

100 YEARS OF TRAINING TO SERVE



Photos by Rob Felt, Jennifer Tyner, and the Georgia Tech Library Archives

From its roots in a student-run Signal Corps, Georgia Tech's Reserve Officers' Training Corps (ROTC) has trained thousands of leaders and is enjoying a centennial celebration this year. At top, students attend their commissioning ceremony in 2010. Above (left), ROTC students process during the When the Whistle Blows ceremony in 2015; (right) Members of the Navy and Army ROTC colorguard in formation in the 1940s. Learn more about the history of Georgia Tech's ROTC programs at c.gatech.edu/ROTC100.

Recommendations from Action Teams Now Under Review

MICHAEL HAGEARTY
INSTITUTE COMMUNICATIONS

The three action teams on Student Mental Health, LGBTQIA Community Support, and Campus Culture provided their recommendations to President G.P. "Bud" Peterson

on Nov. 1. The recommendations were also published to the president's website on Nov. 3.

Over the past week, these recommendations were assigned to the leaders of the appropriate campus unit or units for a thorough review. Those leaders will provide a report of their findings on feasibility, potential resource needs,

timeline, and level of institutional support required to President Peterson by Wednesday, Nov. 29.

Future updates to the campus community will occur once those reports have been received and reviewed so approved recommendations can be implemented as soon as possible.

For more information, visit c.gatech.edu/pathforward.

Climate Survey Will Measure Progress on Campus Inclusivity

ANNETTE FILLIAT
INSTITUTE DIVERSITY

This month, Institute Diversity and Academic Effectiveness will start conducting climate surveys to gauge the Institute's progress on building an inclusive, supportive, and welcoming environment for the campus community.

The findings from the 2017 Climate Assessment Surveys will provide longitudinal data that will be analyzed and compared to the results from the Institute's 2013 Climate Assessment Surveys.

"The climate assessment survey comparisons will help us measure progress toward achieving the goals in our strategic plan and inform the Institute's leadership about our strengths and opportunities to improve efforts with supporting a culture of collegiality, close collaboration, and professional development," said Archie Ervin, vice president for Institute Diversity.

Beginning this week, faculty and staff will receive an email that includes a link to their respective online survey. The survey should take approximately 10 to 15 minutes to complete, and participation is completely voluntary.

Students will receive a climate assessment survey via email during spring semester 2018.

"On behalf of Institute Diversity and Academic Effectiveness, thank you for your time to complete this survey, as your feedback is greatly valued," added Ervin.

Contact Academic Effectiveness at 404-385-1292 or survey@oars.gatech.edu with any questions.

To read the 2013 Climate Assessment Survey findings, visit b.gatech.edu/17c2DzK.

NEWS BRIEFS

Protect Your Identity — Prepare for W-2s

In light of recent national data breaches, Human Resources encourages employees to double-check their mailing addresses and consider electing to receive an electronic W-2. Learn more at:

c.gatech.edu/w2



Make Charitable Campaign Pledges This Week

Employees can donate to a variety of organizations through the state fundraising program. Pledges for 2018 should be made by Friday, Nov. 17. Learn more at:

charitable.gatech.edu



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EVENTS

SEMINARS AND LECTURES

Nov. 16

Georgia Tech researchers will present work related to cancer biology and technology from 3 to 5 p.m. in the Petit Institute.

biology.gatech.edu

Nov. 16

The GRIOT professional development committee hosts a session on *The Nuances of Hiring: The HR Perspective* from 11:30 a.m. to 1:30 p.m. in Room 321, Student Center. Register at:

trains.gatech.edu

Nov. 17

The Office of International Education hosts info sessions for staff and faculty about Fulbright opportunities. Staff members should attend from 9 to 10 a.m. in the Cypress Room, Student Center; faculty should attend from 11:30 a.m. to 1 p.m. RSVP at:

oie.gatech.edu

WORKSHOPS AND TRAINING

Nov. 21

A grant writing workshop will consider the basic strategies for and practical approaches to writing grants, from 9:30 to 11 a.m. in Room 447, Clough Commons. RSVP to Peter Fontaine at:

peter.fontaine@lmc.gatech.edu

HEALTH AND WELLNESS

Nov. 15

Human Resources hosts a Be Well session on *Preparing a Healthy Holiday Meal* from noon to 1 p.m. in Room 343, Student Center.

ohr.gatech.edu/bewell

Nov. 17

The Office of Campus Sustainability hosts free “plain clothes yoga” at the Kessler Campanile from noon to 1 p.m. No special clothing or equipment is required, and mats are provided. The time is offered in 15-minute sessions; come for a short break or stay the entire hour.

sustain.gatech.edu

Nov. 21, 28

Flu shots are available for Tech employees at the Stamps Health Services Pharmacy from 8 a.m. to 4 p.m. Additional dates are available in December.

health.gatech.edu

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Carpenter Digs Working as Archaeologist

VICTOR ROGERS
INSTITUTE COMMUNICATIONS

Jacob “Jack” Davis has traveled to the southeast African nation of Malawi almost every summer since 2011. But, not for vacation. Davis, who is a carpenter II at Georgia Tech 11 months of the year, spends each July in Malawi working as an archaeologist, exploring pre-historic areas of civilization.

When talking to a young archaeologist who works at a university, the first question is: Did his interest in archaeology come from—

“Indiana Jones? Absolutely!” Davis interjects. “I’m a huge fan of Indiana Jones. I’ve got the hat.”

He was even in the stage show performance of the movie at Disneyland for one day — just for giggles, he said.

But his work as an archaeologist is no laughing matter. He is a main member of a project that recently made news for discovering the oldest DNA in Africa. The team conducted a genome-wide analysis of 16 African individuals who lived up to 8,100 years ago. And, they found evidence for a divergent human lineage contributing to western Africans.

The leader of the project is Jessica Thompson, a Paleolithic archaeologist and assistant professor of anthropology at Emory University. She also is Davis’s wife. The two met in Malawi in 2011 during a three-week field course. Davis was finishing his bachelor’s degree in archaeology from the University of Queensland in Brisbane, where he was born and raised.

Before studying archaeology, Davis was a retail manager for REI, the outdoor recreation store. He wasn’t satisfied with his job and wanted to change his life. So, he considered getting a degree in civil engineering because he figured it would partner well with carpentry.

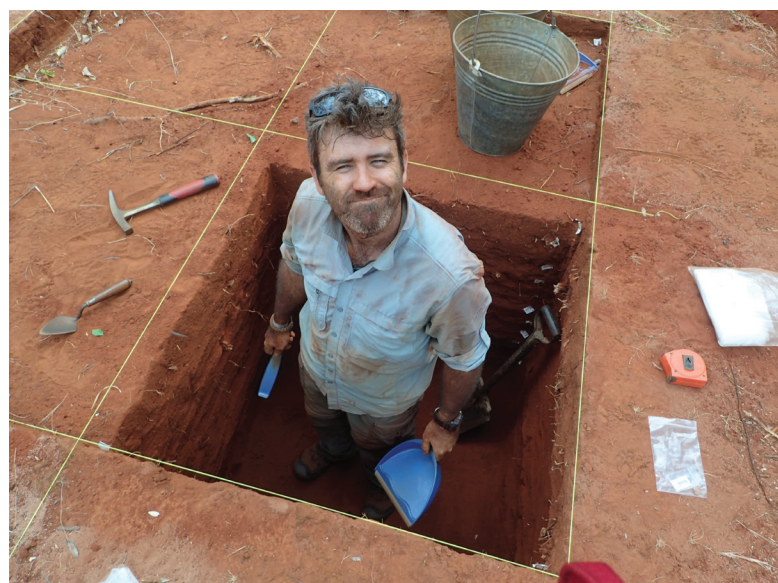
Then, his best friend asked, “Would that be your dream job? Would that make you really happy?”

Davis replied, “No. Archaeology would make me happy. Being able to travel the world, to see cool things that haven’t been seen in such a long time, and to learn more about people. That would really be great.”

His friend said, “Well, go do that.” Davis did.



Above, Davis works as a carpenter on campus in the Materials Science and Engineering building. Below, Davis participates in a dig in Malawi in 2016.



While a full-time archaeology student, Davis also was in the army, and he worked as an apprentice carpenter in Brisbane. He and his wife moved to the U.S. two and a half years ago when she accepted the position at Emory.

Davis started working at Tech in February of 2016. He helps with carpentry needs in Area 2 of campus, which includes the Krone Engineered Biosystems Building, Petit Institute for Bioengineering and Bioscience, Ford Environmental Science and Technology Building, Georgia

Tech Police Department, and the president’s residence.

“It could be repairing cabinets. There are a lot of doors that need to be fixed; gravity and time warp the hinges,” he said.

Davis’s experience as a carpenter and his ability to use tools is very useful when on an archaeological dig.

“Everything breaks in Africa,” he said. “You can have the most reliable thing in the world and it will break as soon as you arrive. I had a new Fitbit and it broke two days in. Then when I got back

home, it started working again,” he laughed.

“If you’re an archaeologist in the field, after a couple of years, you will come out knowing basic electrical work, basic mechanical work, and basic carpentry,” he said. “We’re constantly sharing ways to fix things.”

So, what does Davis look forward to when returning to Malawi every July?

He said the country is beautiful, and the people are warm and inviting. He has made some good friends, and he looks forward to reuniting with them every summer.

He also looks forward to the food.

“Tomatoes with a bit of salt on them,” he said. “The food is sensational. All of the produce is picked each morning. We have local guys who cook for us, and the whole crew sits down like a big family every afternoon. We have these giant cook-out meals with tomatoes, collard greens, onions, beans and an easy-to-make local bread called nsima.”

He said he is fortunate to have supervisors at Tech who are supportive of his work in archaeology, as well as his educational pursuits. He plans to apply for Tech’s master’s program in geographic information science and technology.

“Tech has so many opportunities for employees it’s ridiculous,” Davis said. “You have STRAP and TAP (education assistance programs), and being able to work here and go to school is fantastic.”

In Memoriam

Ronald G. Harley, 1940 – 2017

Ron Harley, Duke Power Distinguished Professor in the School of Electrical and Computer Engineering, died on Monday, Oct. 30, after a battle with cancer.

Harley joined the Georgia Tech faculty in 1999. He was appointed a Regents Professor in 2009 and also served multiple terms as the electrical energy technical interest group chair. His research and teaching interests spanned the design and control of electrical machines, control of power systems, design and diagnostics of electrical machines, and applying artificial intelligence techniques to power systems and machines.

Harley was highly respected and admired by his colleagues at Georgia Tech and in his professional fields. Prior to coming to Georgia Tech, he was on the faculty for 27 years at the University of Natal in Durban, South Africa. He was a fellow of IEEE, IET (London), fellow of the Royal Society of South Africa, and member of the Academy of Science in South Africa.

Harley published more than 600 papers and graduated nearly 40 Ph.D. students and more than 50 master’s students during his academic career.

Harley was a popular teacher and mentor. For the past 10 years, he advised undergraduate research teams through the Opportunity Research Scholars Program. Harley also co-advised a group of 22 undergraduate and graduate students that designed a 5-kW rooftop photovoltaic system for a medical clinic in Thoman, Haiti. He also encouraged and assisted the students in obtaining equipment donations from various U.S. companies, as well as travel funds to send the team to Haiti to install and commission the system successfully.

Harley is survived by his wife, June; daughters Ilona, of Durban, and Linda, who is a faculty member in Tech’s Wallace H. Coulter Department of Biomedical Engineering; and two granddaughters. He was preceded in death by his son, Keith.

Funeral services were held on Nov. 4 in Lawrenceville, Georgia. Read more about Harley at c.gatech.edu/harley.



In Memoriam

Andrew G. Whitlock, 1980 – 2017

Andrew Whitlock, systems support engineer in Georgia Tech Research Institute’s CIPHER lab, died Monday, Nov. 6, in a traffic accident in downtown Atlanta.

Whitlock grew up in multiple places, including cities abroad, before landing in Atlanta. He graduated from The Heritage School in Newnan, Georgia, in 1998. After taking some college courses, he worked in automotive for Sears while looking for jobs in the area of computing and technology.

Whitlock’s love for information technology began at the age of 7 when he got his first computer, a Commodore 64. In elementary school, he was always playing on computers, learning how to write programs using different computer languages and how different equipment interfaced. These self-taught skills eventually landed him a job in the field. He grew his skills to eventually secure a position in the CIPHER Lab. Whitlock was credited with making recent advancements in the security field. He was very proud that this position also allowed him to follow a long family tradition of service to his country, which he loved.

Whitlock was extremely loyal to his family and friends, always there to help when needed. His dry sense of humor put people at ease, and he was known for his sharp mind, laidback ways, and love for family and friends. He loved working on old Volkswagens, spending time outdoors, and playing with his tech toys. He had a deep love of science and enjoyed reading science fiction. He recently developed a love for bicycling and used this as much as he could.

He is survived by his parents, Anne and Bill Whitlock; father Greg Bouffard; sister and brother-in-law, Ashleigh and Chet Sosebee, and their children Wesley and Corinne who called him “Crazy Uncle Andrew”; grandmother Joan Sandquist; and numerous aunts, uncles, and cousins.

The family asks that donations be made in his name to the Atlanta Bicycle Coalition at atlantabike.org.

Read more about Whitlock at c.gatech.edu/whitlock.



EVENTS

ARTS AND CULTURE

Nov. 15

Arts@Tech hosts double-bass phenomenon, multi-instrumentalist, and YouTube sensation Adam Ben Ezra from 7:30 to 9 p.m. at the First Center for the Arts. arts.gatech.edu

MISCELLANEOUS

Nov. 15

Staff Council hosts a general meeting from 10:30 a.m. to noon in the Crescent Room, Student Center. RSVP to Leslie Hall at: leslie.hall@itg.gatech.edu

Nov. 16

The U.S. Passport Fair will take place from 9 a.m. to 4 p.m. in the Peachtree Room, Student Center. Learn more and complete documentation at: c.gatech.edu/passport

Nov. 16

The Center for Engineering Education and Diversity and the Black Graduate Student Association host Engineering Dean Steve McLaughlin for a town hall specifically for graduate students, from 11 a.m. to noon in Room 117, Smithgall Student Services (Flag) Building.

Nov. 22-24

Classes will not meet for Thanksgiving break. Campus is closed Nov. 23–24.

Nov. 25

Georgia Tech hosts the University of Georgia at Bobby Dodd Stadium. Kickoff time TBD. ramblinwreck.com

COMMENCEMENT

Dec. 15

Ph.D. Ceremony 9 to 11 a.m. McCamish Pavilion

President’s Graduation Celebration 11 a.m. to 1 p.m. Student Center Ballroom

Master’s Ceremony 3 to 5:30 p.m. McCamish Pavilion Tickets required.

Dec. 16

Bachelor’s Ceremony 9 to 11:30 a.m. McCamish Pavilion Tickets required.

More information for all ceremonies is available at commencement.gatech.edu

For a more comprehensive listing of events, or to add your own, visit calendar.gatech.edu.

CELEBRATING 80 YEARS OF THE GEORGIA TECH RESEARCH CORPORATION

A celebration took place Thursday, Nov. 2, at the Historic Academy of Medicine at Georgia Tech. The event recognized innovators who are “creating the next” and those who are living out Georgia Tech’s motto of “progress and service.” Congratulations to the following award winners.

Creating the Next

Innovation and Impact in Life Sciences and Bioengineering
Robert M. Nerem
Professor Emeritus, George W. Woodruff School of Mechanical Engineering

Innovation and Impact in Computer Science and Cognitive Science
Ashok K. Goel
Professor, School of Interactive Computing, College of Computing

Innovation and Impact in Electronics and Nanotechnology
Farrokh Ayazi
Ken Byers Professor, School of Electrical and Computer Engineering

Innovation and Impact in Energy and Sustainability
Timothy Charles Lieuwen
Professor, Daniel Guggenheim School of Aerospace Engineering; Executive Director, Strategic Energy Institute

Innovation and Impact in Manufacturing, Trade, and Logistics
Food Processing Technology Division
Georgia Tech Research Institute

Innovation and Impact in Materials Research
Satish Kumar
Professor, School of Materials Science and Engineering

Innovation and Impact in National Security Research
Robotics and Autonomous Systems Division
Georgia Tech Research Institute

Innovation and Impact in Robotics
Magnus Egerstedt
Executive Director, Institute for Robotics and Intelligent Machines; Professor and Julian T. Hightower Chair in Systems and Controls, School of Electrical and Computer Engineering

Innovation and Impact in Research and Innovation
Edward K. Reedy
Past Director, Georgia Tech Research Institute

Progress and Service

Sustained Impact in Education
Online Master of Science in Computer Science
College of Computing

Sustained Impact in the Arts
EarSketch
Jason Freeman, School of Music, and Brian Magerko, School of Literature, Media, and Communication

Sustained Impact in Administration
Gisele Bennett and David N. Ku
Co-Chairs of the Industry Contracting Task Force

Bridges in GTRC and GTARC Industry Engagement and Collaboration Award
Donald P. McConnell
Vice President, Industry Collaboration

Made in Georgia Award
Mustaque Ahamad
Professor, College of Computing

Rosenberg Award for Technology Transfer
William J. Koros
Professor, Roberto C. Goizueta Chair for Excellence in Chemical Engineering; GRA Eminent Scholar in Membranes; School of Chemical and Biomolecular Engineering

Done Deals Award: Strategic Corporate Partnership
Suzy S. Briggs, Elizabeth Bryant, and Caroline G. Wood
Office of Development

Service to Researchers

Institutional Animal Care and Use Committee
T. Richard Nichols
Professor, School of Biological Sciences

Central Institutional Review Board and Joint Center for Advanced Brain Imaging
Barbara Henry
Executive Director (retired), Office of Research Integrity Assurance

Institutional Biosafety Committee
Andrés J. García
Regents Professor and Frank H. Neely Chair, George W. Woodruff School of Mechanical Engineering

Institutional Conflict of Interest Committee
William D. Hunt
Professor, School of Electrical and Computer Engineering



HIDDEN GEORGIA TECH

THE CISTERN SYSTEM

Written by Victor Rogers // Photos by Rob Felt



In the heart of campus, west of Clough Commons, is a 3.2-acre green space called Tech Green. The open space is a prime location for celebrations of all sorts, throwing a Frisbee, or just relaxing.

While there's usually something happening on Tech Green, a different kind of activity is taking place a few feet below — in a 1.4-million-gallon underground cistern system.

Let's go down under. See more photos at c.gatech.edu/cistern.



(1) When entering the reservoir, Billy Baxter, plumber in Facilities Management, carries a carbon monoxide monitor and wears protective gear including a safety harness. (2) The water captured by the cistern system substantially reduces the amount of stormwater Georgia Tech feeds into the city of Atlanta's combined stormwater-sewer system. (3) Water gauge in Clough Commons: If the level of reclaimed water gets too low to supply enough for the building, the system switches to domestic water. (4) This monitoring station, also under Tech Green, allows Facilities staff to inspect the cistern without going into it. Inspections include gathering and removing debris from the vault. (5) Much of the water captured in the reservoir system is sent to Clough Commons for treatment. (6) The rooftop garden of Clough Commons is irrigated with reclaimed water.

Hidden Georgia Tech is a photo essay series highlighting places on campus that may largely go unnoticed but are sometimes hidden in plain sight. If you know of a place worth exploring, email editor@comm.gatech.edu. View more from the series at c.gatech.edu/hidden.

CLASSIFIEDS

VEHICLES

For Sale: 2010 Lincoln MKZ. Silver w/ leather interior, 99k miles, excellent condition inside and out. Well maintained. Includes both keys, brand new spare tire. Lots of upgrades. \$9,500. Call 706-878-6730.

REAL ESTATE/ ROOMMATES

Looking for young working professional, graduate student, or visiting professor to rent furnished, private bedroom in East Midtown adjacent to Piedmont Park. Available Nov. 1 – June 1. \$850/mo. Includes utilities and internet. Walking distance to MARTA, Tech Square, restaurants, entertainment, shopping. Contact 312-218-7686.

3BR/3.5BA furnished townhouse for rent in West Midtown starting Jan. 1, 2018. Four miles to campus. Gated neighborhood w/ 24/7 security and dog park. Walking distance to Publix. \$2,000/mo. Contact 404-421-6922, bingwangatl@gmail.com.

Young, working graduate student seeking living accommodations as a roommate in Buckhead, Midtown, or Downtown location, close to public transportation. I am responsible, cordial, respectful of space, and have excellent study habits. 404-406-2663.

Looking for young working professional, graduate student, or visiting professor to rent 2BR/2.5BA house. Fully furnished house in private community. Sun porch, enclosed patio. Located near GTRI-Cobb County. Close to food markets, restaurants, entertainment, shopping, public transit. Referrals on request. \$1,800/mo. Includes utilities, cable, internet, parking. Contact 770-364-3692, sandra.sheppard67@gmail.com.

Looking for young working professional, graduate student, or visiting professor to rent furnished private bedroom and bath (w/ access to all living spaces) in Buckhead. \$875/mo. Includes utilities, cable, wifi, parking. No smoking, pets, or children. Walking distance to food markets, restaurants, entertainment, shopping, public transit, churches. Request 12-month lease. Referrals upon request. Contact 404-514-7662, reba.darr@gmail.com.

MISCELLANEOUS

Home gym w/ 200-lb weight stack. \$50 OBO. Buyer picks up in Brookhaven. Contact jewell.juan@hotmail.com, 404-822-5342.

55-gallon aquarium w/ stand, Penguin Biowheel Power Filter, heater, reflector, gravel, and other accessories. \$75 OBO. Buyer picks up in Brookhaven. Contact juan@hotmail.com, 404-822-5342.

1960s Hobart M. Cable upright piano w/ bench. Piano body in excellent shape but piano needs tuning. Buyer responsible for moving. Asking \$350. Contact 404-735-7611, james.corbett@gti.gatech.edu.

Twin (long) roll-a-way bed w/ sheet set. Like new — purchased 6 months ago, only used once. Paid \$279, will sell for \$125. Contact 256-504-9409.

Used for sale: Mahogany Brown Modular 52" TV Stand (\$300) and Espresso X End Table Base with 20" glass top (\$80). In great condition. Specs and details at pier1.com. Must provide transport. Email AJ290590@openmail.cc.

Ads run for at least three issues in the order in which they are received. Submit your 35-word-or-less ad to editor@comm.gatech.edu.