Innovation in a changing world

GEORGIA TECH · STATE OF THE INSTITUTE · 2004
“The world leaders in innovation and creativity will also be world leaders in everything else.”

Harold R. McAlindon
Author and innovative business consultant
“Georgia Tech will define the technological research university of the twenty-first century and educate the leaders of a technologically driven world.”

The Strategic Plan of Georgia Tech
The most important ingredient: outstanding people
Incoming freshmen

- 2,600 students (+18%)
  - 782 women (+28%)
  - 153 African Americans (+21%)
  - 105 Hispanics (+48%)
  - 116 international (+35%)
- 1337 average SAT
- 8 perfect SATs, 1 perfect ACT
- 5 sets of twins
Students shine

Blair Dowling, winner of the Phi Kappa Phi Scholarship Cup for the best scholastic record of the 2003 graduating class: Homeland Security Fellowship

Goldwater Scholarships:
- Thomas Oliver
- Mark Callaghan

Laurence Ralph: Mellon Fellowship in Humanistic Studies

Gabe Brostow: Marshall Sherfield Fellowship

Monique Gupta: Churchill Scholarship

Jia Xu: Marshall Scholarship
Faculty honored

National Medal of Technology: Russell Dupuis, elec and comp engineering

Presidential Early Career Award for Scientists and Engineers: Julia Kubanek, biology

Descartes Prize (prestigious European award for collaborative research): Jean-Luc Bredas, chemistry & biochemistry

Presidential Green Chemistry Challenge Award: Charles Eckert, chemical & biomolecular engineering, and Charles Liotta, chemistry
Solving problems at home and abroad
Innovative undergraduate initiatives

- Student computer initiative; Web-enhanced curriculum
- Mid-semester grade reports and follow-up help for lagging students
- Undergraduate research opportunities
- Expanded international study options
- Enhanced student life/leadership options
Students studying abroad
Tech’s national presence

- National Innovation Initiative
- Sam Nunn Policy Forum on Bioterrorism
- National Lambda Rail
- National Nanotechnology Infrastructure Network
Cross-disciplinary education builds understanding
Creating innovative programs

Professional master’s degrees:
- Human-Computer Interaction
- Quantitative & Computational Finance
- Bioinformatics
- Prosthetics and Orthotics

Participating colleges:
- Sciences
- Ivan Allen
- Computing
- Engineering
- Management

McEver Program for Engineering and the Liberal Arts offers unique seminars that consider the impact of engineering on the liberal arts and vice versa.
Four campuses on three continents

Georgia Tech-Atlanta
Georgia Tech-Lorraine
Georgia Tech-Savannah
Georgia Tech-Singapore
Interdisciplinary research stimulates ideas
Georgia Tech-Emory Biomedical Engineering Professor Shuming Nie is one of the first scientists in the world to utilize nanotechnology in the biomedical field. He is the principal investigator for two research grants totaling $10 million awarded by the National Institutes of Health just last week.
Bringing innovation to fruition
VentureLab: from Tech lab to commercial market

Professor Barbara Boyan

Jacket Micro Devices
VentureLab: from Tech lab to commercial market

Advanced Technology Development Center

Radatec’s radar-based sensor for large rotating machinery

CAMotion’s algorithms make robots faster, more flexible
Preserving and creating special places
Creating an innovative campus

Biotechnology Complex

Klaus Advanced Computing Building

Technology Square
...that also supports campus life

Stamps Student Center Commons

Campus Rec Center
Transforming the Fifth Street Bridge
Innovation in a changing world