Centennial Summer Olympics brought city a lasting legacy

John Dunn
Alumni Association

It was the summer that changed Atlanta forever. The 1996 Centennial Summer Olympic Games opened the world’s eyes to Atlanta as an international city and won Georgia Tech acclaim for engineering a technology-friendly event and serving as the Home of the Olympic Village.

Georgia Tech’s involvement in championing the Olympic Games for Atlanta was intensely supportive and provided a level of razzle-dazzle technological fun that overcame the stuffy reserve displayed by some members of the International Olympic Committee (IOC).

It would be the 100th anniversary and there was a universal swell of support for the bid to go to Athens, Greece, birthplace of both the ancient and modern Olympic Games. It was initially considered a cinch.

Atlanta appeared even more of a long shot because it was highly unlikely that the IOC would return the Olympics to the United States so soon after the Winter Games of Lake Placid in 1980 and Summer Games in Los Angeles in 1984. Then there was the harsh reality that no city had ever won the right to stage the games on its first bid attempt.

The fact was, Atlanta was unknown to the international sports world. Atlanta’s strongest international recognition came from its mayor, Andrew Young, former ambassador to the United Nations.

In 1989, a meeting of the IOC in San Juan, Puerto Rico, gave organizers an opportunity to convince IOC members that Atlanta was the best candidate for the Olympic Games. Georgia Tech was asked to design an architectural scale model of Atlanta as the host city. Tech President John Crecine suggested something else. Atlanta should show the IOC the future — virtual reality.

The term “virtual reality” was virtually unknown in 1989, when Tech began a fantastic effort to help win the high-stakes election. More than 40 Games continued, page 2

Meindl named director of nanotechnology center

Megan McLainey
Institute Communications and Public Affairs

Georgia Tech’s newly formed Nanotechnology Research Center, which recently received a $15 million commitment from the Marcus Foundation for a new building, has named Electrical and Computer Engineering Professor James Meindl as its founding director.

Meindl, director of Tech’s Microelectronics Research Center and the recent winner of the IEEE Medal of Honor, will lead the center’s efforts to fuse multiple scientific disciplines in pursuit of breakthrough nanotechnologies.

“The most important economic event of the past half century has been the information revolution,” Meindl said. “Its principal driver has been the ubiquitous silicon microchip, which marvelously engages nanotechnology. Future breakthroughs comparable to the microchip in their impact may be possible through a fusion of discoveries in physical and biological science and engineering enabled by nanotechnology. The Georgia Tech Nanotechnology Research Center will be the first research center in the United States to focus primarily on this exciting and inspiring fusion.”

Meindl joined Georgia Tech in 1993 and was appointed director of its Microelectronics Research Center in 1996. In 1998, he became the founding director of the Interconnect Focus Center, leading a team of more than 60 faculty members from MIT, Stanford University, Rensselaer Polytechnic Institute, the State University of New York at Albany and Georgia Tech in a partnership with industry and government. His research at Georgia Tech includes exploring solutions to problems that arise from trying to interconnect billions of transistors within a tiny chip.

The Center will be the most advanced nanotechnology facility in the Southeast, the first of its kind in the region, and will be one of the most sophisticated in the country. Located on the Georgia Tech campus, the 160,000-square-foot facility will feature 50,000 square feet of cleanrooms critical to research and instruction in microelectronics, semiconductors, materials, medicine and pharmaceuticals.
Tech computer scientists worked against a pressing deadline to create a three-dimensional tour through Olympic venues that had not even been designed, much less built.

Tech created a 7-foot-tall, 3-D interactive video and laser disc projection system that made its debut at the San Juan meeting. The presentation dazzled IOC members. In the fall of 1990, Atlanta secured the bid.

"It wasn't what the Olympics got out of it but what the campus got out of it. The Olympics left an impact but it isn't expressed as, 'You can thank the Olympics for this.'"—School of Mathematics undergraduate Derek Byler, an Atlanta native, on the physical legacy of the 1996 Summer Olympics on the Georgia Tech campus. (Chicago Tribune)

The swimming and diving competitions were held on Georgia Tech’s campus, in a specially built, open-air aquatic center. The facility would ultimately be closed in during the Campus Recreation Center renovation.

The Olympic Plaza with its landmark Kessler Campanile, funded by and named for alumnus Richard Kessler. The plaza was not the same after 1996,” said Wayne Clough, who became Tech’s 10th president in 1994. “Because of its Olympic legacy, Tech will be better prepared to enter the next century.”

New director of GTRI’s sensors laboratory named

T.J. Becker
Research News

The Georgia Tech Research Institute (GTRI) has named William Melvin as director of its Sensors and Electromagnetic Applications Laboratory (SEAL). He replaces Robert Trebits, who retired in May after a 35-year career with GTRI, including 15 years as director of SEAL.

An expert in signal processing and aerospace radar systems, Melvin has been with GTRI for eight years, most recently as director of SEAL’s Adaptive Sensor Technology Project Office.

Mervin’s research has led to three U.S. patents on adaptive radar technology, and he has authored more than 120 technical articles appearing in journals, conference proceedings and government reports. He holds a doctorate in electrical engineering from Lehigh University and was recently named the “Young Radar Engineer of the Year” by the IEEE Radar Systems Panel of the Aerospace and Electronic Systems Society.

"Bill Melvin will be an outstanding laboratory director," said Stephen Cross, GTRI’s director. "In addition to a keen intellect, he possesses the kind of leadership qualities that Jim Collins cites in “Good to Great,” such as personal humility coupled with tremendous drive and commitment to the organization. Bill is a hard worker and is well respected by his colleagues at GTRI and Georgia Tech as well as in our stakeholder communities."

At SEAL, researchers focus on developing radio frequency (RF) sensors, which includes radar, electromagnetic environmental effects and antenna technology. “Our mission is to contribute to the country’s defense, security and well-being by solving complex sensor problems,” Melvin explained.

“Are these exciting times for radar, as a lot has changed in the past 15 years,” Melvin continued. “It used to be that radar systems directed energy into the skies in their search for Soviet aircraft. Today we’re pointing radar systems toward the Earth to provide defense and intelligence communities with information on all types of ground threats.’”

That presents a challenge to make radar systems more effective. For one thing, today’s radar systems must operate in environments with increasingly complex interference, contend with site-specific clutter and man-made objects. What’s more, spectrum has diminished due to the growing number of wireless devices.

Another emphasis at SEAL is signal processing techniques. “We’re trying to make radar bang up against the laws of physics,” Melvin said, referring to radar systems that can look through walls and map the interiors of buildings. “To do that, we need to extract as much information as possible out of the data that a system receives.”

Although the defense community benefits greatly from SEAL’s work, the lab is also pursuing related radar technologies for applications in air traffic control, vehicle safety, site intrusion detection and healthcare.

“Radar is a highly multidisciplinary field, and SEAL has a great team of subject matter experts,” Melvin said. “By pooling their talent, we can develop highly innovative, end-to-end solutions that best meet our customers’ requirements.”

Key units at SEAL:

• Radar Systems Division, which develops air-to-ground and space-to-ground sensors.

• Air and Missile Defense Division, which develops sensors for ballistic missile defense.

• Electromagnetic and Antennas Division, which investigates both new and existing threat systems for the intelligence community and explores electromagnetic effects and antenna design and measurement techniques.

• Tactical Weapons and Sensors Project Office, which develops sensors for tactical weapons systems that support military troops on the ground.
Tech joins statewide effort to improve customer service

Efforts support governor’s initiative

Megan McRainey
Institute Communications and Public Affairs

University System of Georgia (USG) Chancellor Erroll B. Davis Jr. is asking the 38,000 faculty and staff employed by Georgia’s 35 public colleges and universities, including Georgia Tech, to provide faster, friendlier, more efficient service to the USG’s “customers” — more than 253,500 students.

In coordination with Gov. Sonny Perdue’s launch today of the state’s new Customer Service Improvement Initiative, in which all state agencies have united in an effort to make Georgia the best-managed state in the country, Davis announced that every USG campus is poised to implement a plan for improving customer service beginning Aug. 1.

“Georgia Tech has a longstanding commitment to enhance the quality of the undergraduate experience,” said Georgia Tech President Wayne Clough. “Our Customer Service Improvement Plan gives us clear direction to better achieve that goal.”

To kick off its new efforts to improve customer service, Georgia Tech will initially focus on two key service areas — academic advising and personnel transactions.

Student advising is central to retention, timely graduation and student satisfaction, and Georgia Tech will work to strengthen its advising efforts. Special attention will also be paid to the convenience and efficiency of human resource transactions for the students, faculty and staff who work for Georgia Tech.

“We think Governor Perdue’s new initiative is a real shot in the arm to our ongoing efforts to improve campus customer service. We are all for any program that encourages us to do a better job for our students and stakeholders,” said Hal Irvin, senior director of organizational development at Georgia Tech and leader of Tech’s Customer Service Improvement efforts.

This past spring, Davis named Jim Flowers, special assistant to the USG’s chief information officer, to serve as the USG’s representative on the Governor’s Customer Service Team, changing him with developing a customer service improvement plan for the USG. The chancellor also direct-ed USG presidents to appoint customer service champions to launch, guide and manage improvements that will make the services provided by each campus “faster, friendlier and easier” to access.

Customer service champions will work closely with their campus presidents, who — for extra motivation — recently had customer service improvement added to the list of key performance indicators on which they will be annually evaluated.

The USG will also launch a Web site, enabling users to submit their suggestions and criticisms via an online comment tool.

IN BRIEF:

Tech company receives large grant for disease detection

A company co-founded by a George Tech researcher has received a substantial federal grant to develop and commercialize a nanoscale sensor called a “molecular beacon” for detection and diagnosis of diseases including cancer.

The funding — a Small Business Technology Transfer Program (STTR) Phase 2 grant from the National Cancer Institute — provides $1.65 million over two years to Vivonetics, a startup company founded by Gang Bao and Xingwu Godamunne. Bao, a professor in the Wallace H. Coulter Department of Biomedical Engineering operated jointly by Georgia Tech and Emory University, will lead the Vivonetics/Georgia Tech research team.

“The funding will be used for two purposes — to further develop the technology and to commercialize that technology,” said Bao. “We hope to be able to launch a product by May 2007.”

Founded in 2003, Vivonetics also received an earlier STTR Phase 1 grant for $50,000. It also recently won Georgia Research Alliance grants totaling $118,000 through VentureLab, a Georgia Tech unit that supports commercialization of research discoveries.

Sensitive financial information removed from pay stubs

To further secure personal financial information, the Office of Human Resources (OHR) has changed the way that bank account information is displayed on pay stubs. In the future, TechWorks will only display the last four digits of an employee’s bank account number.

Faculty and staff are able to deposit net pay into up to three accounts and/or financial institutions. OHR suggests that those who regularly transfer money from one account to another after pay is deposited take advantage of the direct deposit function in TechWorks, eliminating the need to go through financial institutions to make these transfers.

The direct deposit function allows you to manage your account information, including the ability to change the dollar amounts or percentages to be deposited into each of these accounts. To access the direct deposit function, log into www.techworks.gatech.edu and go to the Payroll and Compensation home page.

Seven swimmers named academic All-Americans

Georgia Tech’s Noah Copeland, Stephanie England, Ofer Finkler, Jason Howard, Teemu Rettunen, Ashley Rasche and Sam Morgan were named to the 2006 College Swimming Coaches Athletic Association of America (CSCAA) Academic All-American teams, announced by the CSCAA on Tuesday.

The men’s swimming and diving team finished 10th in the nation among Division I schools, attaining a team GPA of 3.24 for the spring semester.

To make the All-American team, athletes must compete in the NCAA Championships and achieve a 3.50 grade point average. In order to be selected to the CSCAA Academic All-American honorable mention team, athletes must swim a NCAA “B” qualifying standard and attain a 3.50 GPA.