of the School of Electrical and Computer Engineering and the Birck Distinguished Professor at Purdue University. He received a B.A.Sc. in electrical engineering and computer science from Duke University; an M.S. in electrical engineering from the University of Illinois; an M.Div., Seminary, from Trinity Evangelical Divinity School; and a Ph.D. in electrical engineering from the University of Illinois.

Fuchs formerly served as a professor in the Department of Electrical and Computer Engineering and the Coordinated Science Laboratory at the University of

Illinois. His research interests include dependable computing, testing and failure diagnosis.

Fuchs is a fellow of both the Institute of Electrical and Electronic Engineers and the Association of Computing Machines. His research awards at the University of Illinois include the Senior Xerox Faculty Award for Excellence in Research; appointment as fellow in the Center for Advanced Studies; and the Xerox Faculty Award for Excellence in Research.

Don P. Giddens is the Lawrence L. Gellerstedt Jr. Chair in Bioengineering and Chair of the Wallace H. Coulter Department of Biomedical Engineering at Georgia Tech and Emory University. He received a B.A.E. and M.S.A.E. in aerospace engineering at Georgia Tech, and a Ph.D. in aerothermodynamics from Georgia Tech.

From 1992-97, he served as dean of the Whiting School of Engineering at Johns Hopkins University.

Giddens served from 1968-1992 as a professor in the Schools of Mechanical and Aerospace Engineering at Georgia Tech. During this period he served as co-director of Tech’s Bioengineering Research Center and the Emory/Georgia Tech Biomedical Technology Research Center, and from 1988-1992 he served as chair of the School of Aerospace Engineering.

Giddens is active on advisory boards in bioengineering, biomedicine and biotechnology. His research has focused on biofluid mechanics, specializing in vascular function, vascular grafts, hemodynamics of carotid bifurcation, and measurement of blood flow. He is a member of the National Academy of Engineering and is a fellow of ASME, a founding fellow of the American Institute of Medical and Biological Engineers, and a fellow of the Arteriosclerosis, Thrombosis and Vascular Biology Council, among various other society memberships and activities.

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paid trip to Sarasota, Florida, where the award ceremony will take place.

“I’m very proud to represent ChoicePoint and Georgia Tech in this fashion,” said Rugg, who majored in industrial and systems engineering. “It’s a great honor and lot of credit goes to Lisa Jones at Tech and Rob Phillips at ChoicePoint.”

Rugg graduated from ISyE last December with Highest Honors and a 3.75 grade point average. While at Tech he served as president of Alpha Kappa Phi business fraternity and received numerous honors and scholarships.

Jones, one of Tech’s co-op coordinators, said, “He has an ethic of achievement in the classroom, in his student leadership activities and on the job. I can think of no one more

deserving of the National Co-op Student of the Year honor.”

During his five semesters at the information technology company, Rugg saved the company \$400,000 by heading an initiative to make some of the company’s procedures more efficient. Rob Phillips, a project director at ChoicePoint, said, “Brian immediately stepped into the role of project leader. He directed the efforts of a group of 18 individuals, many of whom were seasoned professionals.”

Tech’s Cooperative Division is a five-year academic program in which students alternate semesters of full-time study with full-time work. Co-op is different from traditional internship programs because students are paid full-time employees of the companies they work for. When Tech established its co-op program in

1912, it was only the fourth school to do so. Today co-op programs can be found in more than 600 U.S. colleges and universities. Tech’s program currently has about 3,000 participating students.

Rugg said he joined co-op because he thought it would advance his career. “I felt like I’d have a leg up on other students when I graduate. Through co-op, I got about 18 months of great work experience while still in school.”

Since graduating, Rugg has received many job offers and plans to work for several years before pursuing a master’s degree in business administration.

For more information...

Georgia Tech Cooperative Division
www.coop.gatech.edu/



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Moving the Flats



photo by Michael Hagearty

Phase one renovations to Bobby Dodd Stadium are under way, with construction crews already having completed the demolition of the north stands (above, top) leaving a clear view of the Edge Intercollegiate Athletic Center. At right, the lower level of the east stands, which have been in place since 1913. Originally built by members of the Georgia Tech student body, Bobby Dodd Stadium/Grant Field is the oldest on-campus stadium in NCAA Division I-A. By the time the season begins in late August, the lower east structure will have a new concourse as well as 2,200 club seats

between the 25-yard lines with private lounges for those patrons. Field level improvements include shifting the playing field approximately 30 feet to the north and 15 feet to the West. This will allow for the addition of a new seating area in front of the Wardlaw Building in the south end zone that will accommodate nearly 3,000 spectators. The next phase, following the 2002 season, calls for a new north end zone structure, which will seat more than 16,000 spectators. The structure will also contain new locker rooms, a sports medicine facility, equipment room and football coaches' offices.

New grant focused on improving digital communications

College students in Atlanta, Boston and Houston are developing the digital future using digital signal processing (DSP) technology — from advances in face recognition technology to wireless video transmission, with support from Texas Instruments (TI).

Last week, TI announced a three-year, \$3 million donation to members of its DSP Leadership University program, comprised of Georgia Tech, Massachusetts Institute of Technology (MIT) and Rice University.

"At Georgia Tech, the DSP Leadership University program

supports the research of six faculty and six Ph.D. students in electrical engineering," said Ron Schafer, Regents' professor and John and Marilu McCarty Chair of Electrical Engineering. "Students and faculty work on research projects ranging from wireless video transmission, interpolation for color digital cameras, face recognition, speech recognition, chaotic systems for digital communication to low bit-rate speech coding.

"In addition to the collaborative research efforts, the three universities benefit from close contact with TI through cooperative internships and project review sessions — opportunities

that give students a competitive advantage," he said.

The three universities were selected in 1999 as inaugural members of the DSP program for university and industry collaboration in research.

Torrence Robinson, TI's DSP University program manager, said, "Not only do we see unique inter-university collaboration, but we have access to leading research from the three schools and accelerated progress in DSP development."

For more information...

DSP University Program
www.ti.com/sc/university

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Pending approval from Duke's Board of Trustees and the Provost's Committee on Appointments, Promotions and Tenure, Brown will chair a department of 19 full-time and 15 part-time faculty, directing advanced research and offering undergraduate and graduate courses in major areas of electrical engineering and computer engineering.

For Brown, moving to Duke will be a homecoming of sorts. Growing up in Hillsborough, North Carolina — just 12 miles from Durham — Brown attended North Carolina State University, receiving her B.S.E.E. in 1981. She attended Cornell University from 1981-1985 and received an M.S. and Ph.D. in electrical engineering.

After graduate school, she joined the University of Michigan as an assistant

professor. She left Michigan in 1987 and joined the Hughes Research Laboratories (HRL) in Malibu, Calif. She worked at HRL, as a member of the technical staff, project manager, section head and senior scientist from 1987-1994.

She joined the Georgia Tech faculty in 1994, becoming professor and associate dean in 1999.

IN BRIEF:

Conference calendar

The **Women's Leadership Conference** has announced its lineup of speakers and workshops for the fifth annual student-organized conference themed "Defying Definition" on Feb. 22-23. On Feb. 22, Georgia Tech alumna Lara O'Connor Hodgson, the co-founder of Thought Capital, will lead an interactive presentation motivating attendees to formulate creative solutions to workplace dilemmas. Hodgson holds a B.S. in Aerospace Engineering from Georgia Tech and an M.B.A. from Harvard University. On Saturday, Beverly Kitaoka, senior vice president of Science Applications International, will lead a breakfast discussion on how lifestyle choices impact career advancement, and what women can do to overcome these challenges. Workshops will include "Taking the Entrepreneurship Leap," "Women in Leadership Roles in a Male-Dominated Atmosphere," "Salary Negotiation," and "Investing and Personal Finance."

The Alumni Association will sponsor an alumnae track, including workshops such as "Leadership Etiquette for Women" and an open forum discussion about concerns of women already in the workforce.

Now is the time to register for the conference and to nominate alumni, faculty, staff and students for the "Women of Distinction" Awards. Registration and nomination forms can be found online at www.cyberbuzz.gatech.edu/wlc. The conference will be held on the third floor of the Student Center on Feb. 22 at 5 p.m. for a reception and distinguished speaker, and continue on Feb. 23 at 8:30 a.m. with workshops running until 4 p.m.

For more information, e-mail wlc02@hotmail.com, visit www.cyberbuzz.gatech.edu/wlc, or call the Women's Resource Center at 385-0230.

Employee benefit

The **(GT)² Club** announces its fifth annual **scholarship competition** for entering freshmen who are sons and daughters of Georgia Tech employees.

Selection will be based on an applicant's high school academic record; leadership, involvement and accomplishments in school and community activities; and their ability to communicate orally and in writing.

To obtain the (GT)² Scholarship application, refer to www.enrollment.gatech.edu/gt2. The deadline for applications is March 15. Qualified applicants will be interviewed by the scholarship committee in late March. Contact Paul Hurst at 894-1944, or paul.hurst@success.gatech.edu for more information.

Professor receives book award

Hanchao Lu, a professor in the School of History, Technology and Society, recently won an **award of scholarly distinction** from the Urban History Association for his book "Beyond the Neon Lights: Everyday Life in the Early Twentieth Century." Methodologically, it combines historical studies with social sciences — in particular, with sociological and anthropological research. It focuses on Shanghai, China's largest city and what Time magazine labeled as a rival to New York City for the title of the "center of the world" in the 21st century.

"I hope this work and its recognition in the scholarly community can contribute to the prominence of our studies of social sciences and the humanities at Georgia Tech," he said.