GTRInsider

Summer 2006

Two-Way Street

OPAR Helps Researchers and Policymakers Get up to Speed on Each Other's Turf

Technology and public policy may seem like strange bedfellows, but theirs is a long-standing affair. Scientific innovations often spark changes in public policy, and conversely, our country's laws, regulations and funding programs can affect what goes on in technology circles.

"This give-and-take has only grown stronger in recent years due to the accelerated pace of technology," observes Randy Case, director of GTRI's Information Technology and Telecommunications Laboratory (ITTL). "Today we need to give policymakers more details about emerging technologies," he says. "We also need to better inform our researchers about the direction of public policy – and any constraints it might have on their projects."

In response, ITTL launched the Office of Policy Analysis and Research (OPAR) in 2004. Among its services, OPAR provides:

- Briefings. Typically one page in length, these summaries give Georgia Tech researchers a high-level view on specific issues, agencies and pieces of legislation. OPAR also generates briefings that look at what other state legislatures are doing – identifying innovative approaches to public policy as well as general trends.

- Outreach. Through its role as a legislative fellow, OPAR connects subject-matter experts with policymakers. For example, two GTRI researchers made presentations this spring to science and technology committees of the state House and Senate: Dara O'Neil discussed cyber-safety for children while Jud Ready discussed advances in nanotechnology.

- Funding opportunities. Laying the groundwork for future GTRI business, OPAR acquaints researchers with various government agencies, what sort of projects they fund and where GTRI can contribute something new. "For example, health information technology has recently emerged as a priority," says Marlit Hayslett, OPAR's program manager, noting that federal spending in this domain totaled more than $900 million in 2004.

- Proposal assistance. Today, more agency solicitations explicitly ask researchers to address public policy in their funding proposals, Hayslett adds. Policymakers want to know how a particular technology might affect existing systems, processes and user groups.

In This Issue

Grants for Schools

ITTL researcher Dara O'Neil (pink jacket, left), presents at a GTRI-hosted meeting of the Metro Atlanta Area Grant Professionals.

Dara addressed this group on the "F3 Funding Forecast", a twice monthly listing of grant opportunities geared specifically for the K-12 audience. Nothing else like it in Georgia, F3 facilitates a face-to-face solution. There are plenty of sites out there tracking funding opportunities, but school folks seldom have time to check them all and some are cumbersome to use.

In contrast, the funding forecast goes out as an email, and the "master" which is regularly updated with the additions, is available on the website: http://www.f3program.org/funding/funding.pdf

This service was started only recently to the K-12 community, and the feedback has been very positive.

GTRI External Advisory Board

Dr. Cross kicks off the May meeting of the GTRI External Advisory Committee

Director's Notes...

I n the continuing effort to integrate Public Policy as a component of GTRI capabilities, we tried something new this winter. Marlit Hayslett, who leads the Office of Policy Analysis and Research in ITTL, was a real presence at the Capitol during this year's legislative session.

In coordination with GTRI, Georgia Tech, and Board of Regents Government Relations offices, she spent two days a week during the session serving as a resource to the Science and Technology Committees in both the House and Senate. She was able to assist as they worked through various technology issues and make them aware of capabilities here on campus that could serve their needs as well as assisting the state. She was also able to get several Georgia Tech researchers to present their work to the committees, including Dara O'Neil (ITTL) and Jud Ready (EOSL) of GTRI. Dara presented on Cyber Safety, a component of the Foundations of the Future initiative, and Jud on the realities and myths of nanotechnology. Both did a great job and helped to significantly raise the awareness of GTRI in the legislature.

For more information on OPAR, see this issue's cover story or visit OPAR online at www.opar.gtri.gatech.edu

The OPAR office is a great resource for GTRI researchers needing policy input for proposals. Be sure to check out this issue's cover story. I strongly encourage everyone to take advantage of the expertise OPAR provides. This is one more way we can continue to work and support each other as One GTRI. It also links directly to the GTRI strategic goal to enhance customer-focused research and development for industry, while supporting economic growth in Georgia.

Stephen E. Cross

Dr. Stephen E. Cross
Vice President, Georgia Tech
Director, GTRI

The Importance of Time Reporting

By Suwana Murchison, PST

Each day, GTRI employees go through the routine task of completing their electronic timesheets through eTime. Although the daily recording of work activities may seem mundane to some employees, accurate accounts of each employee's time is in the best interest of GTRI. Timesheets are the source document for accounting records and provide the basis for salary and wages charged to both sponsored and non-sponsored projects as well as absence accounts.

Timesheets also provide the basis for billing sponsors for costs in accordance with federal regulations. Daily completion of your timesheet ensures GTRI is in accordance with federal audits which are necessary for continued conduct of research by our organization. Further, although sometimes tedious, routine recording of your time can help you better manage your projects and research. WebWISE provides a history of your timesheets, allowing you to see where you focused your efforts to complete your tasks.

Random evaluations are conducted to ensure employees are aware of the procedures for completing their timesheets. The new eTime electronic recording system, also provides reports of employee time-reporting habits. The most common violation among GTRI employees is not completing their timesheet for the previous day, by noon each day. One of the ways you can ensure reporting on time is to set the eTime URL as your homepage: https://webwise.gtri.gatech.edu/DeltekTC/welcome.msv, make completing your timesheet a "daily task" in Microsoft Outlook, or simply tape a note near your computer screen as a reminder.

For more information about time reporting, visit the Compliance Assurance Program site at www.gtri.gatech.edu/cap/

> ## Up Close and Personal With...

Chris Shappert

Chris Shappert

WORKING FOR:
STL

WORK LOCATION:
5th floor CRB

GTRI EMPLOYEE SINCE:
September 2004

MOST MEMORABLE EXPERIENCE:
When a chemical vapor deposition chamber filled with hydrogen and oxygen ignited right next to me.

WHAT I LIKE MOST ABOUT MY JOB:
Constant Learning.

IF I WON THE LOTTERY, I WOULD:
Buy a lodge in Jackson Wyoming and convince all of my siblings and their families to move out there with me.

MOST FAVORITE FOOD:
humus

SOMETHING YOU PROBABLY DIDN'T KNOW ABOUT ME:
I love to spend time in remote wilderness areas. I've kayaked with humpbacks in Alaska, tromped through Belizean rainforest, hung-out in trees with hundreds of giant Australian fruit bats, and watched wild devils eat wombats in the forests of Tasmania.

SOMETHING ELSE YOU PROBABLY DIDN'T KNOW ABOUT ME:
I now spend all my free time with my two year old daughter, Marin. To quickly assimilate her in the family, we took her camping on Kodiak Island at the age of one. She's the only one of us that slept soundly through the gale-force wind and rain.

PEOPLE TELL ME I RESEMBLE:
They don't.

IF I COULD PICK SOMEONE OUT OF HISTORY TO HAVE LUNCH WITH, I WOULD CHOOSE:
Baruch Spinoza

THREE WORDS THAT DESCRIBE ME BEST:
inquisitive, kind, open-minded

ALL TIME FAV MOVIE:
I don't really have a favorite, but if pressed…. Maybe 'The Mission'? The soundtrack is wonderful.

RECENT BOOK READ:
The Monk and The Philosopher by Jean-Francois Revel and Matthieu Ricard

If you'd like to nominate a colleague to be featured in the next 'Up Close and Personal With…' please see the form on the back of this issue of the *GTRInsider*.

Enterprise Services Department UPDATES

By Raj Vuchatu, Manager, ESD

REPORT CENTRAL UPDATE

Report Central has been implemented with a number of project financial reports for the past several months. Many enhancements have been made, and new reports have been added since its release. Please visit RC at https://webwise.gtri.gatech.edu/rc to view the latest updates.

IMPORTANT NOTE All old project financial reports (Greensheets & Account Transactions) will not be available after July 1st 2006. They will exist as historical reports only. Please use report central as the currently approved tool and provide any feedback you have at https://webwise.gtri.gatech.edu/feedback/input?appid=rc

ONLINE PROJECT DELIVERABLES SYSTEM

ESD has rolled out a new Online Project Deliverables System which allows researchers to submit, approve and track deliverables electronically. This replaces the Research Approval Sheet.

Features of the system:

- **REMINDERS** via email will be sent 10 days and 3 days prior to the deliverable due date.
- **LATE NOTIFICATIONS** will be sent 5 days after the due date if the deliverable is not submitted.
- **DESIGNEE:** Will allow PDs to assign designees to deliverables.
- **BUILT-IN APPROVAL** process. Deliverables can be submitted to supervisor/signing-authorities prior to submitting to OSP.
- **OSP AUTOMATICALLY NOTIFIED** when a deliverable is approved in the system.
- **SPONSOR CC:** There is an option to send email to your sponsor through this system.
- **REPORTS:** Various deliverable reports are available to help manage your project deliverables.
- **QUICK ACCESS:** Quick access to deliverables status across your unit/lab.

You can submit your deliverables online at https://webwise.gtri.gatech.edu/osp. Please contact your MAPS representative or webwise-support@gtri.gatech.edu with any questions. ●

INTEGRITY: The Cornerstone of our Organizational Values

By Suwana Murchison, PST

As GTRI Director Steve Cross has communicated so many times, GTRI is committed to its organizational integrity which begins and ends with the individual. Integrity guides our behavior and provides the foundation for our research policies. From maintaining scientific integrity and avoiding conflicts of interest, to following procurement integrity regulations and ensuring the reliability of our financial records, our integrity mandates that we behave in ways that bring only honor to Georgia Tech.

In future issues of the GTRInsider, the Compliance Assurance Program will highlight this important word by reviewing the values of GTRI's Code of Business Conduct. INTEGRITY: (I)ndividual responsibility, (N)otable achievement, (T)eamwork, (E)thics, (G)ood citizenship, (R)espect, (I)nnovation, (T)otal professionalism, and (Y)our Contribution.

Through integrity in our dealings, we must avoid conflicts of interests, maintain accurate and complete financial records, and ensure that all expenditures are for the benefit of the sponsor and/or state of Georgia. In the work we do, its in the cost, and our treatment of each other, avoiding actual and perceived conflicts of interests will assure ourselves and GTRI stakeholders that nothing is sacrificed for the sake of personal gain. GTRI employees maintain the integrity and accuracy of all financial records including sponsored project charges. All hourly time reporting (see *The Importance of Time Reporting* article in this issue) and postings of expenditures must be made accurately. Lastly, knowing that we are entrusted with both state and federal taxpayer funds, we must demand and practice good stewardship and ensure that these funds are expended for their intended purposes.

For a copy of the GTRI Code of Business Conduct, contact Suwana Murchison at (404) 407-6880. ●

Cornerstone: When in Doubt

Ask yourself the following questions:

* Are my actions legal?
* Am I being fair and honest?
* Will my actions stand the test of time?
* How will I feel about myself afterwards?
* How would it look in the newspaper?
* Will I sleep soundly tonight?
* What would I tell my child to do?

If you are still not sure what to do, ask and keep asking until you are certain you are doing the right thing.

Arlington Field Office

With contracts and grants from Department of Defense agencies accounting for nearly three-quarters of GTRI's annual budget, Washington, D.C. is a frequent stop for visiting researchers and administrators. To support the development and maintenance of relationships with key customers, allies and collaborators in the nation's capital, GTRI established its Washington Operations nearly 15 years ago.

Now located in Arlington just two Metro stops from the Pentagon, the office links GTRI's research and engineering capabilities with federal agencies, companies and professional organizations in the Washington area. Several GTRI laboratories – along with certain Georgia Tech academic units – maintain representatives in the Washington Operations office to support active projects and maintain key relationships.

Located at 1700 North Moore Street on the 19th floor of the Rosslyn Metro Center Building, the office is also convenient to the National Science Foundation (NSF), Defense Advanced Research Projects Agency (DARPA) and Office of Naval Research (ONR) – all key customers for Georgia Tech and GTRI. Ed Eagar has managed the Washington Operations since 1992.

Typical activities for Eagar and the Washington Operations include:

- Organizing briefings with Washington-based companies and organizations to clarify capabilities and explore potential collaborations;
- Assessing new opportunities for the development of GTRI research with a broad range of federal agencies;
- Facilitating reviews of campus-based projects with officials of federal agencies, and
- Representing GTRI and Georgia Tech at professional organizations in the Washington area.

The GTRI group is separate from, but often collaborates with, Georgia Tech's Office of Federal Relations, which is located in downtown Washington closer to Capitol Hill and the White House. That office includes Patricia Bartlett and Melissa Meierhoefer who report to Charles Liotta, Georgia Tech's vice provost for research and graduate studies.

Beyond its role as a liaison to agencies and a listening post for what's going on in the nation's capital, the Washington Office also offers attractive meeting and classroom facilities that can be used by campus-based groups. Two conference rooms are available, one accommodating 25 to 30 persons, and the other seating 8 to 10 visitors. There are also two offices available for visitors.

These high-quality facilities have full Internet access, are located convenient to the Rosslyn stop of Washington's Metro rapid transit system, and have access to restaurant and catering facilities in the building.

The facilities, which are equipped for classified use, have hosted SENSIAC projects as well as short courses on such topics as radar signal processing, target tracking, integrated air and missile defense benchmarking. Campus groups as diverse as the Georgia Tech Alumni Association and the Tennenbaum Institute have also held meetings there.

For more information about the Washington Operations, contact Ed Eagar at 703-528-0883 ext. 27 or (ed.eagar@gtri.gatech.edu). To reserve the conference facilities, contact Sunnie Neal at 703-528-0883 ext. 19, or (sunnie.neal@gtri.gatech.edu). ●

GTRI Research Notes

"Chemical Companion" Helps Hazmat Teams Make Critical Decisions

Georgia Tech researchers Christina Baxter and Ben Medlin show the "Chemical Companion" software tool that runs on personal digital assistants.

Georgia Tech Photo: Gary Meek

When dealing with hazardous materials – whether from a truck spill or a terrorist attack – information is critical. Before first responders can begin to aid victims and decontaminate a scene, they must determine what substances are present and understand the inherent risks to humans and the environment.

To help first responders and hazardous materials (Hazmat) teams, researchers at the Georgia Tech Research Institute (GTRI) have developed the Chemical Companion. This software tool, which operates on Windows CE-based personal digital assistants, provides detailed information on 130 of the most common chemicals associated with Hazmat incidents.

"Knowing the characteristics of a chemical, such as its boiling point or density, tells us different things about how to approach the scene," said project co-director Christina Baxter, a senior research scientist in GTRI's Health and Environmental Systems Laboratory (HESL). "Suppose there's a fire. With some flammable substances, water might make the fire burn even hotter, and foam is needed to suppress the blaze."

First responders may be able to identify chemical agents from the shape of containers, shipping papers or signs posted at the Hazmat scene. But if there are no solid clues, the Chemical Companion enables responders to identify an unknown chemical by entering details about the substance's physical appearance, such as odor, color and state. Another option for pinpointing unknown chemicals is the reporting of medical symptoms displayed by victims.

Although there are existing software tools for Hazmat teams, these programs can cost as much as $2,000 per license. In contrast, the Chemical Companion will be free to the military, law enforcement officers and fire departments.

Beta-testing for the Chemical Companion began in the fall of 2005, with a number of fire departments around the country, including units in New York City, Los Angeles, Seattle and Douglas County, Ga. Researchers expect the Chemical Companion will be ready for distribution later this year. (This program is sponsored by the federal government's Technical Support Work Group).

To read more about this story visit: http://gtresearchnews.gatech.edu/newsrelease/chemical-companion.htm

Development of World's First "Purpose-Built" Law Enforcement Vehicle

Image Courtesy Carbon Motors

Computer aided industrial design model representation of planned law enforcement vehicle.

Officials from Georgia Tech and Carbon Motors Corporation – a new U.S. automaker that has announced plans to locate in Georgia – have taken the first step toward a collaboration that would develop the world's first vehicle built expressly for law enforcement agencies.

The company, which will market its innovative "purpose-built" vehicle directly to customers, also plans to revolutionize U.S. automobile manufacturing as a lean and integrated organization. In March, the firm announced plans to locate its headquarters, research and development center, direct sales center, customer service, and mid-volume production and logistics operations in the metropolitan Atlanta area. On April 19th, officials from Georgia Tech and Carbon Motors signed a memorandum of understanding setting out their intent to establish research, education and financial arrangements.

Carbon Motors plans to take advantage of Georgia Tech's expertise in a broad range of areas. Initially, the company's designers and engineers plan to tap Georgia Tech's expertise in the ergonomic design of aircraft cockpits and the integration of highly complex electronic and electrical systems.

Beyond the human factors interface expertise, the company also intends to take advantage of Georgia Tech's experience with integrating complex electronic systems – expertise developed in decades of work for military agencies. The company is also exploring Georgia Tech's expertise in other areas, including materials selection, logistics, information technology, manufacturing product life cycle management, sensor technology, aerodynamics, decision making algorithms and process engineering.

The Georgia Tech Research Institute (GTRI), which recently developed the Ultra-Armored Patrol concept vehicle for the U.S. military, plans to work with Carbon Motors on those key tasks.

"Large scale systems engineering is an area where GTRI has a proven track record of success," said Stephen E. Cross, director of GTRI and a vice president at the Georgia Institute of Technology. "We recently designed and built a concept military fighting vehicle to keep soldiers safer on the battlefield. We look forward to working with Carbon Motors to develop new vehicles that will make first responders safer on the streets."

To read more about this story visit: http://gtresearchnews.gatech.edu/newsrelease/carbon.htm

New Test Facility Will Help Manufacturers Improve the Environment Inside Buildings

Georgia Tech Photo: Gary Meek

Researcher Victor DeJesus adjusts a mannequin in the Georgia Tech Research Institute's room-sized environmental test chamber.

As scientists learn more about the potentially harmful effects of indoor air pollution, nations around the world are imposing increasingly strict regulations on chemical emissions from furnishings, paints and building materials.

Using a new room-sized environmental test chamber, more than a dozen smaller chambers and a mass spectrometric center able to measure ultra-trace concentrations of airborne chemicals being emitted from products, scientists at the Georgia Tech Research Institute (GTRI) are helping manufacturers meet those international standards to minimize emissions.

"We can help manufacturers address regulatory issues," said Charlene Bayer, principal research scientist in GTRI's Health and Environmental Systems Laboratory. "Because U.S. manufacturers sell their products worldwide, they must meet emission regulations imposed by nations in Europe and Asia. We make the measurements companies need, to improve their products."

Large enough to accommodate humans or animals, the new 27.5 cubic meter environmental chamber will also allow researchers to study broader concerns including the impact of low-level indoor air pollutants on productivity and human health.

The large chamber can simulate real-world environmental conditions inside buildings. Coupled with the sensitive mass spectrometers, this allows low-level chemical reactions to be studied in detail.

Beyond an improved understanding of indoor air quality, GTRI's environmental chambers can additionally be used to calibrate a broad range of new sensors being developed.

In all, GTRI operates 15 environmental chambers that range in size from just 135 milliliters up to 27.5 cubic meters.

The facility includes other instruments such as gas chromatograph/mass spectrometer combinations. For testing the efficiency of air filtration systems, Bayer uses a smoking machine that helps simulate a smoke-filled environment. The test facility analyzes the efficiency of other equipment designed to clean the air.

To read more about this story visit: http://gtresearchnews.gatech.edu/newsrelease/envir-chamber.htm

Sensing Support: SENSIAC Helps the Military Advance Technologies for Defense Sensors

Georgia Tech Photo: Gary Meek

Managing SENSIAC are David Shumaker, director, and Ann Batchelor, deputy director. The center is headquartered at the Georgia Tech Research Institute (GTRI) in Atlanta.

In the past, military sensing technologies have focused on observing and targeting the enemy from a distance, but with the new emphasis on homeland security, sensors must get up close and personal.

"We now face a new concept of war where instead of being miles away, the enemy may be in the same building or just a few feet away," said David Shumaker, director of SENSIAC, the military's sensing information analysis center. "That means a paradigm shift in the design of sensors. In many applications today, we need technologies for situational awareness, where long range may be a secondary consideration."

Housed within the Georgia Tech Research Institute (GTRI), SENSIAC is one of the newest information analysis centers (IACs) serving the U.S. Department of Defense (DoD). It replaces IRIA, a center that was initially founded at the University of Michigan's Willow Run Laboratories and operated under various ownership for nearly 50 years until Georgia Tech won the contract in December 2004.

"Although IRIA focused primarily on infrared technologies, SENSIAC has a much broader mission and scope," said Ann Batchelor, SENSIAC's deputy director. "We provide information on all sensing-based technologies related to defense activities, including infrared, laser, radar, acoustic, electro-optical, aroma, chemical and many other sensors."

In addition to being a clearinghouse for information, SENSIAC conducts research projects and educational programs. The center draws upon experts from the Georgia Tech campus, as well as seven other universities that serve as SENSIAC team members.

"Winning the DoD contract gives Georgia Tech national recognition in the military sensing arena," Shumaker said: "This places us in the center of the military sensing community. We touch everyone in one way or another."

Because of a unique contract provision, SENSIAC can conduct research on an expedited basis for government agencies and contractors. "As long as the research is related to military sensing in some way, a project can get a green light in as quickly as two weeks, as opposed to waiting six to eight months under alternative contracting methods," said David Schmieder, the center's Coordinator for Electro-Optics Education and Technical Inquiries.

To read more about this story visit: http://gtresearchnews.gatech.edu/newsrelease/sensiac.htm

Awards & Outstanding Achievement

Jim Wiltse (SEAL) Elected SPIE Fellow, received award at 4/19/06 banquet

Brent Wagner (EOSL) named IEEE Senior Member

Barry Bullard (Director, HRL) named IEEE Senior Member

Gisele Bennett (Director, EOSL) named IEEE Senior Member and GT Fellow - University Leadership Program.

Gary Caille (DO) was selected by the faculty of the School of Mechanical Engineering for a joint appointment as a full professor.

GTRI Employees Receiving Degrees: This spring, 5 full-time employees will receive advanced degrees. They are: Bill Asher (ELSYS, MSECE), James Fraley (STL, MSEET) Clayton J. Hutto (ELSYS, MSCS), Bryan J. Smith (HRL, MSSE), and Adam Tichelaar (ELSYS, MBA).

Tracy Woods (BS) has completed the Office Professional Certificate Program

Julie Blankenship (PAD) received a Georgia Tech Outstanding Staff Performance Award for 2006. The Outstanding Staff Performance Award is presented annually to individual staff members who have rendered the most outstanding performance in support of instructional, research or administrative activity. This honor is accompanied with a prize of $1000.

Julie receives her award with a few words from Provost & Vice President for Academic Affairs Dr. Jean-Lou Chameau while GT President Dr. Wayne Clough looks on.

Lynn Hartley (ITTL) recent paper submission to the Telecommunications Policy Research Conference was selected as the first prize winner (a $1000 award).

Bill Warren (RSD) has recently received certification to become a Certified Protection Professional (CPP); this program is sponsored by the American Society of Industrial Security.

Ron Bohlander (ITTL) has been elected to serve as the Vice-Chair of the Member Council of the Society of Manufacturing Engineers.

Charles Carstensen (EOSL) received the prestigious Bill Goodell award at this year's Military Sensing Symposium on Infrared Countermeasures.

Tom Collins (ELSYS) has received the following awards:

1. 2006 Georgia Tech Educational Partnership Award -- co-recipient with Jeff Davis (ECE) and student/K-12 partners, for founding and organizing the Georgia FIRST LEGO League Tournament.

2. 2006 ECE Academic Spotlight Award -- for "significant contribution to the ECE teaching or academic program" (relative the ECE 2031, the Digital Design Laboratory).

Chris Parnin (GTRI Shackelford Fellow with ELSYS) will be graduating with his MS-CS, and will begin his Ph.D. studies during the fall semester. Chris will present the following papers at several prestigious international conferences this summer:

1. International Workshop of Mining Software Repositories (MSR'06) in Shanghai, China,

2. International Conference of Program Comprehension (ICPC'06) in Athens, Greece.

Kevin Massey's (ATAS) paper entitled, Mechanical Actuators for Guidance of Supersonic Projectiles has been selected as one of the best papers in the last twelve months by the AIAA Applied Aerodynamics Technical Committee.

Margie Brown, Therese Turman and Jennifer Drake (ITTL) received Merit Awards for their work on the OuttaSite! online newsletter that has the goal of helping families explore the Internet together, safely and effectively. It is aimed at parents of children in upper elementary to middle school. OuttaSite! is distributed monthly during the school year by The Friends School of Atlanta, Foundations for the Future (GTRI), and the Family Technology Resource Center (DeKalb County School System). The award was presented by the Society of Technical Communication (STC) – Atlanta Chapter - 2005 Technical Publication Competition. For more info see www.f3program.org and click "OuttaSite!"

Therese Turman (ITTL/CSITD) with her STC award.

Congratulations to the GTRI Business Services Division for taking top honors in the 2005-2006 Georgia Tech Best Practices Challenge. The work, led by Julie Blankenship and Raj Vuchatu, truly reflects the

Georgia Tech culture of excellence and innovation, and GTRI's entry was truly a stand-out!

GTRI-Business Services received the 2005-2006 Best of the Best Challenge Cup trophy for GTRI's Electronic Submission and Processing of Travel Authorization Requests.

The Business Services Division also received a 2005-2006 Certificate of Excellence for GTRI's Electronic Time Capture.

A delighted Raj Vuchatu is enjoying presenting during the challenge.

Balaji Chellam, technical lead on the Travel Authorization request system, and Raj Vuchatu (l to r) show off their Best of the Best trophy.

Congratulations to the GTRI Communications Department for receiving the CASE (Council for Advancement and Support of Education) bronze medal award for its entry of "Ultra Armored Patrol".

The GTRI Communications Office has won a Bronze Anvil Award of Commendation from the Public Relations Society of America for the media relations effort - Unveiling the ULTRA Armored Patrol.

The judges evaluated 881 entries from around the nation and chose 47 Bronze Anvil and 83 Award of Commendation winners amidst stiff competition in a number of different categories.

GTRI Learning and Growth Program:
Personal Development, Research Initiatives, Enhanced Morale

By Suwana Murchison, PST

The GTRI Learning and Growth Program provides resources to research faculty for personal development and research pre-work. The program is composed of programs for both individuals and research initiatives.

The decentralized Individual Program is for personal growth and learning where employees decide activities in which they will participate (in conjunction with their supervisory chain). Priority is given to non-manager research faculty for funds made available through the program. The amount of the Learning and Growth Program pool is dependent on GTRI revenue performance.

The Research Initiative Program allows multiple researchers to receive matching funds for initiatives that lead to GTRI growth and learning. This concept allows researchers to identify opportunities to include others in growth and learning activities, to commit their personal learning and growth funds to activities that impact the strategic goals of GTRI and to receive matching funds to pursue strategic initiatives.

The following people recently took advantage of the program, and here's what they had to say about it:

Name: Bryan Smith
Lab: Huntsville Research Laboratory
Learning Activity: Thesis research
Skills/Competencies Developed: "I developed a way to check the consistency of a conceptual graph using actors and a database. I am midway through preparing a paper for the International Conference on Conceptual Structures."

Name: Burt Jennings
Lab: Aerospace, Transportation and Advanced Systems Laboratory
Learning Activity: White paper and preparatory research
Skills/Competencies Developed: "I became more familiar with the operations at the McKinley Climatic Lab at Eglin Air Force Base by examining the facility's equipment and discussing testing activities with the chief test engineer. Several specific needs of the facility were identified and GTRI can propose solutions."

Name: Colin Usher
Lab: Health and Environmental Systems Laboratory
Learning Activity: Attended seminar/conference/technical forum
Skills/Competencies Developed: "I improved my technical writing skills and gained more confidence in speaking/presenting to a group of technical professionals. Experience garnered from development of materials will help improve my future documentation generation."

Swimming With The Sharks

What's missing from this picture? The shark fins poking out from the surface of the water. As one of two safety divers, Jim Demmers, SRA of ITTL is getting ready to enter the Ocean Voyager tank for a staff training exercise at the Georgia Aquarium. The staff are being trained on how to use surface supply rigs (pictured to Jim's right). Two safety divers are required for each dive to keep the hammerhead sharks and other big fish at a safe distance from the working divers. Jim says they don't use the PVC poles to poke the fish — they're more of a prop than anything else.

If you haven't been to the aquarium, the Ocean Voyager tank holds about 6 million gallons and is approximately 100 yards long by 40 yards wide by 33 feet deep. It currently contains about 85,000 fish, the biggest of which are 2 whale sharks (both around 17 feet).

Photo by: Jim Pierce

SSD UPDATE: Mail Services

By DeeAnn Reese, Administrative Manager, SSD

The Support Services Department provides mail delivery services to GTRI. The Mail Center is located at 430 Tenth Street, North Building. Two regular mail routes are run. Each laboratory and unit has designated IN/OUT mail boxes. The mail services also include delivery to the Georgia Tech Post Office as well as the US Post Office.

Messenger mail services are also provided for articles requiring proof of delivery. Messenger mail slips are available from the Mail Center. The messenger mail courier delivers to campus buildings and to the Cobb County Facility in the afternoon.

Any questions regarding our mail services can be directed to Orville Smith at 404-407-7034 or orville.smith@gtri.gatech.edu. The schedule for mail and messenger delivery runs is listed below.

Campus	
9:00 AM Messenger Mail Route	**3:00 PM Mail Delivery Route #1**
• CRB	• CRB (13 stops)
• Baker	• OSP
• Hinman	• GTRC
• 430 Tenth St., North & South	• 430 Tenth St. North/South (8 stops)
• 250 14th Street	• GT Legal
• Foodpro	• 831 Marietta St.
• Techway	**3:00 PM Mail Delivery Route #2**
• OSP	• Hinman
• GTRC	• Foodpro
• OHR	• Techway
• 711 Marietta St	• 250 14th Street (5 stops)
• GT Foundation	• Baker (7 stops).
• Other non-GTRI departments as needed	**Cobb County**
10:00 AM Mail Delivery Route	**9:00 AM Mail Delivery Route**
• CRB (13 stops)	• Building 1 (5stops)
• OSP	• Building 2
• GTRC	• Building 3 (2 stops)
• 430 Tenth St., North/South (8 stops)	• Building 4 (2 stops)
• 831 Marietta St.	• Building 5 (5 stops)
10:00 AM Mail Delivery Route #2	• 12:30 Messenger Mail Route
• Foodpro	• No specific routing
• Techway	**3:00 PM Mail Delivery Route**
• Hinman	• Building 1 (5stops)
• 250 14th Street (5 stops)	• Building 2
• Baker (7 stops)	• Building 3 (2 stops)
	• Building 4 (2 stops)
	• Building 5 (5 stops)

DISCOVER GTRI

**SEPTEMBER 27 - 11:00 am - 3:00 pm
in the Student Center Ballroom**

Discover GTRI showcases GTRI research opportunities to the GT campus with hopes of recruiting exceptional co-ops, interns and other student positions. The Personnel Support Team is reviewing the response to last year's advertising to ensure we inform as many students as possible about the event.

Refreshments will be provided for participants, as well as information tables for GTRI's technical recruiter and Georgia Tech's Division of Professional Practice. Laboratory directors are encouraged to send their best employees (including student employees) to represent their laboratory in an individual breakout room. This is a great opportunity to highlight special projects, provide demonstrations and talk one-on-one with students after they register in the ballroom.

Several GTRI student employees have mentioned that this event was their first introduction to GTRI. We want to continue to spotlight GTRI to the Georgia Tech campus.

Would you like to represent your laboratory at this event? Notify your laboratory director and contact Suwana Murchison at suwana.murchison@gtri.gatech.edu.

"Policy research isn't something that scientists and engineers typically are interested in– or equipped to handle," says Brett Walkenhorst, an ITTL researcher. OPAR assisted Brett this spring with a proposal to the National Institute of Justice to fund a project that involves multiple antenna processing and cognitive radio.

Although scientists and engineers may intrinsically understand technology's potential impact on government activities, putting that into language that resonates with policy analysts is difficult. "Having a resource like OPAR really fills in the gaps," says Walkenhorst.

Beyond Information Technology

Due to its ITTL roots, OPAR initially focused on information technology and telecommunications. Now the office is broadening its scope to other areas, such as nanotechnology.

This spring, the policy office collaborated with GTRI's Electro-Optical Systems Laboratory (EOSL), Georgia Tech's School of Public Policy and the Office of Undergraduate Research to develop an undergraduate course on nanotechnology.

"The course will take nanotechnology to another level, addressing not only technical aspects of the science, but also ethical, social and political issues," says Jud Ready, an EOSL researcher and one of the principal investigators. Ready hopes to win funding for the program from the National Science Foundation.

"OPAR ultimately envisions collaborating on projects in all GTRI labs," says Hayslett.

One-stop Shopping

To help both researchers and legislators make faster, more informed decisions, OPAR is developing a database-driven, policy analysis tool (PAT).

"Suppose a governor's advisor on health policy needs to brief the governor on ways to stimulate the adoption of electronic health re-cords (EHRs) in state hospitals and medical facilities," says Hayslett. "PAT would collect policy datasets to show what has been done before, (along with results) – what worked, what didn't and under what circumstances."

PAT's ultimate goal is to be predictive as well as analytical. By plugging in parameters, such as a program's cost, number of participants and available funding, decision makers could simulate different scenarios.

"The innovative aspect of this tool is that it's not domain-specific," Hayslett adds, noting that PAT could help decision makers in a variety of areas including healthcare, emergency response, environmental protection, energy management, homeland security, city planning, traffic management and education. A work in progress, PAT is currently in the proof-of-concept phase.

"It's unusual – and a big plus – for a research organization to a have group like OPAR," says Case.

"For one thing, it prevents surprises from occurring as often as they could, such as regulatory issues that might cripple an emerging technology," he explains. "And by bringing technology and policy perspectives together on projects, OPAR enables GTRI to provide one-stop shopping for its customers."

For more information, contact Marlit Hayslett at 404-407-7256 or marlit.hayslett@gtri.gatech.edu.

Training Opportunity

Excellence in Government Contracting

Learn the secrets to cut through government red tape on Government-funded research programs. The most common restrictions, contracting vehicles, forms, reporting requirements, and pitfalls will be discussed. The course will focus on the post-award-to-closeout phases of a typical government contract. **Designed for GTRI Research Faculty.**

Prerequisite(s):
GTRI Project Management

Scheduled Date:
June 14, 2006

Time:
8:30 a.m.-1:30 p.m.

Location:
Centennial Research Building, Room 119

Register:
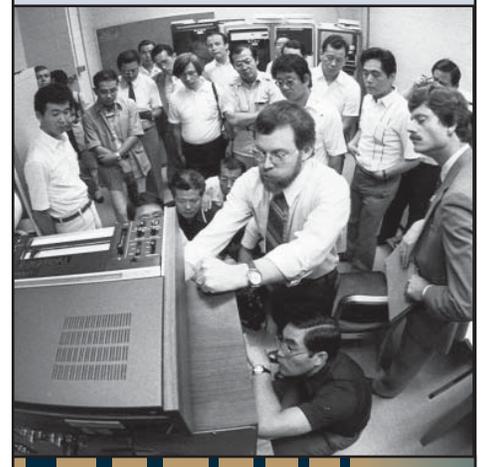https://webwise.gtri.gatech.edu/ Personnel/PDregister.html

> Mystery History

Help us to identify a photo from the GTRI archives. Do you know the person or project depicted? . . .Or, if you want to have some fun, make up a caption! Send to GTRInsider@gtri.gatech.edu

To read feedback on prior Mystery History pictures, log in to WebWise and visit: https://webwise.gtri. gatech.edu/corporate/comm/gtrinsider/index.html

Tuition Reimbursement Deadlines:

July 15, 2006
Approved applications for Fall 2006 must be in PST, 430 North. PST is located at 430 Tenth Street, North Building, Room 117.

August 14, 2006
All grade reports for Summer 2006 must be in PST, 430 North. PST is located at 430 Tenth Street, North Building, Room 117.

One of GTRI's goals is to hire the best, equip the best, and reward the best employees.

The following people have recently joined or retired from the GTRI team!

> Welcome to the GTRI Family!

START DATE	DEPARTMENT/LAB	NAME	TITLE	START DATE	DEPARTMENT/LAB	NAME	TITLE
1/30/06	GTRI-SS	KARY W. SATTERFIELD	MAINTENANCE/CONST WORKER I	3/9/06	GTRI-SS	NAKENYA M. CORKER	CUSTODIAN I
2/1/06	GTRI-STL	TODD L. CARNAHAN	SENIOR RESEARCH ASSOCIATE	3/13/06	GTRI-BSSVC	ROLAND TISDALE	PROJECT DIRECTOR II
2/2/06	GTRI-SS	TAD S. WILSON	CUSTODIAN I	3/16/06	GTRI-ATAS	CHRISTINE I. SHAPIRO	ADMIN ASSISTANT I
2/20/06	GTRI-ELSYS	JOHN K. KALTER	SENIOR RESEARCH SCIENTIST	3/23/06	GTRI-EOSL	SHEMERRA F. SEARCY	SECRETARY SENIOR ADMIN

> Goodbye From the GTRI Family!

RETIRE DATE	DEPARTMENT/LAB	NAME	TITLE	RETIRE DATE	DEPARTMENT/LAB	NAME	TITLE
1/1/06	GTRI-ATAS	JOHN T. SCOVILLE	SENIOR RESEARCH ENGINEER	5/1/06	GTRI-SEAL	BOB TREBITS	Dir-Research SEAL Lab Director
3/1/06	GTRI-SS	WILLIAM A. CLARK	PROPERTY CONTROL OFFICER				

GTRI Fundraising Efforts

Did you know that as a Georgia Tech employee or retiree you can designate your annual (or any) gift to Roll Call to directly support programs within GTRI? Employees and retirees can now designate where their gifts go – so why not direct the funds to GTRI?

You can earmark your gift to any of the following **GTRI accounts:**

351172	GTRI General Fund
352993	Research Faculty Leaders
352994	Shackelford Scholarships
352995	Equipment Funds
357569	DenTeC

If your gift is made in response to the Alumni Association's annual solicitation or the Faculty Roll Call Campaign, you simply write the number of the account to which you want to contribute anywhere on your gift form. You can also split your gift among more than one account. If you give online, put the account number(s) in the "special instructions" box provided.

We all want to support GT, so why not make your gift count for the future of GTRI? For more information please contact Tom Horton at tom.horton@gtri.gatech.edu or (404) 407-8110. ●

We Want to Hear from You!

The GTRI Communications Office welcomes and looks forward to your feedback on our new employee newsletter – the *GTRInsider*. Based on your input, we'll make sure that we focus on topics and stories that matter to you. If you have news, ideas, or suggestions to share concerning stories and features you would like to see in future issues, please let us know by completing and returning this form. You are also encouraged to nominate GTRI employees we can feature in the Up Close and Personal With… section of future issues.

You can fax completed forms to 404-894-9875 or send it via campus mail to Kathryn Knox in CRB 222A/mail code 0801. You can also e-mail your comments to GTRIInsider@gtri.gatech.edu

Please print or type:

Name: _____

Lab/Department: _____

Phone (day): _____ Cell (optional): _____

E-mail: _____

Comments/Suggestions/Ideas: _____

_____

_____

My suggestion for a future employee profile in the "Up Close and Personal With" section is:

Employee's Name: _____ Lab/Department: _____