

ADVANCE Professors Report: 7/1/2014-6/30/2015

During the past year, the ADVANCE Professors, working collectively with the Office of Institute Diversity and each working closely with her college leadership team, have made great progress on the Equity, Diversity, and Excellence Initiative (EDEI). This report is divided into three parts: Part I on the individual achievements of each scholar in her own research specialty; Part II on each individual's accomplishment in the areas of EDEI, and collaboratively as a group; Part III on their future plans for the 2015-2016 academic year.

I. Individual Accomplishments

As a supplement to the individual reports, below are the highlights of the ADVANCE Professors' accomplishments as scholars at Georgia Tech.

Catherine Ross, ADVANCE Professor in the College of Architecture

Dr. Catherine Ross is the Harry West Professor in the School of City and Regional Planning with an appointment in Civil and Environmental Engineering. She is an internationally recognized expert on urban planning, transportation systems planning, and quality growth. She is the Deputy Director of the National Center for Transportation System Productivity and Management (NCTSPM) in a continuing role, funded by USDOT/RITA. She is the Director of the Center for Quality Growth and Regional Development (CQGRD). In her role as Director, she continues to establish a tradition of research, community involvement, academic instruction and interdisciplinary collaboration and teamwork. Recently CQGRD received a grant from the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts and Professor Ross serves as the PI. She also receives the 2014 Georgia Power Professor of Excellence award from Georgia. During the 2014-15 academic year, Dr. Ross presented at 33 conferences, symposia or meetings on topics of megaregions, health impact assessment (HIA), urban development, transportation planning and quality growth. Below are some highlights of Dr. Ross' most significant presentations:

- Keynote address, "The Viable City: Infrastructure and Universal Design," at an international conference in Rome, Italy, in September 2014. The conference, "Engendering Cities – Designing Sustainable and Inclusive Urban Environments for All" focused on gender sensitive perspectives in the interrelated fields of cities, transport and energy and climate change.
- Invited speaker in October 2014 at the U.S. Department of Transportation/Volpe Center's leadership speaker series on Transportation and the Economy. The talk was broadcasted to over 1,000 stakeholder organizations representing a broad spectrum of the transportation community. A video of the talk is available online at: <http://www.volpe.dot.gov/news/transportation-drives-economic-competitiveness-megaregions>
- Distinguished speaker at the International Symposium on Urban Regeneration at the University of Seoul Urban Planning and Design's 30th Anniversary in November 2014.
- Presented updates to Atlanta Regional Commission's (ARC) Board in April, 2015.
- Subject of or contributor to significant media outlets and magazines. She authored 4 publications, including a book.
- Continues to serve on the Board of Directors or in leadership positions for a number of professional societies, including the Auto Club Group, Midtown Alliance, and Editorial Boards for the Journal of Planning Literature and International Journal of Urban Science.

Dr. Ross currently serves as a University of Pennsylvania Institute for Urban Research (IUR) Scholar and is a member of the National Academy of Public Administration.

- Serves as primary adviser and supervises several Ph.D. students. In addition, she serves on a number of Ph.D. committees as a secondary member.
- Served as PI or Co-PI of approximately \$2.3 million in funded research and donations and the resources emanating from her endowed Harry West Chair professorship.

Dana Randall, ADVANCE Professor in the College of Computing

This year, Dr. Randall became Director of the Algorithms and Randomness Center (ARC) at Georgia Tech and Co-Director of a new GT Strategic Initiative on Data Engineering and Science. She served as chair of the Board of Governors of the Institute for Mathematics and its Applications, was an elected member of the AMS Editorial Boards Committee, and will be co-chairing the next biennial SIAM Conference on Discrete Mathematics, 2016. She serves on the Editorial Board of *Theoretical Computer Science* and is a member of the Heidelberg Lectures participant selection committee, inviting international students to meet with Turing, Abel and Nevanlinna Award winners, and Fields Medalists. She also serves on the Algorithms, Combinatorics and Optimization (ACO) Steering Committee.

Dr. Randall was the recipient of the 2015 College of Computing Teaching Award and the 2015 Class of 1940 Course Evaluation Teaching Effectiveness Award. She delivered the Samuel D. Conte Distinguished Lecture at Purdue University and organized a series of workshops and mini-retreats at Georgia Tech during the spring of 2015. This academic year, her publications include conference papers in *SODA'14*, *SODA'15*, two journal papers accepted to *the SIAM Journal on Discrete Mathematics* and one to appear in *Discrete and Applied Mathematics*. This summer two of her NSF grant proposals were recommended for funding. She has three PhD students, two of whom are women; one of them, Sarah Miracle successfully defended her dissertation this spring. Her second year student, Sarah Cannon, was just awarded a Simons Award for Graduate Students in Theoretical Computer Science.

Pinar Keskinocak, ADVANCE Professor in the College of Engineering

During the past year, Dr. Keskinocak continued her research activities in health and humanitarian systems. She gave seminars in Northwestern University, University of California at Berkeley, and Singapore University of Technology and Design, which recognized her technical leadership in her research area. In addition, she gave a tutorial on “OR/MS Research in Public Health” at the annual INFORMS Conference in 2014.

Dr. Keskinocak continued to serve for INFORMS as president (2014), and as past-president (2015) of the *Health Applications Society*. She also serves as the department editor of the flagship journal *Operations Research*, the department editor of *IIE Transactions in Healthcare Systems Engineering*, and the associate/senior editor of *Manufacturing & Service Operations Management*. She is currently co-editing a special issue of *Production and Operations Management*, focusing on Not for Profit Operations Management. Dr. Keskinocak also served in a number of committees at Georgia Tech, contributing to the strategic plan and other activities: (1) Member, Presidential Task Force on Sexual Violence, 2014; (2) Member, ISYE School Chair Search Committee, 2013-2014; (3) Chair, ISYE Reappointment, Promotion, and Tenure Committee, 2013-2014; (4) Women, Science, and Technology (WST) Learning Community mentor, 2014-present.

She continued her broad range of research, education, and outreach activities as the co-director of the Center for Health and Humanitarian Systems (HHS). In addition, she co-chaired the 2014 annual Health and Humanitarian Logistics Conference in Mexico City, and is currently preparing for the 2015 Conference (to be held in South Africa) together with her co-organizers. 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 HHS Center is the professional education certificate program. She co-developed this program in 2012, and it was offered for the fourth time in May 2015, drawing an outstanding group of participants who have lived or worked in 42 different countries.

During this time period, she taught Senior Design (Fall 2014) and Health and Public Applications of OR/MS (Spring 2014). In Fall 2014, two of her Senior design teams became finalist and one of them won the ISYE best of senior design award. The finalist team also won the IIE Undergraduate Student Technical paper competition. Two of her Ph.D. students graduated in August and December 2014, respectively.

Wing Suet Li, ADVANCE Professor in the College of Sciences

During the period of time covered by this report, Dr. Li continued her research on several problems in operator theory concerning eigenvalues, singular values, and Jordan models, both in finite dimensional Hilbert spaces and the finite setting of the von Neumann algebra, from the point of view of the intersection theory of the Grassmann manifold. This work yielded surprising results and gave a better understanding of why these seemingly unrelated problems have virtually identical answers. This work was carried out in collaboration with Dr. Bercovici at Indiana University, Dr. Timotin at the Mathematical Institute of Romania Academy of Science, and Dr. Dykema at Texas A&M University. The National Sciences Foundation (NSF) has almost continuously supported her research for over twenty years. This year, she was invited to give a series of talks at Hong Kong University of Science and Technology on the results from her research. Three research papers appeared or were accepted for publications in journals.

She was also served on the institute Future Workforce Taskforce, the Faculty Panel during the classes of '65, '75, '90 Reunion Leadership Summit. She is one of the ex-officio for the Diversity Council for the College of Sciences, and a current member of the Chair search committee for the School of Mathematics. She also serves on the Steering Committee for the Workshop in Probability and Analysis, an NSF-funded summer program that has been running continuously for the past 25 years at Texas A&M University.

Mary Frank Fox, ADVANCE Professor in the 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, and the 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. NSF has supported Dr. Fox's research nearly continuously for the past 30 years. Her research is published in over 50 different journals, books, and collections, including the present lead for an international section on “Gender and Careers in the Scientific Workforce” for the *Handbook of Science and Technology Studies* (MIT Press, forthcoming 2016).

Recently, she extended her work to an innovative and unique study of the “transmission zone” of knowledge about women, science, and engineering, supported by NSF. She launched a

new project on “Women Faculty in Computing,” funded by the Alfred P. Sloan Foundation, 2014/2015. This academic year, her research program trained and supported three doctoral students, one master’s student, and three undergraduate students. She also served as chair of tenure and promotion for the School of Public Policy. Dr. Fox brought to the national forefront issues of diversity, equity, and excellence in science and engineering through her work, in the prior period, with advisory boards and panels including those of/as:

- Social Science Advisory Board of the National Center for Women and Information Technology.
- Advisory Board for “Talking About Leaving Revisited: Exploring Current Patterns of Undergraduate Persistence in the Sciences,” University of Wisconsin-Madison and University of Colorado-Boulder, funded by NSF and Sloan Foundation.
- Advisory Board, Expanding Computer Education Pathways Alliance, Commonwealth Alliance for Information Technology.
- Editorial Advisory Board for the leading journal, *Social Studies of Science*.
- Co-organizer and presider, session on “Science, Technology, and Medicine,” American Sociological Association.
- Elected Member of the Council on Science, Knowledge, and Technology, American Sociological Association.

Beril Toktay, ADVANCE Professor in the Scheller College of Business

L. Beril Toktay is Professor of Operations Management and the Brady Family Chairholder in the Scheller College of Business at the Georgia Institute of Technology. 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 continued being accepted for publication in high-impact journals such as *Management Science*, *MSOM*, and *Production and Operations Management*. She advises several graduate students. In the 2014-15 academic year, she graduated one PhD student who got an Assistant Professor position at Boston College. She presented her work at several national and international meetings, and participated in the INFORMS Job Search Panel in 2014. Recent seminar invitations include MIT, Harvard, Carnegie Mellon and Kellogg. Professor Toktay has high-profile external service commitments that bring visibility to Scheller College. In 2014-2015, she served as Area Editor or Associate Editor of leading journals in her field (OR, MS, and MSOM).

Professor 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.

II. The Equity, Diversity and Excellence Initiative

To further develop, implement, and promote the Equity, Diversity, and Excellence Initiative

(EDEI), each ADVANCE Professor worked closely with her college Dean and leadership team, while also collaborating as a group with the Office of Institute Diversity (OID). Below are the highlights of each Professor's work in their college, and then of their collective activities.

Catherine Ross, ADVANCE Professor in the College of Architecture

The College of Architecture ADVANCE program (COA - ADVANCE) has created a work program around recognizing the value of women in the College, ensuring equitable search and hiring decisions, promoting a positive work environment, and studying the barriers to entry and advancement for women in this academic setting. The following specific actions have been implemented to further EDEI:

a. Transparency:

- Dr. Ross met monthly with COA female faculty to discuss promotion and tenure guidelines; to respond to issues they identified and lastly to connect them with each other. The role of Research Scientists has been a major point of discussion particularly making the guidelines for promote clearer and to develop a more inclusive environment.

b. Mentoring:

- Dr. Ross convenes monthly luncheons with female faculty members to evaluate the extent to which mentoring is taking place. The College has adopted a policy that identifies two faculty members to mentor an untenured faculty member.
- To improve the work environment, COA-ADVANCE continues using its first monthly meeting (Monthly Luncheon Program) to welcome new female faculty through a structured outreach initiative. The Distinguished Speakers Program sponsors symposia featuring outstanding women from different backgrounds. Distinguished Guest speaker: Gail Evans (Play Like a Man, Win Like a Woman: What Men Know About Success that Women Need to Learn) gave an outstanding talk. In addition COA-ADVANCE partners with and supports the Atlanta Day Shelter for women and children as a college wide effort college bringing junior and senior women together and others in the college.

c. Networking and Team Building:

- To promote excellence and talent in the college, COA-ADVANCE presented four Women of Excellence Awards to: Professor Pardis Pishdad-Bozorgi for *COA-ADVANCE Women of Excellence Faculty Award (\$1500)*, Ms. Angelika Braig, *COA-ADVANCE Women of Excellence Staff Award (\$500)*, Ms. Ai-Lien Vuong, *COA-ADVANCE Women of Excellence Graduate Award (\$500)*, and Ms. Shaowen Zhang, *COA-ADVANCE Women of Excellence Undergraduate Award (\$500)*. Every year four women are honored.

d. Bias Awareness:

- During the 2014/2015 hiring season, Dr. Ross was part of the SCARP Faculty Search Committee, ensuring that questions related to still existing issues such as disparities in promotion and tenure practices, proportion of women in full professorships, allocation of duties, informal departmental communication and interaction, and expectations regarding personal or family life were given consideration in the candidates' selection process. She was also on the School of Architecture Chair search committee. Discussion of bias awareness was central to both search efforts.

- COA-ADVANCE partnered with the Common First Year program to initiate an interactive public art project to invite people to share their aspirations for the COA. Artist Candy Chang's installations, including "Before I die I want to ____", served as inspiration. For four weeks, students, faculty, and visitors left 203 anonymous comments on labels on the main exhibition wall in the centrally located East Atrium. All were invited to fill in the blank: "I wish there was _____ in the COA". The majority of the comments related to issues of culture, such as gender diversity, career preparation, and student/teacher relationships. Other popular topics that surfaced were related to comfort, such as space design and resources. Several shared their appreciation for this space in which they felt heard and supported by the community and its shared ambitions.

Dana Randall, ADVANCE Professor in the College of Computing

In the College of Computing (CoC), Dr. Randall focused on the following areas in EDEI:

Transparency: Dr. Randall worked with other CoC faculty to develop policies and processes for research scientists more clear and transparent. She met with all of the women research scientists to discuss the process for promotion and perceptions of their status within the college and started inviting them to meetings with women faculty.

Mentoring: Dr. Randall continued to run the mentoring program in Computer Science and oversee mentoring across the College of Computing. ADVANCE funds were provided for all mentor / mentee pairs in CoC to have lunch once per semester. She initiated "mentoring / networking breakfasts" for junior faculty in the CoC (male and female). Periodically she meet with junior faculty and a few senior faculty, chosen according to the topic. Topics so far have included mentoring and teaching.

Networking and community building: Dr. Randall initiated a new distinguished lecture series in Computer Science, the Mary Jean Harrold Memorial Lecture. In November 2014, Deborah Estrin came as our first speaker. She organized networking lunches for women faculty in CoC. These have been very well attended and have included half to a third of the women in CoC. She also participated in periodic meetings with the PhD students in CoC.

Bias awareness: She participated on a panel on "Women and TEchology: Real World Challenges and Issues" organized by the Marconi Society during Vint Cerf's visit to Georgia Tech, March 2015.

In addition, Dr. Randall has engaged in the following external outreach diversity activities:

- Panelist for "Effective Self-Promotion to Advance Your Career in Mathematics" at the annual Joint Mathematics Meetings, January 2015.
- Guest at the AWM chapter at Purdue University leading a discussion on self-promotion and leaning in, January 2015.
- External equity reviewer for Canadian Excellence Research Chair evaluating the quality of the institutional recruitment process, Summer 2014.

Pinar Keskinocak, ADVANCE Professor in the College of Engineering

In College of Engineering, Dr. Keskinocak initiated, continued, or participated in the following activities:

Community building: Organized five lunches with women faculty in CoE, to obtain feedback on the EDEI and to informally discuss other topics of interest and relevance to ADVANCE.

Mentoring:

- Organized two resume “speed dating” mentoring sessions, for CoE faculty going through third year critical review (Fall 2014, 13 mentors and 10 mentees) and tenure & promotion (Spring 2015, 6 mentors and 7 mentees). The feedback from participants on both of these events has been very positive.
- In October 2014, co-organized a mentoring panel discussion “Raising an Academic Family,” and participated as a speaker together with Professors Mary Ann Weitnauer and Andrea Thomaz. Co-organizers of this event were the graduate women in School of Aerospace Engineering (thanks to the leadership of Karen Feigh). The event announcement was sent to Ph.D. students in CoE and in CoC, and also to female faculty in CoE. There were around 60 participants, a nice mix of faculty and Ph.D. students (both male and female).
- Participated as a “mentor” in the CoE junior faculty mentoring program organized by Associate Dean Kim Kurtis.
- Continued to serve as a Women, Science, and Technology (WST) Learning Community mentor.
- Mentored and advised individual faculty on issues of family leave, faculty development, and advancement
- Participated as a speaker in 3 sessions in the Future Faculty Workshop (June 2015) organized by Rosario Gerhart <http://diversity.gatech.edu/2015-future-faculty-workshop>

Transparency:

- Provided recommendations to the incoming ISYE Reappointment, Promotion & Tenure (RPT) committee and the ISYE school chair regarding the ISYE RPT policy. The recommendations suggested the following updates to the ISYE RPT policy:
 - Each committee member takes the implicit bias awareness test <https://implicit.harvard.edu/implicit/takeatest.html>
 - The committee jointly watches the NSF video on bias awareness and has a short discussion to reflect on the information
- Regularly informed CoE women faculty about events, publications, etc. related to career development, bias awareness, leadership, etc.

Wing Suet Li, ADVANCE Professor in the College of Sciences

In College of Sciences, Dr. Li continued her efforts through the following activities:

1. Creating a network:

- Dr. Li continued the College of Sciences (CoS) women faculty monthly lunch. Often to accommodate the very demanding schedule of these women faculty, she schedules two luncheons in one month. These lunches allow women faculty to exchange ideas, inform others on their new challenges, get to know each other, and form a support network among themselves.
- Dr. Li hosted an end of the year reception for all the CoS women faculty.

2. Mentoring: the college started a new format for the college-wide mentoring program. The Dean’s office organizes monthly breakfast meetings for all the Assistant Professors in their

first two years in the college with a different theme for each meeting. Dr. Li participated in three of these meetings focused on P&T procedures. In addition, Dr. Li ensured that all female faculty members understand and are well aware of all the P&T procedures in their schools and in the college.

3. Inviting outside experts to visit Georgia Tech: in fall 2014, School of Physics, CoS and Dr. Li co-sponsored the invitation of Dr. Rachel Ivie from the Statistical Research Center of the American Institute of Physics. Her public lecture, *Toward Progress for All: Statistics on the Physics Community*, was well attended. Dr. Ivie also met with female postdocs and graduate students to talk about gender issues during the visit.
4. Data collection: Dean Goldbart, Associate Dean Kubanek, and Dr. Li regularly review and discuss the hiring and P&T data in the college. Looking at the college P&T and hiring data during the last five years, it is easy to see that progress has been made, yet there are still areas that require much work. During each of the last three years, about 25% to 50% of the new hires were women and during the last five years, no female faculty in the college came up for promotion were denied. Currently there are 19% of faculty in the college are female, with 26%, 25%, and 12% of them Assistant Professor, Associate Professor, and Full Professor, respectively.
5. Pilot program for spousal career consultation: During Spring 2015, the College of Sciences is conducting a pilot program aimed at helping prospective faculty members with partners who will be seeking employment in the Atlanta area. CoS partnered with Ken Ferguson of Berkshire Recruiting Services to offer a consultation with faculty candidates' partners about the Atlanta employment market focusing on their profession and skills as well as strategies and tactics for entering the Atlanta job market. Ken has 33 years recruiting, job search, and career planning experience with 20 of those years in Atlanta. Our goal is for candidates' partners to gain a better understanding of Atlanta's employment landscape making his/her job search process easier. The cost of this initial consultation (approximately one hour by phone, Skype, or in person) will be paid by the College of Sciences ADVANCE Professorship.
6. Other notable activities in the college:
 - The Diversity Council in College of Sciences: working closely with college's leadership, Drs. Goldbart and Kubanek redesigned the function and the charge of the Diversity Council and Mentoring Program for the college. Dr. Li acted as one of the ex-officio for the Diversity Council.
 - Dr. Li offered her time to school chairs to meet with their women job candidates (one school chair outside of Math took her offer).
 - With support from the Dean's office, Dr. Li continues to distribute the tri-fold pamphlet that highlights the Institute and College family friendly resources, given to prospective faculty when they come for the campus interview.
 - Dr. Li sponsored the CoS Mentor Awards. This year's winners were Professors Shui-Nee Chow of Mathematics, Jennifer Curtis of School of Physics, and Wendy Kelly of School Chemistry and Biochemistry.
7. Other notable activities outside of College of Sciences.
 - Was invited as a member of the faculty discussion panel for the 2015 Reunion Leadership Conference.
 - Appointed on the Task force for the Future Workforce.

- Be an external equity reviewer for Canadian Excellence Research Chair evaluating the quality of the institutional recruitment process (Summer 2014).
- Participated as a speaker in 3 sessions in the Future Faculty Workshop (June 2015) organized by Rosario Gerhardt.

Mary Frank Fox, ADVANCE Professor in the Ivan Allen College

In Ivan Allen College, Dr. Fox undertook the following activities:

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 each ADVANCE initiative, including the IAC ADVANCE Network of Faculty and the finalization of the IAC Handbooks.
 - c. Supported (as a co-sponsor) the 10th Annual Latino Welcome Week-end (August 2014).
2. Transparency, equitable culture, and accountability
 - a. With the leadership of IAC Dean Royster, partnered toward the annual ADVANCE Annual Deans' Report.
 - b. Served as chair and organizer of an IAC Committee on Schools' Handbooks, constituted by Dean Royster, and saw to conclusion the IAC Handbooks, now posted on the Schools' websites.
3. Mentoring, transparency, and equitable culture
 - a. Organized and hosted two IAC ADVANCE Lunch/Discussions on:
 - i. "Productive Faculty Outcomes: Success with Multiple Roles" (Nov 2014) with IAC Dean J. Royster, and panelists, Diana Hicks (PubPolicy), Lauren Klein (Literature, Media, and Communication), and Margaret Kosal (International Affairs).
 - ii. "Creativity and Productivity in Publishing Books" (Feb 2015) with IAC Dean J. Royster, and panelists, Jin Liu (Modern Languages), Kristie Macrakis (History, Technology, and Society), and Carol Senf (Literature, Media, and Communication).
 - b. Researched and developed a listing, with links, of "Professional Development Opportunities for Faculty" (October 2014), appearing on the IAC website.
 - c. Designed a survey with IAC Dean Royster on IAC faculty members' interests in, and preferences toward, IAC writing for publication groups (April 2015); and based on results, identified conveners for the writing groups, and organized an inaugural lunch/discussion with conveners and participants for June 10, 2015. This gets underway a new initiative on IAC writing groups.
 - d. 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.
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 – that contains links to i) initiatives/units at Georgia Tech (pertinent to women, science, and engineering); ii) professional societies and associations of/for women in science and engineering; and iii) resources on women, science, and engineering: data, bibliographies, and references.
 - c. Mentored and advised faculty across six Schools of IAC through meetings with individual IAC faculty members on issues of family leave, faculty development, and advancement.

Beril Toktay, ADVANCE Professor in the Scheller College of Business

In 2014-15, Beril Toktay served on the Scheller College's Strategic Planning Committee and contributed to defining and articulating the following key goals: *Foster a diverse, inclusive, vibrant, and innovative community of students, faculty, staff and alumni*; and *Attract, develop, and retain a diverse pool of world-class faculty*.

In 2014-2015, Beril Toktay chaired the Scheller College EDE Task force. The task force combined information from the Georgia Tech Climate Survey, the Dean's reports, an additional internal survey, and meetings with faculty to develop a set of objectives and tactics following the outline of the EDEI Initiative and in strong support of the Strategic Plan. The findings and recommendations were shared with the College leadership. Clearly, the EDEI initiative is very well aligned with the Strategic Plan and the work done by the Task Force to transpose this initiative into our College will provide an excellent starting point for our College's new leadership. Going forward, Professor Toktay expects to collaborate with College leadership to translate the task force recommendations into specific actionable items in support of the strategic plan implementation.

In addition to the leadership of this task force, Beril Toktay:

Mentoring

- Organized lunches with women faculty in Scheller
- Participated in a career panel at the INFORMS conference
- Organized a speed review session for faculty preparing their 3rd year review packets. 12 of the 14 junior faculty participated in this session and each got input from 3 tenured faculty on how to best position their work. The feedback was very positive.
- Mentored and advised individual faculty on issues of family leave, faculty development, and advancement.

Transparency:

- Supported presentation by P&T Committee Chair to junior faculty to explain the P&T process.

Data Collection and Accountability:

- Collected and presented data on lateral hires versus rookie hires in terms of diversity to the College's new leadership. The data shows that since 2008, 12 faculty were hired at

the non-rookie level. All were non-URM men. Lateral hires on the whole are more likely to determine the long-term diversity of the College because they are either tenured hires or tenure-track hires with already demonstrated potential. They can also be an opportunity to consciously target high-performing candidates of diverse backgrounds. This data was integrated into the Task Force Recommendation report with the recommendation to develop a coordinated strategy for non-rookie hiring that emphasizes diversity.

The ADVANCE Team, collectively.

During the reporting period, the ADVANCE team accomplished the following collectively:

Provost and Deans Meeting:

The ADVANCE Professors analyzed the Dean's reports for the 2013-2014 reporting period across Colleges, focused on trends, progresses, and needed focused areas for the 2014-2015 academic year. In October, the ADVANCE Professors met with Provost Bras and leaders from all colleges to discuss ADVANCE's finding. One of the outcomes of the meeting is the commitment of implementing a Bias Awareness Training in 2015-2016 academic year. Our goal is to use the meeting to share information and recommendations about what we believe would be valuable to pay specific attention to in their Colleges.

Bias Awareness Workshop preparation:

The Associate Vice President of Institute Diversity, Dr. Julie Ancis, agreed to develop a workshop to support the Bias Awareness component of the EDEI. The ADVANCE Professors worked closely with Dr. Ancis to provide feedback and suggestions. They also provided the financial support of a Graduate Assistantship to assist Dr. Ancis' work. Dr. Ancis' task was to assemble the relevant literature of Bias Awareness together and prepare a presentation for an engaging, thought provoking, and interactive workshop to hiring committees across the campus. The ADVANCE Professors met with Dr. Ancis monthly during the academic year toward the preparation of the Bias Awareness workshop. The ADVANCE Professors also helped Dr. Ancis to form a Faculty Advisory Committee for the preparation. This is an ongoing process. The goal is to have a dry run with a small group of faculty by the end of the summer. An online survey will subsequently be sent to participating faculty to assess effectiveness and solicit input. After any subsequent iterations, if needed, to ensure the style and format will work effectively for Georgia Tech faculty, the workshop will be rolled out some time during the 2015-2016 academic year.

Workshop:

In March 2015, led by ADVANCE Professor of CoE, Dr. Keskinocak, the ADVANCE Professors organized the workshop *Get Your Voice On the Table: Leadership Strategies for Women Faculty* for the institute women faculty. For effectiveness, we limited the number of registrants and ~30 women participated. The feedback has been overwhelmingly positive (please see the Appendix at the end of this report for some of the specific comments) . <http://www.isye.gatech.edu/news-events/events/calendar/day/4842>. We plan to organize follow-up events moving forward.

Distinguished Visitors:

In April 2015, led by CoS ADVANCE Professor Dr. Li, working closely with Dr. Keskinocak, the Colleges of Engineering and Sciences, invited Professor Mel Hochster, prominent researcher in mathematics, member of National Academy of Science and National Academy of Arts and Sciences, one of the founding members of the University of Michigan STRIDE committee, to come to Georgia Tech, meet with groups of faculty, Deans of College of Engineering and College of Sciences, and other state holders of diversity on campus, give a public lecture titled: *Women in STEM Disciplines: Lessons from Mathematics*. It was well attended, drew a large diverse audience. He also held a round table discussion with a group of School Chairs on *Strategies to achieve a more diverse faculty*, met with Dr. Ancis to share his experience as a member of the STRIDE committee, and with a group of women faculty from CoE and CoS.

III. Future Steps and Recommendations

ADVANCE Professors will continue to promote the advancement of women at Georgia Tech by:

- Completing the Bias Awareness workshop design and implementation stage.
- Working closely with their respective Deans and college leadership to advocate and support equity, diversity, and excellence. ADVANCE Professors will look into ways to improve the Dean's report and to track trends more effectively. They will also examine the data related the spousal hires.
- Working closely with women faculty in their college and more broadly at Georgia Tech to create networks for them to advance and to support their advancement. During the past year, with various degrees of coordination among ADVANCE Professors and other groups, there were several such lectures. In the future, there will be more inter-college talks and lectures by outside experts, and with the help of the OID's communication director these lectures will be broadly advertised and have higher institute-wide impact.
- Collectively seeking opportunities for developments from potential donors and funding from granting agencies.
- Proposed activities for next year include:
 - a. Deans' Meeting in September: Prior to this meeting, the ADVANCE Professors will undertake an analysis of the Dean's reports across Colleges, specifically focusing on any developments since last year. The goal is to use the meeting to share information and recommendations about what we believe would be valuable to pay specific attention to in their Colleges.
 - b. Focus on bias awareness training workshop, its design and implementation.
 - c. Continue developing the EDEI and ADVANCE websites.
 - d. Workshops on topics of interest to women faculty, e.g., leadership.

The ADVANCE Professors recommend that Georgia Tech administrators continue to work toward policies that are supportive of women on the campus, including:

- Appointing more women to chaired positions, professorships, and positions of prominence.
- More transparency in dual career and leave policies within the colleges.
- Recommendation that all members of RPT and Hiring Committees and members of the administration, participate in workshops and other bias awareness training.
- Continuing efforts toward family friendly policies, such as back-up care and flexible scheduling, wherever possible.

- Continuing data collection, especially on senior leadership positions across the school, college, and the institute levels, to advocate and promote a greater representation of women and under-represented groups at these key positions.

Appendix: Feedback on the Leadership Workshop “Get Your Voice on the Table”

I thought the workshop was spot on! It was great to have time set aside to examine many issues that I was aware of but which I don't usually have time to think about. Even better was that we were given strategies to move forward.

Can you please organize a longer version of this? Maybe over the summer or the Breaks? Alternatively, can you please consider a leadership course for faculty? There are so many teaching fellowships but no leadership fellowships geared towards faculty (And specifically women faculty).

I'd love to see a future event that would encourage active collaboration among women faculty members.

I would prefer a series of specific events. ... I'd like to see it divided into topics and with enough time to practice the implementation

Develop a set of several classes focused on role playing and drama for teaching. Are there any men-driven workshops for women than help women to see what men see at the meetings, etc.?

Would love to have a regular series of these to help develop skills, and provide arena for sharing what we're trying, what's working and what's not. This was a real shot in the arm. Many, many thanks!!!

I would love to have more workshops just like this one, but where we can hone in on a specific issue and maybe do some role playing, etc to imprint strategies to succeed. I also think the workshop was very successful because it brought together a group of women who aren't usually together; it helped me to hear that other faculty have similar issues and concerns to my own. Like I said above, I believe the facilitator of the event was stellar. I know several faculty who canceled all of their meetings and stayed for the entire thing because she was doing such a good job (including me). I think it made a real impact and that similar workshops, maybe one every quarter could continue to make a difference. The summer might be a good time to do another one because many women stay in town because of family, etc. , yet their schedules are less cramped.

Most useful: tips for stabilizing my voice, reminders that leadership is not always about consensus, the process of presenting your point, interruption, body language,... I almost wish it was a longer workshop and more interactive

The fact that the Institute supports ADVANCE enough to hold such a workshop was notable itself. Thank you!!! Reframing leadership in this adaptive model was very useful, as were the specific pointers about posture, interrupting methods, etc... Least useful was the working through the problem identified; some were useful in our group, but we couldn't get our heads around some of them in the short time.

The facilitator was very inclusive and encouraged all to speak. I thought the facilitator did an excellent job at providing individuals with the time to express their respective thoughts while also being well aware of the time constraints.

As someone trained in the theater, Nancy Houfek was familiar with strategies for using our bodies and our voices to interact with other people. It certainly helped me to see beyond the parameters of my own head. And I loved the concrete strategies.