Robert McGrath

Vice President and Director of the Georgia Tech Research Institute

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Research@GaTech
| Goal 1: Highly Respected Technology-Focused Learning Institutions | • Enrich the student experience  
• Innovate instruction, courses, curricula  
• Vibrant live-work-learn-play environment |
| Goal 2: Excellence in Scholarship and Research | • Best in teaching, research, application  
• Lead in targeted reputational areas  
• Transformative interdisciplinary research  
• Invest in faculty and infrastructure |
| Goal 3: Innovation, Entrepreneurship, Public Service in our Graduates | • Initiatives to serve strategic partners  
• Incentivize and support commercialization  
• State, national, global leadership positions |
| Goal 4: Expand our Global Footprint to Graduate Good Global Citizens | • Expand the world’s footprint at GT  
• Extend GT’s impact around the globe  
• Globally engaged students |
| Goal 5: Institutional Effectiveness | • Continuously improve support functions  
• Performance-based management system  
• Entrepreneurial financial model; best of private and public |
The Tech Research Enterprise
powered by ideas, led by faculty, served by professionals

- Intellectual Rigor
- Interdisciplinary
- Global Impact
- Problem Solving
- Transition to Use
- Systems Focus
- Industry Focused Research Clusters

Colleges

GTRI*

EI2*

Distance Learning – Contracting - Development

Support Services

*Georgia Tech Research Institute, Enterprise Innovation Institute
EII Drives Out New Approach for Research and Commercialization

- Industry focused research clusters
- Grand challenges and roadmaps
- Innovation and transition emphasis
- Collaborative partnerships
- Improved licensing and IP practices
- Integrated education programs
Ga Tech Research Institute (GTRI)

Vice President GT
& Director, GTRI
Robert McGrath

Operations
Lisa Sills

Financial
Rebecca Caravati

Deputy Director
Research Operations
Tom McDermott

Chief of Staff
Tom Horton

Associate Director
George Harrison

Aerospace
Transportation &
Advanced Systems
Rusty Roberts,
Director
Vince Camp,
Assoc. Director

Electro-Optical
Systems
Gisele Bennett,
Director
Mike Harris,
Assoc. Director

Electronic
Systems
Joe Brooks,
Director
Lee Simonetta,
Assoc. Director

Information and
Communications
Jim McGarrah,
Director
Jeff Evans,
Assoc. Director

Sensors &
Electromagnetic
Applications
William Melvin,
Director
Larry Corey,
Assoc. Director

Signature
Technology
Lon Pringle,
Director
Paul Friederich,
Assoc. Director

Applied Systems
Laboratory at
Huntsville
Barry Bullard,
Director
James Smith,
Assoc. Director

Cyber Technology &
Information Security
Bo Rotoloni,
Director
Fred Wright,
Assoc. Director
### Market Centric Interdisciplinary R&D Institutes Are Being Advanced or Established

<table>
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<th>Field</th>
<th>Examples</th>
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<tbody>
<tr>
<td><strong>Big Data</strong></td>
<td>High Performance Computing, Computational Science, …</td>
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<td>Biotechnology</td>
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<td>Electronics and Nanotechnology</td>
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<td>Energy and Sustainability</td>
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<tr>
<td><strong>Infrastructure</strong></td>
<td>Water, Transportation, Urban Systems, …</td>
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<td>Manufacturing and Logistics</td>
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<td><strong>Materials</strong></td>
<td>Carbon-based Electronics, Composites, …</td>
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<td><strong>Paper Science and Technology</strong></td>
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<tr>
<td>People and Technology</td>
<td>Policy, New Media, Enterprises, Health</td>
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IPST Provides Exceptional Leveraging for Industry

• One of the largest endowments at GaTech – providing ~$1.5 million annually specifically to support graduate student projects in the pulp and paper industry

• A variety of exciting R&D projects sponsored by DOE and other federal agencies (totaling over $9 million in support)
  - New Gasification Processes for Biomass Residues
  - Dry Kraft Pulping
  - Southern Pine Based Biomass Center
  - Bioenergy Science Center in partnership with ORNL and NREL
  - Kinetics of High Pressure Gasification
  - Energy Efficient Directed Green Liquor Utilization (GLU) Pulping

• Heavily Leveraged, Direct Industry Contributions
Views of Research@GaTech

Faculty & Students
- Be the best at solving hard problems
- Work with great colleagues
- Access to great infrastructure & support

Alumni & the Public
- Establish & sustain thought leadership
- Enhance institutional reputation

Industry & the State
- Create transformative opportunities
- Grow commercial markets
- Partner with industry