

ACADEMIC RESUME

JOYCE W. YEN, PhD

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PRESENT POSITION

Director, ADVANCE Center for Institutional Change, University of Washington, Seattle

CAREER SUMMARY

Dr. Joyce Yen, Ph.D., is the Director for the UW ADVANCE Center for Institutional Change. As PI or co-investigator, Dr. Yen has received over \$7 million in funding (18 grants) to advance women faculty in science, engineering, and mathematics; to address faculty professional development more generally; to diversify science and engineering at the faculty level; and to create a more inclusive climate in engineering. Dr. Yen's funded activities include four different types of annual national workshops, including workshops for early-career neuroscientists, engineers, and biologists, science and engineering department chairs, and Ph.D.-level women interested in transitioning into faculty careers from industry and government positions. She has also led the development of an online toolkit to disseminate planning and educational materials which enable institutions to plan, organize, and run faculty leadership workshops which emphasize STEM faculty diversity and inclusion. Through her national and UW campus work, she has provided professional development to hundreds of faculty, postdocs, and graduate students. An accomplished workshop facilitator, Dr. Yen has educated others and provided leadership in the field by facilitating over 100 workshops, retreats, trainings, and other events focused on diversity in science and engineering, bias, cultural change in academia, and other related topics. She has spoken at dozens of national and international meetings. In addition to her work in higher education, she has collaborated with program officers and other personnel at private science philanthropies and science non-profit organizations to support their efforts to advance diversity, equity, and inclusion. She was awarded the University of Nebraska-Lincoln's 2004 Outstanding Young Alumni Award, the 2007 University of Washington's College of Engineering Professional Staff Innovator Award, the 2012 University of Washington David B. Thorud Leadership Award, and the 2017 WEPAN Inclusive Culture and Equity Award. She is also featured in the 2019 edition of "101 Careers in Mathematics." Prior to joining UW ADVANCE, Dr. Yen was an assistant professor in Industrial Engineering at the University of Washington, Seattle, researching decision-making and resource allocation under uncertainty (stochastic programming). She received her M.S. and Ph.D. in Industrial and Operations Engineering from the University of Michigan, Ann Arbor. She received her B.S. in Mathematics from the University of Nebraska-Lincoln, graduating from the Honors Program and with highest distinction.

MOST RECENT RESEARCH AND PROFESSIONAL EXPERIENCE

Director, *ADVANCE Center for Institutional Change (CIC), University of Washington, Seattle (October 2015 - present)*

- ◆ Develop, plan, and lead programs to promote the advancement of female faculty in science, technology, engineering, and mathematics (STEM).
- ◆ Originate new programs to diversify STEM departments broadly, write grants to fund them, and lead the resulting grant-funded programs. Current active grant-funded programs include (1) NIH-funded BRAINS: Broadening the Representation of Academic Investigators in Neuroscience; (2) NSF-funded LEAD-it-Yourself!; and (3) NSF-funded Women Achieving Tenure-Track Success - Strategies to Enable Community-Based Retention. Responsibilities include: (a) Leading multi-disciplinary, multi-institutional teams in writing grants to prestigious and competitive funding agencies such as the National Science Foundation and the National Institutes of Health. (b) Managing multi-institutional, multi-disciplinary, multi-functional teams and leading program planning and execution. (c) Leading and facilitating national professional development workshops for cohorts of PhDs in STEM. (d) Disseminating information about the programs through peer-reviewed publications and invited presentations to colleagues around the world. (e) Identifying funding opportunities and securing funding from new sources. (f) Serving as the project

representative and liaison to funding agency program officers on behalf of potential proposals and funded initiatives. (g) Coaching and mentoring program participants on career advancement, professional development, diversity and inclusion, and other issues.

- ◆ Lead UW ADVANCE-campus programs and serving as program liaison on a campus, national, and international scale. Responsibilities include: (a) Identifying program priorities. (b) Curating topics and related materials. (c) Identifying and contacting participants and speakers. (d) Advising program presenters and providing constructive feedback. (e) Designing program agendas and activities. (f) Facilitating workshops and meetings. (g) Managing small and large group dynamics at program events. (h) Representing UW ADVANCE at national and international meetings. (i) Serving as institutional representative of UW ADVANCE on campus committees. (j) Disseminating best practices from UW ADVANCE to colleagues on campus, throughout the U.S., and internationally. (k) Managing administrative and dissemination responsibilities of ENGR 401 (PEERs class) and co-teaching the class.
- ◆ Coach and mentor UW STEM faculty, department chairs, and high-level faculty administrators. Responsibilities include: (a) Working directly with high-level administration to effectively lead departments and advance STEM faculty, particularly women and faculty from underrepresented minority groups. (b) Meeting with department chairs and individual faculty to provide advice and guidance on sensitive issues such as diversity, equity, management, strategic planning, mentoring, and other faculty professional development topics. (c) Serving as a sounding board for general faculty professional development and faculty diversity issues. (d) Connecting faculty and administrators to resources as appropriate. (e) Designing and facilitating complex strategic-planning-type meetings such as unit retreats, visiting committee meetings, and strategic planning sessions.
- ◆ Supervise and mentor professional and student staff.

Diversity, Equity, and Inclusion Consultant, Heising Simons Foundation (February 2018 – present)

- ◆ Recommend best practices to HSF staff based on data and research to improve diversity, equity, and inclusion (DEI) in the 51 Pegasi b fellowship process
- ◆ Provide input on the 51 Pegasi b fellowship process including application materials, evaluation materials, and other related activities.
- ◆ Recommend background reading materials and suggestions for potential DEI training and education
- ◆ Attend and assist with the in-person 51 Pegasi b review panel
- ◆ Recommend best practices for identifying potential grant projects and principal investigators
- ◆ Provide recommendations for evaluating potential projects that incorporate best practices for diversity, equity, and inclusion
- ◆ Provide DEI training for Foundation staff and grantees at summits, workshops, or meetings
- ◆ Provide DEI training for Foundation colleagues (e.g. other science philanthropies)

Program/Research Manager, ADVANCE Center for Institutional Change (CIC), University of Washington, Seattle (June 2003 – October 2015)

- ◆ Led the expansion of ADVANCE's flagship leadership development program for department chairs and deans to more than 70 academic campus units across the greater UW through a partnership with the Leadership, Community, and Values Initiative
- ◆ Spearheaded cultural change initiatives targeting science and engineering units at multiple levels, including department, faculty, and graduate students
- ◆ Identified barriers to women in science, engineering, and mathematics (SEM) related to policy (such as pay equity, promotion and tenure processes, and dual career) and work with appropriate parties to revise policies as appropriate
- ◆ Organized campus-based mentoring and leadership development programs including workshops and networking opportunities for women faculty, department chairs, and emerging leaders
- ◆ Created, organized, hosted, and facilitated multi-day national professional development workshops for department chairs (LEAD), early career neuroscientists from groups underrepresented in neuroscience (BRAINS), early career women ecologists and evolutionary biologists (WEBS), Ph.D.-level women

working in industry or government who are interested in transitioning to faculty positions (On-Ramps into Academia)

- ◆ Spearheaded the PEERs: Promoting Equity in Engineering Relationships program including co-developing and co-teaching the “Leadership Development to Promote Equity in Engineering Relationship” fall seminar and selecting, mentoring, and advising the PEER Leaders students.
- ◆ Wrote proposals to obtain funding for CIC activities and related projects. Proposals resulted in over \$5,300,000 in funding.
- ◆ Organize and oversee programmatic efforts of the CIC
- ◆ Facilitated, moderated, and advised College and departmental faculty retreats
- ◆ Served as liaison to broader UW and national communities and advised other programs around the country who are working on issue related to the work of the CIC
- ◆ Distributed best practices through leading and facilitating workshops, speaking on panels, authoring papers, and delivering presentations.
- ◆ Supervised and guided activities of ADVANCE Graduate Research Assistant and Program/Operations Specialist

Assistant Professor, Industrial Engineering, University of Washington, Seattle, (January 2001 – June 2003)

- ◆ Co-advised or advised two Ph.D. students and three master’s student research projects (Yanto Prasetyo (Ph.D., 2005), Orcun Molvalioglu (M.S. and Ph.D. student), Berkin Toktas (Ph.D., 2003), Catherine Serve’ (M.S., 2003), Lisa Grignon (M.S., 2002)
- ◆ Ph.D. and Master’s Committees: Eva Dereksdottir (M.S., 2002), Clara Fernandes (M.S., 2001), Charoenchai Khompatraporn (Ph.D., 2004), Yangfan Shen (Ph.D., 2005), Alvis Chen (M.S. – University of Auckland, 2005)
- ◆ Taught general optimization and stochastic processes classes at undergraduate and graduate level
- ◆ Served as departmental high school outreach liaison and coordinated visits to local high schools
- ◆ Conducted research on problems involving resource allocation and decision-making under uncertainty
- ◆ Awarded five-year \$918,000 grant from The Boeing Company (Co-PI: Prof. Zeldia Zabinsky)
- ◆ Named Best Paper Honorable Mention, 2003 JFIG (Junior Faculty Interest Group) Paper Competition, Institute for Operations Research and Management Sciences, for “A Stochastic Integer Programming Approach to Solving a Synchronous Optical Network Ring Design Problem” by J.C. Smith, A. Schaefer, and J.W. Yen.
- ◆ Upon changing positions, was appointed as an Affiliate Assistant Professor with Industrial Engineering (2003 –2017)

EDUCATION

- ◆ **University of Michigan, Ann Arbor campus**
PhD, Industrial and Operations Engineering, May 2001 (Advisor: John R. Birge)
Dissertation: Stochastic Integer Programming as Applied to the Airline Crew Scheduling Problem
MS, Industrial and Operations Engineering, May 1997
- ◆ **University of Nebraska-Lincoln**
BS, Mathematics, May 1995, Highest Distinction and with Honors, Phi Beta Kappa

FUNDING

1. The BRAINS Directory: An Assessment and Development Project to Address Networking Needs of Neuroscientists from Underrepresented Groups and Facilitate Connections with External Partners. Alfred P. Sloan Foundation. \$145,644. 8/20 – 12/21. PI: Joyce Yen
2. Supplement to Women Achieving Tenure-Track Success: Strategies to Enable Community-based Retention. National Science Foundation. \$149,955. 8/15 - 8/20. PI: Joyce Yen
3. Supplements to LEAD-it-Yourself! – (3 separate instances). National Science Foundation. \$139,772. 9/13 – 8/19. PI. *Eve A. Riskin. Co-PI: Joyce Yen, Jan Spyridakis.*

4. BPE Travel: Funding Women Engineers to Attend the National LATTICE Symposia, National Science Foundation. \$29,988. 5/17 – 2/20. *PI: Joyce Yen. Co-PI: Eve Riskin.*
5. R25 competitive renewal BRAINS: Broadening the Representation of Academic Investigators in NeuroSciences. National Institute for Neurological Diseases, National Institutes of Health. \$1,350,000. 10/16 – 9/21. *PI: Sheri Mizumori, Co-investigators: Joyce Yen, Claire Horner-Devine.*
6. Women Achieving Tenure-Track Success: Strategies to Enable Community-based Retention. National Science Foundation. \$749,780. 8/15 – 2/20. *PI: Joyce Yen. Co-PI: Eve Riskin, Claire Horner-Devine.*
7. LEAD-it-Yourself!. National Science Foundation. \$749,845. 9/13 – 8/18. *PI: Eve A. Riskin. Co-PI: Joyce Yen, Jan Spyridakis.*
8. BRAINS: Broadening the Representation of Academic Investigators in NeuroSciences. National Institute for Neurological Diseases, National Institutes of Health. \$1,350,000. 9/1/11 – 8/31/16. *PI: Sheri Mizumori, Co-investigators: Joyce Yen, Ana Mari Cauce.*
9. Collaborative Research: Workshop Support for Women Evolving Biological Sciences. National Science Foundation. \$11,264. 9/1/10 – 8/31/12 *PI: Claire Horner-Devine. Co-PI: Joyce Yen.* University of California Santa Cruz Collaborative grant *PI: Samantha Forde*, award amount \$12,726.
10. Interrupting Bias in the Faculty Search Process: A Film and Facilitation Guide. Henry Luce Foundation. \$13,752. 1/15/10 – 7/15/11. *PI: Joyce W. Yen, Co-PI: Coleen Carrigan.*
11. Funding Computer Scientists to Attend the On-Ramps into Academia Workshop. National Science Foundation (Broadening Participation in Computing) \$10,000. 8/1/09 – 7/31/10. *PI: Eve A. Riskin, Co-PI: Joyce W. Yen.*
12. Transforming Engineering Through PEERS: Building a Better Experience for Underrepresented Students. National Science Foundation. \$999,974. 4/1/09 – 3/31/14. *PI: Phyllis Wise, Co-PI: Joyce W. Yen, Eve A. Riskin, Sapna Cheryan, and Sheryl Burghstahler.* Awarded \$613,405 for 4/1/09 – 3/31/12 with continuing funding for years 4 and 5 contingent on performance.
13. ADVANCE Partnerships for Adaptation, Implementation, and Dissemination (PAID) Award: On Ramps into Academia. National Science Foundation. \$569,002. 9/16/08 – 9/15/11. *PI: Eve A. Riskin, Co-PI: Joyce W. Yen, Ana Mari Cauce, Matthew O'Donnell, and Suzanne Brainard.*
14. National Leadership Development Workshops for Science, Engineering, and Mathematics Department Chairs. National Science Foundation. \$500,000. 9/15/06 – 9/15/09. *PI: Ana Mari Cauce, Co-PI: Joyce W. Yen and Eve A. Riskin*
15. Collaborative Research for the ADVANCE Leadership Award: Women Evolving Biological Sciences - WEBS Symposium for early career female scientists. National Science Foundation. \$327,785. 11/01/06 – 10/31/11. *PI: Claire Horner-Devine, Co-PI: Joyce W. Yen.* University of California Santa Cruz Collaborative grant *PI: Samantha Forde*, award amount \$26,816. Supplemental grant for \$54,605 awarded August 2010.
16. National Leadership Development Workshops for Science, Engineering, and Mathematics Department Chairs: A Pilot Program. Alfred P. Sloan Foundation. \$44,825. 11/01/04 – 12/31/06. *PI: Eve A. Riskin Co-PI: Joyce W. Yen*
17. ADVANCE Institutional Transformation Award. National Science Foundation. \$3,750,000. 10/01/01 – 9/30/06. One year extension to 9/30/07 *PI: Ana Mari Cauce. Co-PI: Eve A. Riskin, Suzanne G. Brainard, Joyce W. Yen (added as Co-PI: July 2006), and Ronald S. Irving.*
18. Air Traffic Flow Management Under Temporary Capacity Constraints. The Boeing Company. \$918,000. Original dates: 9/01 – 8/06, however grant terminated in 2003 due to insufficient funds from Boeing team. *Co-PIs: Zelda B. Zabinsky and Joyce W. Yen*

ACADEMIC AND LEADERSHIP HONORS

- ◆ Professional Career
 - WEPAN Inclusive Culture and Equity Award, 2017
 - University of Washington David B. Thorud Leadership Award, 2012
 - University of Washington College of Engineering Professional Staff Innovator Award, 2007
 - Finalist, 2005 ASEE Women in Engineering Best Paper Award
 - University of Nebraska 2004 Outstanding Young Alumni Award
 - Honorable Mention, 2003 Junior Faculty INFORMS Group (JFIG) Best Paper Award

- ◆ Graduate School Career
 - University of Michigan College of Engineering 1999 Distinguished Leadership Award
 - General Dynamic Fellowship, University of Michigan College of Engineering Three-year Fellowship, 1995-1998
- ◆ Undergraduate School Career
 - University of Nebraska-Lincoln, Phi Beta Kappa
 - University of Nebraska-Lincoln College of Arts and Sciences 1995 Outstanding Senior Student Leader
 - Innocents Society, University of Nebraska-Lincoln Chancellor's Honors Society (only 13 student selected each year), 1994-95
 - University of Nebraska-Lincoln 1993-1994 Outstanding Female Student Leader Award and Scholarship
 - National Science Scholars Scholarship (renewable)
 - State Farm Insurance's Exceptional Student Fellowship (multiple years)
 - University of Nebraska Dean H. and Floreen G. Eastman Memorial Scholarship in Mathematics (1991-1995)
 - University of Nebraska Regents Scholarship (1991-1995)
 - USA-Today 1995 Academic All American Honorable Mention

MOST RECENT PUBLICATIONS

- ◆ Margherio, C., Horner-Devine, M.C., Mizumori, S. J. Y., and Yen, J. W. (accepted July 2020) Connecting Counterspaces and Community Cultural Wealth in a Professional Development Program. *Race, Ethnicity, and Education*. DOI: 10.1080/13613324.2020.1798378. Once has published online, it will be available at the following permanent link: <https://doi.org/10.1080/13613324.2020.1798378>.
- ◆ Cheryan, S., Yen, J, and Muszkiewicz, L. (July 3, 2020) Contributed article #17 "Keeping distance learning in place" in "How to Re-design the World for Cornoavirus and Beyond." *Politico Magazine*. <https://www.politico.com/interactives/2020/magazine-friday-cover-redesigning-the-world-coronavirus/>.
- ◆ Yen, J. W. (Dec. 6, 2019) De-biasing the evaluation process of in-person review panels for a postdoctoral fellowship. *Nature Astronomy*. <https://doi.org/10.1038/s41550-019-0835-7>. (covered in *Science* and *Diverse Issues in Higher Education*.)
- ◆ Yen, J. (Nov. 14, 2019) [Advancing diversity, equity, and inclusion is a leadership issue for all of us](#). *PLOS Channels and Collections Blog*.
- ◆ Yen, J., Riskin E. A., Margherio C., Spyridakis, J.H., Carrigan, C.M., Cauce, A.M., (2019) "Promoting gender diversity in STEM faculty through leadership development: From local and national leadership workshops to the online LEAD-it-Yourself! toolkit," *Equality, Diversity and Inclusion: An International Journal*, (special issue on ADVANCEing Women Faculty in STEM: Empirical Findings and Practical Recommendations from National Science Foundation ADVANCE Institutions.) <https://doi.org/10.1108/EDI-09-2017-0181>
- ◆ Horner-Devine M.C., Gonsalves, T., Margherio, C., Mizumori, S.J., and Yen, J.W. (Nov. 2, 2018) "Beyond hierarchical one-on-one mentoring," *Science*. Vol. 362, Issue 6414, pp. 532. <http://science.sciencemag.org/content/362/6414/532.1>
- ◆ Horner-Devine M. C., Margherio C., Mizumori S., Yen, J. "Peer Mentoring Circles: A strategy for thriving in science," *BioMed Central Blog* 2017. <http://blogs.biomedcentral.com/bmcblog/2017/05/18/peer-mentoring-circles-a-strategy-for-thriving-in-science/>.
- ◆ Yen, J. W., Horner-Devine, M. C., Margherio, C., & Mizumori, S. J. Y. "The BRAINS Program: Transforming Career Development to Advance Diversity and Equity in Neuroscience," *Neuron*. Volume 94, Issue 3. Pg. 426-430. 3 May 2017), <http://dx.doi.org/10.1016/j.neuron.2017.03.049>.. Available: [http://www.cell.com/neuron/fulltext/S0896-6273\(17\)30293-3](http://www.cell.com/neuron/fulltext/S0896-6273(17)30293-3)
- ◆ Margherio, C., Horner-Devine M.C., Mizumori S.J.Y., and Yen, J.W. "Learning the Thrive: Building diverse scientists' access to community and resources through the BRAINS program," *CBE Life Sciences Education*. September, 2016. Available: <http://www.lifescied.org/content/15/3/ar49.full>

- ◆ Horner-Devine, M. C., Yen, J., Mody-Pan, P., Margherio, C., Forde, S. (2016). “Beyond traditional scientific training: The importance of community and empowerment for women in ecology and evolutionary biology,” *Frontiers in Ecology and Evolution* 4, p.119. doi: 10.3389/fevo.2016.00119. Available: <http://journal.frontiersin.org/article/10.3389/fevo.2016.00119>
- ◆ Carrigan C, O’Leary K, Riskin E, Yen J, O’Donnell M. “On-ramping: following women scientists and engineers through their transition from nonacademic to faculty careers,” *The Journal of Technology Transfer*. First published online Dec. 31, 2015:1-18. Available: <https://link.springer.com/article/10.1007/s10961-015-9460-5>

SELECTED MAJOR PRESENTATIONS AND WORKSHOPS

- ◆ “Putting diversity, equity, and inclusion into action in the science philanthropic sector: research, data, and best practices” *Simons Foundation*-sponsored three-day virtual workshop series for members of the Science Philanthropy Alliance. October 2020.
- ◆ “Putting diversity, equity, and inclusion into action in the science philanthropic sector: research, data, and best practices” *Heising Simons Foundation*-sponsored full day workshop for members of the Science Philanthropy Alliance. November 2019. Palo Alto, CA.
- ◆ “Your leadership role in advancing diversity, equity and inclusion” Keynote address. *RosettaCon*. August 2019. Leavenworth, WA.
- ◆ “Cultivating a Culture of Mentoring” and “Getting the Mentoring You Need to Succeed.” Workshops delivered at *Stevens Institute of Technology*. October 2018. Hoboken, NJ.
- ◆ “Cultivating a Diverse Community and Inclusive Culture in Engineering.” Workshops delivered at *Santa Clara University*. October 2018. Santa Clara, CA
- ◆ “Bias and women’s participation in STEM.” Invited Lecture. *Trinity College*, March 2015. Dublin, Ireland.
- ◆ “Leaders as Allies and Change Agents: Recruiting and Retaining Diverse Faculty.” Workshop. *Boise State University*, August 2014. Boise, MT.
- ◆ “Bias and women’s participation in STEM.” Invited speaker. *European Cooperation in Science and Technology genderSTE meeting: Empowering women and advancing gender in research and innovation*, May 2014. Heraklion, Crete, Greece.
- ◆ “Bias, privilege and inclusion - every day examples of unconscious discrimination” Invited Lecture. *Bradley University*. April 2014. Peoria, IL
- ◆ “Making Good Decisions or Avoiding Unconscious Bias” and “Who me? Leadership, Implicit Bias, and the Impact of Women and Minorities.” Workshops delivered to *Council of Colleges of Arts and Sciences New Dean and New Chair seminars*. July 2010, Oct. 2011, July 2013. Various locations.