




**GTRI** 75 YEARS

**Problem. Solved.**

## Georgia Tech Research Institute Serving Georgians for 75 Years

The pioneering Georgia Legislators and Regents who founded the State Engineering Experiment Station—now known as the Georgia Tech Research Institute (GTRI)—would no doubt be impressed and amazed with what they started 75 years ago. While they might not recognize today's modern GTRI, the organization's fundamental purpose still rings familiar - real world research which solves tough problems for government and industry.

### A Small State Investment Pays Off Big

-  GTRI was conceived by the state legislature in 1919 and first funded in 1934.
-  The initial \$5,000 in start-up funding has led to more than \$2 Billion in contract research being brought into Georgia – mostly from outside the state.
-  GTRI is Georgia Tech's largest research organization and the original site of all GT research and economic development support to Georgia.
-  GTRI has a 1,275 member staff (including 250 students), who conduct a world class program of contract research.
-  In FY08, research awards were \$184M (a 43% increase from FY07) – representing an 18:1 return on investment on state budgeted funds.
-  GTRI is growing – 120 new staff hired this year! (new high tech jobs – all are taxpayers)
-  GTRI has an annual economic impact on Georgia of nearly \$500 Million.



### A State Charter Defines GTRI's Mission

*To aid in the promotion of scientific, engineering, and industrial research; to encourage the more complete development and utilization of the natural resources of this state; to advance science, technology, and education; to encourage further industrial and economic development; to provide technical advice and assistance to business and industry; to provide an industrial extension service to meet the technical, informational, and other needs of industry and local development groups; and in order to promote the general welfare of the people of this state through a program of scientific, engineering, and industrial research, there is created at and in connection with the Georgia Institute of Technology a department to be known and designated as the "Georgia Tech Research Institute." The department shall be composed of a research institute to be located at the Georgia Institute of Technology and such field offices or substations as provided in this chapter.*

O.C.G.A. § 20-11-1 (2008)

GTRI Locations in Georgia: Atlanta, Smyrna, Warner Robins



## CURRENT GTRI RESEARCH TOUCHES LIVES

(see [www.gtri.gatech.edu](http://www.gtri.gatech.edu) for complete review of research)

- Enabled National Amber Alert System (via web standard for law enforcement community)
- Created and maintain the standard map-based mission planning, currently in use by over 38,000 U.S. Military personnel (FalconView)
- Rushed new and fully tested designs for aircraft defense to Iraq and Afghanistan, manufactured by Georgia companies
- Innovative solutions for port security using wireless sensors (profiled in Feb 2009 National Geographic Special)
- Continued timely and innovative support to the Georgia Food Processing Industry
- Developed GEMA sponsored technology allowing first responders across the state to communicate with each other using existing radio systems
- Developed GDOT sponsored automatic road reflector placement vehicle which will save time, money and lives
- Taught over 17,500 industry and government personnel through GT continuing education programs in 2008, 245 separate courses in defense technology and occupational safety/health.

## PAST GTRI RESEARCH HAD IMPACT

- Incubated Scientific Atlanta (now a Cisco company)
- Developed the first high-speed dental drill
- Developed cotton roving and spinning processes that were three to five times faster than what was then common in the industry
- Designed a complete viscose rayon facility in which the first rayon from Georgia pine pulp was developed
- Created a process for weaving fabric from domestic flax and flax blends for use in suits, towels, parachute webbing and other items
- Designed the U.S. Army's first nomenclature millimeter wave radar
- Designed and constructed a machine that removed meat from chicken necks
- Build a device for measuring the presence of staph germs in a hospital room
- Developed Emory University's first cobalt-radiation machine for lung cancer treatment

## HEALTH AND SAFETY PROGRAMS SUPPORTING GEORGIA

GTRI conducted 90 public courses last year and 96 training interventions with more than 14,000 in attendance. The program has touched more than 300 Georgia companies in more than 120 industries. Over 14,142 Georgia workers were removed from hazardous conditions – saving industry nearly \$2.5 million dollars in OSHA penalties and lost work days due to illness or injury.

## AGRICULTURAL TECHNOLOGY RESEARCH AND GEORGIA'S TRADITIONAL INDUSTRIES PROGRAMS

- 34 Georgia companies supported
- Projects in environmental, food safety & health and process & product improvement.
- 16 recent industry-focused, field-testable prototypes
- 36+ industrial partners participated in one or more projects
- 46 technical assists provided to inquiring companies or individuals that helped solve a problem or provided useful information
- 64 documented technology transfer activities conducted

## KEY POINTS OF CONTACT

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