

ADVANCE PROFESSORS – JOINT TEAM REPORT
July 2016 – June 2017

This Report outlines the Georgia Tech ADVANCE Professors' 1) Institute-level accomplishments as ADVANCE Professors, 2) accomplishments and activities within their respective Colleges, 3) individual research and professional attainments for July 2016-June 2017, and 4) goals for July 2017-June 2018. This Report summarizes in these four areas, with further details appearing in individual Professors' reports. In Fall 2016, the ADVANCE Team was co-led by Professor Catherine Ross (lead) with Professor Mary Frank Fox; and in Spring 2017, by Professor Mary Frank Fox (lead) with Professor Dana Randall.

I. Institute-Wide Programmatic Accomplishments and Activities of ADVANCE Professors, 2016-2017

A. Analysis of Deans Reports for Annual Presentation:

The ADVANCE Professors collaborated toward the analysis and presentation of the content of the 2015 Deans' annual reports for the meeting with the Provost and GT Deans (Fall 2016), led by ADVANCE Professor Ross with Professor Mary Frank Fox. The report focused on data-based decision making, and sourced, vetted and analyzed data on gender distribution of Chairs across the Institute for the third year in a row. Recommendations included identifying/rewarding top researchers with chairs and professorships; continuing leadership development for faculty; a multi-year database on hiring, retention, and departures; and exit surveys of departing faculty toward understanding root causes.

B. Revisions to Active-Service Modified Duty (ASMD) Policy:

Working with the ADVANCE Team, Dr. Susan Cozzens (Institute, Faculty Affairs), and faculty across the Institute, ADVANCE Professor Kim Cobb played a leading role in shepherding forward, and successfully completing, the first major revision to the Institute's ASMD policy with changes including i) the qualification of research-related activities as fulfilling work duties while on ASMD, and ii) the allowance for two semesters of ASMD for birthing mothers per birth (non-birthing parents are still entitled to one semester of ASMD per qualifying event).

Revisions to Policy related to Extension of the Tenure Probationary Period: In addition, pending is language to i) remove the age limits on children whose adoption triggers a tenure clock extension, and ii) ensure that tenure candidates can extend the tenure clock for qualifying events with a request made within one year of the qualifying event, but can assume a non-delayed schedule at a later date if they so desire.

C. Bias Awareness Workshops:

ADVANCE continued collaborating with Dr. Julie Ancis (Associate Vice President for Institute Diversity) toward Bias Awareness Workshops. ADVANCE Professor Fox presented data on organizational conditions supporting equity to the faculty group training as facilitators for the Workshops (May 2017).

D. Strategic Plan Advisory Group (SPAG) Proposal on Diversity and Inclusion:

ADVANCE Professors Keskinocak and Toktay, along with other Georgia Tech colleagues, led the successful SPAG proposal aiming to move the conversation at GT closer to the people through initiatives that raise awareness and engagement around diversity and inclusion. Professor Toktay co-led (with Magnus Egerstedt) the section focusing on Diversity Fellows. Professor Keskinocak co-led (with Steve McLaughlin) the section focusing on Diversity Councils, designed to connect

activities of Institute Diversity Activities to Colleges and Schools, and to obtain feed-back. Councils have been established for CoS, CoD, and Scheller; IAC, CoC and CoE are still forming their Councils. A call for Fellows went out, with 78 applications received and 21 chosen for 2017. Fellows implement projects through the end of the year, including those on diversity and inclusion for doctoral students, [Talking Race@Tech: Student Voices](#), and [Queering STEM](#) panel discussions.

E. Demystifying Tech Panels:

ADVANCE Professors Keskinocak and Toktay organized a series of panels on Demystifying Tech, targeted to the community of GT that felt they knew their corner at the Institute, but would benefit from a larger picture. The 12 events that drew 450 participants, posted to the ADVANCE Website and archived in SMARTech. Topics encompass [Leave Policies at Georgia Tech](#); [Bullying in the Workplace: How to spot it? What to do about it?](#); [Total Person Program – Preparing Student-Athletes to be Champions in Life](#); [Philanthropy at Tech - Tales of Passion, Tales of Woe](#); [Driving innovation through partnerships](#); [Global Engagement at GT - Strategies and Lessons Learned](#); [How the activities of EVPR's office impact GT](#); [Philanthropy - The difference between good & great](#); [Georgia Tech's connections to the University System of GA & Beyond](#); [Industry Relations](#); [Leadership Operations at Georgia Tech](#); [The Colors of Money at Georgia Tech](#).

F. Diversity Symposium:

ADVANCE Professor Ross participated in discussions on “Building Inclusive Communities at Georgia Tech” during the Annual Diversity Symposium, presented by the GT Office of the President and the Office of Institute Diversity (September 2016). She also served as a member of the evaluation/selection committee for the Gender Equity Awards presented at the Diversity Symposium in September 2016.

G. Internal Representation on Committees:

ADVANCE Professor Fox represented ADVANCE for the upcoming Climate survey of Institute Diversity and met on this with VP Institute Diversity (Spring 2017). ADVANCE Professors Keskinocak and Randall represented ADVANCE on the Provost’s Emerging Leaders Program Planning Committee, and Professor Randall participated in a meeting of the CIOS taskforce to reinforce ADVANCE objectives.

H. Women’s Leadership Summit:

ADVANCE Professor Randall served on the organizing committee for a WIE/IEEE Women’s Leadership Summit held in Atlanta, November 2016. Georgia Tech ADVANCE was an official sponsor of the Summit. In addition, she raised \$5K from Microsoft Research to sponsor the attendance of 15 GT students. Professor Randall ran an internal competition to select these students. Participation on panels recommended by ADVANCE included GT faculty members Ayanna Howard, Annie Anton and Dana Randall, along with doctoral student, Sarah Cannon.

I. Institute-wide Women Faculty Lunches:

The ADVANCE Professors have been arranging campus-wide lunches for women faculty once a semester. In Fall 2016, the lunch was arranged by Professors Ross and Fox, providing an opportunity for networking and updating women faculty on the findings and activities of ADVANCE, including a presentation by Dr. Chaowen Ting, Director of Orchestral Studies on “Feminine Cadence: Women in Music.” In Spring 2017, Professors Fox and Randall arranged and hosted the lunch, which broke a record with over 60 women faculty members in attendance.

J. External Representation:

ADVANCE Professor Fox served on External Advisory Board for ADVANCE Institutional Transformation Initiative, Clemson University (May 2017).

II. Programmatic Activities and Accomplishments of ADVANCE Professors in Colleges (2016-2017)

The Georgia Tech ADVANCE Program focuses on aims of equity, diversity, excellence, and inclusion, as achieved through mentoring, transparency, bias awareness and a culture of equity, and accountability through data collected. The ADVANCE Professors supported these aims in their respective Colleges in the following ways.

A. College of Sciences – Kim Cobb

- 1. CoS Diversity Council:** Serves as ex-officio member of the Council, providing means to update on ADVANCE activities and obtain feedback and priorities for consideration. Drafted a statement to headline the COS Diversity web-site (with Stefan France); sat on sub-committee to consider policies to enhance family-friendly policies for CoS postdoctoral scholars; successfully proposed the creation of a CoS Graduate Student Diversity Council.
- 2. Engagement with Faculty and Chairs:** Held two COS-wide open rank ADVANCE lunches (15 attendees each), and one rank-specific lunch for each of the three ranks (15 attendees each). Met with each of the CoS Chairs on ADVANCE activities and policy changes, and gave presentations during faculty meetings in EAS and CHEM. Sponsored a CoS-ADVANCE wine and cheese reception for faculty
- 3. Women in STEM Lecture series:** Inaugurated CoS Women in STEM series with talk and discussion by Dr. Jane Zelikova (founder, 500womenscientists.org) (February 2017, attended by 40+).
- 4. Social Media for Scientists Workshop:** Co-sponsored by CoC ADVANCE Professor Randall, the workshop attracted 30 participants to the lecture by Dr. Paige Jarreau, and 15 to the hands-on workshop and panel.
- 5. Spring Break Faculty Writing Retreat:** In consultation with Dr. Karen Head, held (3 full days) writing retreat with goal settings and report-outs (March 20-22, 2017, attended by 12).
- 6. Queering STEM,** a new conversation series on the experiences of LGBTQIA graduate students, postdocs, researchers, and faculty in STEM fields, co-sponsored with CoE Professor Pinar Keskinocak (March 28 and April 4, 2017).
- 7. Workshop on Ensuring an Equitable RPT Process:** In partnership with CoS Associate Dean Julia Kubanek and School of Mathematics Chair Rachel Kuske, organized a 2-hr workshop for members of every unit's RPT committee across CoS (May 2017).
- 8. New CoS-ADVANCE Website advance.cos.gatech.edu:** Unveiled a new website to be hosted under the diversity.cos.gatech.edu website currently under development, with CoS contributions, resources, and links (June 2017).

B. Ivan Allen College – Mary Frank Fox

- 1. Equity, diversity, and excellence:**
 - a. Acted as liaison with IAC Dean Jacqueline Royster and ADVANCE, meeting together several times each semester to inform and be informed on issues of equity, diversity, and excellence, and to partner with the College in the process.

b. Updated regularly the IAC School Chairs on ADVANCE initiatives, including the IAC ADVANCE Network of Faculty and the annual postings of the IAC Handbooks.

2. Transparency, equitable culture, and accountability: With the leadership of IAC Dean Royster, partnered toward the annual ADVANCE Annual Deans' Report.

3. Mentoring, transparency, and equitable culture:

a. Organized and hosted two IAC ADVANCE Lunch/Discussions on:

i. "What Fosters and Sustains Productivity in Research" with IAC Dean Royster, and faculty panelists, Diana Hicks (Public Policy), Katja Weber (International Affairs), Lisa Yaszek (Literature, Media, and Communications) (November, 2016). Attended by: 20

ii. "Communicating Your Research: Effective Ways to Use Websites, Social Media, and (Other) Electronic Means" with IAC Dean Royster, and faculty panelists, Marilyn Brown (Public Policy), Jenna Jordan (International Affairs), Monica Miller (Writing Program and Literature, Media, and Communications), and Janet Murray (Literature, Media, and Communications) (February 2017). Attended by: 33

Posted on the IAC Advance website are slides from panelist, M. Miller on "Using Social Media to Promote, Produce, and Facilitate Research"

<http://www.advanceiac.gatech.edu/Using%20Social%20Media.pdf>

b. Updated and launched the IAC ADVANCE Network for Women Faculty website profiling IAC faculty by School, with news, calendar, and resources. The site is at:

<http://www.advanceiac.gatech.edu/> The Network fosters exchange among faculty and among faculty and students—including incoming students/faculty and those being recruited to Georgia Tech.

c. Participated in IAC Dean's Meeting on Implicit Bias in Evaluation and presented summary on organizational conditions supporting equity in evaluation (Sept 2016)

d. Participated in IAC Dean's Workshop on Tenure and Promotion, including follow-up with faculty (April 2017).

4. Mentoring and equitable culture:

a. Developed and maintained IAC ADVANCE Listserve, with weekly or biweekly postings of information, events, and updates—including those that publicize and celebrate the accomplishments and community of IAC women faculty.

b. Maintain Ivan Allen College ADVANCE Professor website – www.prism.gatech.edu/~mf27

c. Mentored and advised faculty across six Schools of IAC through meetings with individual IAC faculty members on issues including family leave, faculty development, and advancement.

C. College of Engineering – Pinar Keskinocak

1. Diversity Council: Dr. Keskinocak and Dr. Steve McLaughlin met with Dean May to discuss the structure of the CoE Council and its formation, planned to be finalized by Fall 2017 (more on the Diversity Council appears in the cross-college section, III.)

2. Diversity and Inclusion Fellows: Dr. Keskinocak was active in disseminating the GT-wide Diversity and Inclusion Fellows call in CoE and encouraging applications, and she was also nominated a faculty member. Eight of the 21 GT DI Fellows are now from CoE, each taking

forward projects to contribute positively to CoE's climate.

3. Resume Speed Dating Workshop: Following the tradition from previous years, the workshop was open to all CoE tenure-track junior faculty or associate professors planning for promotion or tenure within a year or two. The event took place in March 2017 with 19 mentors and 15 mentees and one-on-one discussion between them, and with the pairs switching every 15 minutes. The event received very positive feedback and will be repeated again during the next academic year.

4. Other means of advancing equity, diversity, inclusion:

a. In mentoring, participated as a mentor in the CoE junior faculty mentoring program organized by CoE Associate Dean Kim Kurtis, and had individual meeting with several women faculty members to discuss issues family leave, faculty development, dual careers, and advancement.

b. Toward transparency, co-organized the Demystifying Tech series (see Section III), and regularly informed CoE women faculty and school chairs about events and publications related to career development, bias awareness, leadership, and other issues.

c. Promoted bias awareness workshops led by Dr. Ancis.

d. Toward data-based decision making, with the goal of improving the collection of applications for faculty positions on campus (and eventually establishing a unified, centralized, or systematic approach), initiated and participated in discussion with various colleagues on campus to improve understandings of factors that affect decisions of accepting offers for faculty positions.

e. Toward enhancing diversity and inclusion, served on the advisory group for the newly initiated Provost's Emerging Leadership Program, and provided input to the program's selection criteria and guiding principles, content and session facilitators, and the review of the applicants. Met with some of the women and URM faculty candidates during their on-campus interviews; and also participated in various activities of the FOCUS program.

D. College of Computing – Dana Randall

1. Transparency: Led several discussions with CoC faculty on policy and in Fall 2016, met with women faculty to discuss proposed changes to the Modified Service-Active Duties policy and continued to solicit feedback subsequently.

2. Mentoring:

a. Manage the mentoring program in the School of Computer Science and oversee mentoring across the College of Computing, contributing ADVANCE funds for all mentor/mentee pairs in CoC to have lunch and discuss career trajectories.

b. Continue "mentoring/networking breakfasts" for (male and female) junior faculty in the College; periodically arrange topical discussions with junior faculty and a few senior faculty (topics chosen have included mentoring teaching, and advising, and next will be nonstandard funding sources).

c. Advised several women undergraduate and graduate students about job and fellowship prospects upon completion of their degrees, and recommended several women students for scholarships.

3. Networking and community building:

a. Continued the tradition of hosting lunches for women faculty in the College of Computing; gave

updates on major ADVANCE activities and discussions on topics of concern to the faculty.

b. In 2014, founded the Mary Jean Harrold Memorial Distinguished Lecture in the School of Computer Science, and in November 2016, hosted Magdalena Balazinska from the University of Washington as lecturer.

c. Organized breakfasts for women faculty to meet with visiting women scholars, including SCS Distinguished Lecturer Magdalena Balazinska (UW) and CoC Distinguished Lecturer Lenore Blum (CMU).

E. College of Design – Catherine Ross

1. Survey of female graduate students in CoD: In spring 2017, the College of Design (CoD)-ADVANCE team initiated a survey and invited 204 women, enrolled in a graduate program in the College of Design, to share their perceptions, motivations, and aspirations for the various graduate programs in the CoD.

2. Service project: drive for gifts for children of Atlanta Children Shelter during 2016 holiday season.

3. Women of Excellence Awards: Awards made to individuals who have distinguished themselves through professional leadership, mentoring, academic excellence and sustained service on behalf of the Georgia Institute of Technology and the College of Design. Each award winner receives a monetary gift through Advance.

4. CoD Advance Program Meeting with Dean: On November 29, 2016, hosted a “conversation with Dean Steve French” for female faculty and staff to interact with the Dean over lunch on topics including strategies to increase the diversity and number of women faculty and expand bias awareness training.

5. College of Design – Diversity Council: the Council’s goal is to implement and sustain solutions on key themes of diversity and inclusion at Georgia Tech, including ways that women can be recruited and retained. The CoD Advance Professor is an ex-officio member of the Council.

6. Welcome to new members of CoD: Program of support, guidance, and means of communication.

7. Partnership with Women in Music Technology: Shared aim is bringing women into the program and promoting women’s work. Events include the Women in Music Tech—Concert and Reception (November, 2016); and demonstration of music technology tools to 40 8th grade girls who visited Georgia Tech (February 2017).

8. Career Development: Lunch discussions with topics of group dynamics, negotiation, and bias, as well as confidence and self-advocacy.

F. Scheller College of Business – Beril Toktay

1. Fostered Scheller College’s Strategic Plan-Goal for an inclusive, vibrant, and innovative community, working together with Dr. C. Shalley (former ADVANCE Professor-Scheller College) by

a. Establishing a Diversity Council to raise awareness of, and work on, diversity and inclusion within the College.

b. Recruiting Diversity Fellows.

c. Inviting Scheller Dean Alavi to host a panel on diversity and inclusion (with 125 participants,

half from outside Georgia Tech).

d. Identifying the need to overhaul the web page content on diversity and inclusion in Scheller, and participating in several meetings to move this process forward.

2. Directors' Engagement: Drs. Shalley and Toktay participated in two Directors' meetings to create a strong dialogue with Scheller Directors on the diversity and Inclusion goal, and help create a culture of open information sharing and accountability.

3. 2016-17 Staff Lunch and Learn series: Lunch and learn provides an opportunity to develop employees' knowledge, pique their interest about opportunities, and demonstrate the organization's commitment to providing a healthy, value-based, motivational work environment. Drs. Shalley and Toktay secured funding and administrative support from the Dean's office for this monthly series led by the Professional Development Committee, and co-funded by ADVANCE Professor Toktay. The series included the following events: Career Advancement Workshop (~25 attendees); Meet Your Scheller Neighbor (~30 attendees); LinkedIn Workshop (~15 attendees); Scheller Staff & Faculty Appreciation Day (~30 attendees)

4. Other means of advancing equity, diversity, inclusion:

a. In mentoring, organized periodic networking lunches for women faculty in Scheller, relaying the material from presentations to the Provost and Deans, and sharing developments regarding the Scheller Strategic Goal 4 work. Also organized a speed review session for faculty preparing their 3rd year review packets, and participated in a doctoral colloquium panel at the POMS conference.

b. Promoted bias awareness, led by Dr. Ancis, by holding one of the Bias Awareness Workshops in the Scheller College, Fall, 2016.

III. Research and Professional Attainments of ADVANCE Professor (2016-17)

A. Kim Cobb (College of Science)

In October, 2016, Dr. Cobb became the first female endowed chair in College of Science when she was appointed Georgia Power Chair. Dr. Cobb's research focuses on the expressions and mechanisms of both natural and man-made climate changes. She is recognized global expert on climate extremes associated with the El Nino-Southern Oscillation, and specifically their impact on coral reefs today, as well as their long-term variations over the last centuries to millennia. She has an international network of collaborators and continues to publish in the highest-impact journals in her field (*Science*, *Nature*, etc). She continues her Editorship at *Geophysical Research Letters*, which represents the foremost journal of her professional society. She currently holds two active NSF research grants and one Ray C. Anderson NextGen grant (with COB ADVANCE Professor Beril Toktay) to engage GT undergraduates and Atlanta-area companies in climate mitigation-related projects.

Dr. Cobb continues her term as one of two US representatives to the international CLIVAR Pacific Panel, toward the coordination of major climate and oceanographic science campaigns for the entire Pacific Ocean, with a lens to informing and shaping research agendas around key questions related to man-made global warming. Her involvement in this prestigious panel culminated in an invited Plenary Keynote at the CLIVAR Open Science meeting in Qingdao, China, as well as an invited review for *Nature* on her climate research.

Dr. Cobb continues to attract a diverse range of students to her female-dominated group, which includes multiple members of different races and ethnicities as well as members who identify as LGBTQIA. One of her lab members won the prestigious NSF Graduate Research Fellowship, and her senior female PhD student defended in May after winning a tenure-track faculty position at University of Mary Washington. Of particular note, two of her undergraduate researchers gave prestigious oral presentations at the annual meeting of her professional society (AGU), and are preparing first author manuscripts for submission to peer-review journals.

Dr. Cobb continues to play a pivotal role in the development of climate-related initiatives both at Georgia Tech and across the region by fostering new partnerships with the private sector as well as academic institutions. She is an active member of the Strategic Energy Institute Faculty Advisory Committee. She was a member of the Dr. Clough's Global Change Committee over AY2016/2017, and drafted the sub-committee report on potential Educational Initiatives. Beyond Georgia Tech, she is a founding partner of the "[Georgia Climate Project](#)", which combines expertise from GT, Emory, and UGA toward the construction and dissemination of climate-related resources for stakeholders (public and private) across Georgia. Lastly, seed grant funding from the Ray C. Anderson foundation has allowed her and coPI Beril Toktay to pursue new partnerships with a wide range of private-sector entities ranging from large, multi-national corporations (Delta, Suntrust, Home Depot) to small family-owned businesses, pairing them with GT interns and co-coops students towards the reduction of the business' carbon footprint and energy expenses.

Dr. Cobb maintains an ambitious portfolio of public engagement activities that includes numerous public lectures, visits to Capitol Hill, an active social media presence (>4,300 followers on Twitter), and high-profile media appearances (New York Times, The Today Show, Associated Press, CNN, etc). Her commentaries typically focus on climate change science, although increasingly she is tasked to comment on diversity in science. Last month, she was invited to present her latest climate research results to six members of the New York Times climate change reporting group. Her research was prominently featured in the documentary "[Chasing Corals](#)", debuted at the Sundance Film Festival in April, 2017, and to be featured in the upcoming documentary "[Power of Pearls](#)" (summer, 2018 release date). She sits on the Advisory Board of [500womenscientists.org](#), dedicated to the advancement of science and diversity for the benefit of society.

B. Mary Frank Fox (Ivan Allen College)

Dr. Mary Frank Fox's research focuses upon gender, science, and academia—the study of women and men in academic and scientific organizations and occupations, with significant implications for science and technology policy. Her research has introduced and established the ways in which scientists' participation and performance reflect and are affected by social and organizational settings in which they are educated and work. Her research has been funded by the National Science Foundation, nearly continuously for the past 30 years. Her research is published in over 60 different journals, books, and collections, including the lead for an international section on "Gender, In(equity), and the Scientific Workforce" for the *Handbook of Science and Technology Studies* (MIT Press, 2017).

This past year, she received three awards: 1) the Gender Equity Faculty Champion Award, Georgia Institute of Technology, 2016; 2) Ivan Allen College Distinguished Faculty Researcher Award, 2017; and 3) Faculty of the Year Award, Georgia Tech Undergraduate Student Association, 2017. She was also elected to the Electorate Nomination Committee of the American Association for the Advancement of Science (AAAS), a committee responsible for selecting slates of candidates for AAAS positions.

Among her activities at Georgia Tech in 2016/17, Dr. Fox served as chair of tenure and promotion for the School of Public Policy; was a member of the Tenure and Promotion Committees of Ivan Allen College and of the Institute (for both tenure/promotion and critical reviews); and co-directed the Georgia Tech Center for the Study of Women, Science, and Technology (WST). She hosted the visit and lecture of Dr. Alice Agogino, Rocoe and Elizabeth Hughes Chair in Mechanical Engineering, University of California-Berkeley, as 2017 WST Distinguished Lecturer, co-sponsored with GT College of Engineering. She directed the WST faculty-undergraduate research initiative, Georgia Tech's inaugural (first) faculty-undergraduate student research program.

Dr. Fox brought to the forefront issues of diversity, equity, and excellence through her national-level work with advisory boards and panels including those of/as:

- Newly elected member of the AAAS Electorate Nomination Committee.
- Social Science Advisory Board of the National Center for Women and Information Technology.
- Elected Member of the Council on Science, Knowledge, and Technology, American Sociological Association, and chair of the Robert K. Merton book award on studies of science, knowledge, and technology.

- External Advisory Board for NSF ADVANCE initiative, Clemson University.
- Editorial Advisory Board for leading journal, *Social Studies of Science*.

C. Pinar Keskinocak (College of Engineering)

Dr. Keskinocak continued her broad range of research, education, and outreach activities as the co-director of the Center for Health and Humanitarian Systems (CHHS), named as one of four new Phase I Interdisciplinary Research Centers (IRCs) at Georgia Tech. Each of these centers brings together researchers from different disciplines across campus to address topics of strategic importance to Georgia Tech, promoting collaborative research and coordinating activities.

She co-chaired the 2016 annual Health and Humanitarian Logistics Conference (held in Atlanta, after traveling around the world for the past 5 years). Together with her co-organizers, she is currently preparing for the 2017 Conference (to be held in June 2017 in Copenhagen, at UN City). This conference draws around 200 participants from around the world, representing various organizations in the governmental, non-governmental, and private sectors. Another highlight of her work within the CHHS is the professional education certificate program. She co-developed this program in 2012, and it was offered for the sixth time in May 2017, drawing an outstanding and diverse group of participants with 20 different nationalities who have lived and worked in over 80 countries.

During this period, Dr. Keskinocak's research led to various publications and conference presentations recognizing her technical leadership in the fields of health and humanitarian systems. Dr. Keskinocak continued her service as a board member of INFORMS and as one of the five members of the executive committee. In addition, she continues her service as the department editor of the flagship journal *Operations Research*, the department editor of *IIE Transactions in Healthcare Systems Engineering*, and the senior editor of *Manufacturing & Service Operations Management*. She recently completed co-editing a special issue of *Production and Operations Management*, focusing on Not for Profit Operations Management.

In February 2016, she was invited to join the INFORMS ad-hoc diversity committee. The committee has provided support for a society-wide initiative that will make INFORMS more accommodating and reflective of members from diverse backgrounds, perspectives, and abilities, and better enable INFORMS to make substantial contributions to an increasingly diverse society.

At Georgia Tech, she was included in the 2016 Faces of Inclusive Excellence publication by Institute Diversity, to recognize commitments to "advancing a culture of academic and inclusive excellence at Georgia Tech."

D. Dana Randall (College of Computing)

Dr. Randall became co-executive director of the new Institute for Data Engineering and Science (IDEaS) in July 2016. Her research focuses on randomized algorithms and she has helped create an interdisciplinary field bridging computer science, discrete probability and statistical physics. She is a Fellow of the American Mathematical Society (AMS), a National Associate of the National Academies, and has been a Sloan Fellow, a Kavli Fellow and has received an NSF Career Award. She has received numerous awards for research, teaching and service at Georgia Tech. This year she was given the College of Computing mentoring award.

As co-director of IDEaS, she co-led a proposal that is currently a finalist for a Department of Homeland Security Center of Excellence in Quantitative Analysis and Data Science (QuADS) for \$40M. She was also a co-PI on a proposal for an NSF grant for a new Center for Transdisciplinary Research on Foundations of Data Science, also pending (informally awarded). With IDEaS Associate Director David Sherrill, Dr. Randall is designing a new educational program to provide mini-courses and modules to Georgia Tech faculty and graduate students in data science. Other responsibilities include planning retreats to launch collaborative projects and find grand challenges, including inaugural ones with the Pediatric Technology Center (PTC), the Strategic Energy Institute (SEI).

Dr. Randall received an NSF Algorithms in the Field grant, joint with Daniel Goldman (physics, GT) and Andrea Richa (CS, ASU), on her work on a stochastic and distributed framework for programmable matter. A second

grant on the same topic was informally just awarded, and she currently holds two additional NSF grants for her research.

Dr. Randall gave several distinguished lectures this year, spanning diverse fields of data science, networking, distributed algorithms, discrete mathematics and probability theory. Keynote talks included the Foundations of Data Science workshop, UIUC, October 2016, the 40th *Australian Conference on Combinatorial Mathematics and Combinatorial Computing* (ACCMCC) in Newcastle, Australia, December 2016, the *first Applied Probability, Combinatorics and Optimisation Workshop* (APCO), Newcastle, Australia, December 2016, the 9th *IEEE International Workshop on Network Science for Communication Network*, Atlanta, in May 2017 and the 29th *Cumberland Conference on Combinatorics*, Vanderbilt University, May 2017.

Dr. Randall currently serves on various international and national advisory boards, including the International Scientific Advisory Committee of the Centre Recherche Mathématiques (CRM) in Montreal, Canada, the Center for the Science of Information advisory board, Purdue University, the Committee for the Advancement of Theoretical Computer Science, the Symposium on Discrete Mathematics (SODA) steering committee, and was just appointed as a member of the AMS Liaison Committee with the AAAS.

E. Catherine Ross (College of Design)

Dr. Catherine Ross directs the Center for Quality Growth and Regional Development (CQGRD) and holds a dual appointment in Civil and Environmental Engineering and is the Harry West Professor. In 2012, Dr. Ross was named Deputy Director of the National Center for Transportation System Productivity and Management (NCTSPM) in a continuing role. NCTSPM is a USDOT/RITA grant funded Tier 1 University Transportation Center (UTC) that conducts transportation related research in the areas of safety, state-of-good-repair, and economic competitiveness and NCTSPM was awarded a total of \$14 million in sponsored and matching funds and brought together a consortium of universities in Georgia, Florida, and Alabama. She served either as Principal or Co-Principal Investigator on multiple (research) projects in the past year, and managed over \$800,000 in funded research, donations and resources emanating from her Harry West Chaired Professorship.

In 2016-17, Dr. Ross presented at more than 20 conferences, symposia or meetings on topics including mega-regions, health impact assessment (HIA), urban development, transportation planning and quality growth, and published four refereed articles. Dr. Ross serves on the Board of Directors or in leadership positions for professional societies, including the Auto Club Group (ACG) of the American Automobile Association (AAA), the Board of Advisors for the Young Professionals in Transportation, and Editorial Boards for the *Journal of Planning Literature*, and the *International Journal of Urban Science*. She is a University of Pennsylvania Institute for Urban Research (IUR) Scholar and is a member of the National Academy of Public Administration. Dr. Ross serves as a High-end Foreign Expert of the State Administration of Foreign Experts Affairs, China to be a National High-end Foreign Expert at autonomous.

During 2016/17, Dr. Ross was at the Tongji University in Shanghai, China. This appointment has led to the development of a number of joint research proposals currently under review. In addition Dr. Ross contributes to the teaching through lectures on selected topics. Dr. Ross serves as an active board member of the Midtown Alliance a non-profit membership organization and a coalition of leading business and community leaders responsible for implementation of the Midtown Blueprint. She is a member of a select group of academicians invited to the Organisation for Economic Co-operation and Development (OECD's) annual International Transport Forum Summit. The International Transport Forum (ITF) is an intergovernmental organization with 59 member countries. It acts as a think tank for global transport policy and organizes the Annual Summit of transport ministers. ITF is the only global body that covers all transport modes. The ITF is administratively integrated with the OECD.

During 2016/17, Dr. Ross was also the subject or contributor to significant media outlets and magazines, including *Fortune Magazine*, the *Atlanta Journal Constitution*, and Public Radio.

F. Beril Toktay (Scheller College of Business)

L. Beril Toktay is Professor of Operations Management and the Brady Family Chairholder in the Scheller College of Business. A pre-eminent scholar in sustainable operations, Professor Toktay's research focuses on creating a sustainability advantage through business model innovation, primarily focusing on operations and supply chain practices. Her recent focus areas include enterprise strategies for remanufacturing and reuse, business models for collaborative consumption, and the design of extended producer responsibility approaches for electronic waste and pharmaceutical overage. In the past year, her articles were accepted for publication in high-impact journals such as *Management Science*, *MSOM*, and *Production and Operations Management*. In June 2017, Dr. Toktay was named Distinguished Fellow of the *Manufacturing and Service Operations Management Society*, a distinction recognizing outstanding research and scholarship in operations management.

Dr. Toktay advises several graduate students. Her most recent PhD student graduated in August 2016 and obtained an Assistant Professor position at the University of Minnesota's Carlson School of Business. This student is the third female student in a row that Dr. Toktay has graduated. Dr. Toktay presented her work at several national and international meetings, and participated in a POM Doctoral Colloquium. Recent seminar invitations include MIT, Harvard, Carnegie Mellon, Yale, University of Toronto, and University of British Columbia. In 2016-2017, she served as Area Editor or Associate Editor of leading journals in her field (OR, MS, and MSOM). She is on the Board of Directors of the Alliance for Research on Corporate Sustainability. She received the 2016 Ernest Scheller Jr. Prize in Scheller College for her outstanding service contributions.

Dr. Toktay has made significant institutional contributions at Georgia Tech. In 2013, she founded the Center for Business Strategies in Sustainability and serves as its Faculty Director. Following the successes of the Center, it was renamed the Ray C. Anderson Center for Sustainable Business in 2014. Professor Toktay spearheaded the institute-wide Quality Enhancement Program titled Serve-Learn-Sustain and started serving as its Executive Co-Director. This institute-wide educational initiative combining service learning and community engagement with sustainability is the first program of its kind in a top research institution. The SACSCOC review board commended its potential to be transformative not only at Georgia Tech but also nationally. She was a recipient of the 2016 Georgia Tech Women of Distinction Award for these contributions.

IV. Goals for the ADVANCE Professors (2017-18)

In the coming year, the ADVANCE Team plans to:

- 1) Work within each College to foster equity, diversity, excellence, and inclusion – in partnership with the Deans of respective Colleges
- 2) Continue implementing the Diversity Council and Diversity Fellows of the SPAG Proposal awarded for a three year period.
- 3) Continue the Demystifying Georgia Tech Panels.
- 4) Represent ADVANCE on the Georgia Tech Institute Diversity climate survey, and on the bias awareness workshops.
- 5) Implement goals of equity, diversity, excellence, and inclusion through participation in Georgia Tech initiatives, as Modified Service-Active Duties, and through outreach to and participation in external ADVANCE advisory (and other) boards and capacities.
- 6) Implement a publicity communication and publicity initiative on ADVANCE.
- 7) Seek funding opportunities for ADVANCE together with Institute Development.