Institute Update and Georgia Tech’s Role in Shaping Public Policy

President G. Wayne Clough
Georgia Tech Advisory Board
November 8, 2002
Student caliber continues to rise

• 16,400 total enrollment
  – 15,800 on Atlanta campus
  – 600 in southeast Georgia, France, Singapore, or online

• 2,234 freshmen
  – 1336 average SAT score
  – 3.8 average GPA (of 4.0)
67 new faculty
16 endowed chairs

Richard DeMillo, Dean, College of Computing

William T. Trotter, Mathematics

William Wepfer, Vice Provost, Distance Learning and Professional Education

Anselm Griffin, Textile & Fiber Engineering

Judith Curry, Earth & Atmospheric Sciences
Awards honor outstanding faculty

13 NSF CAREER Awards

Presidential Early Career Awards for Scientists and Engineers:
John Zhang, Chem & Bio
Reggie DesRoches, Civil Eng

Robert Dickinson, Earth & Atmospheric Sciences: first Tech professor to be a member of both the National Academy of Engineering and the National Academy of Sciences.
Nation’s 9th best public university

- 9th among public universities; 38th among all universities, *U.S. News & World Report*.

- Graduate rankings strong:
  - Engineering ranks 4th; all ranked schools in top 15.
  - Science programs rank largely in the top 10%.
  - Computing ranks 12th.
  - Management ranks 39th, all ranked programs improve.

- Architecture ranks 5th in *Almanac of Architecture and Design* study.
Improving the Institute

- New strategic plan
- Campus safety
- Academic accountability
- Greek system
- Commercializing research
- Undergraduate initiative: second year
- Enhancing vitality of campus core
Research awards increase

In millions

FY93  FY94  FY95  FY96  FY97  FY98  FY99  FY00  FY01  FY02
Entomopter
Midterm grades prove helpful

- 91% of last year’s freshmen are back
- Number of students receiving a D or F in core courses dropped from 11% to 9%.

Students becoming more aware of the support services that are available to them.
Undergraduate research expands

- New website alerts students to opportunities.
- 108 students received funds from President’s undergraduate research initiative.
- Almost 10% of undergraduates received academic credit for supervised research activities.
A new focal point for campus

- Houston Building
- New Quad
- Undergraduate Learning Center
- Library West Commons
A new focal point for student* recreation and faculty and staff
Facilities

Technology Square tops out
Facilities

Life Sciences Complex takes shape

Ford Motor Company ES&T

Whitaker Biomedical Engineering
President Bush Views Tech's Advanced Homeland Defense Technology

A packed house of about 2,000 invited guests greeted President George W. Bush with thunderous applause, at Georgia Tech's O'Keefe gymnasium nearly drowning out the music that signaled his entrance.

In town for a fund-raiser on behalf of his fellow Republican, Congressman Saxby Chambliss, the President addressed an audience that included many Georgia high school students.

"serving national needs"
President George W. Bush views a demonstration of first-response technologies.

Georgia Tech civil engineers assess the damage at Ground Zero with an advanced digital data system they developed.
"shaping national policy"

Georgia Tech President Named to Presidential Policy Council

President George W. Bush today appointed G. Wayne Clough, President of the Georgia Institute of Technology, to his Presidential Committee on Science and Technology. Dr. Clough is one of 24 members of the prestigious board and is the first Georgia Tech representative to serve on the Council. Another Atlantan joining Dr. Clough on the Council is Dr. Walter Massey. "Dr. Clough also noted the importance of having two Atlanta representatives on the Council. "Walter Massey is highly regarded in Washington and has been instrumental in shaping national policy for years. Our ability to focus on the issue of research and technology transfer-through examples like the Georgia Research Alliance, Vernacore, and the Georgia Initiative..."
GWC
Policy Activities

• President’s Council of Advisors on Science and Technology (PCAST)
• Executive Committee, U.S. Council on Competitiveness
• Markle Foundation - National Security in the Information Age
• Chair - NAE Project “The Engineer in 2020”
• Chair – Governor’s Blue Ribbon Natural Gas Task Force
• Chair - Mayor’s Clean Water Advisory Panel
In Public Policy

HTS Chair Willie Pearson and Public Policy Professor Susan Cozzens are the present and immediate past chairs of the Committee on Science, Engineering and Public Policy of the American Association for the Advancement of Science.

Ivan Allen College Dean Sue Rosser is a national expert on women in science and engineering.
Edward Reedy, director of the Georgia Tech Research Institute, serves on the Army Science Board.

Center for International Strategy, Technology, and Policy, directed by John Endicott, hosted a rare visit of a high-level government delegation from North Korea.
ISyE Professors Bill Rouse and Chip White are nationally recognized experts on intelligent transportation systems and the security issues they pose.

Civil Engineering Professor Mike Meyer is an expert on transportation policy and the environment.
GT CIBER provides data about business standards, technological opportunities, and threats in the global marketplace.

Management Professor Marie Thursby has been a research associate with the National Bureau of Economic Research for 15 years.
Sy Goodman, Computing and International Affairs, provides information technology expertise to foreign governments.

Dean of Computing Rich DeMillo provides policy expertise on defending against cyber attacks.

Helena Mitchell of GCATT advises state and federal policymakers on telecommunications issues.

Sy Goodman, Computing and International Affairs, provides information technology expertise to foreign governments.
The Economic Development Institute (EDI) helps Georgia communities evaluate future growth trends and assists them with economic development planning.

EDI Principal Research Associate Jan Youtie has conducted economic development studies for the U.S. Department of Commerce, the State Office of Planning and Budget, and the Aspen Institute.
Shaping policy

At the State and Local Level

Public Policy Professor Michael Farmer, an expert on the sustainability of natural resources, advises policymakers from Georgia, Alabama, and Florida on shared water resources.

Larry Keating, Architecture, works with Atlanta neighborhoods and advises community leaders on improving the quality of life for minority and low-income residents.
For discussion

Questions on Our National Role

• What is Georgia Tech’s appropriate role in helping to shape policy at the national level?
• What venues serve this role best?
• What do we bring to the table that other players (MIT, Harvard) do not?
• What cautions should we be aware of as we attempt to develop our national policy role?
Questions on State/Local Role

• What is our role at the state and local level?
• How do we balance against national efforts?
• What do we bring to the table that UGA and GSU do not?
• What cautions should we be aware of as we develop our state and local policy role?
Questions on Policy Education

• How much of our policy agenda should be reflected in our undergraduate and graduate curricula?

• What should the typical engineering or science student learn about national and state policy at Georgia Tech?