

Georgia Tech  Center for  
Tech Teaching and Learning

# 2018-2019 Annual Report







## The CTL Vision

The Center for Teaching and Learning envisions a campus culture that creates meaningful learning for all students, empowers people to engage in effective instruction, and values excellence in teaching.

## The CTL Mission

The Center for Teaching and Learning promotes and supports an on-campus and online instructional community where excellence in teaching and learning is valued and where educators engage in evidence-based, state-of-the-art practices that foster opportunities in which diverse students and instructors can thrive.



# Message from the Director



Dear Colleagues,

It is my pleasure to share the 2018-2019 FY report of the Center for Teaching and Learning (CTL) with you. We have once again served a record number of faculty, future faculty, postdoctoral scholars, and TAs through our programming. In brief, we have provided service to approximately **5,795 participants** through orientations, workshops, courses, consultations, and recognitions. Details of these connections are highlighted on the next pages.

CTL's **32% increase** in service to individuals this year follows our previous year's growth of 15% in 2017-2018. Our continued growth during the past two years represents our efforts to contribute to Institute initiatives. As a unit in the Office of the Vice Provost for Graduate Education and Faculty Development, CTL has been an active partner in efforts associated with the Commission on Creating the Next, the Learning Environment Task Force, and Path Forward – Together. We have contributed to numerous curricular innovations such as providing course design workshops for faculty participating in Serve-Learn-Sustain, working with faculty new to the VIP (Vertically Integrated Projects) experience, and facilitating programming associated with grants. Two initiatives that have been especially rewarding to be part of are NRT-IGE: Integrating Team Science into the STEM Graduate Training Experience and IUSE/PFE: RED: Transforming for Inclusion: Fostering Belonging and Uniqueness in Engineering Education and Practice. CTL has “come in from the margins,” and it is exciting to work with our campus constituents to help Georgia Tech achieve its goals.

At CTL, we envision a campus culture that promotes meaningful learning for all students, empowers people to engage in effective instruction, and values excellence in teaching. Thank you for partnering with CTL this year as we work to turn this vision into a reality.

Sincerely,

A handwritten signature in black ink that reads "Joyce Weinsheimer". The signature is fluid and cursive.

Joyce Weinsheimer

Director of the Center for Teaching and Learning

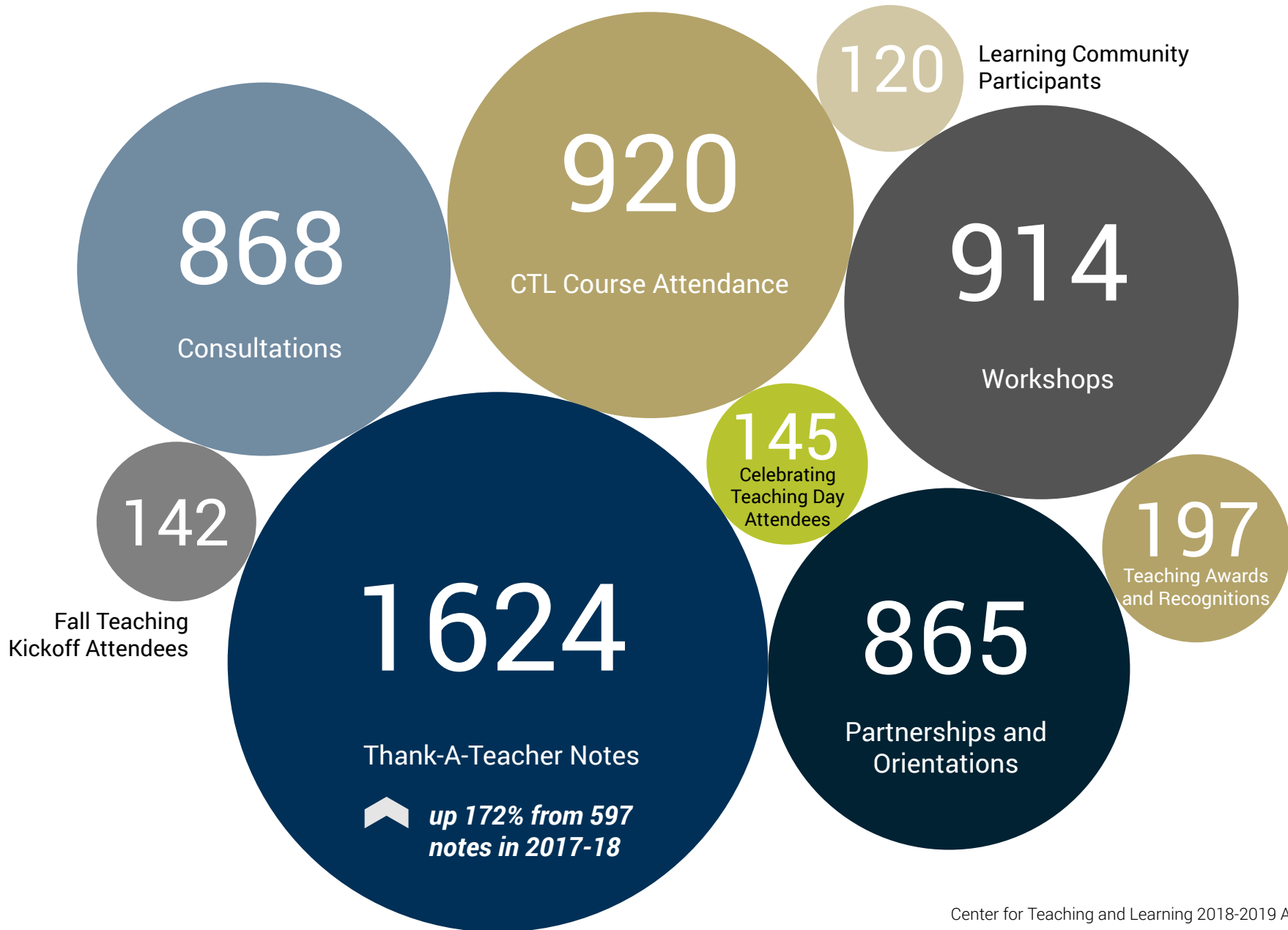
During FY 2018-19, CTL engaged with

over **5795** members of the Georgia Tech community through programming, events, and services.

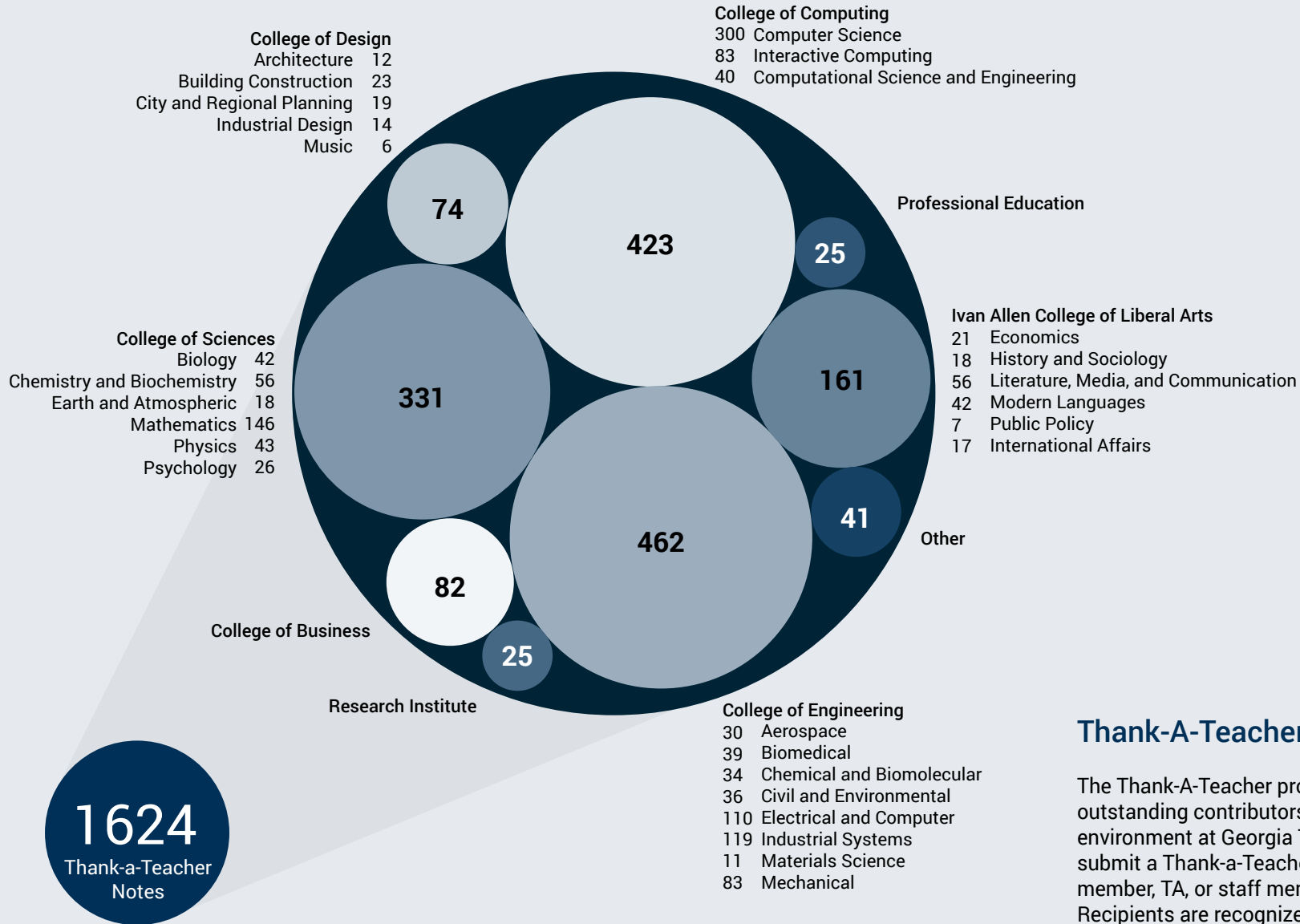
up **32% from FY 2017-18**



# By the Numbers



# Thank-A-Teacher Program



## Thank-A-Teacher Notes by College

The Thank-A-Teacher program recognizes outstanding contributors to the learning environment at Georgia Tech. Any student can submit a Thank-a-Teacher note about a faculty member, TA, or staff member on campus. Recipients are recognized at Celebrating Teaching Day and Dean Griffin Day.

# CTL Staff



Joyce Weinsheimer, Ed.D.  
Director



David Lawrence, Ph.D.  
Associate Director



Tammy McCoy, Ph.D.  
TA Development and Future  
Faculty Specialist



Chaohua Ou, Ed.D.  
Assistant Director of  
Learning and Technology  
Initiatives



Vincent Spezzo, Ed.D.  
Learning and Technology  
Specialist



Carol Subiño Sullivan, Ph.D.  
Assistant Director of  
Faculty Teaching and  
Learning



Kate Williams, Ph.D.  
Assistant Director for TA  
Development and Future  
Faculty Initiatives



Felicia Turner  
Academic Program  
Coordinator II



Sarah Bowling  
Student Assistant



Camryn Burke  
Student Writer



Jenna LeCates  
Student Assistant



Jana Pomerantz  
Student Graphic Designer

The number of CTL consultations with instructional staff increased  
by **86%** from 123 in FY 2017-18 to 230 in FY 2018-19.

# Events



## Fall Teaching Kickoff

Each August, the Center for Teaching and Learning hosts a day-long Fall Teaching Kickoff event, which is a series of interactive workshops to help get participants geared up and ready for the first day of class.

### Syllabus Clinic for New Instructors

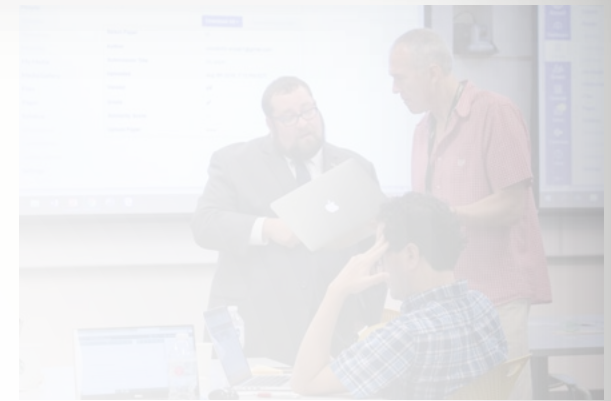
The Syllabus Clinic introduced new instructors to the backwards design process, building on research that shows that the way a syllabus is constructed can affect students' ability to learn in a course. In this workshop, participants explored different aspects of a syllabus, including learning objectives and assessment strategies. In addition, participants explored Georgia Tech policies related to teaching and learning, and made decisions about specific course policies for their own course.



# Events

## Fall Teaching Kickoff Celebrating Teaching Day

In this lively session, participants discussed creating an environment conducive to learning in their courses. We explored aspects of classroom dynamics and the challenges that occur when you encounter a diverse array of students who are all bright and expect to succeed. Participants left with ideas that will help them respond thoughtfully to student expectations, special requests, and microaggressions when they occur. Attendees also learned how strategic little actions taken throughout the term can have a big impact on students as they engage with the course content. This workshop was facilitated by John Stein, vice president for Student Life, Brandt-Fritz, dean of students chair, and Joyce Weinsheimer, director of CTL.



### Leveraging Canvas to Create Engaging Learning Experiences

With the introduction of Canvas as a learning platform at Georgia Tech, instructors have the opportunity to rethink new ways of leveraging technologies to support effective teaching and student engagement. Members of CTL's Learning Technologies team introduced attendees to the many potential options for getting the most out of Canvas and how Canvas can be used in efficient and effective teaching.



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### Little Actions, Big Impact

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# Events

## Celebrating Teaching Day

Celebrating Teaching Day is an annual event hosted by the Center for Teaching and Learning that honors and celebrates the dedication of Georgia Tech faculty and instructors who create engaging, challenging, and supportive learning experiences for their students throughout the year. **This year's event was attended by 145 members of the Georgia Tech community.**

During the program, Alegra Eroy-Reveles, assistant teaching professor of chemistry at the University of California, Santa Cruz, delivered the keynote address, "Who Belongs Here?" She spoke about how many students find that they must leave behind pieces of who they are to become a successful "student-scholar" in higher education. Such feelings of non-belonging may cause students to drop out – or shift from the interests that brought them to college to areas of study that appear more accepting of their identities and values. In addition, Eroy-Reveles facilitated the workshop "Rediscovering Purpose in Teaching and Learning: Spa-Day for the Teaching Mind" for faculty who were interested in thinking further about validating our students' purpose in pursuing an education.

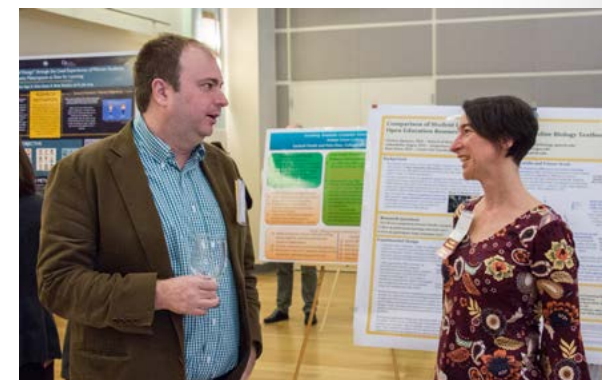
Celebrating Teaching Day offered a poster session

**30%** of attendees at Celebrating Teaching Day were tenured and tenure-track faculty.

featuring **26 educational initiatives** carried out by CTL's faculty teaching fellows, faculty learning communities, Brittain Fellows, and other members of the broader Georgia Tech community.

Celebrating Teaching Day is also an event where faculty receive special recognition for their contributions to the campus. To honor especially dedicated faculty, CTL presented 41 awards such as the Curriculum Innovation Award, the Innovation and Excellence in Laboratory Instruction Award, and the Undergraduate Educator Award.

Faculty and instructors who received Thank-a-Teacher notes, a Class of 1940 Survey Teaching Effectiveness Award, or a GT Fire grant were honored during the luncheon. In addition, all faculty who participated in a teaching and learning community and/or an educational initiative were recognized for their contributions.



# Partner Events and Initiatives

## CTL Partnerships

The Center for Teaching and Learning collaborates with campus administrators, faculty, and students to strengthen Georgia Tech's teaching and learning environment. This year, CTL partnered with groups such as the Commission on Creating the Next and initiatives such as A Path Forward—Together. In addition, CTL contributes to USG-wide initiatives such as Complete College Georgia, Momentum Year Experience, and the Chancellor's Learning Scholars Program. Below is a sampling of on-campus partnerships currently underway.

### New Faculty Orientations

The Center for Teaching and Learning contributed to welcoming new faculty at five events during the 2018-19 academic year.

#### New Faculty Orientation

In August, CTL facilitated "Teaching at Tech" for new faculty. Joyce Weinsheimer and David

Lawrence shared "Expectations: Spoken and Unspoken," a video that CTL recently produced that illustrates what not to do on the first day of class, and then facilitated a speed networking exercise for participants to share ideas for how to set a

## Partner Events and Initiatives

### New Faculty Orientation

### Sizing Up: Instructor-Student Interaction in Large Classes

### GT1000 and GT2000 Training Serve-Learn-Sustain (SLS)

### CIOS/Teaching Effectiveness Taskforce

### Classroom Renovation Committee

### Vertically Integrated Projects (VIP)

### True Grit @ Georgia Tech: Building Student Resilience

CTL also facilitated two extended orientation events for new faculty. In September and February, new faculty helped each other address teaching and learning challenges they had encountered so far.

### Sizing Up: Instructor-Student Interaction in Large Classes

Also in August, Ruth Poproski and Carol Subiño Sullivan facilitated a workshop as part of a faculty retreat for the School of Interactive Computing.

Participants explored three important questions related to faculty's quest to engage with their students in productive and worthwhile ways:

- How can faculty translate their approach to teaching—and what they value about teaching—to the large class context?
- What are the unique opportunities presented by increasing class sizes, and how can faculty leverage them?
- What tools, resources, and strategies can help faculty manage their increasing student population (and what are some best practices you should think about)?

### GT1000 and GT2000 Training

During the annual GT1000 and GT2000 instructor training in June. The first workshop, "Engaging Students in the Classroom in Active Learning," presented research on active learning and a set of effective strategies that can be used to more effectively



# Partner Events and Initiatives

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#### New Faculty Welcome and Orientation to Teaching at Georgia Tech

In August and January, CTL co-hosted this event for new instructors with the Office of Faculty Affairs. Participants include new part-time, temporary, and visiting faculty as well as new graduate student instructors of record. At the event, participants learned about Georgia Tech traditions, have a question-and-answer session with a panel of experienced instructors, learn about policies and procedures that pertain to teaching, and reviewed Thank-a-Teacher notes written by Tech students that express what they value about good teaching.

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CTL facilitated two teaching workshops during the annual GT1000 and GT2000 course training in June. The first workshop, “Engaging Students in the Classroom in Active Learning,” presented research on active learning and a set of effective strategies that can be used to more effectively

# Partner Events and Initiatives

align course activities and course goals as well as help students engage with the course content more deeply. The second workshop, “Facilitating Discussions that Promote Learning in GT1000 and GT2000,” explored how to effectively design and facilitate class discussions that promote learning and encourage all students to learn and participate.

## Serve-Learn-Sustain

Serve-Learn-Sustain (SLS) is a campus-wide academic initiative launched in January 2016 to prepare students to use their disciplinary expertise to address the world’s most pressing sustainability challenges in ways that improve community well-being. Carol Subiño Sullivan represented CTL on the search committee to hire a new service learning and partnership specialist.

## CIOS/Teaching Effectiveness Taskforce

The Teaching Effectiveness Taskforce broadened the scope of their work this year under the direction of Vice Provost Bonnie Ferri. Working with CTL and multiple campus partners, the Taskforce explored how best to determine and report teaching effectiveness on the Georgia Tech campus. The Taskforce presented its recommendations at a



Faculty Senate meeting in April that the Taskforce continue its work during the upcoming year.

## Classroom Renovation Committee

CTL partnered with campus representatives, including Facilities Design and Construction, Capital Planning and Space Management, and the Office of Information Technology to serve on the steering committee overseeing the renovation of the Howey lecture halls. Carol Subiño Sullivan and Vincent Spezzo served on this committee.

## Vertically Integrated Projects (VIP)

CTL began working with VIP in 2015, looking for ways to help new VIP faculty experience success in their roles. Over the last year, Ruth Poproski continued this effort by facilitating orientation workshops for new VIP instructors and working with the VIP coordinators to help refine their approach in supporting VIP instructors to teach effectively.



# Partner Events and Initiatives

## True Grit @ Georgia Tech: Building Student Resilience

Students admitted to Georgia Tech have a track record of academic success; they are high achievers, and they expect to excel at the Institute. Yet, learning involves encountering challenges, taking intellectual risks, and struggling to meet expectations. In this four-hour session, participants discussed the question, “What does resilience look like at Georgia Tech?”

Keynote speaker Laurie Cameron introduced attendees to the four pillars of resilience – attention; purpose, values, and meaning; self-compassion; and connection – and how mindfulness practices can help students develop a more resilient mindset.

Following the keynote, participants asked hard-hitting questions about resilience to a panel of representatives from the Counseling Center, faculty, and alumni about how well Georgia Tech inspires a culture of resilience, fosters connection and self-compassion, and helps students perceive failure as part of learning. The rest of the session time was spent doing interactive workshops focused on what faculty members can do in their own courses to foster resilience with their own students through the four pillars.



# Ongoing Groups

## Faculty Groups

The Center for Teaching and Learning hosts several groups that meet regularly with a focused goal or theme to explore. These cohorts include the CTL Book Club, Faculty Learning Communities, and teaching fellows programs for assistant professors, tenured and tenure-track professors, and research faculty.

## Faculty Learning Communities

CTL offers multiple opportunities for faculty to participate in Faculty Learning Communities (FLCs). These cohorts bring together a diverse group of faculty interested in exploring the challenges of teaching and in finding ways to improve student learning at Georgia Tech. During FY 2018-19, CTL hosted one faculty learning community and partnered with the Chancellor's Learning Scholars to offer four more.

## Teaching Scholars

Teaching Scholars prepares faculty to be reflective practitioners in their teaching career through Teaching-as-Research (TAR). TAR is

“the deliberate, systematic, and reflective use of research methods by instructors to develop and implement teaching practices that advance the learning experiences and outcomes of

# Programming

## Ongoing Groups

## Teaching Fellows

## Faculty Development Workshops

## Faculty Learning Communities

## Course Design Studio

## Faculty Awards and Recognitions



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### Teaching Scholars

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### Chancellor's Learning Scholars

This year, the University System of Georgia (USG) launched an initiative across its 26 campuses to foster pedagogical leadership, develop collegiality among faculty, and create course enrichment products for faculty to share. Four Chancellor's Learning Scholars (CLS) were selected for each USG campus, and each CLS is currently leading an FLC on a special topic at their respective institutions. Chancellor's Scholars led the following FLCs this year:

### Exploring Healthcare in a Minimester

*Facilitated by William Todd, Scheller College of Business, Professor of the Practice*

Faculty in this FLC developed a course design project that is an outgrowth of the minimester concept proposed by the Commission on the Next in Education. This short course was led by three faculty from three different colleges and supported by two other faculty members from two colleges. FLC participants, who come from the Scheller College of Business (Strategy & Innovation and Law & Ethics), Ivan Allen College (Public Policy and LMC), and the College of Engineering (ISYE), will design a course that embeds an emphasis on writing, speaking, and ethics into the curriculum.

**Richard Barke**, Public Policy, *Associate Professor*

**Karie Davis-Nozemack**, Scheller College of Business, *Associate Professor*

**Karen Head**, Literature, Media, and Communication, *Associate Chair*

**Pinar Keskinocak**, Industrial and Systems Engineering, *Professor*

# Ongoing Groups

## Chancellor's Learning Scholars (continued)

### Generating Positive Impact with Large Classes

*Facilitated by Christopher Muhlstein, Materials Science and Engineering, Associate Professor*

Classes with more than 100 students per section are often the first critical steps along the path to an undergraduate degree. In this FLC, participants explored how course architecture, content, and electronic resources can be tailored to ensure that these classes have a high positive impact on undergraduate education.

**Hamid Garmestani**, Materials Science and Engineering, Professor

**Satish Kumar**, Mechanical Engineering, Associate Professor

**Mark Losego**, Materials Science and Engineering, Assistant Professor

**Valeria Milam**, Materials Science and Engineering, Associate Professor

**Mohan Srinivasarao**, Materials Science and Engineering, Professor

### Scientific Teaching: Gathering Evidence About How Your Students Learn

*Facilitated by Chrissy Spencer, Biological Sciences, Senior Academic Professional*

This Scientific Teaching FLC applied the scientific method to assess whether students are learning

from our teaching strategies. Faculty made a change in their courses to address a problem point regarding student learning and collected data on the change. The community provided a sounding board to identify a change, design an intervention, and analyze the data for a deliberate innovation in their teaching.

**Christina Bourgeois**, Electrical and Computer Engineering, Senior Academic Professional

**James Craig**, Aerospace Engineering, Professor Emeritus

**Michael Evans**, Chemistry and Biochemistry, Academic Professional

**Neha Gupta**, Mathematics, Academic Professional

**Brian Hammer**, Biological Sciences, Associate Professor

**Mary Holder**, Psychology, Academic Professional

**Shana Kerr**, Biological Sciences, Senior Academic Professional

**Christie Stewart**, Biological Sciences, Academic Professional

**Amanda Stephens**, Chemistry and Biochemistry, Academic Professional

**Ignacio Taboada**, Physics, Associate Professor

**Kerry Wallaert**, Materials Science and Engineering, Educational Outreach Manager

**Chen Zhou**, Industrial and Systems Engineering, Associate Professor

**Hui Zhu**, Chemistry and Biochemistry, Academic Professional

### Small Teaching in the DCI

*Facilitated by Monica Sweat, Division of Computing Instruction, Director and Senior Lecturer*

The faculty in the College of Computing's

Division of Computing Instruction (DCI) teach foundational courses serving the large enrollment of first- and second- year Computer Science and Computational Media students as well those in many other majors and minors. In this FLC, participants explored James M. Lang's *Small Teaching: Everyday Lessons from the Science of Learning* to discover new tricks and techniques to apply to these large-format, high-demand courses. The DCI also employs more than 250 undergraduate teaching assistants and plans to share the teaching tips from this book with this group to further improve their courses.

**Dan Forsyth**, College of Computing, Senior Research Technologist

**Mary Hudachek-Buswell**, College of Computing, Lecturer

**Melinda McDaniel**, College of Computing, Lecturer

**Mark Moss**, College of Computing, Lecturer

**Fisayo Omojokun**, College of Computing, Senior Lecturer

**Kantwon Rogers**, College of Computing, Graduate Student

**Chris Simpkins**, College of Computing, Lecturer

**Bob Waters**, College of Computing, Lecturer

# Teaching Fellows

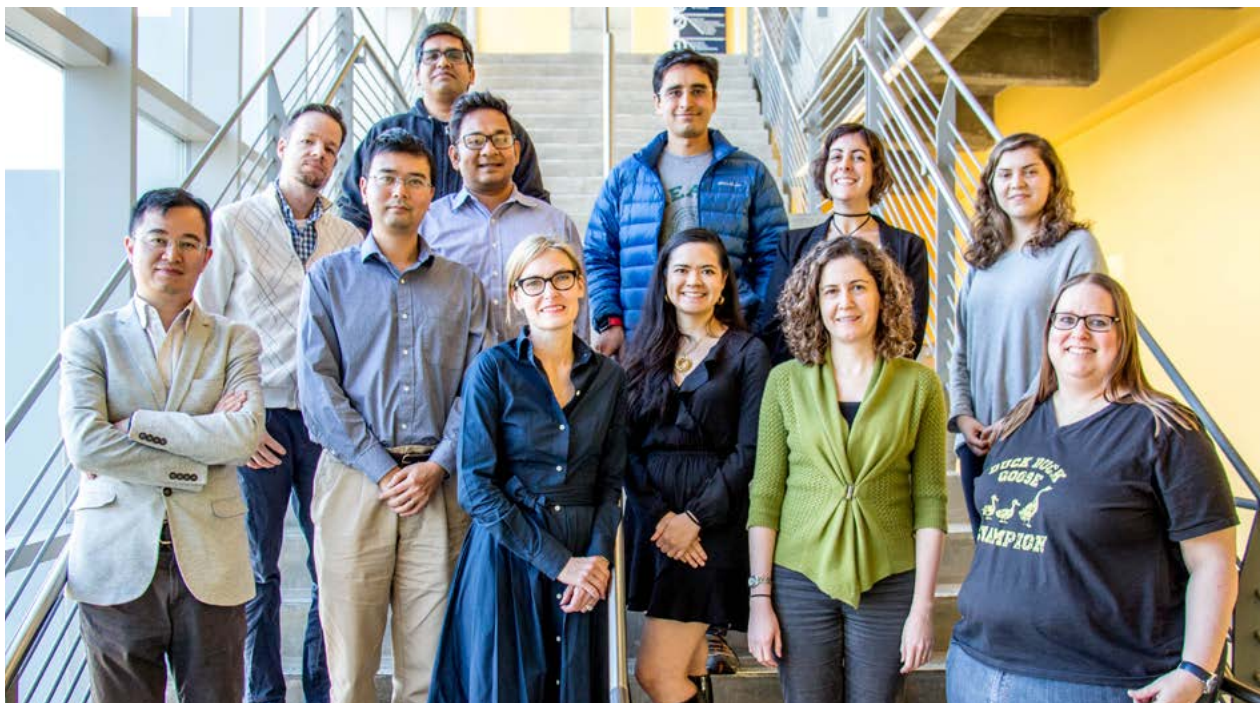
## The Class of 1969 Teaching Fellows

The Class of 1969 Teaching Fellows are an interdisciplinary group of early career faculty who meet regularly for pedagogically focused support and professional development. Exploring evidence-based best practices and innovative teaching methods, they develop and pilot initiatives for their own courses.

This year's cohort was led by Ruth Poproski (CTL) and Karie Davis-Nozemack (Scheller College of Business). Fellows came from the College of Design, College of Engineering, Ivan Allen College of Liberal Arts, College of Sciences, and the Scheller College of Business.

This year, many of the Fellows focused on developing materials to provide their students with more hands-on access to their learning – from sensor libraries with information cards to demo kits to infrared cameras that connect to smartphones and help students “see” heat flow.

In addition, the Fellows visited each other's courses and shared their experiences afterward. This was a unique opportunity to be back in the student seat, while also seeing how different instructors engage with their students in different contexts. Several Fellows also participated in Celebrating Teaching Day in March.



Not pictured: Omar Isaac Asensio, Lutz Warnke, and Shannon Yee.

### The Class of 1969 Teaching Fellows for FY 2018-2019 included

**Vinny Agarwal**, Chemistry and Biochemistry, Assistant Professor

**Azede Ah Ansari**, Electrical and Computer Engineering, Assistant Professor

**Omar Isaac Asensio**, Public Policy, Assistant Professor  
**Saad Bhamla**, Chemical and Biomolecular Engineering, Assistant Professor

**Basak Kalkanci**, Scheller College of Business, Assistant Professor

**Asif Khan**, Electrical and Computer Engineering, Assistant Professor

**Sabeta Matsumoto**, Physics, Assistant Professor  
**Jenny McGuire**, Biological Sciences, Assistant Professor  
**Wei Wang**, Industrial Design, Assistant Professor  
**Lutz Warnke**, Mathematics, Assistant Professor  
**Tim Welch**, City and Regional Planning, Assistant Professor  
**Xing Xie**, Civil and Environmental Engineering, Assistant Professor  
**Shannon Yee**, Mechanical Engineering, Assistant Professor



# Teaching Fellows

## Provost Teaching and Learning Fellows

Launched in December 2016, the Provost Teaching and Learning Fellows (PTLF) program connects the expertise of evidence-based teaching and learning professionals in the Center for Teaching and Learning with the expertise of disciplinary faculty in each college/school. The vision for this hub-and-spoke model is to strengthen teaching and learning in the colleges through an embedded system of on-going instructional support and special initiatives.

This year, CTL welcomed the second cohort of 17 PTLFs (who overlapped with the first cohort in the fall semester) to create a seamless transition. The new college cohorts held teaching and learning events, identified challenges in their respective colleges, and defined their goals for the 2019-2020 academic year. Further details about these events, challenges, and goals are provided below.

### Provost Teaching and Learning Events

- CAREER Awards & the Education Component
- Controversial Topics in Contentious Times
- Effective TA-Faculty Team Teaching in Large CoS Classes at Georgia Tech
- Digital Learners
- Innovating Cross-Cutting Courses in Computing
- True Grit @ Georgia Tech

### PTLF Projects and Goals

The College of Engineering found that its increasing enrollment numbers and limited equipment have made student experiences in lab courses more difficult and less hands-on. The cohort of Fellows from Engineering is working to address this challenge in the coming academic year through the integration of an augmented and virtual reality (AR/VR) platform into select courses.

The cohort from the Scheller College of Business is exploring opportunities to apply a blended-learning approach to their courses to enhance the quality of a traditional classroom education. The group is examining how peer business schools, as well as other colleges within Georgia Tech, have incorporated digital platforms into their courses. A second focus area is covering more leadership topics in their courses, in addition to the leadership programs the college already offers. By inviting speakers and participating in the dean's advisory board, they also contribute to discussions about integrating leadership into the curriculum.

The College of Design's cohort plans to increase awareness of excellence in teaching within their college through new awards. The cohort is collaborating with student organizations within

each of the college's schools to select and honor faculty members at an annual event. The dean will fund this student-selected award.

The cohort from the College of Computing's goal is to enrich the graduate computer science curriculum by offering cross-cutting courses with topics that integrate multiple areas of research. As Santosh Pande describes, while cutting-edge research in the field requires diverse expertise, graduate students traditionally focus on building expertise in one area. These cross-cutting, team-taught courses will enhance graduate education in the College of Computing by helping graduate students use their area of expertise to contribute to emerging research topics. In the spring, the Fellows hosted an event for faculty teaching these courses to discuss how to make these types of courses most effective.

The cohort from the Ivan Allen College of Liberal Arts addressed the challenge of teaching the liberal arts at a technology-focused institute. In the spring, after hosting a panel on teaching controversial topics in today's climate, each Fellow began developing separate projects, including exploring strategies to create a more mindful, empathetic, and just environment in

# Teaching Fellows

## PTLF Projects and Goals (continued)

which to discuss social justice issues; analyzing the pedagogies of digital history; and integrating online education and the liberal arts.

The Fellows from the College of Sciences are identifying opportunities to improve the professional development of Teaching Assistants (TAs) to help them to become effective teachers in today's learning environment. To do this, the cohort is collecting information about the teaching resources offered by the university, practices used for TA professional development by other institutions, and feedback from graduate TAs on future improvements to TA training. They will use this data to develop a competency model to set clearer standards for TAs in training.

Over the 2019-2020 academic year, CTL will partner with each cohort to support their initiatives. The center will update the campus community on the progress of these exciting programs!

## Research Faculty Teaching Fellows

This program, a partnership between the Executive Vice President for Research (EVPR), the Georgia Tech Research Institute (GTRI), and CTL, offers research faculty the opportunity to become an instructor, or, for those with teaching experience, the opportunity to turn their cutting-edge research into instructional programs that enhance the teaching mission of an academic unit. During their award year, the Fellows teach one course and participate in teaching enrichment activities.

Each fellow engaged in teaching and learning development opportunities, including Course Design Studio in May and discussion groups, and

encountered evidence-based teaching practices which helped them use their research experience to enhance student learning.

**Nicole Lopanik**, Earth and Atmospheric Sciences, *Research Scientist II*

**Alessio Medda**, Aerospace Engineering, Transportation and Advanced Systems Laboratory, *Senior Research Engineer*

**Milad Navaei**, Aerospace Engineering, Transportation and Advanced Systems Laboratory, *Research Engineer II*

**Andrew Register**, Georgia Tech Research Institute, *Principal Research Engineer, Organizer*

**Himani Sharma**, Electrical and Computer Engineering, *Research Scientist II*

**Elizabeth Whitaker**, Information and Communications Laboratory, *Principal Research Engineer*

**Charles Zeagler**, Institute for People and Technology, *Senior Research Scientist*



# Teaching Fellows

## Hesburgh Award Teaching Fellows

The Hesburgh Award Teaching Fellows program brings together mid-career and senior faculty who have demonstrated strength in the classroom and are interested in working on initiatives that further enhance student learning. This is an invitation program that is an honor for individuals who are already successful in their own careers and who have the potential of providing leadership in teaching and learning to their colleagues as well.

The Fellows each develop an initiative to enhance student learning in their own courses. This year's Hesburgh Fellows developed a variety of projects including Betsy DiSalvo's project to implement a combination of class policies and class activities to improve attendance and engagement in a 6000-level course. Dave Goldsman developed a number of exercises focused on promoting communication between distance-learning students, their peers, and the instructor. His goal is to help these students

feel like they are just as supported in their learning as the face-to-face students.

Alper Erturk is creating a portable version of a lab device that will facilitate increased opportunities for hands-on learning by students. Manu Platt is implementing a series of reflection exercises that are expected to help reduce achievement gaps for underrepresented minority students. Yomi Oyelere is working to integrate new active learning strategies into a biochemistry class. Overall, the Hesburgh Fellows agreed that they valued the opportunity to learn from each other, to share their successful teaching approaches, and to work on an initiative to improve their own courses.



## Fall 2018 Hesburgh Award Teaching Fellows

**Peter Brecke**, International Affairs, *Assistant Dean, Associate Professor*

**Betsy DiSalvo**, Interactive Computing, *Associate Professor*

**Alper Erturk**, Mechanical Engineering, *Associate Professor*

**Yuhong Fan**, Biological Sciences, *Associate Professor*

**David Goldsman**, Industrial and Systems Engineering, *Professor*

**Adegboyega Oyelere**, Chemistry and Biochemistry, *Associate Professor*

**Manu Platt**, Biomedical Engineering, *Associate Professor*

**Jerry Ulrich**, Music, *Associate Professor*



# Faculty Development Workshops



In FY 2018-19, **165** members of the Tech community participated in CTL faculty development workshops.

## Getting and Keeping Students' Attention

Gaining our students' attention is fundamental for their long-term memory and developing interests beyond our courses. But how do we gain and keep their attention in an era of distractions and multi-tasking? Participants learned strategies to spark student interest and sustain attention.

Carol Subiño Sullivan from CTL facilitated this workshop, featuring Thank-A-Teacher recipients

**Tamara Bogdanović**, Physics, Associate Professor

**Flavio Fenton**, Physics, Professor

**David Scott**, Civil and Environmental Engineering, Associate Professor

**Mark Styczynsky**, Chemical and Biomolecular Engineering, Associate Professor

## The Trials and Tribulations of Teamwork: Re-thinking Student Teams

During this workshop, Mary Lynn Realff, who leads the Effective Team Dynamics initiative at Georgia

Tech, and Ruth Poproski from CTL, shared tools for navigating barriers to effective teamwork, strategies for thoughtful peer feedback, and evidence-based approaches to creating rich, team-based learning experiences for students.

## Supporting Students While We Teach

Each semester, we look forward to welcoming students into our classes and seeing them benefit from our instruction. Then we discover that student perceptions of the course, the content, and their role differ from ours. In this workshop, we explored the ways in which course climate can both facilitate and block student learning. We looked at structures and procedures we can use to ensure a positive course experience for both student and instructor, and help our students feel supported and focused as they learn.

Joyce Weinsheimer from CTL facilitated this workshop, featuring Thank-A-Teacher recipients

**Dan Margalit**, Mathematics, Professor

**Carrie Shepler**, First Year Chemistry, Director

**Richard Vuduc**, Computational Science and Engineering, Associate Professor

**Claire Greenstein**, International Affairs, Research Scientist

## No More Eye Rolling: Managing Student Resistance to Learning in the Classroom

At times, when we introduce new practices into our classrooms, some students will express reluctance to engage. What can we do to help students who resist learning activities we clearly designed to help them learn? In this workshop, Veronica van Montfrans (director of Learning Sciences Innovation and Research, BME) and Kata Dosa (postdoctoral scholar, CTL) presented a research-based, integrated model of student resistance that helped participants think critically about student challenges. Participants used the model and real student stories to design and discuss learning environments that would minimize student resistance.

The average rating from participant evaluations of CTL offerings for faculty was 4.45 out of 5.0 (with 5.0 being excellent).

# Faculty Development Workshops



## CTL Book Club

The Center for Teaching and Learning's book club offers an opportunity to meet with a diverse group of faculty, postdocs, and graduate students each semester to discuss two books that focus on issues related to teaching and learning in higher education. A lively and relaxed setting with a Friday brownbag lunch provides an ideal environment in which to share teaching experiences and to gather new teaching ideas.

### Fall 2018 Books

*The Case Against Education: Why the Education System is a Waste of Time and Money*  
Bryan Caplan (2018)

*Why Students Resist Learning: A Practical Model for Understanding and Helping Students*  
edited by Anton Tolman and Janine Kremling (2016)

### Spring 2019 Books

*Creating the Path to Success in the Classroom: Teaching to Close the Generation Gap for Minority, First-Generation, and Academically Unprepared Students*  
Kathleen F. Gabriel (2018)

*The Neuroscience of Learning and Development: Enhancing Creativity, Compassion, Critical Thinking, and Peace in Higher Education*  
edited by Marilee J. Bresciani Ludvik (2016)

## Course Design Studio

The 2019 version of Course Design Studio was held in mid-May. The sessions were collaboratively developed and co-facilitated by Carol Subiño Sullivan and Kate Williams, the center's assistant directors who focus on Faculty and Future Faculty initiatives. Instructors navigated through a backward design process, beginning with a focus on learning objectives on day one, deriving content from their learning objectives on day two, moving on to assessment on day three, and finishing with a focus on appropriate instructional strategies on day four. In addition, participants considered issues related to creating a positive classroom climate.



CTL offerings range in depth of engagement, from brief encounters to in-depth study of evidence-based teaching.



# Faculty Awards and Recognitions

Each year, the Center for Teaching and Learning coordinates campus awards to honor outstanding faculty contributions to the educational mission of Georgia Tech, including the following:

- Class of 1940 Course Survey Teaching Effectiveness Award
- CTL/BP Junior Faculty Teaching Excellence Award
- Curriculum Innovation Award
- Education Partnership Award
- Faculty Award for Academic Outreach
- Geoffrey G. Eichholz Faculty Teaching Award
- Innovation and Excellence in Laboratory Instruction Award
- Innovation in Co-Curricular Education Award
- Undergraduate Educator Award

For the first time, CTL presented two new awards:

- Teaching Excellence Award for Online Teaching
- Scholarship of Teaching and Learning Award

Each year Georgia Tech submits applications for three University System of Georgia Regents' awards:

- Felton Jenkins, Jr. Hall of Fame Faculty Awards
- Regents' Teaching Excellence Awards for Department or Program
- Regents' Scholarship of Teaching and Learning Awards

CTL solicits award nominees and works with academic units to identify candidates and select winners. In April, CTL presents awards at the annual faculty awards ceremony.

In 2019, 24 faculty members received teaching

excellence awards, winning a combined total of \$46,000. CTL annually updates the names of all campus faculty award winners and USG Regents' Teaching Excellence Awards on the CTL Teaching Award Wall on the fourth floor of Clough Commons.



Raghupathy Sivakumar receiving a Curriculum Innovation Award.



Johnny Smith receiving a Geoffrey G. Eichholz Faculty Teaching Award.

## Curriculum Innovation Award

**Raghupathy Sivakumar**, CREATE-X, *Director*, and Electrical and Computer Engineering, *Professor*

**Craig Forest**, CREATE-X, *Associate Director*, and Mechanical Engineering, *Associate Professor*

**Joyelle Harris**, CREATE-X, *Associate Director*, and Electrical and Computer Engineering, *Academic Professional*

**Timothy Lee**, Bioengineering, *Graduate Teaching Assistant*

**Keith McGreggor**, Enterprise Innovation Institute, *Professor of the Practice*

**Olufisayo Omojokun**, College of Computing, *Senior Lecturer*

**Karthik Ramachandran**, Scheller College of Business, *Associate Professor*

**Raymond Vito**, Mechanical Engineering, *Professor Emeritus*

## Undergraduate Educator Awards

**James K. Rains**, Biomedical Engineering, *Professor of the Practice*

**Emily Weigel**, Biological Sciences, *Academic Professional*

## Geoffrey G. Eichholz Faculty Teaching Awards

**Plamen Iliev**, Mathematics, *Professor*

**Johnny Smith**, History and Sociology, *J.C. "Bud" Shaw Professor of Sports, Society, and Technology and Assistant Professor*



# Faculty Awards and Recognitions



Martin Mourigal receiving a CTL/BP Junior Faculty Teaching Excellence Award.

## CTL/BP Junior Faculty Teaching Excellence Awards

**Joseph Lachance**, Biological Sciences, *Assistant Professor*

**Martin Mourigal**, Physics, *Assistant Professor*

**Morvarid Rahmani**, Scheller College of Business, *Assistant Professor*

**Amit Reddi**, Chemistry and Biochemistry, *Assistant Professor*

**Chaowen Ting**, School of Music, *Assistant Professor*



Ruchi Banerjee receiving an Education Partnership Award.

## Education Partnership Awards

**Mary Hudachek-Buswell**, College of Computing, *Lecturer*

**Ruchi Banerjee**, College of Computing, *Undergraduate Student*

**LeAnne Cheatham**, Willis Road Elementary School, *REACH Elementary Teacher*

## Innovation and Excellence in Laboratory Instruction Award

**David MacNair**, Mechanical Engineering, *Academic Professional*



David Joyner receiving a Teaching Excellence Award for Online Teaching.

## Faculty Award For Academic Outreach

**Jonathan Clarke**, Scheller College of Business, *Associate Professor*

## Teaching Excellence Award for Online Teaching

**David Joyner**, College of Computing, *Senior Research Associate*

## Scholarship of Teaching and Learning Award

**Ashok Goel**, Interactive Computing, *Professor*

# Learning and Technology Initiatives

## Teaching with Technology Workshops and Seminars



During 2018-2019, we conducted five Teaching with Technology workshops:

### **Making Clickers Work: Strategies and Techniques**

What does it take to support student learning with clickers? How might we leverage clickers to facilitate learning activities in large classes? In this workshop, we shared the results of a campus-wide survey on student perceptions about using clickers, and several experienced faculty members shared their strategies and techniques.

### **Exploring Canvas Tools for Active Learning**

In this session, participants surveyed the variety of tools that Canvas offers to help teach effectively and engage students more actively in the course. We reviewed research behind using digital tools for active learning and explored ways to use Canvas to help students master course content.

It is not always clear how to use new technology to support student learning. We conducted workshops to provide opportunities to gather with colleagues and explore how to use it creatively and effectively. Drawing on evidence-based best practices in teaching and learning, we focused on helping participants leverage new technologies to create engaging learning experiences and better learning outcomes.

▶ A total of 201 participants attended Teaching with Technology workshops and seminars.

# Learning and Technology Initiatives

## Teaching with Technology Workshops and Seminars

### Teaching with Technology Spotlight

### Teaching with Technology Summer Institute

### Teaching with Technology Partnership

### Teaching with Technology Consultations

### **Technology of the New Instructional Center**

The Instructional Center classrooms have been

recently redesigned with input from several Georgia Tech faculty to improve student visibility and to support effective teaching. We introduced the technology features in three new classrooms and explored how to accomplish several common teaching tasks. We also participated with other campus units and provided three presentations at their seminars:

- Plagiarism Prevention and Education with Turnitin
- Student Engagement in the Classroom with TurningPoint

To learn more about Teaching with Technology workshops and seminars, please visit [ctl.gatech.edu/ttw](http://ctl.gatech.edu/ttw)

# Learning and Technology Initiatives

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### **Leveraging Canvas to Create Engaging Learning Experiences**

With the introduction of Canvas on campus, instructors have the opportunity to rethink ways of supporting effective teaching and student engagement. In this workshop, participants learned how to take advantage of Canvas tools and become more efficient and effective in teaching.

### **Teaching with Technology**

This workshop for Tech to Teaching (T2T) provided an overview of using different technologies in the classroom and online to create engaging learning experiences. The session also explored the best practices for applying these technologies in teaching and learning.

### **Technology of the New Instructional Center**

The Instructional Center classrooms have been

recently redesigned with input from several Georgia Tech faculty to improve student visibility and to facilitate active learning approaches to teaching. In this workshop, we introduced the technology features in three new classrooms and explored how to accomplish several common teaching approaches with ease.

### **Teaching with Technology Seminars**

We also partnered with other campus units and provided three presentations at their seminars:

- A 7-Principle Model for Designing and Developing Video Lessons for Online Learning
- Plagiarism Prevention and Education with Turnitin
- Student Engagement in the Classroom with TurningPoint

To learn more about Teaching with Technology workshops and seminars, please visit [ctl.gatech.edu/ttw](http://ctl.gatech.edu/ttw)



# Learning and Technology Initiatives

## Teaching with Technology Spotlight

Teaching with Technology Spotlight is a learning and technology initiative that highlights a specific instructional technique, best practice, or innovation related to using technology to enhance teaching and learning at Georgia Tech. It provides participants an opportunity to learn directly from experts and/or individuals who have successfully implemented technology in their classroom.



Two Teaching with Technology Spotlight sessions were offered during fall 2018.

**A total of 44 participants attended the sessions.**



### **Developing and Using Mobile Educational Apps: A Teacher's Perspective**

Julián J. Rímoli, associate professor of Aerospace Engineering, shared his experiences with developing Truss Me!, an educational game that challenges players to engineer the lightest possible moon lander vehicle in the shortest period of time. Rímoli discussed how he used the game to engage students with course content and foster deeper learning while also making learning fun. He also discussed the philosophy behind the game and shared his experience implementing the game in the classroom.

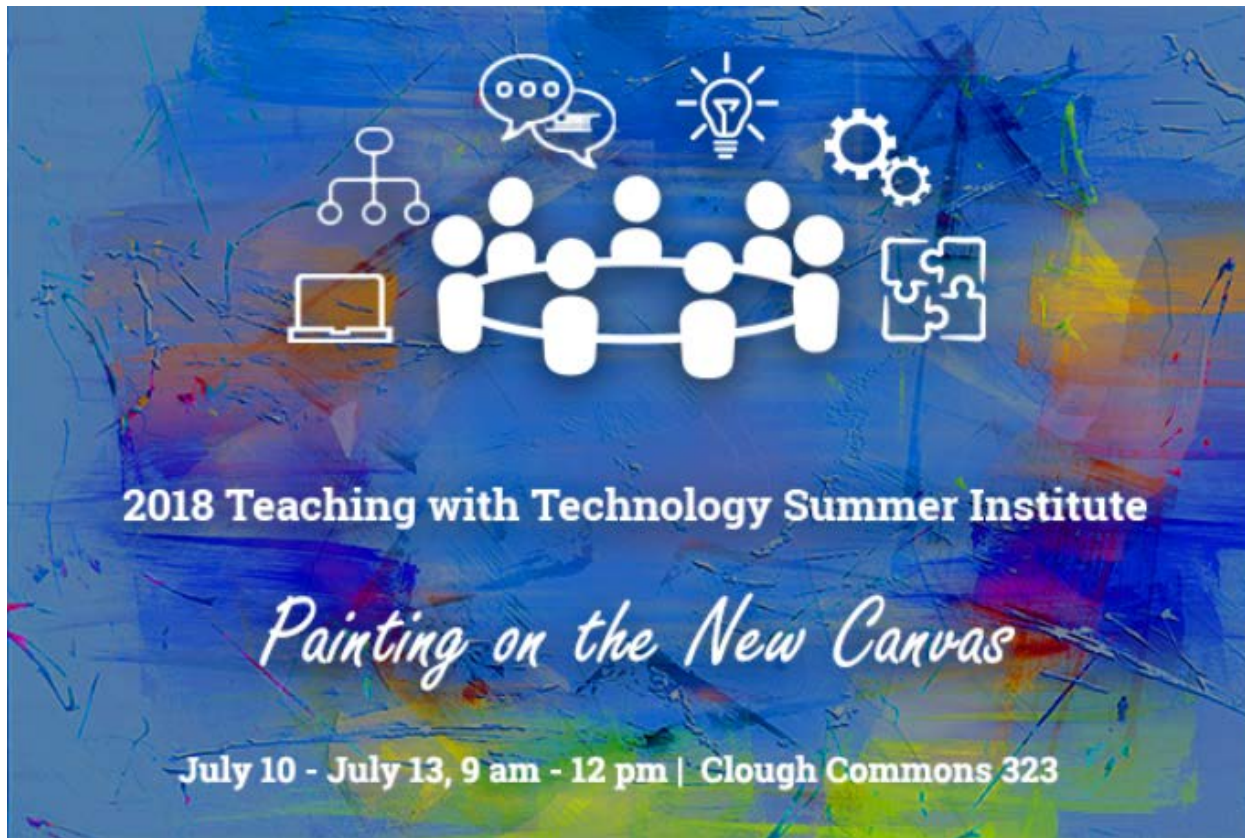


### **A New Solution to the Teaching Conundrum of What to Do with Student Writing**

Karie Davis-Nozemack, associate professor in the Scheller College of Business, shared her experiences with Essay Wizard, a tool she uses to provide analytical writing opportunities to students in large classes. The software allows students to edit their writing by guiding them with scaffolding questions and follow-up prompts. After demonstrating its functions, Davis-Nozemack highlighted her students' feedback on the effectiveness of using the tool to develop their writing skills. She also discussed how other instructors could potentially adopt or adapt the software in their classes.

# Learning and Technology Initiatives

## Teaching with Technology Summer Institute



In July 2018, CTL conducted its first ever Teaching with Technology Summer Institute on the theme of “Painting on the New Canvas.” A total of 68 participants attended the institute.

The Teaching with Technology Summer Institute is a learning and technology initiative comprised of a multi-day workshop series focusing on integrating technologies into curriculum to support effective teaching and learning.

During the institute, participants focused on building a course in Canvas by creating interactive course content, engaging course activities, and effective assessment tools that aligned with their course goals and objectives.

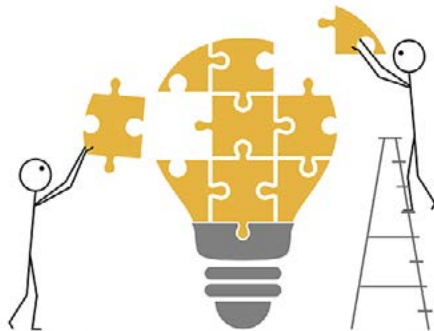
The institute consisted of a mix of small-group and large-group sessions, as well as individual work time. Participants engaged in discussions and hands-on workshop activities facilitated by the learning technology specialists from CTL.

To learn more about the Teaching with Technology Summer Institute, please visit [ctl.gatech.edu/summerinstitute](http://ctl.gatech.edu/summerinstitute)

A total of **68 participants** attended the four-day Summer Institute and rated its effectiveness at **4.71/5.00**.

# Learning and Technology Initiatives

## Teaching with Technology Partnership



Teaching with Technology Partnership is a learning and technology initiative that aims to support and promote the effective and innovative use of technology in teaching and learning. The partnerships are a collaboration between faculty, who sponsor a project, and CTL. Chaohua Ou and Vincent Spezzo from CTL meet with individual faculty fellows regularly and serve as a creative partner for developing and implementing their projects. All faculty fellows meet as a cohort once a month for two semesters and discuss their projects, as well as other topics related to teaching with technology.

Four faculty fellows partnered with CTL on their Teaching with Technology projects during 2018-2019. Additionally, James Black from the Office of Graduate Studies and Chaohua Ou from CTL were awarded a grant of \$15,000 from the Provost's Fund for Excellence in Graduate Studies (PEGS) for their partnership project, Integrated Blended Learning for Grad Groups.

To learn more about the Teaching with Technology Partnership, please visit [ctl.gatech.edu/ttp](http://ctl.gatech.edu/ttp)

During 2018-2019, four faculty fellows were selected to partner with CTL on their Teaching with Technology project.



**James Black**  
Office of Graduate Studies, *Special Projects Coordinator*

Project: Integrated Blended Learning for Grad Groups



**Rosario Gerhardt**  
Material Science and Engineering, *Professor*

Project: Active Learning and Student Engagement for MSE-2001



**Bob Myers**  
Scheller College of Business, *Lecturer*

Project: Innovative Use of Tablet for Enhanced Classroom



**Tatiana Rudchenko**  
Scheller College of Business, *Lecturer*

Project: Enhancing the Flipped Classroom Model with Videos for MGT-2250



# Learning and Technology Initiatives

## Open Educational Resources (OER) Initiative

In April 2019, Aselia Urmanbetova from the School of Economics and Chaohua Ou from CTL were awarded a \$30,000 grant from Affordable Learning Georgia for a textbook transformation project, creating an open introductory economics textbook with improved content and assessment.

Urmanbetova teaches ECON-2105: Principles of Macroeconomics, one of the four required economics courses offered at Georgia Tech. It introduces students to the fundamental concepts in economics, focusing on the aggregate behaviors of market, national and international economics. About 850 undergraduate students take this course every academic year. The cost of the required textbook ranges from \$160 (eTextbook) to \$249 (paperback).

In order to reduce the high cost of the textbook for students, Urmanbetova and Ou are adopting, adapting, and developing an open textbook from OpenStax for this course.

This project is transforming the textbook by (1) revising the content to make it better aligned with the course learning objectives, (2) integrating interactive multimedia learning materials to better engage students and facilitate their learning, and



(3) developing assessment tools to help students reinforce their learning and achieve the intended learning outcomes. The technology-enhanced textbook will be available online, and students at Georgia Tech and other schools around the world can use the resource free of cost. The goal of the project is to make learning economics more enjoyable and meaningful, thus helping students learn more effectively.



**Chaohua Ou**  
CTL, Assistant Director,  
Learning and Technology  
Initiatives



**Aselia Urmanbetova**  
School of Economics  
Research Scientist

# TA Development and Future Faculty Initiatives

The Center for Teaching and Learning offers extensive programming, support, and recognition for teaching assistants at the undergraduate, graduate, and postdoctoral levels, as well as pathways for those interested in a faculty career. In addition to courses in teaching and learning, TA and future faculty can choose from a number of workshops, online training modules, and other opportunities to increase their knowledge of effective pedagogy in the college classroom.

The number of initial intakes in the Tech to Teaching Program

increased **22%** from 115 in FY 2017-2018 to 140 in FY 2018-2019.

**762** doctoral students and postdoctoral students explored academic careers through CTL offerings.

## Future Faculty Initiatives

### Teaching Certificate Programs

Tech to Teaching and CIRTLL

The Tech to Teaching certificate program helps prepare Georgia Tech graduate students

# TA Development and Future Faculty Initiatives

## Future Faculty Initiatives

## TA Development Programs

## Institute-wide Partnerships and Outreach

## TA and Future Faculty Awards Day

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## Future Faculty Initiatives

### Teaching Certificate Programs

#### Tech to Teaching and CIRTLL

The Tech to Teaching certificate program helps prepare Georgia Tech graduate students and postdocs for college teaching positions. Participants develop a thorough understanding of the scholarship of teaching and learning and demonstrate their ability to apply skills in the classroom.

When participants complete the ten learning outcomes through a combination of classes, workshops, and online programming, they earn an Associate Certificate from the Center for the Integration of Research, Teaching, and Learning (CIRTLL). Next, they complete a significant teaching experience, most often through co-teaching a course or serving as instructor of record, and engage with future faculty peers in a weekly learning community seminar.

In 2018-2019, Tech to Teaching enrolled 249 graduate students and postdoctoral scholars, a 48% increase in enrollment over the previous year. This year, 48 participants earned the CIRTLL Associate Certificate, and 34 participants completed the full Tech to Teaching certificate.

#### Courses

As one route to earning the Tech to Teaching certificate, courses offer an in-depth study of learning theory to prepare future faculty for teaching positions in higher education. This year, 98 graduate students completed one of the three Tech to Teaching courses:

- CETL 8713 Fundamentals in Teaching and Learning
- CETL 8717 Course Design
- CETL Teaching Practicum

#### Teaching Workshop Series

The teaching workshop series provides graduate students and postdocs the opportunity to explore central tenets of effective pedagogy. A total of 157 participants attended these workshops over the course of the year.

#### Classroom Observations

Feedback on instructional practices helps novice instructors identify strengths in their emerging pedagogy and opportunities for improvement. In the capstone experience, CTL representatives observe and record live lessons, and provide written feedback. After an observation, participants are encouraged to meet with a CTL representative to discuss topics including learning goals and



# TA Development and Future Faculty Initiatives

assessment, instructional strategies, classroom climate, and presentation skills. Each participant in the teaching capstone receives two classroom observations, and other graduate students and postdocs can request individual observations. In 2018-2019, CTL faculty and Graduate Teaching Fellows conducted 82 classroom observations, an increase of 73% over last year.

## Teaching-as-Research

Teaching-as-Research, or TAR, is the systematic investigation of a teaching challenge of interest. A core pillar in the CIRTL programming, TAR projects can be completed by graduate students and postdocs after finishing the CIRTL Associate Certificate. For example, this year, a postdoctoral scholar in CTL developed the curriculum for and piloted a TAR course to support students in the design of their teaching-as-research projects.

## Academic Career Support

### Academic Career Workshop Series

CTL offers a series of workshops for graduate students and postdocs to prepare them for all aspects of the faculty hiring process. In the fall, CTL hosted a three-hour bootcamp session and individual workshops throughout the semester, preparing attendees to create an effective

job search packet, including writing a CV, a targeted cover letter, and teaching and research statements. The spring bootcamp and workshops focused on conducting successful phone and in-person interviews and giving dynamic job talks.

### Individual Consultations

Future faculty entering the academic job market tap into CTL resources through workshops and individual consultations. This year, a total of 203 participants attended academic career workshops on creating the application packet, preparing for interviews, and developing dynamic job talks. In addition, CTL provided individual consultations to 82 graduate students and postdocs about their academic job search.

## Postdoctoral Development

### AGEP

The purpose of the National Science Foundation's Alliances for Graduate Education and the Professoriate (AGEP) program is to increase the number of underrepresented minority (URM) faculty in STEM disciplines and education research. The AGEP alliance connecting Georgia Tech, Rice University, Florida A&M University, and the University of Colorado at Colorado Springs is developing and implementing an innovative model

that increases the number of URM engineering postdoctoral scholars who transition successfully into tenure-track faculty positions. CTL's Tammy McCoy provides academic enrichment to the alliance, covering teaching and learning in higher education, course design, and practical teaching experience.

### Postdoc Course

Each spring, CTL offers a non-credit course on teaching for postdocs. This year, the course was redesigned to fully align with the Tech to Teaching outcomes.



There was a **73%** increase in CTL classroom observations from 2017-2018 to 2018-2019.

# TA Development and Future Faculty Initiatives

## TA Development Programs

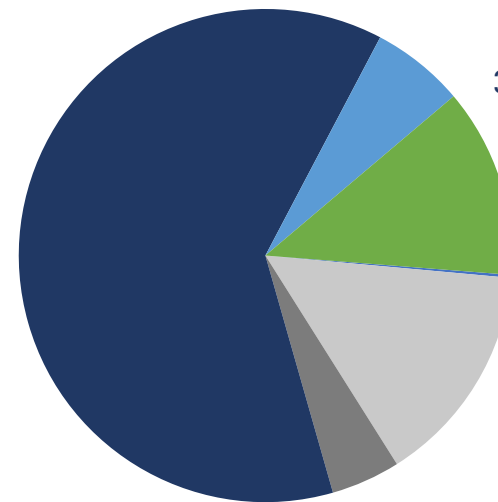


### TA Orientation

New undergraduate and graduate TAs are introduced to their job responsibilities and Georgia Tech policies through a half-day TA Orientation (TAO) session offered just prior to the start of each semester. An additional International TA Orientation (ITAO) introduces international TAs to the American student and classroom. These TA training sessions employed eight experienced Graduate Teaching Fellows to lead workshops on Tech policies and procedures relevant to a student's role as a TA. Participants attended workshops on a range of topics including teaching tips, presentation skills, and grading. The chart on the right shows the number of new TAs attending by college.

The number of TA Orientation participants increased

**32%** from 384 in 2018 to 507 in 2019.



- 315 - College of Engineering
- 31 - College of Liberal Arts
- 63 - College of Sciences
- 1 - College of Business
- 74 - College of Computing
- 23 - College of Design

Total Attendance: 507

# TA Development and Future Faculty Initiatives

## TA Development Programs

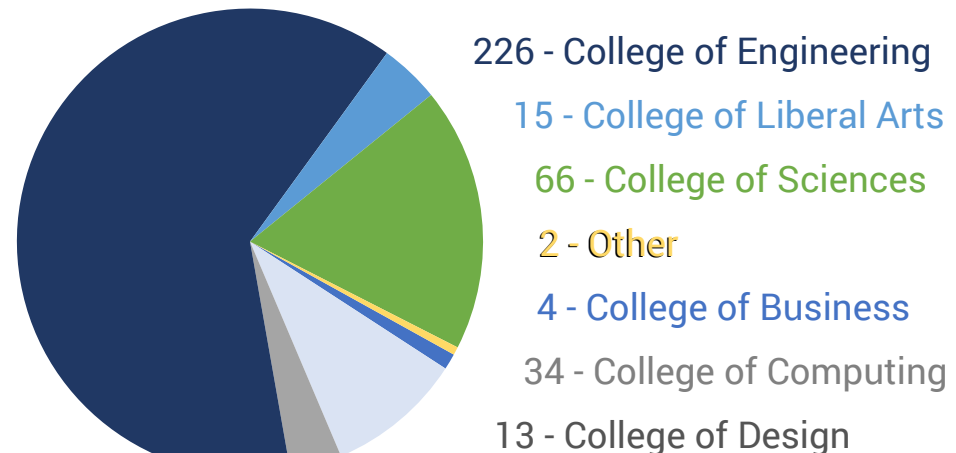
### CETL 8000

In addition to TA Orientation, new TAs from certain departments develop teaching, tutoring, and other relevant skills through CETL 2000 for undergraduate TAs and CETL 8000 for graduate TAs. This year, 262 students enrolled in CETL 8000, and 99 completed CETL 2000.

### International TA Pilot (with Language Institute)

To ensure international TAs have the resources they need to thrive in a teaching position in a new language and culture, CTL partnered with the Georgia Tech Language Institute to gather information from campus constituents, create an oral language screening assessment, and develop short courses to support new international TAs. During this pilot, 30 international graduate students participated in the pilot's oral screening and were invited to engage in a workshop series on communication and culture. Beginning in fall 2019, all new international TAs will participate in the oral proficiency screening and support program.

### Future Faculty Workshop Attendance



Total Attendance: 360

CTL offerings related to TA development attracted **905** participants (including 82% of the graduate TAs on campus).



# TA Development and Future Faculty Initiatives

## Institute-wide Partnerships and Outreach



Pictured: Ian Helfrich, Rebecca Watts Hull, Elaine Rhoades, Angela Yoo, Evan Mallen, Sidni Justus, Terri Dunbar, and Madeline Gray

### Graduate Teaching Fellows Program

The new Graduate Teaching Fellows (GTF) program launched in summer 2018. Designed on the hub-and-spoke model developed for faculty outreach programs, the GTFs consist of a cohort of eight advanced graduate students who serve as peer leaders for teaching development. They designed and delivered TA Orientation, conducted classroom observations and feedback sessions, and independently created individual projects to further support graduate student teaching developing in their home academic unit.



“What I like best about participating in the GTF program is that it has connected me to people across campus who are incredibly passionate about teaching. These connections have inspired me to continually improve and reflect on my own teaching as well as help support effective instruction for students across campus.”

- Terri Dunbar, GTF

# TA Development and Future Faculty Initiatives

## Institute-wide Partnerships and Outreach

### Preparing Future Faculty Partnerships

Although many graduate students and postdocs learn about CTL's future faculty programming through word of mouth, a growing number of schools have established partnerships with CTL to formalize and encourage their students' participation. These Preparing Future Faculty Partnerships created a consistent flow of students from participating schools, which demonstrates those schools' commitment to fully preparing their graduate students and postdocs for careers in the academy.

### Civil and Environmental Engineering (CEE)

Each year, CEE select a cohort of three to five graduate students to join the Preparing Future Faculty program. Selected participants complete the Tech to Teaching program and receive a monetary stipend from CEE to support their ongoing professional development.

### Economics

Ph.D. students in the School of Economics are required to participate in the Tech to Teaching program as part of their graduate training.

Incoming students complete the Tech to Teaching courses in their first or second year and can become eligible to teach as instructor of record beginning in their third year.

### Biomedical Engineering (BMED)

The course BMED 7004 Teaching & Research Practicum I satisfies four of the foundation level outcomes in Tech to Teaching. Participants from this field can use any pathway to satisfy the remaining outcomes and then participate in the teaching capstone.

### Industrial & Systems Engineering (ISyE)

The course ISyE 8811 Fundamentals of Teaching & Learning satisfies five of the foundation level outcomes. Participants from ISyE can use any pathway to satisfy the remaining outcomes and then participate in the teaching capstone.

### Psychology, Mechanical Engineering, Materials Science & Engineering

These schools offer a teaching practicum course that students may complete instead of the CTL teaching capstone. Students in these practicum courses still participate in the two classroom

observations and submit the capstone portfolio to satisfy the capstone learning outcomes.

### LEAD (Leadership Education and Development) Program

LEAD hires co-instructors for leadership sections of GT 1000 and for the Public Policy section of PUBP 4140 Foundation of Leadership for PUBP students. Preference for these teaching assignments is given to Tech to Teaching members. The teaching assignment can be used for the capstone requirement.





# TA Development and Future Faculty Initiatives

## TA and Future Faculty Awards Day

Each year, CTL celebrates the contributions to teaching excellence at Georgia Tech made by our graduate and undergraduate teaching assistants. Graduate and undergraduate TA Award winners, Tech to Teaching and CIRTl certificate recipients, student Thank-A-Teacher recipients, and TA Fellows were recognized for excellence in teaching at the second annual TA and Future Faculty Awards Day event held in April. Held in the Bill Moore Student Success Center, 131 people attended the event, and 237 awards and recognitions were presented.

The annual awards process opened in January. CTL requested all schools/departments conduct an internal competition to produce one person per each category: (1) Graduate Student Instructor of the Year; (2) Graduate Teaching Assistant of the Year; and (3) Undergraduate Teaching Assistant of the Year. Each school-level winner was invited to submit an application to participate in the institute-wide TA of the Year competition. All recipients of school/department awards were honored and the campus-wide winners announced at the annual event.



Awards and Recognitions **237**

Total Attendees **131**

- 11** Undergraduate TA of the Year Awards
- 20** Graduate TA of the Year Awards
- 25** Graduate Student Instructor of the Year Awards
- 91** Thank-A-Teacher Recipients
- 48** CIRTl Associate-level Certificate Recipients
- 34** Tech to Teaching Certificate Recipients
- 8** TA Fellows Recognitions



# TA Development and Future Faculty Initiatives

## TA and Future Faculty Awards Day

### Graduate Student Instructors of the Year

Pedro Jose Arias Monje, Material Science and Engineering  
Sophie Kay, Psychology  
Evan Mallen, City and Regional Planning

### Graduate TAs of the Year

Jessica Fisch, City and Regional Planning  
Rafael Marin, Electrical and Computer Engineering  
Tuo Zhao, Civil and Environmental Engineering

### Undergraduate TAs of the Year

Adrianna Brown, Computer Science  
Martin Sebastian Fernandez, Mathematics  
Talha Khawaja, Physics

24 of Tech's 29 schools participated in the TA and Future Faculty Awards.



Top: Two of the nine 2019 TA Institute-wide winners, Martin Sebastian Fernandez and Adrianna Brown, display their awards.

Bottom Left: Posters of award recipients from each department were displayed at the event.

Bottom Right: Evan Mallen, a Graduate Student Instructor of the Year (left), and Jessica Fisch, a Graduate TA of the Year (right), pose with Dracy Blackwell, an academic advising manager (center).



# Online Resources



## Online Resources

**Creating a Positive Teaching and Learning Environment**  
**TA Training Online Program**  
**Online Teaching and Learning Resources**  
**On Teaching and Learning at Georgia Tech CTL Blog**  
**Teaching Guidebook**

**Creating a Positive Teaching and Learning Environment**  
**An Online Toolkit for Faculty**

In 2016, the Georgia Tech Task Force for the Learning Environment released their report indicating that a culture of civility, collegiality, and respect is the bedrock of a healthy instructional environment. In response to this report, CTL was tasked with developing an online toolkit to help faculty understand how instructional strategies and interactions with students contribute to a positive learning environment. One of the goals of this online resource is for faculty members to understand how the values of civility, collegiality, and respect translate into concrete strategies and measures that are considered effective teaching. [learningenvironment.ctl.gatech.edu](http://learningenvironment.ctl.gatech.edu)

of resources to enhance the teaching effectiveness of teaching assistants (UTAs) and graduate teaching assistants (GTAs). CTL TA Development specialists conducted six TA orientation sessions in person, four in the fall term and two in the spring term. For those GTAs unable to attend these in-person orientations, CTL designed and deployed a series of TA training modules accessible via Canvas, Georgia Tech's learning management system. The modules cover academic integrity, FERPA, and disability services. Each module has interactive components and built-in assessment tools. Upon successful completion of the modules, students can print a document verifying their participation.

TA online training participants rated overall effectiveness of the modules a **4.4** out of 5 (5 being excellent).

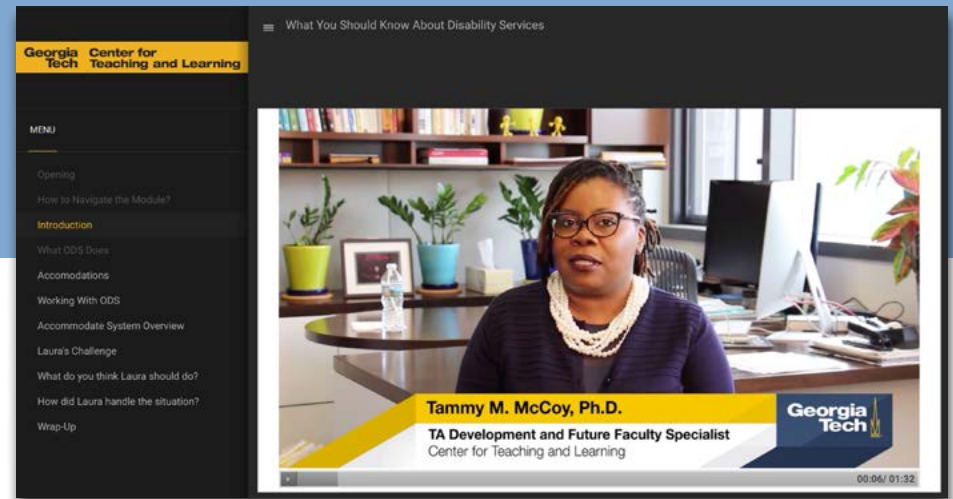
Over **200** TAs have completed the TA Training online modules.

# Online Resources



## Creating a Positive Teaching and Learning Environment An Online Toolkit for Faculty

In 2016, the Georgia Tech Task Force for the Learning Environment issued their report indicating that a culture of civility, collegiality, and respect is the bedrock of a healthy instructional environment. In response to this report, CTL was tasked with developing an online toolkit to help faculty recognize how instructional strategies and interactions with students contribute to a positive learning environment. One of the goals of this online resource is for faculty members to understand how the values of civility, collegiality, and respect translate into concrete strategies and measures that are considered effective teaching. [learningenvironment.ctl.gatech.edu](http://learningenvironment.ctl.gatech.edu)



## TA Training Online Program

CTL offers a variety of resources to enhance the teaching effectiveness of Georgia Tech's undergraduate teaching assistants (UTAs) and graduate teaching assistants (GTAs). CTL TA Development specialists conducted six TA orientations during the academic year, four in fall term and two in the spring term. To support TAs unable to attend these in-person orientations, CTL designed and deployed a series of TA training modules accessible via Canvas, Georgia Tech's learning management system. The modules cover academic integrity, FERPA, and disability services. Each module has interactive components and built-in assessment tools. Upon successful completion of the modules, students can print a document verifying their participation.

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# Online Resources

Georgia Tech Home Campus Map Directory Offices

## Georgia Tech Center for Teaching and Learning

About Us Faculty Postdoctoral Scholars Graduate Students Undergraduate Students Teaching and Learning Resources Events and News SEARCH

GT Home > Home > Teaching and Learning Resources > Best Practices in Teaching

### Dealing with the Unexpected

Teachers typically get ready for class by thinking about the content for the day. What will be your focus? Do you have the notes and materials you need? How will you engage your students?

Then the unexpected occurs — and it has nothing to do with what you've prepared. A student's comment pushes a hot button. You're confronted about a grade. You see an open backpack that contains a gun. Students are talking about the suicide of a peer. There's a major emergency event on campus.

Suddenly you find yourself at loss — this is not what you had in mind when you envisioned your life as an educator!

Here are some resources to help you out when you are dealing with the unexpected as you teach:

- Coping with Canceled Classes (and Technical Difficulties)
- Dealing with Distressed Students
- Handling "Hot Moments" in the Classroom
- Responding to Traumatic Events

#### CAMPUS RESOURCES

- Counseling Center
  - Crisis Line: 404.894.2575 (M-F 8 a.m. - 5 p.m.)
  - After-hours counselors: 404.894.2204
- Dean of Students and Student Life (404.894.2565)
  - Referral messages (if concerned about a student's academic performance, classroom behavior, or well-being)
  - Student Temporary Assistance and Resources (STAR) (for services like the food pantry, emergency funds, and temporary housing)
- Georgia Tech Police Department (404.894.2500)
- LGBTQIA Resource Center
- Office of Institute Diversity
- Veterans Resource Center
- Women's Resource Center

ACCESSIBILITY INFORMATION

## Online Teaching and Learning Resources

### Access Best Practices in Teaching

The Center for Teaching and Learning has developed a number of online resources to support and enhance teaching efforts at Georgia Tech. Use the links below to access a specific resource.

[Dealing with the Unexpected](#)

[Developing Your Syllabus](#)

[Gathering and Responding to Feedback on Teaching](#)

[Crafting Your Teaching Statement](#)

## On Teaching and Learning @ Georgia Tech

Georgia Tech Center for Teaching and Learning

News Teaching Tips Technology Events Campus Voices Commentary Future Faculty

### ON TEACHING AND LEARNING @ GEORGIA TECH BLOG

June 2018

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Categories: Campus Voices (7), Commentary (1), Events (0), Future Faculty (6), News (25), Teaching Tips (15), Technology (10)

### CTL Celebrates Outstanding TAs and Future Faculty

A chance to interact with undergraduate students — that's why Khaleel Al Kurdi decided to become a teaching assistant (TA). "When you're working on a Ph.D., you don't typically get to connect with undergraduate..."

RECENT POSTS

- Including! Creating Accessible Classes with the Help of Tools for Life
- CTL Celebrates Outstanding TAs and Future Faculty
- CREATE-X
- Forget-Me-Not: A new typeface designed to aid student learning
- Crafting Your Research Statement

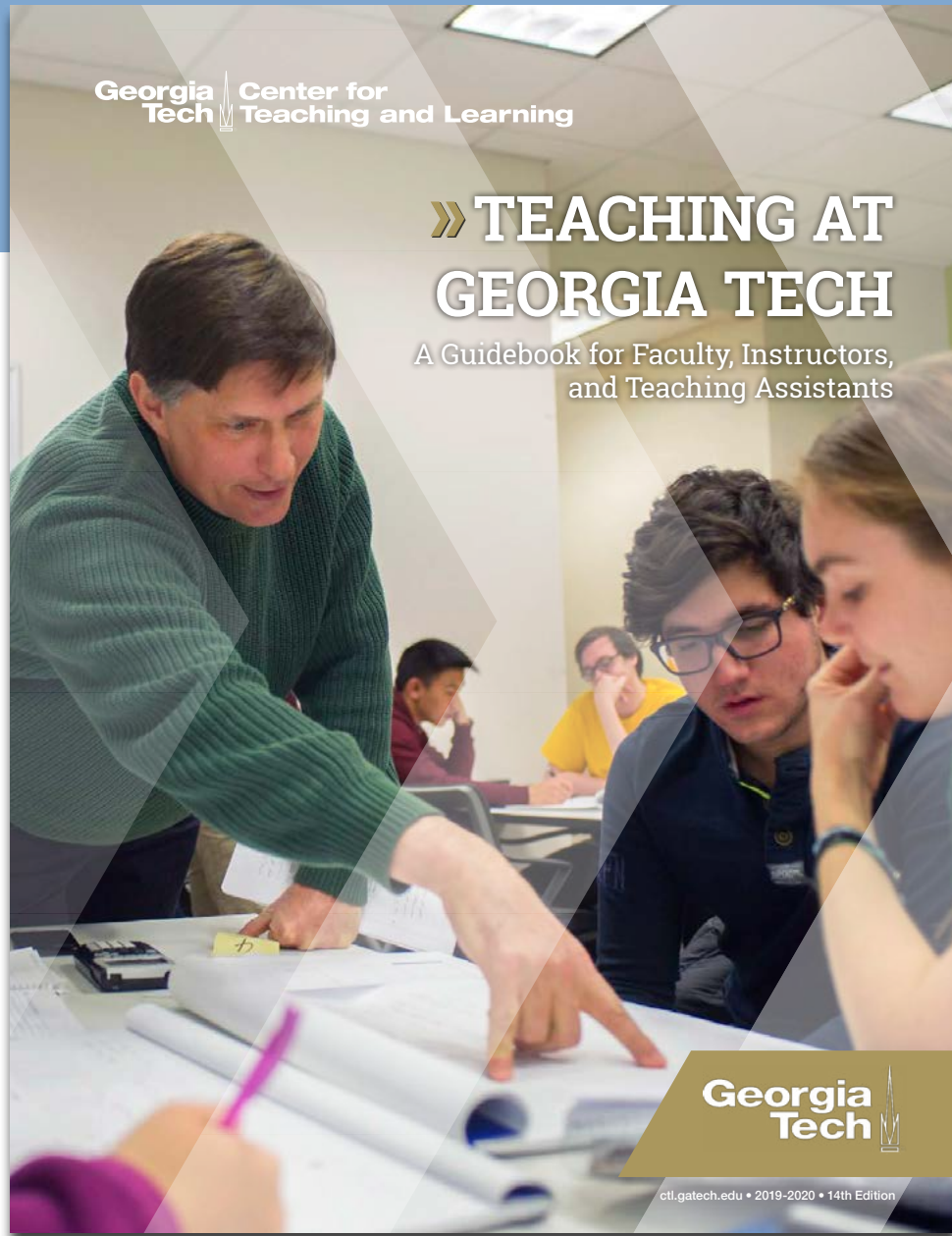
## On Teaching and Learning @ Georgia Tech

### CTL News Blog

*On Teaching & Learning @ Georgia Tech*, CTL's blog, features a range of articles from CTL staff and various contributors, with content such as teaching tips, inclusive teaching, reviews of workshops, and many more.

[Visit the blog >>>](#)

# Online Resources



## **Teaching at Georgia Tech**

### **A Guidebook for Faculty, Instructors, and Teaching Assistants**

Every year, CTL produces a guidebook for instructors. The printed version of the 14th edition was distributed to participants in New Faculty Orientation, part-time faculty at the New Faculty Welcome Event in fall and spring, and over 450 teaching assistants who attended TA Orientation during the spring and fall terms. Instructors of CETL 8000, a TA development course, also use the guidebook as a resource in their classes. The online version of the guidebook is highly interactive with numerous links to additional information and relevant offices. This fully downloadable version of the guidebook also works on tablets and mobile devices.



[Read the Teaching Guidebook online](#)



# 2018-2019 Annual Report

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