# CRA-W CAREER MENTORING WORKSHOP MARCH 8 - 11, 2017



# SEATTLE WASHINGTON

Washington State Convention Center



# Welcome to the CRA-W Early Education Workshops



The purpose of the workshops is to provide you with support to further develop your career. Our aim is to increase the number of women who advance to the top of career tracks in education.

Women often find themselves a minority in their own departments, having few female colleagues and role models, and concerned about their potential for success. Our aim is to provide critical mentoring information and advice on a wide range of topics for graduate students and early career faculty in Computer Science and Engineering.

We have prepared programs to address many facets of career development. For the parallel sessions, please feel free to attend the session for your workshop in the track that appears to be most useful to you – regardless of the label. We have also built in breaks and meals for you to get small group mentoring.

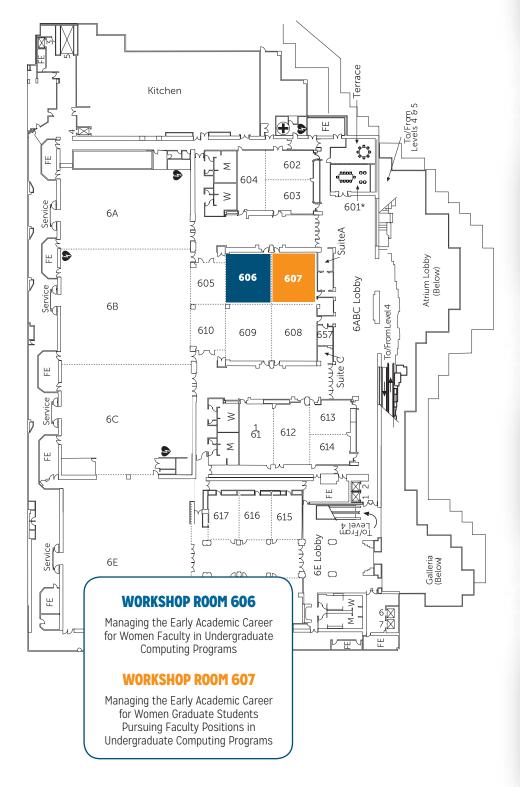
The speakers for our workshops are an exceptional group of senior women who are here to help you. Please take every opportunity to meet other participants and the speakers, and build your own professional network.

These workshops would not be possible without the funding and support from the National Science Foundation and the Computing Research Association (CRA). We would especially like to thank Erik Russell and Melissa Borts from CRA who helped with the organization and the logistics of the workshops.



# **Workshop Locations**

# **Washington State Convention Center**



# Workshops At-A-Glance

Managing the Early Academic Career for Women Graduate Students Pursuing Faculty Positions in Undergraduate Computing Programs (Room 607)

Managing the Early Academic Career for Women Faculty in Undergraduate Computing Programs (Room 606)

computing Programs (Room 607)				
7:30 a.m.	Registration and Breakfast	7:30 a.m.	Registration and Breakfast	
8:00 a.m.	Welcome Speaker: Sheila Castaneda	8:00 a.m.	Welcome Speaker: Andrea Danyluk	
8:30 a.m.	Mentoring 101 Speaker: Jodi Tims	8:30 a.m.	<b>Promotion to the Next Level</b> <b>Speakers:</b> Ellen Walker / Lynn Andrea Stein	
9:15 a.m.	Research Strategies Speaker: Kelly Shaw	9:15 a.m.	Being an Effective Leader Speaker: Jennifer Burg	
10:00 a.m.	Break	10:00 a.m.	Break and Networking	
10:30 a.m.	Finding the Right Job Speaker: Ingrid Russell	10:30 a.m.	Managing Down/Up - Students/Chair/Dean Speaker: Ellen Walker	
11:15 a.m.	Networking Strategies Speaker: Sheila Castaneda	11:15 a.m.	Mentoring 101 Speaker: Gloria Townsend	
11:45 a.m.	Lunch / Networking	11:45 a.m.	Lunch / Networking	
1:00 p.m.	Teaching Survival Tactics Speaker: Shannon Duvall	1:00 p.m.	Effective Teaching, Class Management	
1:45 p.m.	Life Balance in an Academic Research Environment		Speaker: Lori Pollock	
2:30 p.m.	Speaker: Lisa Landgraf  Break and Networking	1:45 p.m.	Leading Initiatives, Building Programs Speaker: Lynn Andrea Stein	
3:00 p.m.	Promotion and Tenure	2:30 p.m.	Break	
5.00 p.m.	Speaker: Jodi Tims	·		
3:45 p.m.	Q&A Discussion w/ Panel members	3:00 p.m.	Academic Negotiation Speaker: Dianna Xu	
	<b>Speaker:</b> Sheila Castaneda w/ panel	3:45 p.m.	Q&A Discussion w/ Panel members Speaker: Andrea Danyluk w/	
5:15 p.m.	Wrap-up and evaluations Speaker: Sheila Castaneda		panel	
5:30 p.m.	Workshop ends	5:15 p.m.	Wrap-up and evaluations Speaker: Andrea Danyluk	

5:30 p.m.

**Workshop ends** 

# Early-Career Mentoring Workshops

### **Room 607 • GRAD STUDENTS**

7:30 a.m. **Registration and Breakfast** 

8:00 a.m. Welcome

Speaker: Sheila Castaneda

8:30 a.m. **Mentoring 101** 

Speaker: Jodi Tims

We will explore how to find a mentor and how to be a good mentor. We will discuss building mentor relationships, challenges and barriers in

mentoring others.

9:15 a.m. Research Strategies

**Speaker:** Kelly Shaw

Figuring out how to manage the limited time you have for research productively is a challenging problem! In this talk, I'll discuss different approaches you can take for constructing your research plan and creating a set of research collaborators. The talk will also include some practical tips for working with students productively, publishing your work in a way that works for your college or university, and finding funding opportunities for your research and collaborations.

10:00 a.m. Break

10:30 a.m. Finding the Right Job

Speaker: Ingrid Russell

FFor participants on the job market or planning to be on the job market: What can you do to start preparing? What career path options are available? What do employers value? What goes into a job application? What should you expect during an interview? What are you supposed to do after the interview? If you are lucky enough to have multiple offers, how do you choose between them? What is "negotiation" and what can it do for you? In this session, we will discuss these and other related topics, share relevant experiences, and answer your questions.

11:15 a.m. **Networking Strategies** 

Speaker: Sheila Castaneda

Conferences provide a wide variety of ways to expand the scope of people that can help you to further your career. In this talk we will explore ways of making professional connections and using them wisely.

11:45 a.m. **Lunch / Networking** 

1:00 p.m. **Teaching Survival Tactics** 

**Speaker:** Shannon Duvall

In the "Using the Classroom as Your Research Study" session, participants will learn practical tips for effective Computer Science teaching. We will discuss current pedagogy theories and strategies for what to do when things don't go as intended. Best practices for conducting education research will be given so that participants can turn their classroom endeavors into teaching and learning scholarship.

1:45 p.m. Life Balance in an Academic Research Environment

Speaker: Lisa Landgraf

Academia is a demanding profession. For many of you who will hear this talk you understand the rigors of research. That task alone can be time-consuming. As a new instructor you will have many other time consuming activities such as class prep, teaching, and students. Where is the time for your life outside of the academic environment? I hope to be able to offers some advice and wisdom from the perspective of 22 years of working in higher education.

2:30 p.m. **Break and Networking** 

3:00 p.m. **Promotion and Tenure** 

Speaker: Jodi Tims

This session discusses the promotion and tenure process and stresses consistent planning as a key for a successful outcome. Challenges along the road to promotion and tenure that one may face and strategies for handling them will be discussed.

3:45 p.m. **Q&A Discussion w/ Panel members** 

**Speaker:** Sheila Castaneda w/ panel

5:15 p.m. Wrap-up and evaluations

Speaker: Sheila Castaneda

5:30 p.m. Workshop ends

### **Room 606 • FACULTY**

7:30 a.m. **Registration and Breakfast** 

8:00 a.m. Welcome

Speaker: Andrea Danyluk

8:30 a.m. **Promotion to the Next Level** 

Speakers: Ellen Walker / Lynn Andrea Stein

Understanding the process of promotion and tenure proves difficult and stressful for most early career academic professionals. This session attempts to take some of the mystery out of the process and provides practical advice for developing a successful promotion and tenure portfolio. One of the primary takeaways is to begin early and develop the portfolio over multiple years in a manner that emphasizesthe candidate's strengths and reflects on professional growth during the pre-tenure years. Challenges along the road to promotion and tenure that one may face and strategies for handling them will also be discussed

9:15 a.m. **Being an Effective Leader** 

Speaker: Jennifer Burg

What is leadership? What does it take to become a leader? Why is it important to be seen as a leader? This panel will cover strategies for building and being recognized for your leaderships kills. It will also cover strategies for building a long-term leadership role at your institution, such as building consensus and recognition of others.

10:00 a.m. Break

10:30 a.m. Managing Down/Up - Students/Chair/Dean

Speaker: Ellen Walker

All of us are managers and have managers. This session will discuss strategies for managing in an academic environment. It will cover managing student researchers/classes/TAs. It will also cover strategies for managing up in interactions with chairs, deans, etc.

11:15 a.m. **Mentoring 101** 

**Speaker:** Gloria Townsend

Being a mentor and having a mentor are two of computing's requirements. Both activities give meaning to careers and enrich lives. We will explore all aspects of mentoring, including: categories of mentoring, strategies for acquiring mentors and mentees, tips and rules for being a good mentor and mentee, and benefits of mentoring and being mentored. There will be time for Q&A and for a role-playing activity.

11:45 a.m. **Lunch / Networking** 

1:00 p.m. **Effective Teaching, Class Management** 

Speaker: Lori Pollock

An interactive session focused on the participants' choice of topics, including: How to plan, manage, and assess a CS course, particularly with collaborative projects; dealing effectively with large enrollments; active learning techniques in CS classes, addressing teaching evaluations.

1:45 p.m. **Leading Initiatives, Building Programs** 

Speaker: Lynn Andrea Stein

This panel will address how to help your institution make a change either due to your own interests or because your management asked you to lead a change. Identifying and pursuing change can provide a feather in your cap but it can just as easily go wrong. This discussion will present strategies for building support for a change and eliminating resistance. A major part of successfully leading change is negotiating up-front for the support you need to be successful.

2:30 p.m. **Break and Networking** 

3:00 p.m. **Academic Negotiation** 

Speaker: Dianna Xu

Once you have your faculty position, how can you ensure that you have all you need - students to work with, professional development, travel support, etc.? This discussion will focus primarily on advice about time and life management in the early years through negotiations. Topics include how and when to ask, how to say no, how to find resources and mentoring, and how to avoid and/or choose conflicts, etc.

3:45 p.m. **Q&A Discussion w/ Panel members** 

**Speaker:** Andrea Danyluk w/ panel

5:15 p.m. Wrap-up and evaluations

Speaker: Andrea Danyluk

5:30 p.m. Workshop ends

# Workshop Speakers

# Jennifer Burg Wake Forest University



Dr. Jennifer Burg received Master's degrees in French and English from the University of Florida in 1976 and 1977. After teaching these subjects for several years, she went on to pursue a PhD in computer science, receiving this degree from the University of Central Florida in 1993. Dr. Burg has been teaching computer science at Wake Forest University since 1993, achieving the rank of full professor in 2009. Burg's work is focused on developing innovative curriculum material that integrates digital media - imaging, audio, and video - into computer science education. She

is currently the principal investigator on two National Science Foundation grants, one of which is an inter-campus collaboration with the University of North Carolina School of the Arts. Burg's textbook, The Science of Digital Media, was published by Prentice-Hall in 2008. Burg's personal interests are bird watching and films of the 1930s and 1940s.

### Sheila Castaneda

Clarke University



Sheila Castañeda is Professor Emerita of the Computer Science Department at Clarke University, Dubuque, Iowa. She received her MS in Computer Science from The University of Wisconsin - Madison in 1979 and taught at Clarke University until her retirement at the end of 2014. Her professional interests include computer science education, programming languages and database systems. She is a member of the Computer Research Association's Committee on the Status of Women in Computing and is co-director of the Early Career Mentoring Workshops

- Education (CMW-E). She is a member of the lowa STEM Statewide Computer Science Workgroup working to establish more computing opportunities in lowa schools. She is also a member of the Sister City Relationship Advisory Commission for the City of Dubuque. She is married and has four grown children and three granddaughters. Away from the office she enjoys traveling, gardening, baking, sewing and of course spending time with her family.

### **Andrea Danyluk**

Williams College



Andrea Danyluk is the Dennis A. Meenan '54 Third Century Professor of Computer Science at Williams College. She received her A.B. from Vassar College in 1984 and her Ph.D. from Columbia University in 1992, and was a researcher at NYNEX (now Verizon) before joining the faculty at Williams in 1994. At Williams she has served as Department Chair as well as Acting Dean of the Faculty. Danyluk's research interests are in machine learning. In addition to publishing in this area, she has served as both Program co-chair and General Chair of ICML. Danyluk is also active in CS education. She is a

co-author of Java: An Eventful Approach, with Kim Bruce and Tom Murtagh, and was a member of the ACM / IEEE Task Force on CS Curricula 2013. She is currently a member of the ACM Education Council. At Williams she regularly teaches CSI as well as courses in AI and Machine Learning at all levels. She is also a member of the Cognitive

### **Shannon Duvall**

Elon University



Shannon Duvall is an Associate Professor of Computer Science at Elon University in Elon, NC. She teaches courses at all levels of the curriculum, from introductory programming through Artificial Intelligence and Graphics & Games Programming. She is active in the Computer Science Education community, especially with work on "Kindergarten Computer Science," making Computer Science accessible and fun to learn. Her other research interests include Accessibility, Serious Games, and Natural Language Dialog Systems. She is wife to Robert Duvall and mom to seven-year-old Lilliana.

Science program. She joined CRA-W in 2008, where her projects focus primarily on undergraduate research mentoring.

**Lisa Landgraf** *University of Wisconsin - Platteville* 



Dr. Lisa Landgraf received my Bachelors degree in Computer Science from Iowa State University in 1980. Then Dr. Landgraf I worked in Industry for about 15 years. She was a programmer and was promoted to "data processing center" manager at a small college. Then Dr. Landgraf worked as a consultant, programmer, analyst and trainer. Her Master's degree in Computer Science came in 1995 from the University of Iowa. She started teaching at that time. I received my PhD in 2005 from Nova Southeastern University in Information Systems. Dr. Landgraf taught in a small private liberal

arts college and have been at the University of Wisconsin - Platteville for 15 years. She has been the PI for two NSF S-STEM grants and some of her research has been directly related to those grants. Dr. Landgraf was asked to start up a new department called the Instructional Center for Educational Technologies at Platteville, but because of budget cuts, that department merged with the Scholarship of Teaching and Learning office on campus, and she went back to academia after 18 months. Dr. Landgraf was promoted to Full Professor in 2016 and this year became the first woman chairperson of the Computer Science and Software Engineering department at UW- Platteville.

# **Lori Pollock** *University of Delaware*



Dr. Lori Pollock is Alumni Distinguished Professor in Computer and Information Sciences at the University of Delaware and ACM Distinguished Scientist. Her research focuses on software artifact analyses for easing software maintenance, testing, and developing energy-efficient software, code optimization, and computer science education. She leads a team to integrate CS into K-12 through teacher professional development in the CSIOK national efforts. She was awarded the ACM SIGSOFT Influential Educator award 2016 and University of Delaware's Excellence in

Teaching Award, E.A. Trabant Award for Women's Equity in 2004. She serves on the Executive Board of the Computing Research of Women in Computing (CRA-W), which was honored with the National Science Board's 2005 Public Service Award to an organization for increasing the public understanding of science or engineering.

# Susan Rodger Duke University



Susan Rodger is a Professor of the Practice in the Department of Computer Science at Duke University. Over twenty years ago, she was a faculty member in the Computer Science Department at Rensselaer Polytechnic Institute. She received her PhD in Computer Science from Purdue University, and her B.S. in Computer Science and Mathematics from North Carolina State University. Her research is in visualization, algorithm animation, and computer science education. She has developed JFLAP, software for experimenting with formal languages and

automata. JFLAP was recognized as one of two finalist candidates in the NEEDS Premier Award for Excellence in Engineering Education Courseware in 2007. Rodger leads the Adventures in Alice Programming project and has taught computing to over 300 K-12 teachers. Rodger has supervised over eighty undergraduate students in research projects. Rodger is a member of the SIGCSE Board as immediate past chair, and is a member of the CRA-W Board and the ACM Education Policy Committee. She is an ACM Distinguished Educator and a recipient of the ACM 2013 Karl V. Karlstrom Outstanding Educator Award.

# **Ingrid Russell** *University of Hartford*



Ingrid Russell is Professor of Computer Science at the University of Hartford. She has served in several leadership positions, including an Associate Dean in the College of Arts and Sciences and Vice Chair of the Faculty Senate. In addition, she has worked in consulting capacities including software development, research and development, and educational consulting. Her research interests are in the areas of machine learning, data mining, and computer science education. Her research has been funded by the National Science Foundation, National Aeronautics

and Space Administration, and the Connecticut Space Grant Consortium. Russell is well published in her areas of research and is the recipient of several honors and awards. She has been invited to speak about her research at numerous venues. Russell has served in editorial capacities for numerous Computer science conference proceedings and journal special issues and has chaired several conferences in her areas of research. She has served in several board leadership positions of national and regional computing organizations. She served on the Board of Directors of the Association for Computing Machinery's Special Interest Group on Computer Science Education, as Vice President of the Florida Artificial Intelligence Research Society, and as President of the Consortium for Computing Sciences in Colleges (CCSC). She is a founding member and first president of the Northeastern region of CCSC and since its founding has served as a member of its board of directors.

# **Kelly Shaw**University of Richmond



Kelly Shaw is an Associate Professor of Computer Science at the University of Richmond, a small liberal arts college in Virginia. Shaw's research largely focuses on parallel computer architectures, including many-core architectures and graphics processors. In addition to hardware design and optimization, she is interested in tools and approaches that make it easier to program these architectures. While at the University of Richmond, Shaw has constructed a research program that has included advising her own undergraduate students on

research projects, co-advising undergraduate research students with colleagues from other disciplines, and co-advising graduate students enrolled at a research university. Shaw completed her Master's and Doctoral degrees from Stanford University and her Bachelor's degree from Duke University, all in Computer Science.

# **Lynn Andrea Stein** *Olin College of Engineering*



Lynn Andrea Stein is a founding faculty member and professor of computer and cognitive science at Olin College of Engineering. AB CS from Harvard; SM/PhD CS from Brown; from 1990-2000, Stein was MIT EECS faculty member and at AI Lab/LCS. Stein held the NSF Young Investigator Award, an ONR/Bunting Fellowship, and the Helen Plants Award (ASEE). She has served in leadership for AAAI and ACM and on numerous program committees, panels, and advisory boards. Stein's CS research focuses on the role of interaction in computational and cognitive processes; projects

include construction of an artificial humanoid and an intelligent room, philosophical and pragmatic work from KR to semantics of cognition, and co-authorship of foundational semantic web documents. Stein has led innovations in computing/engineering curricula, including pioneering applications of inexpensive robotics, innovative curriculum for intro CS, and an award-winning interdisciplinary, cross-generational design immersion. Stein also collaborates on the transformation of educational cultures with universities worldwide, running workshops to help stimulate curricular creativity, empower student-motivating pedagogic experimentation, and catalyze departmental and institutional change. In 2009, Stein was charged with spearheading Olin's aspiration to transform engineering education and named founding director of Olin's Initiative for Innovation in Engineering Education (now the Collaboratory); from 2012-2016 she served as Associate Dean for External Engagement and Initiatives.

Jodi Tims
Baldwin Wallace University



Dr. Jodi Tims is a Professor of Computer Science at Baldwin Wallace University, Berea, OH. She serves as Chair of the Department of Mathematics and Computer Science. She began teaching at the University of Pittsburgh at Johnstown in 1992 as an Instructor of Mathematics and progressed to the rank of tenured Associate Professor of Computer Science in 1994. In 1992, she received the Edward A. Vizzini Natural Science Division Award for Excellence in Teaching. After earning her Ph.D. in Computer Science (University of Pittsburgh, 1998), she accepted a position

as Associate Professor and Coordinator of Computer Science at Saint Francis University, PA. She moved to Baldwin Wallace in 2002 and was promoted to Full Professor in 2004. Dr. Tims serves on numerous university-wide committees and is a member of the Board of Directors of OHTech, the Executive Board of the Regional Information Technology Engagement Board of Northeast Ohio, and the ACM-W Executive Council, currently serving as Vice Chair. She is Chair of the Executive Committee of the Ohio Celebration of Women in Computing, and served as Program Chair for OCWIC 2009 and 2011, and General Chair of OCWIC 2013. Dr. Tims was Symposium Co-Chair for SIGCSE 2016, serving previously as Poster Chair (2013) and Program Co-Chair (2015).

### **Gloria Townsend**

DePauw University



Gloria Childress Townsend, Professor of Computer Science, has taught at DePauw University for thirty-seven years and chaired her department for six years. She is a member of ACM's Council on Women in Computing, founded ACM Celebrations, and chairs the ACM-W Chapters project. Her research interests include evolutionary computation and gender issues in computing.

# Ellen Walker Hiram College



Ellen Walker is Associate Dean of Academic Affairs and Professor of Computer Science at Hiram College, which she has served since 1996. She earned her Sc.B. from Brown University, and M.S. and Ph.D. from Carnegie Mellon, all in Computer Science. Her research interests include artificial intelligence and computer science education. She is deeply interested in undergraduate teaching and mentoring as well as issues affecting women in computer science. She chaired the 2009 Ohio Celebration of Women in Computer Science, and co-chaired the 2011 ACM SIGCSE

Technical Symposium. She has published over 40 papers in refereed journals and conferences, and supervised nearly 100 student research projects. Dr. Walker is a member of AAAI, and a Senior Member of ACM and IEEE.

# **Dianna Xu** *Bryn Mawr College*



Dianna Xu is professor and chair of Computer Science at Bryn Mawr College. Dianna Xu received her Ph.D in computer science from the University of Pennsylvania in 2002. She has made contributions on applied problems in Computer Graphics, Vision and Imaging, with methods strongly rooted in geometric analysis and algorithms. She is also interested in geometric and topological methods in data analysis and visualization. In addition, Dianna has devoted considerable time and effort rethinking the CS curriculum to attract and retain women

and minorities in the field. Most recently she has led an NSF project focusing on using creative computation and visual arts to attract non-traditional students into Computer Science and update CSI with contemporary, diverse examples of computing in a modern context. development committee.

# **Participants**

Managing the Early Academic Career for Women Faculty in Undergraduate Computing Programs				
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The Computing Research Association's Committee on the Status of Women in Computing Research (CRA-W) is an action oriented organization dedicated to increasing the number of women participating in Computer Science and Engineering (CSE) research and education at all levels.



In addition to increasing the number of women involved, we also seek to increase the degree of success they experience and to provide a forum for addressing problems that often fall disproportionately within women's domain. We are hopeful that the committee activities will also have a positive impact for other underrepresented groups in CSE and we are committed to improving the working environment for Computer Scientists and Engineers of both genders.

CRA-W is a committee of the Computing Research Association. Contact CRA-W at <a href="mailto:crawinfo@cra.org">crawinfo@cra.org</a> for general information.





www.cra-w.org @CRAWomen