On a Mission

Board of Regents Approves New Tech Mission Statement

INSTITUTE COMMUNICATIONS

The University System of Georgia Board of Regents (BOR) has approved Georgia Tech’s updated mission statement generated from the work done as part of the new strategic planning process launched in Fall 2019 under President Ángel Cabrera. The approval was granted at the BOR’s monthly meeting, which took place May 12.

The approved mission statement reads:

The Georgia Institute of Technology is a public research university established by the state of Georgia in Atlanta in 1885 and committed to developing leaders who advance technology and improve the human condition.

Along with this new mission statement, the strategic planning process has also produced a vision and foundational narrative, values definition, and strategic themes, which are currently being further refined by active working groups.

During strategic visioning, more than 5,700 students, faculty, staff, alumni, campus partners, and community leaders shared varied perspectives, aspirations, and dreams to help shape the future of the Institute. Learn more about the process at strategicplan.gatech.edu.

Tech Moving Forward: Phased Return, Budget Revisions

A May 21 email to campus provided updates about a Phased Return-to-Work Plan and Georgia Tech’s recent Budget Revision Submission to the University System of Georgia (USG).

Phased Return-to-Work Plan

On Friday, May 15, Georgia Tech submitted to the USG its plan for the summer months. The plan follows a phased approach that prioritizes employee health and safety while providing for the delivery of critical services and preparing for the resumption of in-person, campus-based instruction in August 2020.

The summer plan includes recommendations for a ramp-up of staff who serve:

• Ongoing activities, that will need to be continued throughout the summer, related to support for on-campus students.
• The broadening of research

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WORKING TOWARD A VACCINE

Krishnendu Roy (right), Robert A. Milton Chair and professor in the Wallace H. Coulter Department of Biomedical Engineering, is part of a team that has received funding from the National Institutes of Health to screen and evaluate certain molecules known as adjuvants that may improve coronavirus vaccines. Adjuvants are used with some vaccines to help them create stronger protective immune responses in persons receiving the vaccine. Read more about coronavirus-related research on page 3.

Photo by Rob Felt
activities from the current essential research to a phased return of all sponsored (essential and nonessential) research activity.

- The operations and services that will need to be conducted in order to prepare for the start of in-person instruction in August 2020.

In addition, the plan includes some recommendations around various operations and services that might be resumed during summer — pending additional guidance from the USG, public health authorities, and the National Collegiate Athletic Association (NCAA):

- Resumption of in-person, non-credit classes through Georgia Tech Professional Education.
- Resumption of summer camps and other community events.
- Resumption of student-athlete training and team activities.

The Institute’s initial budget revision includes details on the furlough plan recently announced by the USG. Georgia Tech’s leadership team will continue to model various financial scenarios as the full impact to the state’s revenue becomes clearer. Updates will be shared with campus by email on a weekly basis. Once the USG has approved the plan, the Institute will share full details about a phased return. Until then, employees should continue to work in the same manner in which they have been working.

**Budget Revision Submission**

As we continue to experience challenging times, the COVID-19 pandemic has had a significant impact on the state’s economy. This April, state revenues declined by more than $1 billion (or 35.9%) compared to April of last year. Further revenue declines are expected, and will likely result in serious budget reductions we must plan for now.

The USG and all state agencies were recently asked to prepare budget plans that reduce spending by 14% in Fiscal Year 2021, which starts July 1. Nothing will be final until a budget appropriation is approved by the General Assembly and signed by the governor. That is expected to happen in June, as legislative leaders meet for the remainder of the 2020 legislative session and finalize the FY21 state budget.

In identifying possible areas for budget reductions, the plan prioritizes student academic progression and quality of instruction, and protects sponsored research that is self-funding and contributes to supporting our infrastructure and reputation. The goal is to protect as much employment as possible while acknowledging that some personnel will inevitably be affected. Any necessary personnel actions will be taken with fairness, compassion, and respect.

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Even with fewer people on campus, the Facilities Management staff continues to work tirelessly to maintain the campus for essential operations. Custodian Seth Osekre disinfects parts of The Kendeda Building for Innovative Sustainable Design.

Outstanding Employees

Each spring, faculty and staff members are recognized for their work in the preceding year at the annual Faculty and Staff Honors Lunch. In spite of the event not being held this year, employees from across campus are still being recognized for their good work. See a full list of award winners at specialevents.gatech.edu/faculty-staff-honors.

Even fewer people on campus, the Facilities Management staff continues to work tirelessly to maintain the campus for essential operations. Custodian Seth Osekre disinfects parts of The Kendeda Building for Innovative Sustainable Design.

Photo by Rob Felt
Researchers Receive NIH Funds for Adjuvant Research to Boost Coronavirus Vaccines

Researchers have received funding from the National Institute of Allergy and Infectious Diseases, part of the National Institutes of Health, to screen and evaluate certain molecules known as adjuvants that may improve the ability of coronavirus vaccines to stimulate the immune system and generate appropriate responses necessary to protect the general population against the virus. The research team will screen a library of various adjuvant combinations to quickly identify those that may be most useful to enhance the effects of both protein- and RNA-based coronavirus vaccines under development.

Emory, Georgia Tech Create Barrier Protection Devices

Medical staff treating patients on the front lines of the COVID-19 pandemic come face to face daily with the risk of exposure to the virus. Among the riskiest moments are inserting and removing breathing tubes, procedures that create a spray of respiratory droplets. Georgia Tech and Emory researchers have created barrier protection devices designed to contain that droplet spray and aerosol with a goal of reducing the risk of disease transmission.

Made of clear polycarbonate material, the four-sided box is placed on a bed over the patient’s head and shoulders. Protected hand openings allow physicians or other healthcare personnel to reach into the box to perform procedures such as intubating a patient who needs to be placed on a ventilator.

Interdisciplinary Team Develops Policy Simulator

Turgay Ayer, George Family Foundation Early Career Professor and associate professor in the H. Milton Stewart School of Industrial and Systems Engineering, is working with a group that created the COVID-19 Simulator, an interactive tool designed to inform COVID-19 intervention policy decisions in the U.S. It evaluates the effects of different social distancing interventions on the reduction in spread of coronavirus in the U.S., on both a national and state level. The tool is available to the general public.

Immunity of Recovered COVID-19 Patients Could Cut Risk of Expanding Economic Activity

While attention remains focused on the number of COVID-19 deaths and new cases, a separate statistic — the number of recovered patients — may be equally important to the goal of minimizing the pandemic’s infection rate as shelter-in-place orders are lifted.

The presumed immunity of those who have recovered from the infection could allow them to safely substitute for susceptible people in high-contact occupations such as healthcare.

Library Collecting Materials for Archives

The Georgia Tech Library is looking to preserve the experiences of the Tech community as they navigate the COVID-19 pandemic. It will collect photos, videos, notes, or anything else that people create during this time. Anyone is welcome to submit items to the collection, regardless of whether they’re on campus.

With this project, the Library hopes to gather information that can assist future researchers who will study the pandemic, as well as Georgia Tech’s research and response to it. Similar archives detail the community’s experience with the Spanish Flu in 1918.

“It is so important to preserve our experiences for the future,” said Jody Thompson, head of archives and special collections at the Library. “These materials demonstrate the impact of COVID-19 on student, faculty and staff life, and could be used for instruction or research.”

Thompson provides additional information about the project in a video at youtube.com/gtlibrary.

To begin uploading items, visit library.gatech.edu/archives.
Jeff Wu is considered a visionary in engineering statistics. During a 1997 lecture he popularized the term “data science,” which is now used worldwide. He was the first academic statistician elected to the National Academy of Engineering. He has received almost every award in the field of engineering statistics. And he is the only person in statistical sciences to have received all three of the following awards: the Committee of Presidents of Statistical Societies (COPSS) Presidents Award in 1987, the COPSS Fisher Lecture in 2011, and the Deming Lecture in 2012. Georgia Tech honored him with the Sigma Xi Sustained Research Award in 2014.

Wu, professor and Coca-Cola Chair in Engineering Statistics in the H. Milton Stewart School of Industrial and Systems Engineering (ISyE), has now received Georgia Tech’s highest award given to a faculty member: the Class of 1934 Distinguished Professor Award.

The award recognizes outstanding achievement in teaching, research, and service. Instituted in 1984 by the Class of 1934 in observance of its 50th reunion, it is presented to a professor who has made significant long-term contributions that have brought widespread recognition to the professor, to his or her school, and to the Institute.

“Any good work is teamwork,” Wu said. “I would like to acknowledge my former students, my collaborators, and the supportive environment of ISyE, especially our chair Edwin Romeijn for his leadership. I will continue to give my best to the Institute.”

From Taiwan to Data Science

Wu grew up in Taiwan with two sisters and three brothers. His parents owned a shoe store where he worked behind the scenes as the accountant because he did not like being out front bargaining with customers. He was an intellectually curious child, and working alone gave him more time to read.

He earned a B.S. in mathematics from National Taiwan University and a Ph.D. in statistics from the University of California, Berkeley. He was a professor at the University of Wisconsin-Madison, the University of Waterloo, and the University of Michigan before coming to Georgia Tech in 2003.

Georgia Tech invited Wu to give a seminar in February of 2002. Two weeks before the seminar, ISyE informed him that an endowed chair was available, and they asked for his c.v.

“I found Georgia Tech to have a great environment, forward-looking and ambitious faculty, and lots of resources,” Wu said. “I give credit to Bill Rouse, the ISyE chair at the time, whose vision was to develop statistics as a branch of industrial engineering.”

Wu also credits then-provost Jean-Lou Chameau, for adding five new assistant professor positions within the school’s statistics program. All five assistant professors, recruited by Wu, earned the National Science Foundation CAREER Award.

“Over the years data science, machine learning, and data analytics have flourished on campus,” Wu said. “This is why I will stay here until I retire. I have been very happy here.”

When asked about the legacy he hopes to leave, Wu said, “The obvious answer is the collection of my research. But several people have pointed out that my bigger legacy is the students I have educated who are now in academia and industry.”

He has supervised 49 doctoral students, out of which 35 are teaching in major research departments or institutions in statistics, engineering, and business in the U.S., Canada, Asia, and Europe. Among them, there are 21 fellows of the American Statistical Association, the Institute of Mathematical Sciences, the American Society for Quality, and the International Academy for Quality; three editors of Technometrics, and one editor of the Journal of Quality Technology.