A Look Back at 2010: From the Wet Dog Shake to Waffles

In the Jan. 8, 2001, issue of The Whistle, the editor reflected on the year that was 2000 for Georgia Tech.

So what were some of the year’s highlights?

The announcement was made that $148 million would be spent to extend the campus to the east side of the 1-75/85 connector along Fifth Street to West Peachtree (i.e., Tech Square).

Also, the School of Mechanical Engineering was recognized as an American Society of Mechanical Engineers Historical Site — the first time the organization honored an academic institution.

And yes, it was the year when longtime basketball coach Bobby Cremins announced his plans to retire from college coaching.

Flash forward 10 years to 2010 and a lot has changed — including The Whistle’s annual “Year in Review” feature.

In this issue, you’ll find a collection of some of the high points of 2010, separated into the following categories: Institute, Research, Community, and People.

Enjoy your trip down memory lane.

Continued on Page 3

McGrath Will Direct the Georgia Tech Research Institute

Battelle Memorial Institute’s Robert T. McGrath has been named the new vice president and director of the Georgia Tech Research Institute (GTRI).

McGrath, currently a consultant on National Laboratory/University Partnerships, STEM Education and Race to the Top initiatives for Battelle Memorial, will begin his new responsibilities Feb. 1, 2011. He succeeds Executive Vice President for Research Stephen Cross, who served as GTRI director from 2003 to 2010.

“GTRI is a research powerhouse,” McGrath said. “It has a significant reputation for applied engineering and basic science research. GTRI is very well positioned because of its researchers’ outstanding expertise in selected problem areas important for defense and homeland security. We also have a significant opportunity to translate that expertise into important technology contributions in sectors such as energy, biomedical engineering and healthcare.”

Clough Commons to be Managed by Library

Provost and Executive Vice President for Academic Affairs Rafael L. Bras has announced that the new G. Wayne Clough Undergraduate Learning Commons will become part of the libraries and operate under the management of Dean and Director Catherine Murray-Rust.

“Because the Clough Commons will connect with the Price Gilbert Library and the Crosland Tower, we see the provost’s decision as an opportunity to create a vibrant academic and cultural complex at the center of campus,” Murray-Rust said. “The library faculty and staff are delighted that the Clough Commons will be managed by the library.”

Rendering of Clough Commons.

Events continue on page 3

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MorrisNamedAVPofHumanResources

The start of the new year will bring changes in the OfficeofHumanResources, including a new associate vice president.

M. Scott Morris, who previously served as associate vice president for human resources and executive director for strategic planning at the University of Buffalo, announced the role on Jan. 3. He comes to Tech with more than 15 years of HR experience and has worked in the University of California System, the California State University System, the State University of New York and the National Nuclear Laboratories.

“Understanding the institution’s strategic visionanddirection,clearlyarticulatingand connectingHR priorities to that vision, and then motivating and inspiring the team to flawlessly execute the plans is critical,” Morris said. “The challenges that I’m being asked to address at Tech are really exciting. I look forward to taking the knowledge that I’ve gained in my past positions and putting it to good use.”

As associate vice president, Morris will report to the vice president for campus services and will be responsible for career and leadership development, HR consultancy, talent acquisition, benefits, payroll and records, HR systems, compensation, employee relations and equal opportunity.

Morris will also be responsible for implementing several strategic initiatives including new job classification and compensation and electronic vacation and sick leave reporting systems.

ProsvotteAppointsInternationalAdvisoryGroup

With the renewed emphasis on global engagement articulated in Georgia Tech’s new strategic plan, Institute leadership has formed an advisory group that will provide additional faculty input and guidance in forging future international partnerships.

Earlier this month, Provost Rafael L. Bras announced the creation of the International Faculty Advisory Group, a faculty committee that will serve to support and advise both the provost and the vice provost on issues related to Georgia Tech’s strategy for global engagement.

“Tech’s strategic plan, we have articulated an ambitious agenda not only in our global footprint and influence, but also in bringing the world to Atlanta,” said Steve McLaughlin, vice provost for international initiatives and chair of the advisory group. “Not only will this foster research collaborations and promote economic development both at home and abroad, but it will also ensure Georgia Tech graduates are good global citizens who are prepared to assume leadership positions with multinational institutions.”

The International Faculty Advisory Group will meet at least once per quarter with the agenda centered on pending issues and advice-assistance in shaping global engagement. Immediate tasks for this group include finalizing Tech’s Global Strategic Plan and developing a set of guidelines for reviewing Institute-level opportunities for international partnership.

Inaugural members of the group include the following people:

- Godfried Augenbroe, College of Architecture; Vicki Birchfield, Ivan Allen College of Liberal Arts; Aaron Bobick, College of Computing; John-Paul Clarke, College of Engineering; Andrei Fedorov, College of Engineering; Merick Furst, College of Computing; Larry Jacobs, College of Engineering; Seth Marder, College of Sciences; John McIntyre, College of Management; and John Pappolymerou, College of Engineering.

Ayanna Howard, Electrical and Computer Engineering; Nicholas Robson, undergraduate student; Rob Parrish, graduate student; and Elliotte Creed, graduate student.

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StrategicPlanningNews

Developmentof‘X-CollegetobeExpanded

Earlier this month, Provost Rafael L. Bras announced the creation of a committee that will review options and formulate strategies for the creation of an X-College, one of the ideas that sprouted from the yearlong strategic planning process.

“The X-College Initiative grew from the very strong recommendations from students and faculty in the strategic planning process that Georgia Tech needs to increase student-faculty interaction and allow more flexibility in curricula,” said Richard Barke, arts and associate professor in the School of Public Policy and chair of the X-College planning committee. “For example, the X-College is considering whether to allow students with strong faculty guidance to compose programs of study that focus on particular ‘grand challenges’ facing society, using knowledge from a wide range of relevant fields. The committee is investigating how to achieve these goals while balancing disciplinary and interdisciplinary learning, maintaining the traditional rigor of a Tech education, innovating in learning techniques and educational technologies, and respecting the expectations of grade schools and employers.”

The vision is broader than student-designed degrees, however. An X-College experience should also serve to challenge faculty to experiment with learning techniques, balancing core instruction and developing alternatives to regular courses taught in semester-length blocks.

“For some time, our students have asked the administration to offer some kind of self-directed learning options,” Bras said. “The X-College concept should be developed to reflect the fundamental importance of a rigorous Georgia Tech education, to complement existing degree programs and academic units and to prepare students for creative careers.”

The committee includes the following people: Richard Barke, Public Policy (chair); Sabir Khan, Architecture; Ravi Bellamkonda, Biomedical Engineering; Colin Potts, Interactive Computing; Rich DeMillo, Computer Science; Monica Halka, Honors Program; Jason Freeman, Music; David Collard, Chemistry; Mike Schatz, Physics; Stylianos Kavadas, Management; Becky Grnter, Interactive Computing; Usha Nair-Reichert, Economics; Lisa Yanek, Literature, Communication and Culture; Bart Bras, Mechanical Engineering.

www.gatech.edu/vision
2010: Year in Review

Institute

• “Designing the Future: A Strategic Vision and Plan”: Georgia Tech’s strategic plan was launched on Aug. 31. (1)
• The Big 123: Tech kicked off its 123rd birthday celebration. (2)
• Invitation Accepted: Tech joined the Association of American Universities on April 20.
• InVenture Prize: The 2010 competition was televised for the first time on Georgia Public Broadcasting.
• Ramblin’ Wreck: The Wreck began celebrating its 50th anniversary.
• France Comes to Atlanta: Tech partnered with the Consulate General of France in Atlanta to present 20 events in science, business, humanitarian efforts and the arts from Nov. 29 to Dec. 12. (3)
• Georgia Tech Lorraine: The Institute’s first international campus in Metz, France, celebrated its 20th anniversary. (4)
• First Black Students: Tech kicked off the 50th anniversary celebration of the matriculation of black students at the Institute.
• Campaign Launch: The Nov. 12 campus launch of the public phase of Campaign Georgia Tech featured an announcement that an anonymous current faculty member had committed $5 million. (5)

Research

• OpenStudy: OpenStudy, a service that allows students from across the globe to turn to each other for study help, was launched by a team from the Advanced Technology Development Center.
• Graphene: Scientists made a breakthrough toward creating nanocircuitry on graphene, widely regarded as the most promising candidate to replace silicon as the building block of transistors. (6)
• Deceptive Robots: The first detailed examination of robots and their ability to deceive was conducted. In the future, robots capable of deception may be valuable for several different areas, including military and search and rescue operations. (7)
• Vaccines Via Microneedles: A study conducted by researchers from Emory University and Georgia Tech evaluated the immunization benefits of delivering vaccines through small microneedle patches. (8)
• The Wet Dog Shake: Researchers looked to the physics of the wet dog shake to improve the efficiency of washing machines, dryers, painting devices, spin coaters and other machines.
• Nanogenitors: Researchers continued to hone nanogenitors that could power devices such as iPods or pacemakers. (9)

Community

• The Haiti Earthquake: A candlelight vigil was held to remember those lost in January’s earthquake.
• Waffle Time: In June, Waffle House opened a location on campus in Tech Square.
• Construction Closures: Skiles Walkway closed in late December and will not reopen until August 2011 — just in time for the scheduled opening of the Clough Undergraduate Learning Commons.
• iPhone App: Noah Witherspoon, a senior in Georgia Tech’s computational media program, worked with Tech to design an official iPhone and iPod Touch application for the Institute. (10)
• Petræus Pays a Visit: In January, General David H. Petræus spoke to an audience on campus as part of the Colonel Leslie Callahan Memorial Endowment Lecture. (11)
• Best Place to Work: For the second year in a row, the Institute was named to The Chronicle of Higher Education’s Great Colleges To Work For Honor Roll. Tech was the only Georgia school on this year’s list. The results, which were released in late July, were based on a survey of more than 42,000 employees at 277 colleges and universities.

People

• Steve Cross became Tech’s first executive vice president for research. (2)
• Rafael L. Bras was named provost and executive vice president for academic affairs. (13)
• Michael Warden became vice president for communications and marketing. (14)
• Archie Ervin was named Tech’s inaugural vice president for institute diversity. (15)
• Don Giddens, dean of the College of Engineering, announced that he will retire in July 2011. (16)
• Zvi Galil became dean of the College of Computing. (17)
• Jacqueline J. Royster was named dean of Ivan Allen College. (18)

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Membranes are this Professor’s Passion

Imagine that someone offered you $1 million if you could list three uses for molecular filters. Could you do it?

William Koros could. But he does have an unfair advantage. Koros is the GEA Eminent Scholar in Membranes and the Roberto C. Goizueta Chair for Excellence in Chemical Engineering at Georgia Tech.

His teaching and research focuses on making new materials to create more efficient molecular filters, with a specific interest in molecular gas filters.

“One can remove carbon dioxide from natural gas to make a cleaner gas, can remove ethanol from water to make biofuels to replace conventional gasoline and can create more efficient molecular filters, with a specific interest in molecular gas filters.”

“Membranes can remove carbon dioxide from natural gas to make a cleaner gas, can remove ethanol from water to make biofuels to replace conventional gasoline and can molecularly filter water out of salt water to produce drinkable water. Koros said. Recently, The Whistle sat down with Koros to learn more about his experiences at Tech and as an instructor. Here’s what he said:

Tell me something unusual about yourself. I’ve been a vegetarian for 30 years.

What are three things everyone should do while working at Tech? Do a good job, whatever your job is. Tell people who are doing a good job that they are. Help people who are having difficulties figure out how to help themselves — without trying to solve their problems for them.

What brought you to Tech? I’ve been teaching as a faculty member since 1977 but didn’t arrive at Tech until 2001. I was invited to serve on an advisory board at Tech when I was a faculty member at the University of Texas at Austin, and I learned about the excellent balance between graduate research and undergraduate education that exists at Tech. I was attracted to contribute to that effort.

What is the greatest challenge associated with teaching, and how have you dealt with this issue? Remembering that everyone is different and that methods that work best for student A are not necessarily the best for student B. The best way I have found to deal with this challenge is to talk to individual students outside of class to learn what is working and not working for them in the in-class interactions. Of course, this only works if students are motivated to have this discussion.

What do you enjoy most and least about your job? How do you make your least favorite thing bearable? I most enjoy the opportunity to work with students and to teach them the fine art of problem solving. The least enjoyable part of the job is raising money to allow me to do the type of research I want to pursue. But, I’m realistic, so I know that one can’t do the enjoyable part without doing the less enjoyable part as well.

As an instructor, what piece of technology could you not live without? Any device that allows a schematic representation of a real situation. It could be a pencil and paper, a white board and marker or a computer screen and mouse — simple words don’t work as well as words and a sketch.

Where is the best place to grab lunch (on or off campus) and what do you order? I usually just eat nuts and wheat crackers and drink coffee at my desk for lunch. So, I’m not a good person to ask about this.

If you weren’t in your current line of work, what would you be doing? I’ve never had to consider a second choice as to what to do; my challenge has only been figuring out where to do it.

CLASSIFIEDS

Very cool 2BR/1BA, $1,550 utilities included. End unit in quiet concrete building, hardwood parquet floor, gated, tennis courts and pool. Glazed pond, courtyard, doubles as separate dining area or office. Located very close to Tech. Contact lajohn@coxnet.gatech.edu or 404-894-1883.

Apartment w/ large master BR, free Internet, walk-in closet, private bath, hardwoods. Kitchen w/ new appliances, island, patio/deck, parking, gated. Washer/dryer. $675/Mo. West midtown. 713-568-9828.

3BR/2BA townhouse for rent with fenced backyard. $1,200/month. For additional info and contact numbers, go to tinyurl.com/3ypgpbk.

Built in 2003, 3 BR/4 BR bonus room, 3,250 sq ft. house on cul-de-sac in quiet neighborhood. Only 813K. Due to BRAC, seller pays $4,000 closing costs w/full price offer closing 12/31/09. Hardwoods, plush carpet, privacy-dyed blinds, large living and dining rooms, master and laundry on main. Only 17 miles from Tech off I-20. Enter 5415 on realtor.com or call 678-504-1567 to view.

FURNITURE/APPLIANCES

Leather sofa and love seat. Set is less than 2 years old, smoke free/pet free environment. $700 (no money order only) or best offer. Must pick up, located in Cumberland Mall area. E-mail jennifer.jacobs@mgt.gatech.edu.

Maytag Legacy Series washer and dryer. Everything you need is included to hook you right up and start using these units! No scratches or dents. $600. Call 404-839-1048.

Like new, 3-place Macy’s chocolate microsuede queen sleeper sofa, chair and storage ottoman. Sleeper bed has never been slept on! $750. Call 404-939-1048.

Heavy-duty swivel TV stand for both CRT and flat panel TVs. Can hold more than 100 lbs. has a divider shelf for stereo/DVR/VCR components with glass door and side storage shelves for DVD/VHS. Some scratches and scuffs from normal wear. Call 404-939-1048.

Dinette set with six chairs. Round table w/ leaf measures approx. 66 in. by 40 in. In good shape. Medium oak with modern style design. Pictures upon request. $100. Call 404-385-3689 or e-mail rta@brownfurinc.gatech.edu.

MISCELLANEOUS

Eureka “The Boss” SmartVac vacuum. Top-rated by Consumer Reports. Carpet and floor selection, like new, 18 months old. $500. Cash. Order only) or best offer. Must pick up, located in Cumberland Mall area. E-mail jennifer.jacobs@mgt.gatech.edu.

Free yellow jacket next removal. Nests to be used for research at Georgia Tech. Call 385-6311 or e-mail michael.goodisman@biology.gatech.edu.

HP 12c financial calculator — hardly used w/ case. $35. E-mail kls@gtacaltech.edu.

Speakers for sale: Mirage FTR-7 floorstanding speakers, $503/pair. Mirage CM-C3 center channel, $220 or $500 for all three. Call 404-717-9186.

Pro-Form 485EX Treadmill. Elevates, odometer in good condition! $75. Call 770-386-3181.

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