



HIGHLIGHTS OF OUR YEAR

MEMBER UNIVERSITIES

Augusta University
 Georgia Institute of Technology
 Georgia State University
 University of Georgia

Clark Atlanta University
 Emory University
 Mercer University
 Morehouse School of Medicine



Research HIGHLIGHTS

In 2023, Georgia's university scientists moved the world ever closer to new answers to human needs. Their work generated hundreds of millions of dollars in research grants as well as new opportunities for workforce development.



- 1 Newly published data showed that **grants and contracts to Georgia universities** drove more than \$3 billion in R&D spending – a new milestone. Georgia held its no. 8 national ranking in research. Nearly \$900 million of the R&D expenditures came from GRA Academy scientists.
- 2 Eric Krause moved his lab from Florida to Georgia State to become a GRA Distinguished Investigator. **Krause is an expert** on how stress impacts metabolism, behavior and the cardiovascular system.
- 3 GRA Eminent Scholar Anumantha Kanthasamy (UGA) expanded the work of the Isakson Center for Neurological Disease Research by adding two endowed professorships, thanks to a **\$1.4 million gift** from the Isakson Initiative.
- 4 Melissa Davis started work as a GRA Distinguished Investigator at Morehouse School of Medicine. Her research explores the **biology behind disparities** in disease, especially cancer.
- 5 In computer simulations, GRA Eminent Scholar Lynn Kamerlin (Georgia Tech) discovered that changing the structure of an enzyme could **break down common plastics** faster.
- 6 GRA Eminent Scholar Vince Calhoun (Georgia State / Emory / Georgia Tech) found that **brain patterns could predict schizophrenia**. Calhoun fuses massive amounts of data from different kinds of medical imaging into a single picture.
- 7 GRA Eminent Scholar Karen Norris (UGA) **advanced a vaccine** to thwart drug-resistant fungal infections, a growing threat to humankind.
- 8 GRA Eminent Scholar Qin Wang (Augusta University) identified **a potential new treatment for PTSD**.
- 9 A process developed by GRA Eminent Scholar Bill Koros (Georgia Tech) was found to be effective in **removing harmful elements** (like solvents) from water.
- 10 GRA Eminent Scholars Robin Buell and C.J. Tsai (UGA) advanced development of poplar trees as **viable biofuels**.
- 11 **The Max Cooper Prize** was created to honor GRA Eminent Scholar Max Cooper (Emory), a pioneer in immunology. The \$100,000 international prize will be awarded to researchers advancing the field.



KEY 2023 RESEARCH METRICS



\$857 Million

R&D expenditures by GRA Academy scientists



2,484

Jobs created last year in Georgia's university labs



#8

Georgia's national ranking in university R&D

Entrepreneurship HIGHLIGHTS

GRA helped move more inventions out of Georgia’s university labs and into the marketplace. In 2023, several GRA-backed startups reached major milestones – from attracting big venture capital to improving the quality of life of Georgians and people everywhere.



- 1 The FDA gave clearance to EarliTec’s second-gen technology, **which diagnoses autism** much earlier in life. With the clearance, the door opened for the GRA-backed startup to move the diagnostic into doctors’ offices. The technology has its roots in Emory and Children’s Healthcare of Atlanta.
- 2 Startup HyperCell took the **\$1M top prize** in a national competition, and MycoLogic netted a \$250K award at the same competition. Both have received early investment and guidance from GRA.
- 3 Absolics broke ground on a manufacturing plant in Covington, Ga., bringing **\$600M in investment** and creating 400+ jobs. The plant will make glass substrates for microchips, an invention that traces back to a Georgia Tech research center established by a GRA Eminent Scholar.
- 4 Startup Cognosos expanded product development after receiving a **\$25 million investment**. The company also landed a spot on the Inc. 5000 (and GRA-backed Codoxo made the Inc. 500).
- 5 **Focused Cryo** (cryoablation tech) and **Kodikaz** (gene therapies) joined the portfolio of the GRA Venture Fund.
- 6 GRA-backed Micron Biomedical moved toward manufacturing a **needles-free measles vaccine**, thanks to a \$23.6 million grant from the Bill & Melinda Gates Foundation.
- 7 Target began online sales of the nasal aspirator offered by GRA-backed startup Dr Noze Best. The device comfortably **clears nasal congestion** in infants.
- 8 AnemoCheck became the first at-home hemoglobin test kit to receive **clearance by the FDA**. Marketed by GRA-backed startup Sanguina, the test requires a simple finger prick.
- 9 GRA Eminent Scholar Eric Sorscher (Emory) designed clinical trials to move a drug he developed for **chronic sinusitis** closer to the marketplace. GRA venture investment helped attract more than \$3 million in outside investment.
- 10 Investors added \$7 million to help GRA-backed Lucid Scientific expand marketing and sales of its Resipher system. The technology analyzes what’s happening in cultured cells in real time, **speeding the development of new drugs**.

KEY 2023 ENTREPRENEURSHIP METRICS



\$148 Million

Outside capital invested in GRA-backed university startups



1,977

Jobs created last year in startups (more high-tech workforce prep)



\$246 Million

Revenue and grants generated by startups

New & Noteworthy IN 2023



NEW FACES: **Tim Denning** took the helm as GRA's new president and CEO following the retirement of **Susan Shows**, who was named a GRA Senior Advisor. **Andrew Short** joined the GRA team as associate director of venture development.

AGTECH INNOVATION: Several university inventions to benefit Georgia farmers were showcased at the **Convergence Summit**, an event GRA and partners staged.

NEW EMPOWERMENT: GRA-backed startup **Kinemo** partnered with **Shepherd Center** to evaluate the company's mobile-assistance technology, which expands independence for people with tetraplegia and quadriplegia.

WORKFORCE PREP: GRA expanded its Student Scholars program into a **Workforce Development Initiative**, which adds postdoc researchers and professional development opportunities.

OUT & ABOUT: GRA hosted state legislators and business leaders at an event on the Mercer University campus... sponsored students at the American Society of Vaccinology Symposium in Athens and the Keystone Vaccinology Symposium in Atlanta ... and staged the 2023 GRA Academy of Scientists.

ONE MORE KEY METRIC FROM 2023

\$1.3 Billion

Generated by GRA programs in university research and entrepreneurship. Since 1990, GRA's overall ROI is more than **\$13.1 billion**.

The Georgia Research Alliance grows Georgia's economy by expanding university research and entrepreneurship. For 33 years, GRA has received state appropriations to invest in its programs; operations are funded through private contributions. GRA is a strategic partner / affiliate of the Georgia Chamber of Commerce. • Our story: GRA.org



Keep up with university research + entrepreneurship in Georgia in 2024: Subscribe to our monthly e-newsletter, GRA Notes.