GEORGIA CTSA IMPACT REPORT



Accelerating Discoveries to Improve Health















Our Impact





3,000 Investigators Assisted

- 1,900 Clinical Research Center Studies
- 1,300 Biostatistics and Research Design Consultations
- 7,500 Collaboration and Team Science Event Participants



400 Clinical and Translational

Scientists Trained



- 220,000 citations
- 2.4 times the average citation rate for comparable papers



Pilot Grants Awarded

- \$25 million in pilot grant funding
- \$190 million in follow-on funding
- 7.5:1 return on investment

Four Institutions Working Together to Improve Health in Georgia & Beyond



Georgia CTSA Principal Investigators

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Georgia Clinical and Translational Science Alliance (Georgia CTSA) accelerates discoveries from the lab, clinic, and community into real-world solutions that improve health. Through groundbreaking research and community partnerships, Georgia CTSA is leading advancements that impact health in Georgia and across the country.

The alliance comprises four of Georgia's premier academic institutions. **Emory University** is a national leader in health care and biomedical research as well as an outstanding leader in clinical and translational research training and education. **Morehouse School of Medicine** is a nationally recognized institution that brings biomedical research, successful community engagement research, and serves as a pipeline for training researchers. The **University of Georgia** is a top public institution that leads in education and innovation, and as the state's land and sea-grant institution, provides a statewide network to enhance community engaged research, service, and outreach. The **Georgia Institute of Technology** is a national leader in bioengineering and the application of innovative systems engineering to health care solutions. These institutions foster collaboration, bringing together researchers, patients, and community organizations to develop solutions for pressing health challenges.

What sets Georgia CTSA apart is its emphasis on collaboration and integration. Investigators from many disciplines form teams to tackle health challenges from multiple angles, leveraging expertise and resources. The unique strengths of each institution create a powerful synergy, accelerating innovation.

In 2022, **the NIH awarded Georgia CTSA \$58.6 million over five years**, ensuring its continued impact. Since its founding in 2007, Georgia CTSA has been a cornerstone of innovation and scientific discovery in the region. The Georgia CTSA's focus is clear:

- · Training the workforce and next generation of clinical investigators and translational scientists
- Translating new discoveries to advance health from laboratory to bedside to community
- Fostering multidisciplinary teams to collaborate on new treatments, technologies, and approaches to improve health
- Engaging Georgians in research to improve health in their communities

Through its resources and programs, Georgia CTSA is improving health and helping ensure breakthroughs reach those who need them most.

Fostering Collaboration & Team Science



"When I was a fellow in the TEAMS program, I was a young faculty member with many research interests. I had all of this potential that was scattered in too many different efforts, and the program was good at concentrating my energy and effort into a clear trajectory. By working with my mentor, I saw the results of having that guidance."

Ines Gonzalez-Casanova, PhD Assistant Professor Emory University The Georgia CTSA **Collaboration & Multi-Disciplinary Team Science Program**, led by Dr. Kathy Griendling at Emory and Dr. Lillian Eby at UGA, promotes collaboration and team science among investigators at all four institutions and ultimately across Georgia and the nation. This program cooperates with other arms of the Georgia CTSA to conduct a multitude of valuable activities, including:

- Hosting ongoing team science workshops, online research matching resources, and major collaborative events- such as the flagship Southeast Regional Clinical & Translational Science Conference. This successful, three-day event, with attendees from neighboring CTSA institutions in Florida, Alabama, South Carolina, and beyond creates a forum for the exchange of ideas and opportunities to strengthen wide professional networks. The 2025 conference hosted 300 attendees from 30 institutions. Keynote speakers have included national leaders from the NIH and FDA.
- Enhancing recognition of team science by conferring two **Awards of Distinction for Team Science** at this conference, further fostering teamwork across the partner institutions.
- Offering mentorship activities, such as the **TEAMS Program**, which has served nearly 100 fellows with a formal, multi-disciplinary team science curriculum that includes small team learning communities, resources, and 1:1 mentoring. Mentor-mentee pairs in this program have included 52 cross-institutional matches that have **fostered lasting professional relationships**.





Funding Collaborative Research

Pilot Grants Fuel Discoveries

The four academic partners of the Georgia CTSA collectively recognize the critical need for start-up, feasibility, or proof-of-concept resources. Pilot grant programs act as a catalyst across each of the academic institutions, providing resources to generate preliminary data and to demonstrate the feasibility of novel experimental tools and concepts. The program promotes new networks of multidisciplinary and inter-institutional research teams for the transformation of clinical and translational science in Georgia.

CTSA resources such as Pilot Grants, give competitive advantage to projects that involve more than one institution: across the four Georgia CTSA institutions, across schools and departments, or across affiliated institutions like Children's, Grady, or the Atlanta VA. Thus far, the program has supported **196 multi-institutional pilot research projects**.

For example, Dr. Julianne Schmidt, Associate Professor, Department of Kinesiology, UGA, recently received a \$1.8 million NIH R01 Grant to study how concussions affect driving behavior. This study builds on earlier work funded by a Georgia CTSA Pilot Grant, helping to accelerate this science from the lab into clinically created guidelines recommended for the general public. Serving as the Principal Investigator, Dr. Schmidt led the multi-institutional team of investigators from UGA, Emory, Georgia Tech, and the University of Kansas Medical Center. Dr. Schmidt's research showcases how **Georgia CTSA's Pilot Grants** accelerate clinical and translational science. By supporting innovative research, the program fosters collaboration among multidisciplinary teams and drives future advancements in science for Georgia's residents and across the country.

"Our Georgia CTSA Pilot Grant formed the base for our NIH R01. Our work will better define when driving performance returns to normal after concussion, and help clinicians provide recommendations that balance driving safety with the need to return to the road as soon as safely possible."

Julianne Schmidt, PhD Associate Professor University of Georgia



Evidence for Collaborative Success



Co-authorship network for 5,000 Georgia CTSA-supported publications from 2007-2025 (top 25 collaborating institutions)

Georgia CTSA's Evaluation & Continuous Improvement (ECI) team leads in using advanced tools to assess the impact of the Georgia CTSA and the national CTSA consortium. Publication analysis offers an accessible and measurable method for assessing research output, collaboration, and impact.

Since 2007, the Georgia CTSA has supported the research behind over **5,000 publications**, including strong and wide collaboration networks across Georgia institutions and beyond. Analysis shows that supported publications have driven further academic research through over 220,000 academic citations, **2.4 times the average citation rate**.

Investment in collaboration has led to significant change in collaborative research output. Especially since the addition of UGA in 2017, co-authorship has increased markedly, with hundreds of publications co-authored across the Georgia CTSA. Initially, only 3% of the Georgia CTSA publications were co-authored by investigators from two or more of the partner institutions. By supporting cross-institutional introductions, mentorship, and grant/research collaboration, **cross-institutional co-authorship grew over each grant cycle** to 13% by 2025, a trend that we anticipate will continue.



academic citations cross-partner

publications

Growth in Georgia CTSA Cross-Institutional Co-Authorship

supported

publications



Evaluating Translational Impact Worldwide

Total altmetric references to Georgia CTSA-supported publications worldwide, 2007-2024, including X, Bluesky, news, blogs, Wikipedia, policy, patents, and clinical guidelines

Beyond academia, however, *altmetric* references show how research publications also inform public health policy, clinical guidelines, and public discourse in news and social media. The Evaluation & Continuous Improvement team utilizes cutting-edge information technologies to uncover the broad impact of CTSA-supported research, both inside and outside academic settings.

In 2023, ECI collaborated with other CTSA hubs to publish an evaluation^a in *Academic Medicine* that explored documented links between CTSA research and global policy literature. Led by ECI Associate Director Nikki Llewellyn, PhD, the study used new data tools to identify the types of research influencing health policies worldwide. For example, a 2011 flu vaccine publication^b supported by the Georgia CTSA was referenced in a 2014 global health report. The report used CTSA-supported research findings to clarify uncertainty and provide recommendations on the safe use of vaccines during pregnancy. More recently, Georgia CTSA supported research^c was published in *New England Journal of Medicine* on a breakthrough treatment for preventing dangerous food allergy reactions in youth. Altmetric data revealed international media excitement for the findings, as well as use in policy, clinical guidelines, and a patent.

Llewellyn summarizes, "Using the latest evaluation methods, ECI follows the trail of breadcrumbs from high-quality research to real-world health impact. These efforts reveal our strengths, opportunities, and paths forward."

a PMCID: PMC10523888; b PMCID: PMC3104979; c PMCID: PMC11193494

"Georgia CTSA's ECI team collaborates with other **CTSAs to develop innovative** methods for understanding how CTSA-supported research is utilized to advance translation. Our newest policy evaluation work is being used as a model across our institutions and the national CTSA consortium. For instance. upcoming research led by **ECI UGA Professor Amanda** Abraham, PhD, explores how **CTSA-supported work has** shaped substance use policy, an important and timely public health issue."

Eric Nehl, PhD Director, Evaluation & Continuous Improvement Emory University Rollins School of Public Health



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Accelerating **Discoveries**



"Georgia CTSA Clinical **Research Centers were** critical. We worked with Drs. Kraft and Ziegler on this project to conduct our study visits in the research units. The flexibility in scheduling made it easier for us to accommodate the participant schedules, as well as tailor the protocol and nursing needs specifically to this study."

Michael Woodworth, MD, MSCR Assistant Professor Emory School of Medicine

Georgia CTSA Clinical Research Centers Accelerate Discoveries

Georgia CTSA Clinical Research Centers at Emory, Morehouse School of Medicine, UGA, and Children's offer researchers multiple resources to support their research including designing and implementing successful complex studies. Multiple locations facilitate clinicians seeing patients on flexible schedules. Experienced staff take patient labs, nurses and physicians oversee patient visits, while coordinators manage studies. Since 1960, these research centers have proven necessary to accelerate the successful translation of research to patient treatments.

Clinical Research Centers Help Discover New Approach to Treating Multi-Drug Resistant Microbes

Healthcare settings struggle with multi-drug-resistant microbes that exist and grow in the presence of antibiotics. These organisms can lead to bloodstream infections, sepsis, and patient death. Recent research by investigators, supported by the Georgia CTSA Clinical Research Centers, successfully lowered the levels of microbes in vulnerable patients to such an extent that the study was stopped early so more patients could take advantage of its benefits.

Research Team Includes Georgia CTSA Master of Science in Clinical Research Graduate

Michael Woodworth, MD, MSCR, Assistant Professor, Emory School of Medicine (SOM), and Colleen Kraft, MD, MSCR, Professor, Emory SOM, Division of Infectious Diseases and Georgia CTSA Clinical Research Centers Director, led the study. The research team transplanted microbiota from the stool of healthy donors into a vulnerable population, kidney transplant recipients. These patients reported a significantly reduced hospital infection rate associated with a single drug-resistant microbe, C. difficile.



Georgia CTSA Clinical Research Centers



Propelling Health Innovations

Innovation Catalyst Moves Health Innovations to Patients More Quickly

Georgia CTSA's Innovation Catalyst program aims to move health innovations to patients more quickly. The translational process involves developing awareness and skills in areas not traditionally taught in academia, including innovation, entrepreneurship, and commercialization. Innovation Catalyst accelerates health technology through an impressive range of courses, events, and services.

A flagship service is the **AppHatchery**, a multi-disciplinary effort that co-develops, with Georgia CTSA investigators, digital health products. Thus far, these collaboratively developed apps have resulted in more than 2,000 monthly active users, eight publications, three local news stories, and six ongoing clinical trials.

For example, a new app called **TypeU** was developed in collaboration with Children's Healthcare of Atlanta's Diabetes Clinic, master's students in computer science and design from Georgia Tech who created the initial design, and Emory University who developed and maintains the app. Other apps developed in the AppHatchery have fostered useful advances in clinical practice, including:

- 1) improving patient education and children's health
- 2) supporting a mobile reference for centralized tuberculosis information in Georgia
- 3) enabling speech collection for clinical studies on physician burnout, depression, and epidemiology

"The AppHatchery has a background and genuine interest in the health sciences. This puts them in a unique position to develop apps that hold in balance the latest in mobile technologies with evidence-based research and practice. It's a rare combined skillset and one that is needed to develop tools that can have real translational impact."

Deanna Kaplan, PhD Assistant Professor Emory School of Medicine

Training Clinical and Translational Investigators



"As a KL2 Scholar, I have learned so much about clinical and translational science. We also have been focusing at Georgia Tech on how to bring in community partners and inform all our investigative studies about our invasive neurotechnology capabilities."

Sankar Alagapan, PhD Research Scientist II & Georgia CTSA KL2 Scholar Georgia Tech School of Electrical and Computer Engineering The Georgia CTSA Research Education Program provides structured training, mentorship, and research support to prepare early-career investigators for impactful careers in clinical and translational science. Through the **KL2 mentored career development award**, the **TL1 pre/post-doctoral training award**, the **Master of Science in Clinical Research (MSCR)**, and the **Certificate Program in Translational Science (CPTS)**, trainees across our four institutions gain critical skills to move discoveries from the lab to patient care. With graduates leading over **5,400 peer-reviewed publications and securing \$267M+ in NIH funding**, the program has fueled advancements in infectious disease research, neurotechnology, and cancer treatments. By fostering cross-institutional partnerships and equipping scholars with the tools to drive innovation, Georgia CTSA is shaping the future of healthcare in Georgia and beyond.

Georgia CTSA KL2 Scholar Discovers Key Biomarker

Using a multi-disciplinary approach, KL2 Scholar Sankar Alagapan, PhD, MS, and research team of clinicians, engineers, and neuroscientists made a groundbreaking neuroscience discovery published in *Nature* (PMCID: PMC10550829). This research collaboration across Georgia Tech, Emory, and Mount Sinai, used innovative medical devices, novel imaging technologies and AI to create an actionable approach for helping patients with depression.

By studying the brain activity of depressed patients, the team **discovered a new biomarker** that changes as patients recover from depression. Tracking this biomarker allows clinicians to adjust a patient's treatment throughout recovery based upon quantifiable data.

For researchers like Dr. Alagapan, the **KL2 Scholar Program is vital** to their advancement, as the program supports career development for junior faculty in clinical and translational science and research. Providing two years of partial salary support to fund research, the KL2 Program also covers tuition for the degree or certificate programs. Graduates credit the mentored research training and education in leadership, team science, and scientific communication as having been essential to their success.





Statewide Impact & Beyond

The **Community Engagement (CE) program** of the Georgia CTSA fosters meaningful **collaboration between academic institutions and communities** to ensure that research is relevant, actionable, and impactful. By facilitating partnerships, providing resources, and ensuring community voices shape research priorities, CE accelerates the application of scientific discoveries to **improve public health in Georgia and beyond**.

Key Georgia CTSA Community Engagement initiatives include:

- Biennial Community Engagement Forum Brings together researchers and community leaders to exchange ideas and strengthen partnerships.
- UGA's Archway & Extension Programs Expands research-driven health initiatives into communities across Georgia, ensuring broader reach and impact.
- Grant Writing Academy Conducted in collaboration with the State Office of Rural Health, successfully supported 45 partnerships, leading to over \$500,000 in funded projects that advance community health in rural Georgia.

The **Translational Workforce Development (TWD)** program of Georgia CTSA enhances research collaboration by providing specialized training, career development resources, and cross-institutional learning opportunities. A cross-institutional effort, TWD cultivates a skilled and adaptable research workforce. Through strategic partnerships and shared expertise, TWD equips researchers and healthcare professionals to bridge disciplines, accelerate discoveries, and drive health innovation.

TWD Builds a Skilled Workforce for Translational Research

- eMPACT: A career navigation platform designed for Clinical Research Coordinators, providing customized learning paths and job-matching opportunities to strengthen Georgia's research infrastructure.
- TWD Catalog: In collaboration with University of Southern California CTSI, this catalog offers 66 free online courses, providing training in clinical research, regulatory science, and translational medicine.

TWD Accelerates Impact Through Training and Continuing Education



"Georgia CTSA's Community Engagement program is designed to support community-university research partnerships by connecting existing academic community research programs, transforming research from scientist-subject interaction to a partnership, and training investigators in principles of community-engaged and community-based participatory research."

Tabia Henry Akintobi, PhD, MPH Director, Community Engagement Morehouse School of Medicine



To improve health in Georgia and beyond, the Georgia CTSA provides:

- **Funding opportunities**
- Collaboration and multi-disciplinary team building
- Mentoring in clinical and translational science
- **Biostatistics & informatics consultations**
- Community engagement & partnership
- High-impact, emerging innovation & translation practices
- Dedicated research units
- Regulatory, recruitment, & trial strategies
 - Training, career, & workforce development



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