

# Growing the Economy of Tomorrow for Georgia



The economy of tomorrow is smart.

Diversified. Inventive.

It's built on companies with a strong foundation of science and technology.  
It generates high-wage jobs and attracts outside investment.

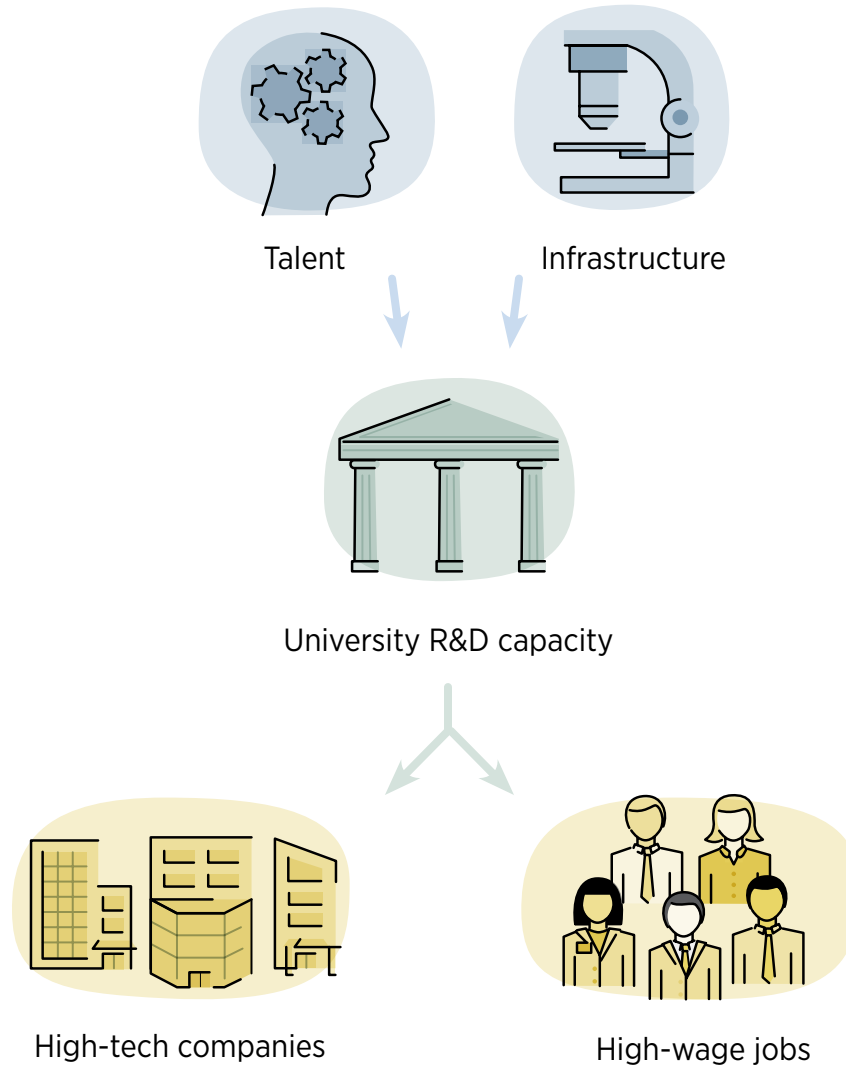
And it makes Georgia a more competitive state.

The Georgia Research Alliance is growing this economy of tomorrow for Georgia. [Our distinct role is to expand the R&D capacity of our universities to generate more breakthroughs, launch more high-tech companies and create more high-wage jobs.](#)

The strategy is working.

And its potential to shape the future is extraordinary.

## How GRA works to grow the economy of tomorrow





# 5 companies that exemplify GRA's impact

Expanding research capacity at Georgia's universities has brought much more than breakthrough discoveries and billions of dollars in research grants.

It has also propelled the launch of 175 high-tech companies ... helped accelerate the growth of established companies ... and created thousands of high-wage jobs.

Here are five companies that exemplify what can result from GRA's investment in talent and infrastructure at research universities – and its further investment through the VentureLab commercialization program.

1 People who need surgery for bone or ligament injuries may have a friend in **MedShape Solutions**. The company, which received GRA VentureLab seed money, makes orthopedic implants that have “shape memory” technology. Surgeons who use the implants can make smaller incisions, strengthen surgical repairs and promote faster healing of damaged bones and tissue. MedShape’s technology was born in the laboratories of Georgia Tech.

2 **GeoVax** (GOVX.OB) exemplifies how GRA can trigger chain reactions that promote economic growth. In 1996, GRA helped bring Rafi Ahmed to Emory University as a GRA Eminent Scholar. Aided by further GRA investment, Ahmed launched the Emory Vaccine Center, where Dr. Harriet Robinson developed a promising vaccine for HIV/AIDS. That discovery drove the creation of GeoVax, and the company is now testing the vaccine in human clinical trials.



Gary Meek

3 “GRA’s VentureLab kept us afloat early,” says **Sentrinsic** co-founder Dave Beck. A good thing, too: The Atlanta-based maker of sensing technology secured growth capital in 2010, including one of the first investments by GRA Venture Fund LLC, a public-private partnership providing early-stage investment in promising VentureLab companies. Among other benefits, Sentrinsic’s technology promotes energy efficiency in industrial pumps. The technology came out of Georgia Tech.

*From left: Sentrinsic executives David Beck, Mike Orndorff and Haihon Zhu.*

## GRA-TAG BUSINESS LAUNCH COMPETITION WINNERS

# 5 more promising companies

4 San Francisco-based **Trellis Bioscience** represents a different kind of connection to GRA. Since 2007, Trellis has collaborated with GRA Eminent Scholar Ralph Tripp (UGA) and the U.S. Centers for Disease Control and Prevention to develop a new drug to treat Respiratory Syncytial Virus, or RSV. That collaboration eventually led to a major partnership with MedImmune, which manufactures the leading RSV medication. As a result, Trellis spent 2010 intensifying its interactions with Tripp as well as expanding its collaborative network to include Georgia experts on other infectious diseases, both viral and bacterial.

5 Recruiting Jin-Xiong She to Georgia as a GRA Eminent Scholar was considered a coup in 2001: He brought a team of 20 scientists and millions in federal funding to the Medical College of Georgia. This year, She developed a new way to process thousands of RNA and DNA samples at high speeds, which led to the launch of **Jinfiniti Biosciences**. GRA's VentureLab program provided early seed money, and Jinfiniti has secured several contracts for its services.

In 2006, GRA approached the Technology Association of Georgia with an idea: Create a partnership to foster high-tech entrepreneurship in the state.

That partnership brought about the GRA/TAG Business Launch Competition, which helps uncover budding high-tech companies in Georgia and propel them toward the next stages of growth. Each competition winner receives cash and professional services valued at \$300,000. And so far, 130 entrants have benefited from mentoring by experienced entrepreneurs.



This year's winner was Toomah, which develops software that helps companies automate the screening and interviewing of

job candidates. This automation saves time and cuts hiring costs by as much as 50 percent.

Here's a quick look at what's happened to the other four winners to date:

REACH Call Inc., the competition's first winner, provides telemedicine services enabling medical specialists to evaluate and diagnose patients in

remote locations and underserved areas 24/7. **REACH Call has raised more than \$5 million in financing**, generated \$6 million in revenue and grown its customer base to 109 hospital clients in seven states. The company expects to substantially expand its team of software developers and marketing professionals in the next two years.

IVOX, which took top honors in 2007, has received **\$3.8 million from outside investors**, has formed strategic partnerships and is capitalizing on the "great exposure" the contest brought. IVOX helps carriers and self-insured fleets manage driver risk.

According to CEO Nandan Sheth, Acculynk, Inc., the 2008 winner, "**has experienced very strong growth and become the standard** for its industry." The company provides a suite of software-only services, which are backed by a powerful encryption and authentication framework to secure online transactions.

2009's champion, AccelerEyes, develops and markets Jacket, a software platform that provides a graphic view of complex application data used by scientists, engineers and analysts. **AccelerEyes has sold 500 licenses in 21 countries** and is working with Google to accelerate the coding of YouTube videos.



Meg Buscema



## The INPUTS: TALENT

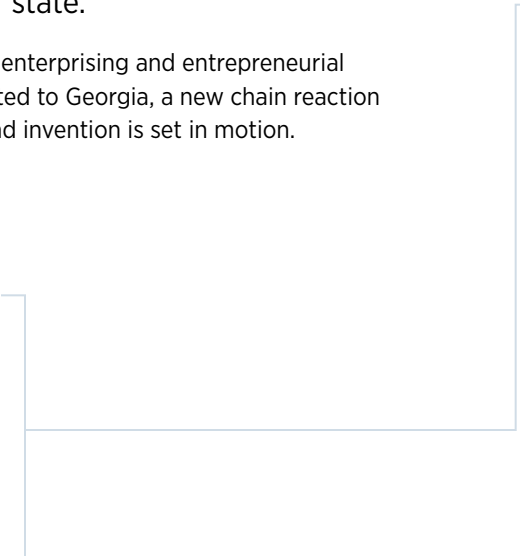


# The economy of tomorrow is built on a foundation of ideas

conceived and shaped by brilliant minds in science and technology. GRA works with Georgia's research universities to identify these bright minds and bring them to our state.

And with each enterprising and entrepreneurial scientist recruited to Georgia, a new chain reaction of discovery and invention is set in motion.

GRA Eminent Scholar Julia Hilliard is arguably the world's most renowned expert on herpes B, a naturally occurring virus in monkeys – but one that kills 80 percent of humans who contract it. Hilliard's Biosafety Level 4 laboratory, one of a very few based at a university, tests blood samples submitted from across the globe for possible infection.




It all begins with the individual – the GRA Eminent Scholar. Today, 62 such scholars are working at Georgia’s research universities. Most arrived with research teams and millions of dollars in federal research grants. All came to the state to an endowed chair that leverages GRA’s investment through matching funds from private sources.

But their arrival is just the beginning. Each GRA Eminent Scholar embarks on a journey of advancing human knowledge toward a new milestone. **Often, that milestone is a breakthrough discovery or invention with commercial potential.** When that happens, a company is born, and a new chain reaction is ignited.

Beyond starting new companies, the Eminent Scholars’ work has other implications for the economy. An example: GRA Eminent Scholar Julia Hilliard heads the Viral Immunology Center at Georgia State University. In addition to conducting research, the center tests samples submitted by industry and research institutions from around the world for the deadly herpes B virus, making it a business in its own right.

There’s a good reason several states have copied GRA’s Eminent Scholars program. *It works.*

 GRA’s Eminent Scholars program took top national honors from the State Science and Technology Institute (SSTI) in 2007.

## The 2010 STORY: GUIDO SILVESTRI

How, exactly, does HIV cause AIDS? That question has been a source of wonder in the scientific community since HIV surfaced 30 years ago.

Guido Silvestri aims to answer it.

Silvestri, recruited to Emory in 2010 as a GRA Eminent Scholar, compares HIV-infected people with non-human primates who have acquired SIV, or Simian Immunodeficiency Virus. While SIV’s molecular make-up resembles that of HIV, a primate called the sooty mangabey does not become ill once infected with SIV.

“It’s a major mystery in AIDS research,” Silvestri says. “These animals have virus replication that remains active in their bodies for as long as they’re alive. But the virus does not kill them. That tells us it’s not just the infection and replication that kills. Something more is happening.”

That’s quite a different story from macaque monkeys. Like humans, macaques do experience a strong, persistent inflammatory response to the virus. “Over a long period of time, this response contributes to destroying the immune system,” Silvestri says.

Regarded as one of the nation’s leading investigators of HIV/AIDS, Silvestri serves as chief of microbiology and immunology at Yerkes National Primate Research Center. GRA helped Emory bring Silvestri to Georgia from the University of Pennsylvania, where he developed a comprehensive and highly collaborative research program.

At Emory, Silvestri will work to develop novel therapeutic approaches to modulate inflammatory responses to HIV as well as explore new vaccines for chronic disease.



Billy Howard

*In Guido Silvestri, Georgia has one of the top HIV/AIDS researchers in the country. GRA helped Emory recruit Silvestri from the University of Pennsylvania to develop new vaccines and drugs.*



The **INPUTS: INFRASTRUCTURE**



## The brightest minds need state-of-the-art technology to advance their work.

Here again, GRA plays a pivotal role.

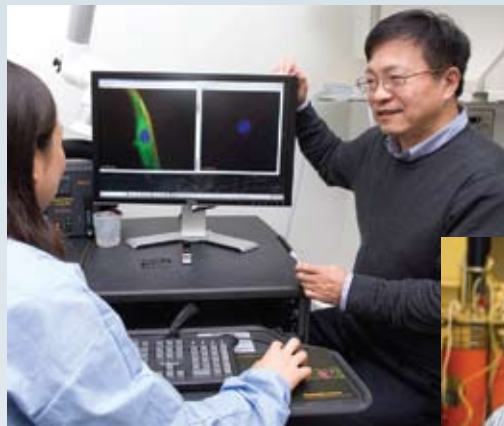
Federal funding sources such as the National Science Foundation and the National Institutes of Health prefer to invest in the work of people, rather than in technology and equipment. By making strategic investments in research infrastructure, GRA strengthens the position of Georgia universities applying for sizable research grants.

These tools also create focal points of discovery, often involving multiple universities. In fact, more than two dozen “Centers of Research Excellence” have been born from GRA’s infrastructure investments. Many are collaborations in research.

University of Georgia

GRA’s 2002 investment in this NMR spectrometer – one of the most powerful in the world – has paid off. It draws researchers from around the country, whose usage fees pay for the facility’s operation. It was also key to securing a \$7.7 million grant from NIH in 2010. Left to right: GRA Eminent Scholar Jim Prestegard with associates Wendy Nkari and Adam Barb.

## The 2010 STORY: NANOMEDICINE COLLABORATION



Georgia Tech

*Gang Bao directs the NIH Nanomedicine Development Center based at Georgia Tech, and GRA Eminent Scholar Bill Dynan (below) of MCG serves as associate director. The center – which counts Harvard, Emory, Stanford and MIT among its other participants – received a crucial infrastructure investment from GRA.*



Medical College of Georgia

One example can be found at the University of Georgia, where GRA helped purchase one of the most powerful instruments in the world for obtaining detailed information about molecules. The instrument – a 900 MHz nuclear magnetic resonance (NMR) spectrometer – is the cornerstone of a 17-university collaboration to advance biomolecular research.

The economic benefits of GRA's technology investments are real:

- Promising science is accelerated toward commercial application.
- A bridge is built between Georgia's research universities and private companies seeking to develop new products and new markets.
- And scientific discovery generates hundreds of millions of dollars in federal research investment in Georgia.

A single mutated gene lies at the core of sickle cell disease, a condition at birth that affects 70,000 Americans and millions more around the world.


Fixing this gene has eluded science and medicine for decades. But a Georgia Tech-Medical College of Georgia center is taking a highly focused and precise approach to stop the gene from producing the abnormal protein that renders healthy red blood cells hard, sticky and sickle-shaped.

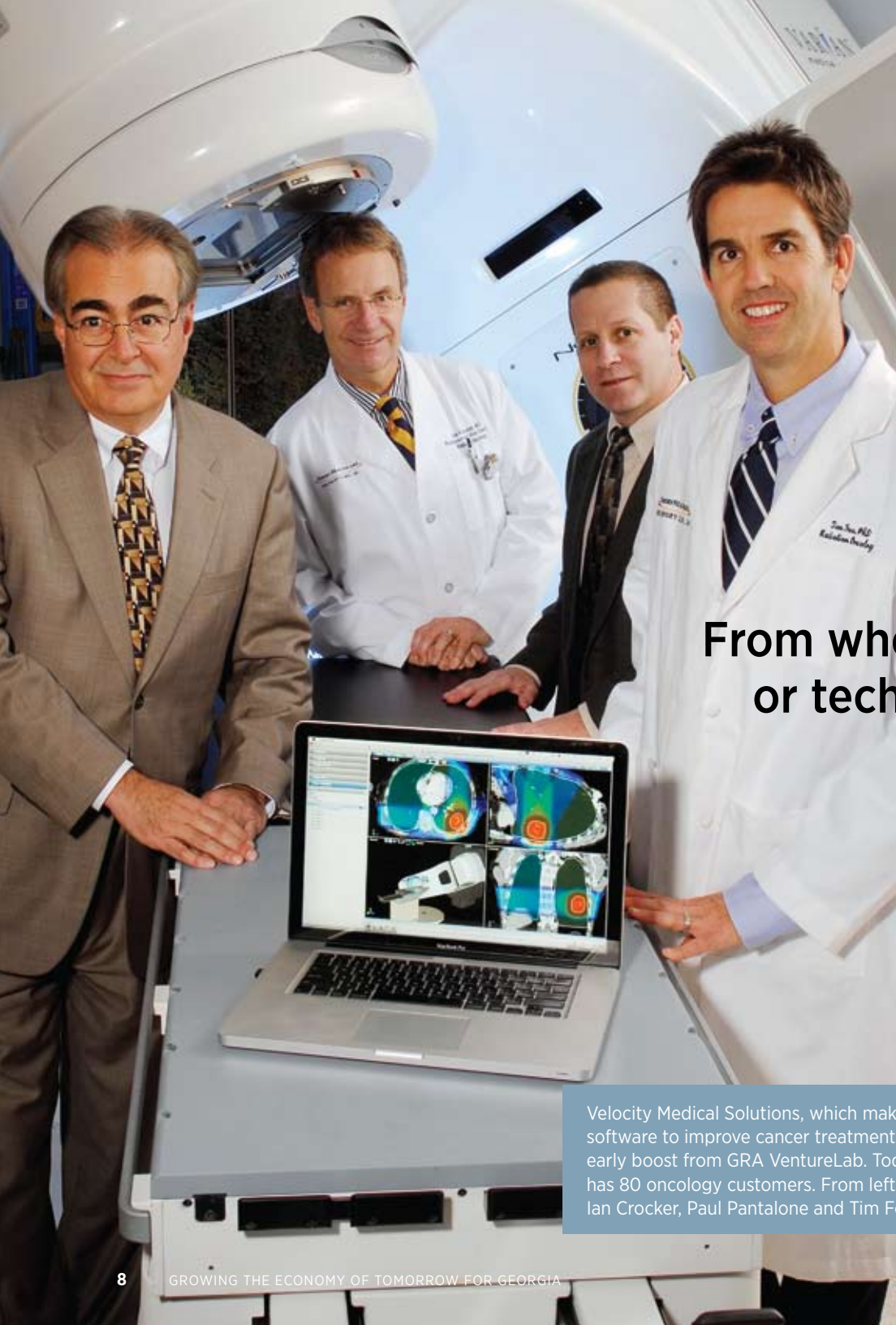
This approach takes place at the nano level, and the center – the Nanomedicine Center for Nucleoprotein Machines – received a major vote of confidence in 2010 when NIH renewed its earlier support with a \$16.1 million research grant.

Sickle cell disease is the front-line target in the center's broader mission to understand and redirect natural processes to repair damaged DNA. Human cells have many pathways for such repair, each involving a different type of nucleoprotein "machine."

GRA made a crucial investment in the center in 2005 by providing \$3.5 million to acquire vital nano-imaging equipment. Georgia Tech, MCG and Emory are among the eight institutions collaborating in the center. Gang Bao at Georgia Tech directs the center, and GRA Eminent Scholar William Dynan from MCG serves as associate director.

Other participating institutions are Harvard, Stanford, MIT, New York University and Cold Spring Harbor Laboratory.

 GRA's investment in infrastructure has been instrumental in generating more than \$1.5 billion in federal grants to advance Georgia-based research.



## The INPUTS: COMMERCIALIZATION

# From where will the next science or technology company emerge?

To ensure that question can be answered, GRA adds a third input to its economic growth engine – investment in commercialization.

New discoveries and inventions deserve every chance to be widely used. GRA's VentureLab program provides that chance by helping universities move the best technologies out of the lab and into the marketplace.


Gary Meek

Velocity Medical Solutions, which makes imaging software to improve cancer treatment planning, got an early boost from GRA VentureLab. Today, the company has 80 oncology customers. From left, Richard diMonda, Ian Crocker, Paul Pantalone and Tim Fox.

**University researchers can receive grants from GRA VentureLab to evaluate the commercial potential of their new technology, develop prototypes and form companies.** And loans from GRA VentureLab add fuel to eligible VentureLab companies that have a fully executed license from the university as well as Georgia-based management.

Velocity Medical Solutions is one such company. In 2004, a medical physicist, a radiation oncologist and a software developer at Emory recognized that the imaging software they developed could improve the planning of radiation therapy for patients. With initial grants from GRA VentureLab, they launched Velocity. Three years later, Velocity received a VentureLab loan, and today it is a viable company with 80 customers.

The most promising VentureLab companies have another potential avenue of support: GRA Venture Fund LLC. Launched in 2009 with a mix of private and state resources, the private investment fund provides investment capital to selected VentureLab companies. An independent board manages GRA Venture Fund, and GRA provides administrative support.

 More than 175 high-tech companies have been launched out of university labs with GRA's commercialization support.

## The 2010 STORY: BODY SURFACE TRANSLATIONS, INC.

Hog farmers can soon put away the scales and measuring tape: There's a new way to calculate the weight of swine.

It's based on 3D imaging technology, and it comes in the form of a portable device invented at the University of Georgia. When aimed at a pig, the device can calculate the animal's weight. Currently, pigs are measured for length and girth, and the industry uses a mathematical formula to convert those measurements to weight.

GRA VentureLab invested in the idea back in 2007, which led to the formation of a company, Body Surface Translations. This year, GRA VentureLab awarded a loan to help the company build its management team, with key executives based in Georgia.

The device, called the WeightReader, answers a challenge confronting the nation's \$15 billion pork industry: How to weigh livestock accurately and in real time to receive the most value in the market.

"We estimated that there was as much as \$10 per head of additional revenue to be captured just from having this weight information," says Gregg BeVier, president of Body Surface Translations. "With 100 million pigs produced each year, that's a \$1 billion value proposition for swine alone."

Body Surface Translations is focusing on the swine and cattle industries first, but the technology has other potential applications in agriculture, as well as in human health.



*David Reeves, an associate professor at UGA and an executive with Body Surface Translations, calculates the weight of a crossbred pig using an alpha prototype of WeightReader, the imaging device developed by the company. The company received a GRA VentureLab loan this year.*

Special

## SCIENTIFIC ADVANCES

### The journey from hypothesis to discovery is marked with many milestones.

Here are a few of the notable 2010 milestones in Georgia-based university science – spurred in part by Georgia Research Alliance involvement.

>>> Researchers at the Emory Vaccine Center, led by GRA Eminent Scholar Rafi Ahmed, **discovered a molecule that identifies which virus-fighting T cells will die off** after an acute infection – and which will live on to battle future illness. The new knowledge can help scientists develop more effective vaccines against tough viruses, such as HIV, and even cancer. The research was funded by the NIH and the Bill and Melinda Gates Foundation.



*The AIDS Vaccine 2010 Conference drew 1,100 participants from 50 countries. From left: Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases; GRA Eminent Scholar Eric Hunter; and Alan Bernstein, executive director of the Global HIV Vaccine Enterprise.*

>>> Georgia played host in 2010 to the world's only scientific meeting dedicated to HIV vaccine research. The AIDS Vaccine 2010 conference, held in the fall, drew 1,100 scientists, funding organizations and policy makers from nearly 50 nations. **Among the presenters were a number of Georgia scientists,** including GRA Eminent Scholar Eric Hunter and GeoVax Director of Medicine Harriet Robinson. GRA served as a sponsor of the conference, which was co-presented by the Emory Center for AIDS Research and the Global HIV Vaccine Enterprise.

>>> Devices to clean up air pollution and remove certain contaminants from natural gas supplies can be designed more quickly thanks to **new modeling tools developed at Georgia Tech** by GRA Eminent Scholar David Sholl. Using computerized models, scientists can analyze the performance of thousands of materials that could be used to build large-scale gas separators. So instead of spending decades constructing physical models and gathering data, engineers may be running field tests of the most promising designs within a few years.

>>> GRA Distinguished Investigator Yukai He continued working on a new way to **alert the body's immune system to attack tumors**, rather than mistakenly protect them. A scientist at the Medical College of Georgia, He and colleagues from Sloan-Kettering and the University of Chicago modified antigens in animal models so that they notify memory cells and trigger an immune response. He envisions using this approach to spawn an immune army to fight cancer, HIV, tuberculosis, malaria and other diseases.

>>> Ovarian cancer has come to be known as “the silent killer” because it is difficult to detect at the earliest stages, when treatment is most effective. But in 2010, **Georgia Tech scientists developed a technique that in preliminary studies correctly confirmed ovarian cancer in 100 percent of women** who were previously diagnosed with the disease. Led by John McDonald, a biology professor at Georgia Tech and chief research scientist of the Ovarian Cancer Institute, the team developed the technique using mass spectrometry technology purchased with the help of GRA. The researchers are now beginning a new phase of testing on a larger group of patients.

## MORE COMPANIES IN THE NEWS



>>> Patients with Type 1 diabetes may be among the first to benefit from advances in stem cell research at the University of Georgia's Regenerative Bioscience Center. The UGA scientists, in collaboration with Emory researchers, are working to **grow healthy pancreatic cells that could be transplanted into diabetes patients**, giving their bodies the ability to produce insulin. The research is built on the work of GRA Eminent Scholar Steve Stice, whose lab mastered a new technique for creating embryo-like cells from adult pigs. Although a similar procedure creates stem cells from laboratory mice, pigs are a better choice for medical research because they are physiologically similar to humans.

### Many companies that have been launched out of university laboratories continue to grow and prosper.

Here are 2010 developments for a few companies that have received GRA-related investment in the past. (And for more, check out pages 2-3 and 8-9 of this annual report.)

>>> GRA VentureLab was well represented at the Southeast BIO Investor Forum in November. Morehouse School of Medicine's NRG Biotechnology program, which received VentureLab investment, was recognized for having **the most competitive business plan**. Joining NRG Biotechnology in the top four of the business plan competition were VentureLab companies Spectropath Medical (Emory) and Reactive Diagnostics (Georgia Tech). Two other GRA VentureLab companies also received recognition at the Forum - InVasc, a drug developer, won SEBIO's Best Initial Financing Award, and NeurOp, which develops medicines to treat central nervous system disorders, presented at the Forum. InVasc also raised \$3.1 million in 2010 to develop a new drug that could delay the need for dialysis treatment.

>>> **GRA Venture Fund LLC made its first investment this year** - \$820,000 in Damballa, maker of software that detects and stops attacks against computer networks. The investment was part of a round of capital investment totaling \$9 million in 2010. Built on technology invented at Georgia Tech, Damballa has grown to more than 50 employees.



Val Rahmani,  
CEO of Damballa

>>> The maker of the first wireless implant to help doctors manage chronic cardiovascular disease added to its momentum in 2010. **CardioMEMS, which received early support from GRA, attracted a \$60 million equity investment** from St. Jude Medical, a global medical device company. The September investment followed a \$38 million round of funding in May that enabled CardioMEMS to complete a clinical trial showing that its implantable monitor significantly reduced hospitalizations from cardiovascular disease.

>>> Medical device company **Axion Biosystems, another GRA VentureLab company, raised \$2.1 million from private investors**. Their devices, which stimulate live neural tissue, are valuable to drug companies that test whether new formulations pose risks to the heart or brain. Axion is housed in the Advanced Technology Development Center at Georgia Tech.

>>> ZOOZ Mobile, developers of smart phone applications for playing games and creating music, received **\$150,000 from the National Science Foundation** and support from GRA VentureLab. And Whisper Communications, which secures the transmission of financial information, received **\$300,000 in financing** in 2010. Whisper is a participant in the GRA VentureLab program and continues to receive GRA support.

## Every grant to support a scientist's work is an endorsement of the potential of that work.

In 2010, research efforts with ties to GRA generated some \$200 million in federal grants – all of which will propel scientific questions towards new answers.



GRA Eminent Scholar C.J. Tsai (right) and colleague Scott Harding are working to genetically engineer trees to become better sources of biofuel.

>>> How might trees grown for biofuel produce more wood? The answer lies in genetic engineering. In 2010, a \$1.3 million grant from the U.S. Department of Energy helped GRA Eminent Scholar C.J. Tsai and a colleague, Scott Harding, search for ways to genetically engineer trees so that they can become **more productive sources of biofuel**. The grant builds on the University of Georgia researchers' somewhat surprising discovery that a certain protein carrying food from leaves to the rest of a tree is abundant in the wood part of the tree.

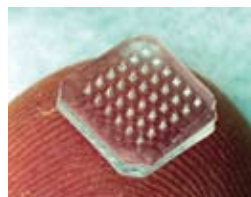
University of Georgia

>>> It's not easy for medical innovations to make the leap from the laboratory to the marketplace, but a new center launched last year with GRA's help is intended to speed the process. In 2010, the Global Center for Medical Innovation (GCMI) won a \$1.3 million grant from the U.S. Department of Commerce, which GRA matched. The center offers design, engineering and prototyping to turn scientific discoveries into viable, commercial products. GCMI predicts **the center will generate \$72 million in new investments and create or save more than 150 jobs**.

>>> What if the effectiveness of a vaccine on an individual could be known before he or she received the vaccine? That question is the focus of a new Center for Systems Vaccinology established at Emory in 2010 with a \$15.5 million grant from NIH. GRA Eminent Scholar Rafi Ahmed serves as co-principal investigator in the center's work, which aims to **predict better the effectiveness of newly developed vaccines** and determine why some people – including a large segment of older people – do not develop immunity after a vaccination. Bali Pulendran, who developed the multidisciplinary approach being used in the research, serves as principal investigator.

>>> Cancer caused by radiation is the focus of a collaborative study by researchers at Emory and the Medical College of Georgia. Funded by a five-year, \$7.6 million grant from NASA, the team will work together in a specialized research center to examine **how a component of radiation in outer space may induce lung cancer**. Besides providing new information on the risks of space travel, the center is expected to yield insights into the effects of radiation on Earth. Emory professor Ya Wang will direct the center, and GRA Eminent Scholar Bill Dynan will serve as co-director.

>>> A Georgia Tech and Emory project to develop simple skin patches for immunization won a \$10 million grant from the NIH – a **200-to-1 return on GRA’s investment** in the research project. In 2009, GRA awarded a \$50,000 VentureLab grant to Mark Prausnitz at Georgia Tech to explore commercialization of the microneedle technology, which delivers vaccine via hundreds of microscopic needles that dissolve into the skin. What researchers learned using the GRA grant enabled them to apply for and win the five-year NIH grant, which will take the patches through further study and into Phase I clinical trials.



Special

*This tiny patch got a \$10 million boost in 2010, bringing it a step closer to the marketplace.*

>>> How cells behave has been studied extensively, but less is known about how cell clusters interact with each other. Scientists from three Georgia universities will attempt to shed new light on these complex interactions by joining a **new multi-institutional center started this year with a \$25 million grant from the National Science Foundation**. The center is a partnership among Georgia Tech, MIT and the University of Illinois, and participants include researchers in the Coulter Department of Biomedical Engineering at Georgia Tech and Emory as well as GRA Eminent Scholar Steve Stice of the University of Georgia. Georgia’s share of the grant amounts to \$1.6 million annually over several years.

>>> What began as a lunch conversation between two GRA Eminent Scholars has evolved into a novel scientific collaboration – one that received a \$1.17 million grant from NIH in 2010. James Cox, an experimental economist at Georgia State, and Allan Kirk, a transplant immunologist at Emory, are developing new criteria to **help hospitals decide when it’s best to discharge patients**. The criteria is being shaped from careful study of 3,000 former hospital patients, and the two scientists are also developing and testing technology to process the decision-making data.

>>> The work of a major collaboration of researchers in the Southeast got a significant boost with **the purchase of a powerful new X-ray detector**. NIH provided \$1.5 million to purchase the detector, which helps decode the structure of molecules. B.C. Wang, a GRA Eminent Scholar at the University of Georgia, will use the next-generation device in his study of the molecular structures of proteins – research that forms the basis of more than 80 NIH-funded projects.

## HONORS AND ACCOLADES

### Top research talent earns recognition for Georgia.

Here are just a few of the awards and honors bestowed in 2010 to university-based researchers with connections to GRA.

>>> GRA Eminent Scholars **Robert J. Maier** and **Roberto Docampo**, both of the University of Georgia, were elected Fellows of the American Academy of Microbiology. >>> **Lars Mathiassen**, a GRA Eminent Scholar at Georgia State University, was invited to Umea University in Sweden as a visiting professor. His recruitment is part of the university’s efforts to make its applied information technology program one of Europe’s best. >>> *Forbes* Magazine named Georgia Tech’s **Advanced Technology Development Center (ATDC)** one of “10 technology incubators that are changing the world.” ATDC was the only incubator in the Southeast to be included. >>> GRA Eminent Scholar **Robert Yu** received the Lifetime Achievement Award from the Medical College of Georgia for work to advance treatment of neurodegenerative diseases.

### GRA marks a milestone



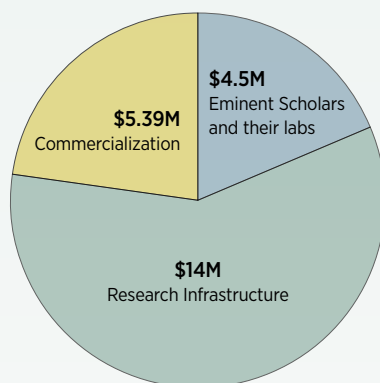
A group of influential business leaders got together in the late 1980s to shape a vision for making Georgia a powerhouse for university-based research. They ended up shaping history.

Since its founding in 1990, the Georgia Research Alliance has not only grown the state’s economy by expanding the research capacity of universities – it’s also put Georgia on the map.

In celebrating its 20th anniversary this year, GRA published a retrospective of the organization’s growth and development. *The First 20 Years* captures the chain of events that led to the formation of GRA as well as major milestones and developments in the years since.

For a copy of *The First 20 Years*, email GRA at [info@gra.org](mailto:info@gra.org).

## GRA FY2010 INVESTMENT PORTFOLIO



**Total = \$23,890,000**

Source of Funds: Funding to support GRA investments is provided by the State of Georgia.

### About the portfolio:

- GRA's **Eminent Scholars** program helps identify and bring world-class scientists to Georgia's research universities to lead extraordinary R&D programs with the highest potential for improving the state's economic vitality.
- GRA's **Centers of Research Excellence**, developed around GRA investments in research infrastructure, serve as the backbone of Georgia's research enterprise.
- GRA's lead **Commercialization** program is VentureLab, which seeks out university-based innovations, assesses their commercial potential and provides resources to address management, markets and technology risks associated with new venture formation.

## CUMULATIVE GIVING TO GRA

The Georgia Research Alliance, Inc., a private, non-profit enterprise, is supported by generous contributions from corporate, foundation and individual donors.

### \$250,000 and above

Anonymous  
AT&T  
CF Foundation, Inc.  
The Coca-Cola Company  
Georgia Power Foundation  
United Parcel Service  
Robert W. Woodruff Foundation

### \$100,000 - 249,999

Aflac Foundation  
The Bradley-Turner Foundation and Related Funds  
GE  
Georgia Crown Distributing Company  
Regions Financial Corporation  
SunTrust Foundation Atlanta  
The Wachovia Wells Fargo Foundation, Inc.

### \$50,000 - 99,999

Acuity Brands  
Arcapita Ventures  
The R. Howard Dobbs, Jr. Foundation  
Flowers Foods  
GRA Eminent Scholars  
The Imlay Foundation  
Lockheed Martin  
Synovus Financial Corporation  
The Tull Charitable Foundation  
The University Financing Foundation (TUFF)  
The Williams Family Foundation

### \$25,000 - 49,999

AGL Resources, Inc.  
James S. Balloun  
Frederick and Helen Cooper Charitable Foundation  
Cousins Properties  
CSX  
Bradley Currey, Jr.  
Delta Air Lines  
Equifax  
Genuine Parts Company  
GRA Staff  
Norfolk Southern Foundation  
David Ratcliffe  
Sea Island Company  
Siemens  
Waffle House Foundation  
The Weathertop Foundation

### \$10,000 - 24,999

Ackerman Family Foundation  
AirTran Airways  
Bank of America Charitable Foundation  
W. Frank Barron  
Computer Generation  
James Copeland  
Deloitte  
The Fickling Family Foundation  
Georgia-Pacific  
Gold Kist  
Intelligent Systems  
Kilpatrick Stockton LLP  
Matria Healthcare  
National Service Industries  
Nations Bank  
Oglethorpe Power  
Southwire Co.

### Up to \$10,000

Aaron Rents  
AtheroGenics, Inc.  
AviGenics, Inc./Synageva  
BioPharma Corp.  
Bank South  
James H. Blanchard  
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Charter Medical Corporation  
CIBA Vision Corporation  
Cox Enterprises  
Thomas Crotty  
First Union National Bank  
John and Mary Franklin Foundation, Inc.  
Russell French  
Gray Communications Systems  
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Healthydyne  
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Logan Ide  
Interface, Inc.  
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Jackson Spalding Communications Management  
Jones Day  
Charles H. (Pete) McTier  
Bryan Moss  
David Perryman  
Resonance Marketing  
Riverwood International  
Rock-Tenn Company  
Servidyne  
Shaw Industries  
Lizanne Thomas  
Thomaston Mills  
United Distributors  
Felker Ward, Jr.

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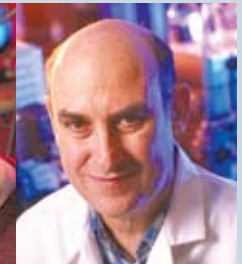
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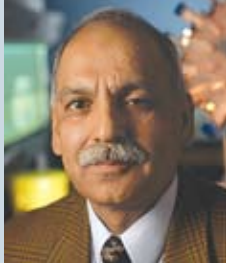
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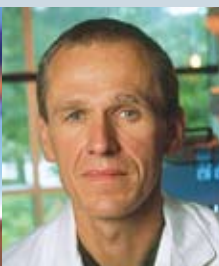
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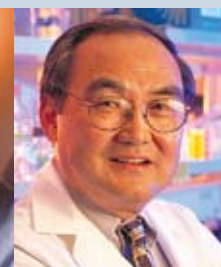
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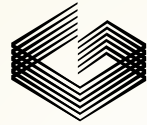
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