





Responsibilities included handling research and program development assignments. Assisted in coordinating a diversity symposium for faculty, including follow-up feedback and evaluation. Coordinated the review process for the university's Presidential Initiatives Fund Competition (sponsored by the Kellogg Foundation). Assisted with preparations for the Presidential Initiatives Fund Symposium, Martin Luther King Celebration, Minority High School Apprenticeship Grant, and other miscellaneous projects.

1982-87            PPG Industries                            Allison Park and Springdale, Pennsylvania

- *Research & Product Development Chemist (Chemist I & II)*

Coatings and Resins Group Research Center: Responsible for paint formulation, problem solving on customer production lines, and new product development for the truck, agricultural and heavy construction equipment markets. Last project included coordinating the research segment and facilitating interaction between two other groups in different locations to produce a team effort to achieve goals. Supervisory skills attained in research laboratory.

Exploratory Research in Coatings and Resins Group Research Center: Responsible for long-term research in the market areas of fire retardants and biosupports. Patents filed in the architectural, fire retardant, and biosupport areas.

Product Development in the Springdale Coatings and Resins Plant: Responsible for paint formulation, problem solving on customer production lines, technical sales, presentations, and new product development for the aluminum extrusions market.

## **GRANTS RECEIVED**

**2023-2028 \$26M National Science Foundation. NSF Center for Human Augmentation via Dexterity (HAND is a NSF ERC). NU Financials Award and Project Number: (PI is Ed Colgate, Northwestern University).**

The team of Northwestern, Carnegie Mellon, Florida A&M, MIT, and Texas A&M engages a broad ecosystem including small, mid-sized and large manufacturers, manufacturing extension partnerships, robotics companies, national labs, and government agencies to achieve maximum effectiveness and impact. Application specific testbeds will be set up by each partner school and, in most cases, embedded within an ecosystem facility to ensure extensive engagement with end users. Dexterous robots have the potential remove drudgery from jobs, make human workers vastly more productive, and enable individuals with motor impairments to live fuller lives. To ensure that these benefits are realized and shared equitably, HAND will employ a variety of mechanisms to engage a broad set of advisors and stakeholders. Among these will be embedded testbeds, formal advisory councils, publication of a "State of Dexterity" report, and hosting an annual Future of Work symposium. HAND will ensure that the next generation of roboticists is diverse and well-prepared to engage with the new technology by developing foundational courses that encourage critical thinking about social and ethical issues, as well as hands-on learning opportunities at every level from high school to practicing engineers. My role involves team science activities, graduate and postdoctoral training, and professional development.

**2023-2028 \$52M. National Science Foundation and Simons Foundation. National Institute for Theory and Mathematics in Biology (NITMB). NU Financials Award and Project Number: NSF (DMS-2235451) and Simons Foundaton (MPS-NITMB-00005320) (PI is Richard Carthew, Northwestern University).**

The scientific mission of NITMB is to develop the theory and mathematics needed to quantify the roles of physical, chemical, and biological constraints as organizing principles for understanding biological mechanisms. Understanding constraints from mathematical and biological perspectives provides a unique opportunity for interdisciplinary work with mathematical research that will advance our knowledge of biology and biology research that will catalyze new mathematics. Built as a partnership between Northwestern University and the University of Chicago, the proposal analyzes the role of constraints imposed by physics, chemistry, and biology on the emergence of biological order. The plan is organized around five themes: fidelity and variation, fitness and optimization, information processing, learning and adaptation, and prediction and anticipation. The mathematical themes include dimensionality reduction, fitness optimization, multiresolution network models, neuronal network dynamics and synchronization, and ML applied to models of learning and planning. The institute activities include short and long programs, faculty and postdoctoral research, graduate student programs and engagement programs with secondary school students and teachers. NITMB will integrate inclusiveness into the training, education, research capacity building, community outreach, workforce development, and dissemination activities. I play an advisory role regarding its efforts to make training, education, and outreach more inclusive. Overtime, we will study interdisciplinary research and training of postdoctoral fellows.

**2022-26 \$249,390 John Templeton Foundation and LSST, Inc. as an additional supplement for senior social scientists for \$1.2M in total. “Establishing a Templeton LSST Early-Career Research Fellowship” from July 15, 2022-September 30, 2026.**

This is a supplement to the grant from Templeton and LSST, Inc. for senior social scientists for \$1.2M in total. The supplement is for research, mentorship, and work on the Catalyst Steering Committee activities. The research involves a research agenda encompassing three core themes: 1) diversity and community impact; 2) the democratization of astronomical data; and 3) mentoring and collaborative teams. Both the LSST community and the Catalyst Fellowship present new models of mentoring, teamwork, and collaboration that may transform the field. The LSST community is unique in its multi-disciplinary composition (including not only astrophysicists but also high energy physicists, computer scientists, and engineers), methodological and technical breadth, and modes of collaboration (e.g., huge numbers of collaborators working with one ‘dataset’). The Catalyst Fellowship is unique in its reliance on mentoring committees, comprising members from both astrophysics and the social sciences. Thus, the professional relationships that form through and around the Catalyst Fellowship may very well challenge our understanding of scientific teams. The LSSTC Catalyst Fellowship is distinctive among prestigious astronomy fellowships in its deliberate embrace of diversity and community impact throughout recruitment, selection, support, mentoring, interdisciplinary and international collaboration, and fellowship activities. Given this historical moment of heightened awareness to justice, equity, and inclusion as well as repeated studies showing how science benefits from diverse teams, I have studied undergraduates, graduate students, and faculty in STEM and am eager to understand the individuals who co-developed and participate in this unique community. What sets them

apart? By studying the Catalyst Fellows, the LSST community, and the environmental and cultural context, we will be able to identify factors that promote successful and satisfying careers, and develop new models of how to build and support diverse and stimulating scientific communities.

**2021-26 \$9M. John Templeton Foundation and LSST, Inc. “Contribution to the Implementation and Study of the LSST” (Total award was approximately \$9M). NU Financials Award and Project Number: SP0076892, 60063972. (PI is Jennifer Solokoski Columbia University and LSST, Inc. )**

We will share best practices for mentoring the science fellows who began in October 2022, and contribute to their professional development in year 1 of the program. We will also coordinate to determine the application and selection processes for recruiting the first cohort of social science fellows in January 2023. Here is a link that was shared on Northwestern News and featured on the homepage in August 2021:

<https://news.northwestern.edu/stories/2021/08/astrophysicists-social-scientists-to-probe-the-universes-deepest-mysteries-vera-rubin-observatory>

**2015-21 \$2,966,598. National Science Foundation, "NRT-DESE: Training in Data-Driven Discovery - From the Earth and the Universe to the Successful Careers of the Future." (Co-I with Vicky Kalogera as PI)(DGE-1450006-001).**

**2007-11 \$283,469 National Science Foundation, “Prototyping the Engineer of 2020: A 360-Degree Study of Effective Education.”**

The study provided guidance for engineering education by accomplishing two goals: 1) identifying case studies from engineering schools and programs that are currently producing graduates who closely resemble the engineer of 2020, and 2) identifying and analyzing in detail the curricular, pedagogical, cultural, and organizational features of those programs that support high-quality and innovative engineering education that is well-aligned with the goals of the Engineer of 2020. The study investigated the development of three attributes of the Engineer of 2020: design and problem-solving skills, interdisciplinary competence and contextual competence. Case study reports were distributed for Howard University and MIT. This award ended.

**2004 \$100,000 John Templeton Foundation to support the research project, “Promoting Student Development Through Faculty Development.”**

**2003-04 \$200,000 from the Eli Lilly Foundation to support the research project, “Promoting Student Development Through Faculty Development.”**

Also conducted research on faculty development, student development, organizational change, and teaching and learning in postsecondary institutions. Specifically, worked on a Lilly Foundation and John Templeton Foundation funded project titled: “Promoting Student Development Through Faculty Development.” This involved an examination of how church-related colleges foster holistic student development in and out of the classroom, and included data from a survey of Chief Academic Officers from over 250

institutions and in depth case studies of faculty, administrators, and students from ten church-related colleges. The results were presented in a book titled, *Putting students first: How colleges develop students purposefully* (Jossey Bass, 2006), designed to provide conceptual grounding and practical advice for campuses (especially faculty) that want to approach the task of student development in holistic way.

**1992-96. Post Doctoral Fellow and Research Associate (1992-1996)**

Contracted by the National Center on Postsecondary Teaching, Learning, and Assessment (NCTLA) to research newly hired faculty in a longitudinal analysis for three years. The project also involved research on enhancing teaching and faculty assessment use. Primary responsibilities included data management and analysis and interviewing at one of the six case sites. Other responsibilities included supervising three graduate students, writing quarterly reports and papers, and presenting at conferences and workshops. Helped to finish book on this project as PI died before completion.

**PUBLICATIONS**

**Books**

Braskamp, L., Trautvetter, L., & Ward, K. (2006). *Putting students first: How colleges develop students purposefully*. San Francisco, CA: Jossey Bass.

Menges, R. J. & Associates. (1999). *Faculty in new jobs: A guide to settling in, becoming established, and building institutional support*. San Francisco: Jossey-Bass.

**Book Chapters**

Trautvetter, L.C. (2019). Institutional practices and policies for recruiting and supporting undergraduate women in engineering across four-year institutions. In *Advancing higher education research on undergraduate women in STEM, New Directions for Institutional Research*, 179, San Francisco, CA: Jossey-Bass Wiley.

Trautvetter, L. C., Braskamp, L. A., & Ward, K.C. (2009). Reducing stress for new faculty at church-related colleges and universities in D. R. Buckholdt and G.E. Miller (Eds.), *Faculty stress*. Routledge.

Trautvetter, L. C. (2008). Undergraduate perspectives about religion in higher education. In M. R. Diamond (Ed.), *Encountering faith in the classroom: Turning difficult discussions into constructive engagement*. Sterling, VA: Stylus Publishing.

Trautvetter, L. C. (2007). Developing students searching for meaning and purpose. In G. Kramer (Ed.), *Fostering student success in the campus community*, San Francisco, CA: Jossey-Bass.

Trautvetter, L. C. (1999). Experiences of women, experiences of men. In *Faculty in new jobs: A guide to settling in, becoming established, and building institutional support*, edited by Robert J. Menges and Associates. San Francisco: Jossey-Bass.

**Peer-Reviewed Journals**

Thurber, D., & Trautvetter, L. (2020). Examining Student Reported Interaction and Satisfaction in Higher Education Administration Graduate Seminar-Style Blended Courses. *Online Learning*, 24(3). doi:<http://dx.doi.org/10.24059/olj.v24i3.2102>

Knight, D. B., Trautvetter, L. C., & Novoselich, B.J., (2014). Expanding women in undergraduate engineering: A mixed methods analysis of recruitment cultures, practices, and policies. Madrid, Spain: Proceedings 44<sup>th</sup> ASEE/IEEE Frontiers in Education.

\*Trautvetter, L. C., Marra, R. M., Lattuca, L.R., Piacentini, K.L., & Knight, D. B., (June 2011). Programs and Practices Making a Difference: A Cross-Case Analysis Identifying Programs and Factors that Influence Recruitment and Retention of Women Engineering Students. Vancouver, B.C.: Proceedings 118<sup>th</sup> American Society for Engineering Education (ASEE).

\*Received the 2011 Denise D. Denton Best Paper Award for the Women Engineering Division

Lattuca, L.R., Trautvetter L.C., Codd, S. L., Knight, D.B., Cortes, C.M. (June, 2011). Working as a team: Enhancing interdisciplinarity for the engineer of 2020. Vancouver, B.C.: Proceedings 118<sup>th</sup> American Society for Engineering Education (ASEE).

Lattuca, L.R., Plumb, C., Terenzini, P.T., & Trautvetter, L.C. (2010). Solving Engineering Problems in Context: Preliminary Results from Case Studies of Six Exemplary Engineering Programs. Washington D.C.: Proceedings 40<sup>th</sup> ASEE/IEEE Frontiers in Education.

Trautvetter, L.C., McKenna A., & Saddler, T. N. (2009). Prototyping the Engineer of 2020: A curricular examination of two exemplary institutions preparing undergraduate engineers. San Antonio, TX: Proceedings 39<sup>th</sup> ASEE/IEEE Frontiers in Education.

Trautvetter, L. C., Braskamp, L.A., & Ward, K. (2008). Reducing stress for new faculty at church-related colleges and universities. Journal of Human Behavior in the Social Environment, 17 (1/2).

Braskamp, L., Trautvetter, L., & Ward, K. (March/April 2008). Putting students first: Promoting lives of purpose and meaning. About Campus, 13:1

Ward, K., Trautvetter, L. C., & Braskamp, L. A. (November, 2005) Investing in students for faith development. Journal of College and Character, Florida State University

Blackburn, R., Bieber, J., Lawrence, J., & Trautvetter, L. (1991). Faculty at work: Focus on research, scholarship, and service. Research in Higher Education, 32 (4), 385-413.

Blackburn, R., Lawrence, J., Bieber, J., & Trautvetter, L. (1991). Faculty at work: Focus on teaching. Research in Higher Education, 32 (4), 363-383.

## **Other Publications**

AAUW (pending). Solving the Equation: The variables for women's success in engineering and computing. Advisor and contributor from conference attended October 8-10, 2015). AAUW and NSF working conference: A Research Agenda on Gender Equity in Engineering and Computing. Washington D.C.

McKenna, A. & Trautvetter, L. C. (2014). Prototyping the Engineer 2020: Case Study of Massachusetts Institute of Technology. Washington D.C.: National Science Foundation.

Trautvetter, L. C. & McKenna A. (2012). Prototyping the Engineer 2020: Case Study of Howard University. Washington D.C.: National Science Foundation.

Trautvetter, L.C. Book Review of Debating moral education: Rethinking the role of the modern university. Elizabeth Kiss and J. Peter Euben, Editors. Durham and London: Duke University Press. The Review of Higher Education, Winter, 2011.

Trautvetter, L. C., Book Review of Old Main: Small colleges in twenty-first century America by Samuel Schuman. Baltimore: John Hopkins University Press. The Review of Higher Education, Summer 2006: 542-544.

Braskamp, L. A., Trautvetter, L. C. & Ward, K. (July, 2005). How college fosters faith development of students. Spirituality in Higher Education Newsletter 2 (3), [www.Spirituality.ucla.edu/newsletter/4.html](http://www.Spirituality.ucla.edu/newsletter/4.html).

Wenzel, S. & Trautvetter, L.C. (September, 2004). Evaluation Report: CMSI/CUSP University-based Teacher Professional Development Courses. A report to the Chicago Public Schools, Office of Mathematics and Science CMSI Evaluation Project. Chicago: University of Illinois.

Wenzel, S. & Trautvetter, L.C. (September, 2003). Evaluation Report: CMSI/CUSP University-based teacher professional development courses. A report to the Chicago Public Schools, Office of Mathematics and Science CMSI Evaluation Project. Chicago: University of Illinois.

Trautvetter, L. (1991). Gender differences in predicting faculty publication output in the natural sciences. Ph.D. dissertation. Ann Arbor, MI: University of Michigan.

Blackburn, R., Lawrence, J., Hart, K., Dickmann, E., Bieber, J., Bentley, R., Brazzell, J., Gaither, S., Herzberg, G., Linder, V., Luedy, B., Mackie, C., Trautvetter, L., & Zhou, W. (1990). Same institution, different perceptions: Faculty and administrators report on the work environment. Ann Arbor, MI: National Center for Research to Improve Postsecondary Teaching and Learning, Program D (Faculty as a Key Resource).

## **PATENTS**

U.S. Patent 4,725,457 (February 16, 1988). Ward, T.A., Schimmel, K., Trautvetter, L.C., Heber, R., Mikus, J. Seiner, J. PPG Industries. Resinous compositions and their formulation into intumescent fire protective compositions.

## **PRESENTATIONS**

### **Peer-Reviewed Paper Presentations**

Trautvetter, L.C., Anderson, B. (April, 2026). Stellar guidance: Exploring the dynamics of postdoctoral mentoring in scientific collaborative communities of practice. American Educational Research Association: Los Angeles, CA.

Trautvetter, L. C., Neary, C. (April, 2026). Career-readiness: Requiring a master's project experience. American Educational Research Association: Los Angeles, CA.

Trautvetter, L.C., Yin, M. (March, 2025). Cultivating partnerships for transformative experiential learning and collaboration involving internships/capstones. Asia Pacific Association in International Education (APAIE): Delhi, India.

Trautvetter, L.C., Tanweer, A., Holbrook, J., Leahey, E., & Diesner, J. (July 15-20, 2024). Transforming scientific communities through multiple roles: Researcher, leader, and mentor. 4S/ EASST Conference: Amsterdam, Netherlands.

Trautvetter, L. C., Yin, M. (2024). Current approaches, challenges and triumphs for experiential learning internships for master's degree programs. London, UK: CIEE GIC Conference June, 2024.

Sturner, A., Holbrook, J.; Johnston, K.V.; Diesner, J.; Sokoloski, J.; Trautvetter, L.; Tanweer, Anissa; Leahey, E. (January 19, 2023). Introducing the LSST-DA Catalyst Fellowship: Increasing the transformational power of Rubin LSST. Space Science in Context (SSiC): South Africa.

Trautvetter, L. (2021, January). Lessons learned for recruiting and retaining underrepresented trainees. National Science Foundation (NSF) NRT Annual Conference, Washington D.C.

Paulsen, M. & Trautvetter, L. (2019, November). IDEAS for advancing science communication and interdisciplinary education, American Association of Colleges and Universities (AACU) Transforming STEM Higher Education Conference, Chicago, IL.

Trautvetter, L. (2019, September). IDEAS for attracting and retaining underrepresented trainees for data science related careers. National Science Foundation (NSF) NRT Annual Conference, Evanston, Illinois.

Thurber, D and Trautvetter, L.C. (2018). Examining student reported interaction and satisfaction in higher education administration graduate seminar-style blended courses. Association of the Student of Higher Education (ASHE). Tampa, Florida.

Perez-Felkner, L, Trautvetter, L. C., Gayles, J., Sax, L., & Wang, X. (2016). Sharpening the lens: Leveraging research on undergraduate and graduate women in STEM. Columbus, OH: Association of the Study of Higher Education (ASHE).

Sax, L., Perez-Felkner, L, Trautvetter, L. C., Wang, X. (2015). A "World Café" on the nuanced experiences of women across STEM: Theoretical and methodological considerations of disciplinary differences and intersectionality in computer science and engineering. Denver, CO: Association of the Study of Higher Education (ASHE).  
Knight, D. B., Trautvetter, L.C., & Novoselich, B.J., (2014). Expanding women in undergraduate engineering: A mixed methods analysis of recruitment cultures, practices, and policies. Madrid, Spain: Proceedings 44<sup>th</sup> ASEE/IEEE Frontiers in Education.

Trautvetter, L., & Knight, D., (April, 2013). Encouraging civic learning in the engineers of 2020: Using institutional values, curricula, and pedagogies of engagement to explore learning. American Educational Research Association (AERA). San Francisco, CA.

Trautvetter, L. C., & Knight, D. B., (November, 2012). Gender differences still exist: A mixed methods analysis identifying practices that influence recruitment and retention of women engineering undergraduate students. Association of the Study of Higher Education (ASHE), November, 2012, Las Vegas, NV.

\*Trautvetter, L. C., Marra, R. M., Lattuca, L.R., Piacentini, K.L., & Knight, D. B., (June 2011). Programs and Practices Making a Difference: A Cross-Case Analysis Identifying Programs and Factors that Influence Recruitment and Retention of Women Engineering Students. American Society for Engineering Education (ASEE). Vancouver, B.C.\*  
The 2011 Denise D. Denton Best Paper Award for the Women Engineering Division

Lattuca, L. R., Trautvetter L. C., Codd, S. L., Knight, D.B., Cortes, C.M. (June, 2011). Working as a team: Enhancing interdisciplinarity for the engineer of 2020. American Society for Engineering Education (ASEE). Vancouver, B.C.

Trautvetter, L. C. & Cortes, C. (April 2011). Developing civic competence in undergraduate engineers using institutional values, curricular, and pedagogies of engagement. American Educational Research Association. New Orleans, LA.

Lattuca, L. R., Plumb, C., Terenzini, P.T., Trautvetter, L.C. (2010). Solving engineering problems in context: Preliminary results from case studies of six exemplary engineering programs. Washington D.C.: 40<sup>th</sup> ASEE/IEEE Frontiers in Education.

Trautvetter, L. C., McKenna A., & Saddler, T. N. (2009). Prototyping the engineer of 2020: A curricular examination of two exemplary institutions preparing undergraduate engineers. San Antonio, TX: 39<sup>th</sup> ASEE/IEEE Frontiers in Education.

Trautvetter, L. C. & McKenna, A. (April 2009). Making progress: Using organizational context to study learning and persistence of female and underrepresented students and faculty members in engineering. Presentation at American Educational Research Association (AERA). San Diego, CA.

Lattuca, L., Terinzini, P., Trautvetter, L., & Marra, R. (October 22-24, 2008). Preparing the engineer of 2020: Emerging evidence from six exemplary colleges and universities. Presentation at Frontiers in Education meeting (FIE), Saratoga Springs, NY.

McKenna, A., Trautvetter, L. C., & Hutchison, M. (July 7-9, 2008). The engineer of 2020: Case studies of organization features of effective engineering education. Presentation at Research in Engineering Education Symposium (REES). Davos, Switzerland.

Trautvetter, L. C. (2008) Religion, politics and student engagement: What faculty do and what students want. Presentation at the annual meeting of American Education Research Association. New York, NY.

Trautvetter, L. C. (2007) The secular classroom: Undergraduate perspectives about religion and pedagogical strategies for faculty. Presentation at the annual meeting of the Association of the Study of Higher Education. Louisville, KY.

Trautvetter, L. C., & Braskamp, L. (2006). Curricular and pedagogical strategies for fostering holistic student development. Presentation at annual meeting of American Education Research Association. San Francisco, CA.

Braskamp, L. A., Trautvetter, L. C, & Ward , K. (February 2006) Investing in students for faith development. Invited presentation at Institute for College Values, Florida State University.

Braskamp, L. A. & Trautvetter, L. C. (January 2006) How colleges develop students purposefully. Presentation at annual meeting of American Association of Colleges and Universities. Washington, D.C.

Trautvetter, L. C., Ward, K. & Braskamp, L.A. (November 19, 2005) Holistic student development: Campus perspectives. Presentation at Association for the Study of Higher Education. Philadelphia, PA.

Braskamp, L. A., Trautvetter, L. C. and Ward, K. (February 4, 2005). Spirituality in academics: Data driven directions with faculty, staff, and students. Annual meeting of FSU Institute on College Values. Tallahassee, FL

Braskamp, L. A., Trautvetter, L. C. and Ward, K. (January 27, 2005). Engaging campus conversations for holistic student development. Annual meeting of American Association of Colleges and Universities (AAC&U). San Francisco, CA

Calkins, S. and Trautvetter, L.C., and Kelley, M. (November, 2004). Faculty expectations for Teaching Assistants: The move to a mentoring model at a research university. Presentation at Association for the Study of Higher Education, Kansas City, MO.

Wenzel, S., Feranchak, B., & Trautvetter, L.C. (May 3, 2004). Evaluation of the CMSI university-based teacher professional development courses. Paper presented at the Symposium on Excellence in Teaching Mathematics and Science: Research and Practice, University of Illinois at Chicago.

Trautvetter, L.C. (1995). New faculty members' perceptions about valued work skills and environment and their effects on teaching and research. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

Trautvetter, L.C. (1995). Socialization of newly hired female faculty members: Plugging the leaking pipeline. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

Trautvetter, L. C., Quinn, J., & Lenze, L. F. (1993). A portrait of newly hired faculty of color at four- and two- year institutions. Paper presented at the annual meeting of the American Educational Research Association. Atlanta, GA

Trautvetter, L. C. & Blackburn, R. T. (1993). Gender differences in predicting faculty publication output in different fields. Paper presented at the annual meeting of the American Educational Research Association. Atlanta, GA

Trautvetter, L. C. & Menges, R. J. (1993). The socialization of women and minority faculty. Paper presented at the annual meeting of the American Educational Research Association. Atlanta, GA

Trautvetter, L. C. (1992). A portrait of newly hired faculty at different institutions in four disciplinary fields. Paper presented at the annual meeting of the Association for the Study of Higher Education. Minneapolis, MN.

Trautvetter, L. (1991, April). Gender differences in predicting faculty publication output in the natural sciences over time. Paper presented at the annual meeting of the American Educational Research Association. Chicago, IL.

Trautvetter, L. & Blackburn, R. (1990, April). Gender differences in predicting faculty publication output in the natural sciences. Paper presented at the annual meeting of the American Educational Research Association. Boston, MA.

Lawrence, J., Trautvetter, L., Blackburn, R., Hart, K. & Herzberg, G. (1990, April). Women faculty in selected "female" and "male" disciplines: A view of professional behavior at three points in time -- 1969, 1975, 1988. Paper presented at the annual meeting of the American Educational Research Association. Boston, MA.

Blackburn, R., Bieber, J., Lawrence, J., & Trautvetter, L. (1990, April). Faculty at work: Focus on research, scholarship, and service. Paper presented at the annual meeting of the American Educational Research Association. Boston, MA.

Lawrence, J., Trautvetter, L., & Blackburn, R. (1989, November). Predicting faculty publication output: Evaluation of a model across institutional types. Paper presented at the annual meeting of the Association for the Study of Higher Education. Atlanta, GA.

Blackburn, R., Pitney, J., Lawrence, J., & Trautvetter, L. (1989, March). Administrators' career background and their congruence with faculty beliefs and behaviors. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

Lawrence, J., Frank, K., Bieber, J., Bentley, R., Blackburn, R., & Trautvetter, L. (March, 1989). Faculty scholarly output: Development of a theoretical model. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

Lawrence, J., Bieber, J., Blackburn, R., Trautvetter, L., Hart, K., & Frank, K. (March, 1989). Predicting individual change in faculty research productivity. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

Blackburn, R., Lawrence, J., Bieber, J., & Trautvetter, L. (1988, November). Faculty at work: Focus on teaching. Paper presented at the annual meeting of the Association for the Study of Higher Education. St. Louis, MO.

Lawrence, J., Pitney, J., & Trautvetter, L. (1988, November). Faculty and administrative views: The organizational climate for teaching. Paper presented at the annual meeting of the Association for the Study of Higher Education. St. Louis, MO.

### **Invited Presentations**

Trautvetter, L., Neary, C., Aaron, R., Prachand, A., Meents-DeCaigny, E. (May, 2026). Facilitating a master's research project for career-readiness. TEACHx Conference: Northwestern University, Evanston, IL.

Trautvetter, L.C. (April, 2026). Teaching, Learning, and Pedagogy. Discussant, Los Angeles, CA: American Educational Research Association (AERA) 2026

Leahey, E. Tanweer, A., Trautvetter, L., Holbrook, J., Diesner, J. (November, 2025). Social science studies of LSST-DA. Tucson, IL: Presentation at Catalyst Annual Symposium 2025.

Trautvetter, L. C. (April, 2025). Nurturing Faculty Success and Resilience: Mentorship, Identity, and Well-Being in Academia, Discussant, Denver, CO: American Educational Research Association (AERA) 2025.

Trautvetter, L. C. (April, 2025). Nurturing Faculty Success and Resilience: Mentorship, Identity, and Well-Being in Academia, Discussant, Denver, CO: American Educational Research Association (AERA) 2025.

Trautvetter, L.C., Leahey, E. Tanweer, A., Holbrook, J., Diesner, J. (November, 2024). Social science studies of LSST-DA. Evanston, IL: Presentation at Catalyst Annual Symposium 2024.

Trautvetter, L.C., Tanweer, A., Holbrook, J., Leahey, E., & Diesner, J. (2024). Transforming Scientific Communities Through Multiple Roles: Researcher, Leader, and Mentor. Amsterdam, Netherlands: 4S/ EASST Conference, July 15-20, 2024.

Trautvetter, L.C., Holbrook, J., Tanweer, A., Diesner, J., Leahey, E. (October 23-25, 2023). Social Scientists Introducing Our Research with Interactive Activity. Presentation at LSST-Discovery Alliance Catalyst Symposium, Tucson, AZ.

Sturner, A. (LSST-DA), Holbrook, J. (Edinburgh); Johnston, K.V. (Columbia); Diesner, J. (University of Illinois Urbana-Champaign); Sokoloski, J. (Columbia and LSST-DA); Trautvetter, L. (Northwestern University); Tanweer, Anissa (University of Washington); Leahey, E. (University of Arizona). Space Science in Context (SSiC) 2023 “Introducing the LSST-DA Catalyst Fellowship: Increasing the Transformational Power of Rubin LSST” Poster Session on January 19, 2023.

Trautvetter, L., Neary, C., Thurk, J., & Davis, N. (April, 2023). Smartsheet: A new hope. Best Practices Forum: Northwestern University Office of Change Management, Evanston, IL.

Trautvetter, L. & Neary, C. (May, 2022) “Assessing Justice, Equity, Diversity, and Inclusion in Curriculum.” Northwestern TEACHx: Evanston, IL. Shared a template that was designed for DEIJ. In addition, have now informally organized a group of 8 colleagues across the university that represent 5 different Northwestern schools and departments in addition to SESP to discuss and share inclusive teaching practices and pedagogy.

Trautvetter, L., Neary, C., Prachand, A., Meents-DeCaigny (May, 2021). TEACHx (May, 2021). “Hopin: Connections in Research through a Virtual Platform.” Presented with Chris Neary, Amit Prachand, and Ellen Meents-DeCaigny. Northwestern TEACHx. Presented virtually.

Office of Provost (May 14, 2021) . Panelist for the New Faculty Mentoring Program.

Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA) (October, 2020). “Lessons Learned for Recruiting and Retaining Underrepresented Trainees in Graduate Education”.

Trautvetter L.C. (August, 2017). Pedagogy Workshop at NU-Q – Reflecting on the mission and learning centered objectives of the NU-Q curriculum; How do we select appropriate teaching strategies and activities; and Assessment strategies -- connecting evidence-based approaches to learning and pedagogical strategies. Presentations in Doha, Qatar.

Trautvetter L.C. (October, 2016). Recruiting women in STEM: Promoting Integrated Data-Driven Discovery (Integrated Data-Driven Discovery in Earth and Astrophysical Sciences (IDEAS), Center for Interdisciplinary Exploration and Research in Astrophysics

CIERA and MS in Higher Education Administration and Policy program. Hosted by the Council for International Culture and Education (CICE) in New York. Presentations in Jinan, Xian, Chengdu, Shenyang, and Tianjin.

Trautvetter L.C. (May 4, 2016). State-of-the-science: Innovators and innovations in STEM graduate training. Future STEM Leaders conference with national experts from academic, government and industry to discuss the future of graduate STEM training. Ronald Reagan Building and International Trade Center, Washington D.C.  
<http://futurestemleaders.com>

Trautvetter L. C. (October 8, 2015). Recruitment of Female and Underrepresented Engineering Faculty: The Influence of Organizational Context. AAUW and NSF working conference: A Research Agenda on Gender Equity in Engineering and Computing. Washington D.C.

Trautvetter, L. C. (July, 2014). 2014 U.S. Leading Graduate and Professional Schools Tour in China hosted by the Council for International Culture and Education (CICE). Presentations in Shanghai, Hefei, Wuhan, Guangzhou, Shenzhen, Beijing, and Tianjin.

Trautvetter, L. C. (February 1, 2013). Gender Differences Still Exist: Identifying Practices that Influence Retention and Recruitment of Undergraduate Students. Chicago Symposium Series, Excellence in Teaching Mathematics and Science Research and Practice. Chicago, IL: University of Illinois at Chicago.

Trautvetter, L. C. (November, 27, 2012). Gender Differences Still Exist: A Mixed Methods Analysis Identifying Practices that Influence recruitment and Retention of Women Engineering Undergraduate Students. Human Development and Social Policy Talk. Evanston, IL: Northwestern University, School of Education and Social Policy.

Trautvetter, L.C. (January 20, 2012). Programs and Factors that Make a Difference in Recruiting and Retaining Women Engineering Students. NCEER, McCormick Engineering and Sciences. Evanston, IL: Northwestern University.

Ro, H. K., Marra, R. M., Terenzini, P. T., Trautvetter, L. C. (June, 2011). If You Build It, They Will Come (and Stay): Recruiting and Retaining Women and Underrepresented Minority Students. Symposium Panel presented at American Society for Engineering Education (ASEE), Vancouver, B.C.

Trautvetter, L. (November 2, 2007). Civic engagement & the university: What do we know? What is Northwestern's role? Funded by Northwestern's Asset-Based Community Development Institute, Center for Writing Arts, and Institute for Policy Research, Evanston: IL.

Trautvetter, L. C. (July, 2007). Exploring the spiritual dimension on student learning. Invited presentation at Society of Values in Higher Education 83<sup>rd</sup> Annual Meeting, Inquiry and Action: Teaching and Learning in a Religiously Pluralistic World, Baltimore: MD.

Trautvetter, L. (May 2007) Faculty Workshop Series: Holistic Approaches to Teaching and Learning, Northwestern University's Searle Center for Teaching Excellence. Evanston, IL

Trautvetter, L. C., & Stevens, T. (December, 2006). Spiritual identities: Examining the religious lives of Northwestern students. Northwestern University's Division of Student Affairs Staff Development workshop.

Trautvetter, L. C., & Braskamp, L. (June 21, 2006). Putting students first. Invited Keynote Speakers at Northwestern University's Division of Student Affairs (DOSA) Conference, Evanston: IL.

Trautvetter, L. (May, 2006). Faculty Workshop Series: College Student Development and Holistic Approaches to Teaching and Learning, Northwestern University's Searle Center for Teaching Excellence, Evanston: IL

Trautvetter, L. C., & Braskamp, L. (February, 2006). How colleges develop students purposefully. Invited presentation at the National Association of College and University Chaplains' Conference: Seeking religious dialogue: Conversations, collaborations, and communities. Evanston, IL.

Braskamp, L. A., Trautvetter, L. C, & Ward, K. (February 2006) Investing in students for faith development. Invited presentation at Institute for College Values, Florida State University.

Trautvetter, L. C. (July, 1997). How can senior faculty help junior faculty? A seminar prepared and presented to senior faculty (the Executive Council) at the School of Public Health, University of Pittsburgh at the request of the Dean.

Trautvetter, L. C. (1993). Junior faculty institute: Faculty stress in a new job. Invited institute presented at the annual meeting of the American Educational Research Association. Atlanta, GA.

### **Media Engagements**

WTTW, Channel 11. "Chicago Tonight." August 10, 2015. (Panelist commenting on controversies at the University of Illinois such as top party school ranking and the withdrawal of a faculty job offer.

<http://chicagotonight.wttw.com/2015/08/10/u-i-spotlight-after-chancellors-resignation-email-violations>

### **SERVICE**

#### **Professional Service**

Reviewer for American Educational Research Association proposals (1991-present)

Reviewer for Association for the Study of Higher Education proposals (1991-present)

Referee for Review of Higher Education Journal (1998-present).

Referee for American Educational Research Journal (1998-present)

Emerging Scholars Fellow Program. Division J. American Educational Research Association Annual Meeting, CA: San Francisco, 2013.

Emerging Scholars Fellow Program. Division J. American Educational Research Association Annual Meeting, British Columbia: Vancouver, 2012.

Co-Chair of Faculty, Teaching, and Learning, Division J, American Education Research Association Annual Meeting. NY: New York City, 2008.

Reviewer for ASHE Monographs (2009-present)

Referee for Journal in Higher Education (2008-09)

Referee for Research in Higher Education (2007 – present)

Referee for Science (2006- present)

Referee for Review of Higher Education Journal (1998-present).

Referee for American Educational Research Journal (1998-present)

Referee for Journal of Teacher Education (2003-2006)

Vice Program Chair, College Students, Division J, American Educational Research Association Annual Meeting, GA: Atlanta, 1993.

### **Institutional Service**

Northwestern Buffet Global Council, School of Education and Social Policy Representative (2022-2026)

Mentor, Office of the Provost's Mentoring Program for Early Faculty (2020-2025)

Northwestern University U7+ Alliance of World Universities, Access to Higher Education Working Group (2023-24)

Reviewer for Red Team for Northwestern University through Office of Research (2020-2023)

SESP representative on University Faculty Appeals Panel (2017-2021)

Northwestern Foundations Manager Mentoring Program (2020-2022)

Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA) and IDEAS affiliated faculty member (2016 – present)

School of Education and Social Policy Dean Search Committee (2016-17).

Invited and participated in Pedagogy Workshops for Northwestern faculty in Doha, Qatar and Orientation and Onboarding (August, 2017). Reflecting on the mission and learning centered objectives of the NU-Q curriculum; How do we select appropriate teaching strategies and activities; and Assessment strategies -- connecting evidence-based approaches to learning and pedagogical strategies.

Office of the Provost Professional Master's Programs Council Member (2015-2021)

Steering Committee Member, Center for Civic Engagement, Northwestern University (2008-2020)

Northwestern Center for Engineering Education Research Scholar, Northwestern University (NCEER) (2008-present)

Research Associate, Searle Center for Advancing Teaching and Learning, Northwestern University (2003-present).

Invitation to collect data and present findings from survey conducted with Campus Ministries to Northwestern University Central Administration and Survey Planning Committee on Spiritual Lives of Northwestern Students obtained from surveys and focus groups, May 2007.

Faculty Workshop Series: Holistic Approaches to Teaching and Learning, Northwestern University's Searle Center for Teaching Excellence, May, 2007, Evanston: IL

Member, Committee for Civic Engagement (pre Center for Civic Engagement), 2006-08.

Collaborator, Division of Student Affairs, Learning Beyond the Classroom, First Year Experience at Northwestern University, Residential Housing, etc., 2005-08, Evanston, IL.

Keynote Presentation, Division of Student Affairs Conference, Northwestern University. Putting Students First, June 2006.

Faculty Workshop Series: College Student Development and Holistic Approaches to Teaching and Learning, Northwestern University's Searle Center for Teaching Excellence, May, 2006, Evanston: IL

E-IRB workgroup during Fall 2005- Summer 2006 for the Office for the Protection of Research Subjects. Also periodically help the IRB office by making the process easier for students to get IRB approval.

## **PROFESSIONAL AFFILIATIONS**

American Society for Engineering Education (ASEE)

American Educational Research Association (AERA)

Association for the Study of Higher Education (ASHE)  
National Association of Student Personnel Administrators (NASPA)  
Association of the American Colleges and Universities (AACU)  
American Association of University Women (AAUW)  
American Chemical Society (ACS)

### **CONSULTATIONS**

- 2023-25 Partnership: The Office of the Vice President for International Relations and the Master's Program in Higher Education Administration and Policy are honored to represent Northwestern in this initiative with Kazakhstan-U.S. University Consortium (KUUC) Partnership Program. Supported by the U.S. Government and administered by IIE, the consortium aims to cultivate a dynamic higher education ecosystem that promotes bi-national collaboration between universities and colleges in Kazakhstan and the United States. The goal of the Kazakhstan-U.S. University Consortium (KUUC) Partnership Program is to strengthen existing ties and foster new strategic partnerships between U.S. and Kazakhstan institutions through the development of an innovative consortium and community of practice. The consortium will comprise a diverse range of U.S. and Kazakh higher education institutions (HEIs) who will participate in a yearlong virtual curriculum on creating sustainable partnerships in fields of study critical to U.S. – Kazakhstan's economy and higher education sector, including renewable energy, environmental science, agriculture, food security, and STEM. This is a program of the U.S. Embassy in Kazakhstan with funding provided by the U.S. Government, administered by IIE.
- 2011 Loyola University School of Education. Report on junior and newly tenured faculty.
- 2006-08 Garrett-Evangelical Theological Seminary. Assisted in data collection plan and survey instruments to gather information from alumni. Also helped analyze the results.
- 2002-04 Chicago Institute for Mathematics and Science Education, University of Illinois.  
Evaluated Chicago Public School's Chicago Urban Systemic Program (CUSP) and Math and Science Initiative for National Science Foundation funding, including the evaluation of the professional development courses piloted in Chicago's areas higher education institutions and writing the reports in September 2003 and 2004.
- 1991 National Center for Teaching, Learning, and Assessment, Northwestern University. Worked with the board on the Newly Hired Faculty Project.

### **OTHER ACTIVITIES**

P.E.O. Chapter MP (National Women's Philanthropic Educational Organization) (held leadership positions). Organization engages in helping women pursuing undergraduate and graduate education, especially those with hardships. Our Evanston chapter has sponsored 5 women in the past 2 yrs. (1991-present)

Night Ministry volunteer -- provide and serve food bimonthly to Chicago homeless -- about 50-60 people show up each night that we serve.

College of Wooster Alumni Admissions Committee (since 2012) -- mentor prospective and current students, especially women and underrepresented students close to graduation in STEM. Exploring a way to share the higher education administration career pathway with undergraduates and help them discover "Who I am" and find purpose.

Northminster Presbyterian Church, Evanston, Illinois, Elder/Chair of Nominating, (January 2022-25), and member of Racial Justice Committee (2019-present). Leading educational trainings and learning more about our Evanston community and beyond; Elder, Worship (2000-03; 2016-18) and member of Fellowship Committee (2013-18)

Northwestern University Christian Ministry, Board Director (2006-2014), including traveling with a group of Northwestern undergraduates to Cuba in 2014 spring break

Lincolnwood Elementary PTA Program Chair (2001-2003)

Traveled to 44 different countries: Recent trips include India, Netherlands, UK, China, and Chile, as well as Armenia as part of an educational mission trip through the Jinishian Memorial Foundation and the Presbyterian Church USA.