# Katy Luchini Colbry, Ph.D.

# ADMINISTRATION, TEACHING AND RESEARCH EXPERIENCE

Assistant Dean, Graduate Student Services, College of Engineering, Michigan State Univ.

Director for Graduate Initiatives, College of Engineering, Michigan State University

Director for Graduate Recruiting, College of Engineering, Michigan State University

2018

2018-present 2014-2018 2010-2014

## Graduate Retention and Professional Development

- Advise graduate students individually and in small groups, with a focus on non-academic issues such as making transitions, accessing campus resources, and improving interpersonal communications
- Initiated bi-weekly professional development seminars for graduate students and post-doctoral fellows, providing resources for academic success, career development, and personal wellness
- Established a monthly meeting for Graduate Women in Engineering
- Established a Graduate Leadership Fellow program to provide ongoing professional development and administrative experience to graduate students using a cohort model combined with individual mentoring
- Developed a workshop series on applying for NSF Graduate Research Fellowships and provide individual assistance to student applicants, including 68 NSF fellowships winners since 2011
- Instituted an annual Engineering Graduate Research Symposium, showcasing ~300 research posters and presentations, along with departmental and College-wide awards and industry/career networking
- Developed and taught new graduate seminars on dissertation writing, professional skills and ethics

#### **Graduate Recruitment**

- Recruit diverse, highly qualified graduate students for MS/PhD programs in 11 engineering disciplines
- Establish a recruiting calendar and train a team of graduate student recruiters to represent the College of Engineering and MSU at graduate recruiting events locally, regionally and nationally
- Develop a database of prospective graduate students and processes to cultivate strong prospects
- Expand on-campus visit activities for prospective graduate students, including spring visit weekends and programs for students from underrepresented populations; average yield from these events is over 60%
- Advise undergraduates on preparing for and selecting a graduate school, including workshops on preparing applications, writing personal statements, and choosing between graduate programs

#### Undergraduate Research

- Revised and coordinate the College of Engineering Summer Undergraduate Research Experience (EnSURE) program; since 2011 the program has served 1,000+ undergrads and 600+ faculty mentors; \$250,000 annual budget
- Initiated two year pilot inGEAR (Internship in Global Engineering & Advanced Research) program, serving ~20 students and ~10 faculty annually; \$80,000 annual budget
- Design and deliver 10 weeks of professional development for undergraduate research assistants
- Collaborate with MSU Office of Undergraduate Research to develop campus-wide networking activities
- Co-founder and organizer of annual Mid-Michigan Symposium for Undergraduate Research Experiences
- Developed and taught new, 1-credit course (EGR 291/393/893: Engineering Research Methods)

#### Research and Service

- Ongoing research on graduate student recruitment and retention, including undergraduate research programs, resulting in numerous peer-reviewed publications and presentations
- Primary Investigator and Senior/Key Personnel on external and internal funding proposals to support graduate recruitment (including undergraduate research) and graduate student professional development
- Active nationally with professional organizations, including holding offices with the Graduate Studies
   Division of the American Society for Engineering Education and Tau Beta Pi Engineering Honor Society

## **Administration**

- Support selection processes for MSU and College graduate fellowship programs (\$1m+ annually)
- Assist in establishing and monitoring degree collaboration with GE Edison Scholars Program
- Represent the College of Engineering in various committees, including graduate union negotiation team
- Hire and supervise both professional and student staff members, and coordinate the efforts of volunteers

- Advised more than 600 high-achieving students annually through individual appointments, group information sessions, email and phone; reviewed annual progress plans and certified degree status
- Helped to establish new review process to select new members from current MSU undergraduates
- Developed expertise in MSU data systems (SIS, ESAF, Degree Navigator) and created procedures for managing membership data, monitoring student progress, and streamlining reporting tasks
- Designed and maintained websites for ReCUR Undergraduate Research Journal and Academic Scholars
- Research about undergraduate research experiences, including collaboration on an annual survey of MSU students that resulted in a book chapter and two conference presentations

#### Visiting Instructor, Computer Science & Engineering Department, Michigan State University

Fall 2006

- Taught CSE 231 (Introduction to Programming I) to 100+ students in twice-weekly lectures
- Held office hours; supervised several teaching assistants; oversaw weekly labs and programming projects; created and graded exams; managed student grades and instances of dishonesty/cheating

## Research Fellow, Highly Interactive Computing in Education, University of Michigan

1999-2004

- Researched educational technology, mobile devices, human computer interaction, and interface design
- Designed handheld computer software to support science inquiry by middle school students
- Led a team of undergraduate programmers in implementing and testing handheld software
- Funded by National Science Foundation and University of Michigan fellowships and assistantships

## COURSE DESIGN AND INSTRUCTION EXPERIENCE

## EGR 993: Engineering Research Writing, Michigan State University

- Designed and deployed this 1-credit seminar course to support engineering graduate students during substantial writing projects, such as the thesis or dissertation
- Taught 3 times/year since Spring 2019 (initially offered under other course numbers)

#### EGR 893: Graduate Experiential Education, Michigan State University

- Designed and deployed this1-credit course to support students engaged in graduate-level projects with faculty mentors, or in approved internship experiences in government, non-profit, or private sectors
- Taught every summer since 2018; every fall and spring since 2020 (initially offered under other course numbers)

#### EGR 393 002H: Engineering Research Skills for EnSURE Participants, Michigan State University

- Designed and deployed this 1-credit, honors-level course to help undergraduates build skills in academic research and prepare for graduate school; adapts NSF-supported "Entering Research" curriculum
- Taught every summer since 2011 (initially offered as non-credit, also under other course numbers)

#### EGR 193: Introduction to Research for Engineering PAs, Michigan State University

- Designed and deployed this 1-credit course to support first-year, first-semester undergraduate students working as professorial assistants (PAs) to conduct research with engineering faculty mentors
- Taught every fall since 2020

# CMSE 890: CyberAmbassadors – Communications, Teamwork, Ethics and Leadership Training for Multidisciplinary Research Teams, Michigan State University

- Designed and deployed this 2-credit, interactive seminar course to support professional skills development in graduate students from STEM (science, technology, engineering, mathematics)
- Curriculum designed as part of an NSF-funded grant project to train CyberInfrastructure professionals, and adapted for STEM graduate students as part of the funded project goals
- Taught every year since 2019

## COMMUNICATIONS AND FUNDRAISING EXPERIENCE

#### Communications and Development, St. John Student Parish, East Lansing, Michigan

2004-2008

- Promoted from Alumni Relations Coordinator (2004) to Director of Communications and Development (2005-07); continued serving as Development Consultant (2007-08) after moving out-of-state
- Responsible for design and maintenance of a Raiser's Edge fundraising database containing 18,000 constituents who donated more than \$1 million annually
- Designed direct mail appeals that raised \$60,000 annually
- Responsible for annual major donor dinner (\$18,000 profit) and Dinner/Dance (\$30,000 profit)
- Developed four new student internships (in marketing/communications and development); hired and supervised these interns
- Created a new visual identity for the parish, which included a new logo, letterhead and font style; re-designed the website; designed new communications materials for parish activities and events
- Assisted in developing \$900,000 annual budget; responsible for establishing donation and reconciliation procedures; familiar with donation-related tax laws and IRS procedures; check-signing authority

### Change Management Coordinator, St. Mary Student Parish, Ann Arbor, Michigan

2003-2004

- Coordinated transition to new development software package (Raiser's Edge)
- Interviewed staff, determined data architecture, managed data clean-up, supervised data-entry
- Reviewed and provided feedback on direct mailing materials/schedules and special events

## **EDUCATION**

Ph.D. in Computer Science and Engineering, University of Michigan, Ann Arbor M.S.E. in Computer Science and Engineering, University of Michigan, Ann Arbor 2005 2001

PhD Committee: Elliot Soloway (chair), John Laird, Martha Pollack, Joseph Krajcik, Christopher Quintana

B.S. in Computer Science, Michigan State University, East Lansing

1999

B.A. in Political Theory and Constitutional Democracy, Michigan State University, East Lansing

1999

- Member of the Michigan State University Honors College
- · Degrees earned concurrently and awarded with honors

#### **Certifications and Continuing Education**

- NSF Inclusive STEM Teaching Project, 2021
- MSU HUB Faculty Fellowship, 2020
- Master Facilitator, National Research Mentor Network, 2018
- Certified Facilitator, National Research Mentor Network, 2017
- SafeZone Certification, provided by the Gay Alliance at the ASEE National Conference, June 2014 & 2018
- Mental Health First Aid Certification, Community Mental Health, Lansing, MI, May 2013; renewed 2019
- Online Faculty Certification, University of Phoenix, March 2008
- Interpersonal Communications for Fundraising, Indiana University Fund Raising School, September 2005
- Building the Annual Fund, Indiana University Fund Raising School, August 2005
- Dale Carnegie: Effective Communications and Human Relations, Findlay, OH, 1994-1995

## RESEARCH AND PROJECT GRANTS

- Co-Principal Investigator: "Collaborative Research: HDR DSC: Increasing Accessibility through Building Alternative Data Science Pathways." (2021-2024) NSF Award 2123260, \$1,022,780 over three years to develop and deploy a 3+2 BS+MS pathway for STEM undergraduates from HBCUs to earn a Master's degree in data science at MSU. 0.5 month/year.
- Co-Principal Investigator: "Creating Equitable Pathways to Advanced Degrees in Data Science, a Spelman MSU Partnership." (2021-2024) Alfred P. Sloan Foundation Award G-2021-16976, \$500,000 over three years to increase access for Black women pursuing careers in data science. Participant support only.

- Co-Principal Investigator: "CyberTraining: CIP Professional Skills for CyberAmbassadors." (2017-2023) NSF Award 1730137, \$498,330 over three years (plus 3 no-cost extensions due to the pandemic) to develop and deploy a national training program for computational specialists to strengthen communication, teamwork and leadership skills. 1.0 month/year.
- Co-Principal Investigator: "PerSIST: Pursuing Success through Inclusion, Support, and Training." (2018-2023) \$85,000 funding through the "Creating Inclusive Excellence at MSU" program; coordinating efforts among student success programs at MSU to create a pathway for students from disadvantaged backgrounds to complete a BS and MS in Engineering. Participant support only.
- Key Personnel: "MSU BEST: Integrated Biomedical Training for Multiple Career Options." (2014-2019) NIH Award 5DP7OD020320, \$1.9m over five years to recruit and provide career training and professional development for graduate students pursuing biomedical research. 1.0 month/year.
- Key Staff Member: "Tier 1 University Transportation Center." (2013-2017) \$2.8m funding from the Research and Innovation Technology Administration from the U.S. Department of Transportation to recruit and provide professional development programs for undergraduate research assistants. 0.5 month/year.
- Principal Investigator: "Graduate Women 'Lean In': Building Community and Broadening Understanding." (2013) \$10,000 funding through the "Creating Inclusive Excellence at MSU" program; developing semester-long facilitated discussion series for graduate students and associated research study of program impact. Participant support only.

# OUTREACH AND SERVICE

## Tau Beta Pi Engineering Honor Society

**Director, Engineering Futures Program** (2015-present)

Engineering Futures Facilitator (2000-present)

- Developed and deployed "EF Online" during the pandemic, serving more than 2,500 participants world-wide in less than two years through synchronous webinars
- Pre-pandemic, directed the efforts of 40+ volunteers facilitating ~200 sessions for 4,000+ participants annually at universities across the United States and Puerto Rico
- Develop and oversee \$100,000+ annual budget to facilitate professional skills seminars nationally
- Secure funding and establish partnerships to develop and deploy new curriculum and train facilitators
- Served on the Engineering Futures Planning Committee (2005-2008)

Chapter Advisor, MI-Alpha Chapter at Michigan State University (2004-2006, 2011-present)

Provide assistance to student officers, participate in group activities and bi-annual chapter initiations

**District Director**, Michigan and Ohio (2004-2006)

• Collaborated with a team of 4 directors to support 26 collegiate chapters

#### **American Society for Engineering Education**

Board of Directors, Chairperson of Professional Interest Council (PIC) II, (2023-present)

Serve on the national board of directors, supporting the activities of 10 divisions within ASEE

Past Chairperson, Graduate Studies Division, ASEE (2020-2022)

Support Division activities, including development of new bylaws

Chairperson, Graduate Studies Division, ASEE (2018-2020)

Elected to lead Division's membership activities, including coordinating monthly board meetings

Program Chair, Graduate Studies Division, ASEE (2017-2018)

Elected to organize Division's paper solicitation, review, and scheduling for 2018 National Conference

**Secretary-Treasurer**, Graduate Studies Division, ASEE (2015-2017)

Elected by members to serve as a Division officer, responsible for financial accounts and reporting

Interim Program Chair, Graduate Studies Division, ASEE (2014-2015)

Organized Division's paper solicitation, review, and scheduling for 2015 National Conference

#### **Selected Peer Review Activities**

- National Science Foundation Review Panels (2016-2022)
- SMART Scholarship and Fellowship Evaluation Panel (2016-2023)
- NDSEG Graduate Fellowship Evaluation Panel (2013-2023)
- ASEE Annual Conference & Exposition (2011-2023)
- CoNECD (Collaborative Network for Engineering & Computing Diversity) Conference (2021)
- Air Force Summer Faculty Fellowship Evaluation Panel (2014)
- ASEE North Central & Illinois-Indiana Section Conference (2011-2012)
- Journal of Women and Minorities in Science and Engineering (2011-2012, 2014)
- Associate Editor, Learning Technology Newsletter (2005-2008)
- Assistant Editor, Journal of Educational Technology and Society (2005-2008)

# **HONORS AND AFFILIATIONS**

#### **Awards**

- American Society of Engineering Education ASEE Hall of Fame Recipient (2023)
- University Distinguished Academic Staff Award, Michigan State University (2022-23)
- Withrow Student Service Award, MSU College of Engineering (2022)
- MSU HUB Faculty Fellowship (2020)
- Best Paper. Workforce Development. Diversity and Professionalization Track. PEARC (2020)
- Patricia B. Enos Mentoring Award (2017)
- "Best of NEE" Paper Session, New Engineering Educators Division, ASEE National Conference (2014)
- Best Paper, Graduate Studies Division, ASEE National Conference (2013)
- Best Paper, Second Place, ASEE North Central Section Conference (2012)
- Best Paper, IEEE International Conference on Advanced Learning Technologies (2001)
- National Science Foundation Graduate Research Fellowship (1999)

## **Professional and Honor Society Memberships**

- Association for Engineering Education
- Women in Engineering Programs and Advocates Network
- Tau Beta Pi Engineering Honor Society
- Phi Beta Kappa Liberal Arts Honor Society
- Upsilon Pi Epsilon Computer Science Honor Society

# PEER-REVIEWED PUBLICATIONS

- \*\* denotes graduate student author
- \* denotes undergraduate student author
- 1. S. Christlieb, K. Luchini-Colbry. (2023) "Engineering Graduate Leadership Fellows Mentored Projects to Build Community." Proceedings of the 2023 ASEE Annual Conference & Exposition, Baltimore, MD.
- 2. K. Luchini-Colbry, D. Colbry, \*\*A. Briliyanti, J. Rojewski. (2022) "Training the Trainers: Preparing Facilitators to Provide Professional Development for Engineers and Scientists." Proceedings of the 2022 ASEE Annual Conference & Exposition, Minneapolis, MN. https://strategy.asee.org/40642
- 3. K. Luchini-Colbry, M. Stephens Cooley, A. Christlieb, L. Stevensen, D. Colbry, M. Dark McNeese, V. Melfi, T. Oliver, B. O'Shea, J. Volcy. (2022) "Building the Corps: an HBCU+PWI Partnership to Broaden Participation in Data Science (Experience)." Proceedings of the 2022 ASEE Annual Conference & Exposition, Minneapolis, MN. https://strategy.asee.org/40634
- 4. J. Payumo, E. Alocilja, \*\*C. Boodo, K. Luchini-Colbry, P, Ruegg, E. McLamore, D. Vanegas, R.K. Briceno, A. Castaneda-Sabogal, K. Watanabe, M.J. Gordoncillo, D. Amalin, L. Fernando, N. Bhusal. (2021) "Next Generation of AMR Network." Encyclopedia. 1(3):871-892. https://doi.org/10.3390/encyclopedia1030067

- 5. M. Luchini, D. Cribbs, D. Colbry, K. Luchini-Colbry. (2021) "Adapting an NSF-Funded Professional Skills Curriculum to Train Engineers in Industry: A Case Study" Proceedings of the 2021 ASEE Annual Conference & Exposition. https://doi.org/ 10.18260/1-2--36648
- 6. C. Hill, K. Luchini-Colbry. (2021) "Entering Research Online: Developing a Virtual Course to Support Experiential Education for Undergraduate Research Assistants." Proceedings of the 2021 ASEE Annual Conference & Exposition. https://peer.asee.org/37089
- 7. \*\*A. Briliyanti, J. Rojewski, K. Luchini-Colbry, D. Colbry. (2020) "CyberAmbassadors: Results from Pilot Testing a New Professional Skills Curriculum." Proceedings of PEARC'20: Practice and Experience in Advanced Research Computing, Portland, OR. https://doi.org/10.1145/3311790.3396619 Best Paper, Workforce Development, Diversity and Professionalization Track.
- 8. K. Luchini-Colbry, M. McDaniels. (2020) "Equity, Inclusion and Ethics: Adapting a Mentoring Curriculum to Develop an Ethics Workshop for Engineers." Proceedings of the 2020 ASEE Annual Conference & Exposition. https://doi.org/10.18260/1-2--34583
- 9. \*\*A. Briliyanti, J. Rojewski, D. Colbry, K. Luchini-Colbry. (2020) "STEMAmbassadors: Developing Communications, Teamwork and Leadership Skills for Graduate Students." Proceedings of the 2020 ASEE Annual Conference & Exposition. https://doi.org/10.18260/1-2--35207
- 10. K. Luchini-Colbry, C. McComb, J. Rojewski, \*\*A. Briliyanti, D. Colbry. (2019) "Engineering Futures: Updating a Successful Professional Development Program to Address New Challenges." Proceedings of the 2019 ASEE Annual Conference & Exposition, Tampa, FL. https://doi.org/10.18260/1-2--32724
- 11. K. Luchini-Colbry, D. Colbry, J. Rojewski, \*\*A. Briliyanti. (2019) "Partners in Professional Development: Initial Results from a Collaboration Between Universities, Training Programs, and Professional Societies." Proceedings of the 2019 ASEE Annual Conference & Exposition, Tampa, FL. https://doi.org/10.18260/1-2--33159
- 12. \*\*A. Briliyanti, J. Rojewski, \*T. VanNguyen, K. Luchini-Colbry, D. Colbry, (2019) "The CyberAmbassador Training Program." PEARC '19: Proceedings of the Practice and Experience in Advanced Research Computing on the Rise of the Machines (learning), Chicago, IL. https://doi.org/10.1145/3332186.3332218
- 13. C. Berdanier, K. Luchini-Colbry. (2017) "The Care and Keeping of Graduate Students: An Interactive Panel Discussion for Novice Advisers of Graduate Students." Proceedings of the 2017 ASEE Annual Conference & Exposition, Columbus, OH. https://peer.asee.org/28947
- 14. K. Luchini-Colbry. (2017) "Applying to Graduate School in Engineering: A Practical Guide." Proceedings of the 2017 ASEE Annual Conference & Exposition, Columbus, OH. https://peer.asee.org/27607
- 15. K. Luchini-Colbry. (2017) "Getting Great Recommendation Letters: A Practical Guide." Proceedings of the 2017 ASEE Annual Conference & Exposition, Columbus, OH. https://peer.asee.org/28405
- 16. K. Luchini-Colbry. (2017) "Choosing Between Graduate Program Offers: A Practical Guide." Proceedings of the 2017 ASEE Annual Conference & Exposition, Columbus, OH. https://peer.asee.org/28031
- 17. K. Luchini-Colbry, M.A. Walker. (2016) "The inGEAR Program: Recruiting International Graduate Students through Undergraduate Research Internships." Proceedings of the 2016 ASEE Annual Conference & Exposition, New Orleans, LA. https://doi.org/10.18260/p.26195
- 18. K. Luchini-Colbry, J.R. Luchini. (2016) "What is the Length of a Toilet Paper Tube? A Hands-On, Team-Based Lesson in the Ethics of Data Collection." Proceedings of the 2016 ASEE Annual Conference & Exposition, New Orleans, LA. https://doi.org/10.18260/p.27194
- 19. \*\*R. Coffey, K. Luchini-Colbry. (2016) "Undergraduate Research Experiences: Qualitative Results from a Multi-Year Survey." Proceedings of the 2016 ASEE Annual Conference & Exposition, New Orleans, LA. https://doi.org/10.18260/p.27093

- 20. K. Luchini-Colbry, \*\*J. Rojewski. (2015) "Leaning In' by Leaving the Lab: Building Graduate Community Through Facilitated Book Discussions." Proceedings of the 2015 ASEE Annual Conference & Exposition, Seattle, WA. https://doi.org/10.18260/p.23349
- 21. \*\*J. Rojewski, K. Luchini-Colbry. (2015) "Graduate Women 'Lean In': Building Community and Broadening Understanding." Proceedings of the 2015 ASEE Annual Conference & Exposition, Seattle, WA. https://doi.org/10.18260/p.24162
- 22. S. Ciston, K. Luchini-Colbry, C. Weyant, R. Nagel, J. Nagel, A. Genau, K. Wagstrom, D. Briedis. (2015) "Two Body Solutions: Strategies for the Dual-Career Job Search." Proceedings of the 2015 ASEE Annual Conference & Exposition, Seattle, WA. https://doi.org/10.18260/p.24946
- 23. K. Luchini-Colbry, K. Steinke Wawrzynski, M. Shannahan. (2014) "The Mentoring Experience: Finding Value in Guiding Undergraduate Researchers." Proceedings of the 2014 ASEE Annual Conference & Exposition, Indianapolis, IN. https://peer.asee.org/23167
- 24. K. Luchini-Colbry, T. Gonzalez. (2014) "Finish My Research! Find a Job! Feel Better! Seminars to Support Engineering Graduate Students' Professional and Personal Goals." Proceedings of the 2014 ASEE Annual Conference & Exposition, Indianapolis, IN. https://peer.asee.org/20497
- 25. D. Colbry, K. Luchini-Colbry. (2014) "Scaffolded Structuring of Undergraduate Research Projects." Proceedings of the 2014 ASEE Annual Conference & Exposition, Indianapolis, IN. https://peer.asee.org/23001 "Best of NEE" Paper Session.
- 26. C. Jackson-Elmoore, K. Steinke-Wawrzynski, K. Luchini-Colbry, \*\*J. Daniels. (2013) "Undergraduate research: Blending the scholarship of discovery, teaching, application, and integration." Going Public: Civic and Community Engagement. 33-50.
- 27. K. Luchini-Colbry, K. Steinke Wawrzynski, M. Shannahan. (2013) "Feeling Like a Grad Student: A Survey of Undergraduate Researchers' Expectations and Experiences." Proceedings of the 2013 ASEE Annual Conference & Exposition, Atlanta, GA. https://peer.asee.org/19613 Best Paper Award, Graduate Studies Division.
- 28. K. Luchini-Colbry, \*T. Ortega-Knight, \*C. Chen, \*D. Lynch, \*K. Fitzsimons, \*C. Alton, \*J. Mena Lapaix, \*J. Drost, \*G. Kohler. (2013) "Exploring the Experience of Undergraduate Research: A Case Study Using facebook." Proceedings of the 2013 ASEE Annual Conference & Exposition, Atlanta, GA. https://peer.asee.org/19594
- 29. K. Luchini-Colbry, D. Colbry. (2013) "Gadget Avalanche: A Technology Literacy Course for Novice Adults." Proceedings of the 2013 ASEE Annual Conference & Exposition, Atlanta, GA. https://peer.asee.org/19644
- 30. D. Colbry, K. Luchini-Colbry. (2013) "STEM inSight: Developing a Research Skills Course for First- and Second-Year Students." Proceedings of the 2013 ASEE Annual Conference & Exposition, Atlanta, GA. https://peer.asee.org/22469
- 31. K. Luchini-Colbry, K. Steinke Wawrzynski, \*\*R. Mangiavellano, \*E. McCune. (2012) "Guiding Them to Graduate School: Professional Development for Undergraduates Participating in Engineering Research Programs." Proceedings of the 2012 ASEE Annual Conference & Exposition, San Antonio, TX. https://peer.asee.org/21442
- 32. D. Colbry, K. Luchini-Colbry. (2012) "CyberGreen: Hands-On Engineering Research in Sustainability and Supercomputing." Proceedings of the North Central Section Conference of the Annual Conference of the American Society for Engineering Education (ASEE), Ada, OH. Best Paper Award, Second Place.
- 33. S. Christlieb, K. Luchini-Colbry. (2012) "Developing a Graduate Research Symposium: A Case Study in Engineering." Proceedings of the North Central Section Conference of the Annual Conference of the American Society for Engineering Education (ASEE), Ada, OH.

- 34. K. Luchini-Colbry, D. Colbry, W. Punch. (2007) "Designing Introductory Programming Courses for Graduate and Undergraduate Students: A Parallel Case Study." Proceedings of the 2007 ASEE Annual Conference & Exposition, Honolulu, Hawaii.
- 35. K. Luchini, C. Quintana, E. Soloway. (2004) "Design guidelines for learner-centered handheld tools." Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '04), 135-142. https://doi.org/10.1145/985692.985710
- 36. J. Lee, K. Luchini, B. Michael, C. Norris, E. Soloway. (2004) "More Than Just Fun and Games: Assessing the Value of Educational Video Games in the Classroom." CHI '04 Extended Abstracts on Human Factors in Computing Systems (CHI EA '04), 1375-1378. https://doi.org/10.1145/985921.986068
- 37. K. Luchini, C. Quintana, E. Soloway. (2003) "Pocket PiCoMap: A Case Study in Designing and Assessing a Handheld Concept Mapping Tool for Learners." Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '03), 321-328. https://doi.org/10.1145/642611.642668
- 38. K. Luchini, C. Quintana, J. Krajcik, E. Soloway. (2003) "Designed for Learners: Applying Software Engineering to the Development of Scaffolded Educational Software." International Journal of Continuing Engineering Education and Lifelong Learning, 13(3/4), 366-386. https://doi.org/10.1504/IJCEELL.2003.003268
- 39. K. Luchini, C. Quintana, J. Krajcik, E. Soloway. (2002) "Designing Learner-Centered Scaffolded Tools for Handheld Computers." Proceedings of the International Conference of the Learning Sciences, 268-275.
- 40. K. Luchini, C. Quintana, E. Soloway. (2002) "ArtemisExpress: A Case Study in Designing Handheld Interfaces for an Online Digital Library." In Paternò, F. (ed.), Human Computer Interaction with Mobile Devices, vol 2411, 306-310.
- 41. K. Luchini, W. Bobrowsky, M. Curtis, C. Quintana, E. Soloway. (2002) "Supporting Learning in Context: Extending Learner-Centered Design to the Development of Handheld Educational Software." Proceedings of the IEEE International Workshop on Wireless and Mobile Technologies in Education, 107-111. https://doi.org/10.1109/WMTE.2002.1039230
- 42. K. Luchini, C. Quintana, J. Krajcik, C. Farah, N. Nandihalli, K. Reese, A. Wieczorek, E. Soloway. (2002) "Scaffolding in the small: designing educational supports for concept mapping on handheld computers." CHI '02 Extended Abstracts on Human Factors in Computing Systems (CHI EA '02), 792-793. https://doi.org/10.1145/506443.506600
- 43. K. Luchini, C. Quintana, M. Curtis, R. Murphy, J. Krajcik, E. Soloway, D. Suthers. (2002) "Using handhelds to support collaborative learning." Proceedings of the Conference on Computer Support for Collaborative Learning: Foundations for a CSCL Community (CSCL '02), Gerry Stahl (Ed.). International Society of the Learning Sciences, 704-705.
- 44. E. Soloway, K. Luchini, C. Quintana, C. Norris. (2002) "Which Scenario is Better for Learning?" Learning & Leading with Technology Journal, 29(8), 14-15.
- 45. M. Curtis, K. Luchini, W. Bobrowsky, C. Quintana, E. Soloway. (2002) "Handheld Use in K-12: A Descriptive Account." Proceedings of the IEEE International Workshop on Wireless and Mobile Technologies in Education, 23-30. https://doi.org/10.1109/WMTE.2002.1039217
- 46. W. Bobrowski, M. Curtis, K. Luchini, C. Quintana, E. Soloway. (2002) "Exploring the Affordances of Handheld Computers: Helping Teachers Engage in Best Practices." Proceedings of the International Conference of the Learning Sciences, 510-511.
- 47. K. Luchini, P. Oehler, C. Quintana, E. Soloway. (2001) "An Engineering Process for Constructing Scaffolded Work Environments to Support Student Inquiry: A Case Study in History." Proceedings of the IEEE International Conference on Advanced Learning Technologies, 55-56. https://doi.org/10.1109/ICALT.2001.943853 Best Paper Award.

# PEER-REVIEWED PRESENTATIONS

- 1. K. Luchini-Colbry, D. Colbry. (2019) "Mastering Complex Communication." Presented at the International Network for the Science of Team Science (INSciTS) Conference. Lansing, MI.
- 2. K. Steinke-Wawryznski, C. Jackson-Elmoore, \*\*J. Boucher-Niemi, K. Luchini-Colbry. (2010) "The Impact of Mentoring on Students' Broader Understanding of Undergraduate Research." Poster presented at the AAC&U Conference on Creativity, Inquiry and Discovery: Undergraduate Research In and Across the Disciplines. Durham, NC.
- 3. \*\*J. Boucher-Niemi, J. Auchtung, K. Steinke-Wawryznski, K. Luchini-Colbry, C. Jackson-Elmoore. (2010) "Developing Citizen-Scholars through Undergraduate Research Experiences." Workshop presented at the 2010 National Conference of the Council on Undergraduate Research. Ogden, Utah.
- 4. K. Luchini, C. Quintana, E. Soloway. (2004) "Evaluating the Impact of Small Screens on the Use of Scaffolded Handheld Learning Tools." Paper presented at the 2004 Annual Meeting of the American Educational Research Association. San Diego, CA.
- 5. K. Luchini, C. Quintana, E. Soloway. (2003) "Learner-Centered Design of Scaffolding." Poster presented at the NSF Engineering and Computing Education Grantee Meeting. Washington, D.C.
- 6. K. Luchini, A. Wieczorek, N. Nandihalli, C. Quintana, E. Soloway. (2002) "Supporting Real-Time Collaboration on Handhelds." Demonstration at Conference on Computer Supported Collaborative Work. New Orleans, LA.
- 7. K. Luchini, A. Wieczorek, N. Nandihalli, C. Quintana, E. Soloway. (2002) "Collaborative Pocket PiCoMap: A Demonstration of Real-Time Support for Collaborative Work with Handheld Computers." Demonstration presented at the Mobile Human Computer Interaction Conference. Pisa, Italy.
- 8. K. Luchini. (2002). "MaLTs in the Classroom: Mobile Learning Tools in the Eighth Grade." Poster presented at Center for Learning Technologies workshop on Ubiquitous Mobile Computers in Education. Portland, OR.
- 9. C. Quintana, K. Luchini, C. Norris, E. Soloway. (2002) "From Desktop to Handheld: A Learner-Centered Design Approach to Developing Software that Scaffolds Learning Across Platforms." Tutorial given at the Mobile Human Computer Interaction Conference. Pisa, Italy.
- 10. J. Krajcik, C. Quintana, K. Luchini, A. Wieczorek. (2001) "Scaffolded Work Environments to Support Collaborative Inquiry Activities." Presentation at the National Research Council's Committee on Improving Learning with Information Technology Workshop on Roadmapping & Community Building. Palo Alto, CA.
- 11. K. Luchini. (1999) "Using Interactive Exercises to Increase Student Involvement in Online Education." Poster presented at the ACM Conference on Computer Science Education. New Orleans, LA.

# SELECTED PRESENTATIONS AND SPECIAL PROJECTS

- 1. K. Luchini-Colbry, A. Kurr. (2022) "Communication Skills for Engineers." Workshop presented at the 2022 ASEE Annual Conference & Exposition.
- 2. K. Luchini-Colbry, C. Hill. (2021) "Entering Research Online: Developing a Virtual Course to Support Undergraduate Research Assistants." Poster presented at the MSU Teaching & Learning Conference.
- 3. K. Luchini-Colbry. (2019) "Equity, Inclusion & Engineering Ethics." Workshop presented at the Annual Conference of American Society for Engineering Education (ASEE), Tampa, FL.

- 4. C. Berdanier, K. Luchini-Colbry. (2018) "The Care and Keeping of Graduate Students." Invited panel organized for the Annual Conference of American Society for Engineering Education (ASEE), Salt Lake City, UT.
- 5. K. Luchini-Colbry, M. Ohland. (2016) "The Value of Interpersonal Skills Training in Engineering Education: An Interactive Panel Discussion with the Tau Beta Pi Engineering Futures Program." Invited panel organized for the Annual Conference of American Society for Engineering Education (ASEE), New Orleans, LA.
- 6. K. Luchini-Colbry. (2012-2016) "Undergraduate Research Opportunities." Professional development seminar given for Engineering Professorial Assistants; CoRE Engineering Program; EGR 160: Diversity and Engineering, Michigan State University, East Lansing, MI.
- 7. K. Luchini-Colbry. (2010-2016) "Applying for the NSF Graduate Research Fellowship." Professional development workshop series for the MSU College of Engineering, East Lansing, MI.
- 8. K. Luchini-Colbry. (2010-2015) "Why Go to Grad School?" Professional development seminar given for undergraduate groups (SASE; Women in Computing; Society of Women Engineers; DePauw NSF REU; EGR 291: Engineering Success; ENE Student Society) at Michigan State University, East Lansing, MI.
- 9. K. Luchini-Colbry (2012) "Applying to Engineering Graduate School." Professional development seminar given at Trine University, Angola, IN.
- 10. D. Colbry, B. Lindvall, K. Luchini-Colbry, A. Ostreko. (2012) "Getting into Graduate School." Professional development panel discussion at the Tau Beta Pi National Convention, Lexington, KY.
- 11. K. Luchini-Colbry, D. Colbry, (2012) "What Can I Do with that Gadget: iPads, iPods, iPhones." Seminar given for Women's Resource Center, Michigan State University, East Lansing, MI.
- 12. D. Colbry, K. Luchini-Colbry. (2012) "Tech Gadget Avalanche: Navigating the Ever-Changing World of Portable Devices." Non-credit personal enrichment course given for MSU Evening College, East Lansing, MI.
- 13. K. Luchini-Colbry. (2012) "Navigating the Campus Visit." Professional development seminar given for Engineering undergraduates, Michigan State University, East Lansing, MI.
- 14. K. Luchini-Colbry. (2011) "The Graduate School Application Process." Professional development seminar given for Engineering undergraduates, Michigan State University, East Lansing, MI.
- 15. K. Luchini-Colbry. (2011) "Financing your Graduate Education (and Choosing the Right Graduate Program)." Professional development seminar given for the McNair Scholars Program, Michigan State University, East Lansing, MI.