

## Curriculum Vita

email mwillkers@berkeley.edu  
 mobile 760.877.0121  
 web ocf.berkeley.edu/~mwillkers

University of California, Berkeley  
 Graduate School of Education  
 2121 Berkeley Way West, Office 4413  
 Berkeley, CA, 94720-1670

## APPOINTMENTS

**University of California—Berkeley, CA, USA**  
 Assistant Professor, Graduate School of Education 2016-Present

**Tufts University, Medford, MA, USA**  
 Assistant Professor, Department of Education 2011-2015  
 Co-Director, STEM Education Graduate Program (2014-2015)

**Northwestern University, Evanston, IL, USA**  
 Graduate Student, Learning Sciences Program 2005-2011  
 IES Multidisciplinary Fellow (2006-2010); Cognitive Science Research Fellow (2005-2006)

**University of California—San Diego, CA, USA**  
 Undergraduate Research Assistant, San Diego Supercomputer Center 2003-2005

**University of Oklahoma, Norman, OK, USA**  
 Undergraduate Research Assistant, Human-Computer Interaction Center 2003

## EDUCATION

**Northwestern University, Evanston, IL, USA**  
 Ph.D. Learning Sciences 2012

**University of San Diego, San Diego, CA, USA**  
 B. A. Mathematics; B. A. Diversified Liberal Arts (Elementary Education) 2005  
 Summa Cum Laude, Phi Beta Kappa

## PUBLICATIONS (\*students; ^partner teachers; ‡postdoctoral scholars. Most titles link to articles online.)

## JOURNAL SPECIAL ISSUES/EDITORIALS

**Wilkerson, M. H.** & Polman, J. (Eds.) (2020). Situating data science: Exploring how relationships to data shape learning. [Special Issue] *Journal of the Learning Sciences*, 29(1), 1-10. doi: 10.1080/10508406.2019.1705664

**Wilkerson, M. H.**, D'Angelo, C., & Litts, B. (Eds.) (2020). Stories from the field: Locating and cultivating computational thinking in spaces of learning. [Special Issue] *Interactive Learning Environments*, 28(3), 264-271. doi: 10.1080/10494820.2020.1711326

## REFEREED JOURNAL ARTICLES

**Wilkerson, M. H.**, Lanouette, K. ‡, & Shareff, R. L.\* (in press). Exploring variability during data preparation: A way to connect data, chance, and context when working with complex public datasets. Article to appear in *Mathematical Thinking and Learning*.

Erickson, T., **Wilkerson, M. H.**, Finzer, W., & Reichsman, F. (2019). Data moves. *Technology Innovations in Statistics Education*, 12(1). <https://escholarship.org/uc/item/0mg8m7g6>

Quan, T., Bracho, C. A., **Wilkerson, M. H.**, & Clark, M. (2019). Empowerment and transformation: Integrating teacher identity, activism, and criticality across three teacher education programs. *Review of Education, Pedagogy, and Cultural Studies*, 41(4-5), 218-251. doi: 10.1080/10714413.2019.1684162

Shaban, Y.\* & **Wilkerson, M. H.** (2019). The co-construction of epistemological framing in clinical interviews and implications for science education research. *International Journal of Science Education*, 41(12), 1579-1599. doi: 10.1080/09500693.2019.1620972

**Wilkerson, M. H.** & Laina, V.\* (2018). Reasoning about data, context, and chance through storytelling with repurposed local data. *ZDM: International Journal on Mathematics Education*, 50(7), 1223-1235. doi: 10.1007/s11858-018-0974-9

**Wilkerson, M. H.**, Shareff, R.\*, Laina, V.\*, & Gravel, B. E. (2018). Epistemic gameplay and discovery in computational model-based inquiry activities. *Instructional Science*, 46(1), 35-60. doi: 10.1007/s11251-017-9430-4

**Wilkerson, M. H.**, Bautista, A., Tobin, R., Brizuela, B., & Cao, Y.\* (2017). More than meets the eye: Patterns and shifts in what middle school mathematics teachers describe as models. *Journal of Mathematics Teacher Education*, 21(1), 35-61. doi: 10.1007/s10857-016-9348-9

**Wilkerson, M. H.**, Andrews, C.\*, Shaban, Y.\*, Laina, V.\*, & Gravel, B. E. (2016). What's the technology for? Teacher attention and pedagogical goals in a modeling-focused professional development workshop. *Journal of Science Teacher Education*, 27(1), 11-33. doi: 10.1007/s10972-016-9453-8

**Wilkerson-Jerde, M. H.**, Wagh, A., & Wilensky, U. (2015). Balancing curricular and pedagogical needs in the design of computational toolkits: Lessons from the DeltaTick Project. *Science Education*, 99(3), 465-499. doi: 10.1002/sce.21157

**Wilkerson-Jerde, M. H.** & Wilensky, U. (2015). Patterns, probabilities, and people: Making sense of quantitative change in complex systems. *Journal of the Learning Sciences*, 24(2), 204-251. doi: 10.1080/10508406.2014.976647

**Wilkerson-Jerde, M. H.**, Gravel, B. E., & Macrander, C.\* (2015). Exploring shifts in middle school learners' modeling activity while drawing, animating, and simulating molecular diffusion. *Journal of Science Education and Technology*, 24(2-3), 396-415. doi: 10.1007/s10956-014-9497-5

**Wilkerson-Jerde, M. H.** (2014). Construction, categorization, and consensus: student generated computational artifacts as a context for disciplinary reflection. *Educational Technology Research & Development*, 62(1), 99-121. doi: 10.1007/s11423-013-9327-0

Bautista, A., **Wilkerson-Jerde, M. H.**, Tobin, R., & Brizuela, B. M. (2014). Mathematics teachers' ideas about mathematical models: A diverse landscape. *PNA*, 9(1). doi: 10481/33231

**Wilkerson-Jerde, M.** & Wilensky, U. (2011). How do mathematicians learn math?: Resources and acts for constructing and understanding mathematics. *Educational Studies in Mathematics*, 78(1), 21-43. doi: 10.1007/s10649-011-9306-5

**Wilkerson, M.** (2009). Computer Math Snapshots. Agents with attitude: Exploring Coombs unfolding technique. *International Journal of Computers for Mathematical Learning*, 14(1), 51-60. doi: 10.1007/s10758-008-9142-6

## BOOK CHAPTERS

**Wilkerson, M. H.** & Gravel, B. (in press). Storytelling as a support for collaborative constructionist activity. Chapter to appear in N. Holbert, M. Berland, & Y. Kafai (Eds.), *Designing Constructionist Futures: The Art, Theory, and Practice of Learning Designs* (pp. 213-225). Cambridge, MA: MIT Press.

**Wilkerson, M. H.** (2017). Teachers, students, and after-school professionals as designers of digital tools for learning. In C. DiSalvo, B. DiSalvo, J. Yip, & E. Bonsignore (Eds.), *Participatory Design for Learning* (pp. 127-140). Taylor & Francis.

Gravel, B. & **Wilkerson, M. H.** (2017). Integrating computational artifacts into the multi-representational toolkit of physics education. In D. Treagust, R. Duit, & H. E. Fischer (Eds.), *Multiple Representations in Physics Education* (pp. 47-70). Springer.

**Wilkerson, M. H.** & Fenwick, M. (2017). The practice of using mathematics and computational thinking. In C. V. Schwarz, C. Passmore, & B. J. Reiser (Eds.), *Helping Students Make Sense of the World Using Next Generation Science and Engineering Practices* (pp. 181-204). Arlington, VA: National Science Teachers' Association Press.

**Wilkerson, M. H.** (2017). DataSketch: A tool to turn student sketches into data-driven visualizations. In T. Hammond, A. Adler, & M. Prasad (Eds.), *Frontiers in pen and touch: Impact of pen and touch technology on education* (pp 227-234). Springer.

Stonedahl, F., **Wilkerson-Jerde, M.** & Wilensky, U. (2011). MAGICS: Toward a multi-agent introduction to computer science. In M. Beer, M. Fasli, and D. Richards (Eds.) *Multi-Agent Systems for Education and Interactive Entertainment: Design, Use and Experience* (pp. 1-25). IGI Global. doi: 10.4018/978-1-60960-080-8.ch001

#### INVITED ARTICLES AND COMMISSIONED REPORTS

Finzer, W. & **Wilkerson, M.** (2020). Writing data stories. *@Concord*, 24(1), 10-11. <https://concord.org/newsletter/2020-spring/writing-data-stories>

**Wilkerson, M. H.**, Lee, V. L., Shinohara, M., Chaudhary, S., Brady, C., & Marin, A. (2018). *OpenSciEd design specification: Using computational and mathematical thinking and interpreting and analyzing data*. Curricular specifications for Carnegie Corp.'s OpenSciEd Initiative (Danny C. Edelson, Chair).

Lee, V. & **Wilkerson, M.** (2018). Data use by middle and secondary students in the digital age: A status report and future prospects. Commissioned report for the National Research Council study *Engaging Middle and High School Students in Science and Engineering: Investigations and Design*.

Berland, M., Halverson, E., Polman, J. & **Wilkerson, M.** (2017). Expressive construction: Enabling learners to represent powerful ideas. In J. Roschelle, W. Martin, J. Ahn, & P. Schank (Eds.), *Cyberlearning Community Report: The State of Cyberlearning and the Future of Learning with Technology* (pp. 17-24). Menlo Park CA: SRI International.

**Wilkerson-Jerde, M. H.** (2015). Open peer commentary: Locating the learner in collaborative constructionist design. *Constructivist Foundations*, 10(3), 315-316.

#### AWARDS AND SPONSORSHIPS

AERA Division C <b>Jan Hawkins Award for Early Career Contributions to Humanistic Research &amp; Scholarship in Learning Technologies</b>	2020
Arcadia University <b>Transformative Teacher Educator Fellowship</b>	2018
National Science Foundation <b>Faculty Early Career Development Program (CAREER) Award</b>	2014
ICLS <b>Early Career Workshop</b>	2014
AERA Division C <b>New Faculty Mentoring Program</b>	2012
AERA Special Interest Group in Learning Sciences/Advanced Tech for Learning <b>Best Student Paper</b>	2010
Models in Developing Math Ed Conference <b>Student Travel Sponsorship</b>	2009
Northwestern University Graduate Travel Grants	2007-2010

#### GRANTS

##### EXTERNAL GRANTS – AWARDED/ACTIVE

<b>PI, NSF STEM + Computing Partnerships Program</b>	2019-2022
Writing Data Stories: Integrating Computational Data Investigations into the Middle School Science Classroom (IIS-1900606, \$2.4M; with Kris Gutierrez, William Finzer, Anthony Petrosino, Hollylynn Lee)	
<b>PI (subawardee), NSF Discovery Research K12 Level II</b>	2020-2023
From Access to Sustainability: Investigating Ways to Foster Computational Modeling in K-12 Science Classrooms (DRL-2010413, \$57,000 subcontract with Teachers College Columbia University; \$2M total)	
<b>PI, NSF Early CAREER Award</b>	2014-2020
DataSketch: Exploring Computational Data Visualization Literacy in the Middle Grades (IIS-1350282, \$599,996.00)	

##### EXTERNAL GRANTS – AWARDED/COMPLETED

<b>PI (subawardee), NSF Cyberlearning Development and Implementation Plan</b>	2015-2019
Data Science Games - Student Immersion in Data Science Using Games for Learning in the Common Online Data Analysis Platform (IIS-1530578, \$227,435 subcontract with Concord Consortium; \$1,348,808 total)	

<b>PI, NSF Discovery Research K12 Exploratory Learning</b> CodeR4STATS: Code R for AP Statistics and Common Core Statistical Concepts (DRL-1418163, \$469,936; with Co-PI Eric Simoneau, Boston Latin School)	2014-2018
<b>PI, NSF Cyberlearning Capacity-Building</b> Data Science, Learning and Youth: Connecting Research and Creating Frameworks (IIS-1541676, \$49,958; with Co-PIs Tapan Parikh, Joseph Polman, Victor Lee)	2015-2017
<b>PI, NSF Cyberlearning Exploratory</b> SiMSAM: Bridging Student, Scientific, and Mathematical Models with Expressive Technologies (IIS-1217100, \$546,353; with Brian Gravel, Tufts University; transferred to Gravel upon move to UCB)	2012-2017

#### INTERNAL GRANTS

<b>UC Berkeley Student Technology Fund</b> (\$5,000) Educational Robotics Library	2017
<b>Tufts Faculty Research Fund</b> (\$3,599) Data Visualization for Middle School	2012
<b>Northwestern Univ. Community Building Grant</b> (\$2,914, renewed for \$1,500) Constructing for Learning: An Open House for Technologies in Education	2009-2011

#### REFEREED CONFERENCE PROCEEDINGS

**Wilkerson, M. H.**, Roberto, C.\* , & Bulalacao, N.\* (accepted/online due to COVID-19). Debugging data: Diagnosing, evaluating, and repairing data for analysis. In Y. Kafai (Org.) & J. Danish (Disc.), *Turning bugs into learning opportunities: Understanding debugging processes, perspectives and pedagogies*. To appear in *Proceedings of the 14<sup>th</sup> International Conference for the Learning Sciences (ICLS 2020)*. Nashville, TN, USA: ISLS.

Lanouette, K.‡, Rivero, E.\* , Barton, J.\* , Bulalacao, N.\* , Lopez, M. L.\* , Cortes, K.\* , Roberto, C.\* , Gutiérrez, K., **Wilkerson, M. H.**, Lee, H., Stokes, D.\* , Finzer, W., Erickson, T., Petrosino, T., Haldar, L. (accepted/online due to COVID-19). Writing data stories: Reauthoring scientific data through syncretic computational investigations in middle school science. In C. Matuk & S. Yoon (Orgs.) and J. Polman (Disc.), *Data literacy for social justice*. To appear in *Proceedings of the 14<sup>th</sup> International Conference for the Learning Sciences (ICLS 2020)*. Nashville, TN, USA: ISLS.

Lopez, M. L.\* , **Wilkerson, M. H.**, & Gutiérrez, K. (accepted/online due to COVID-19). Contextualizing, historicizing, and re-authoring data-as-text in the middle school science classroom. In G. Arastoopour Irgens, S. Knight, & A. Wise (Org.) *Data literacies and social justice: Exploring critical data literacies through sociocultural perspectives*. To appear in *Proceedings of the 14<sup>th</sup> International Conference for the Learning Sciences (ICLS 2020)*. Nashville, TN, USA: ISLS.

Erickson, T., Finzer, W. Reichsman, F., and **Wilkerson, M.** (2018). Data moves: One key to data science at the school level. In M. A. Sorto, A. White, & L. Guyot (Eds.), *Looking back, looking forward. Proceedings of the International Conference on Teaching Statistics (ICOTS-10)*, Kyoto, Japan. Voorburg, The Netherlands: International Statistical Institute. [https://iase-web.org/icots/10/proceedings/pdfs/ICOTS10\\_9B3.pdf](https://iase-web.org/icots/10/proceedings/pdfs/ICOTS10_9B3.pdf)

Thoma, S.\* , Deitick, E.\* , & **Wilkerson, M.** (2018). “It didn’t really go very well”: Epistemological framing and the complexity of interdisciplinary computing activities. In J. Kay & R. Luckin (Eds.), *Rethinking learning in the digital age: Making the learning sciences count, Proceedings of the 13<sup>th</sup> International Conference for the Learning Sciences (ICLS 2018)* (Vol. 2, pp. 1121-1125). London, England: ISLS.

**Wilkerson, M.**, Lanouette, K.\* , Shareff, R. L.\* , Erickson, T., Bulalacao, N.\* , Heller, J., St. Clair, N., Finzer, W., & Reichsman, F. (2018). Data moves: Restructuring data for inquiry in a simulation and data analysis environment. In J. Kay & R. Luckin (Eds.), *Rethinking learning in the digital age: Making the learning sciences count, Proceedings of the 13<sup>th</sup> International Conference for the Learning Sciences (ICLS 2018)* (Vol. 2, pp. 1383-1384). London, England: ISLS.

Deitrick, E.\* , **Wilkerson, M.**, & Simoneau, E. (2017). Understanding student collaboration in interdisciplinary computing activities. In J. Tenenber, D. Chinn, J. Sheard, & L. Malmi (Eds.), *Proceedings of the 13<sup>th</sup> Annual ACM International Computing Education Research Conference (ICER 2017)* (pp. 118-126). Tacoma, WA, USA. doi: 10.1145/3105726.3106193

- Wilkerson, M.**, Shareff, B.\* , Gravel, B., Shaban, Y.\* , & Laina, V.\* (2017). Exploring computational modeling environments as tools to structure classroom knowledge building. In B. K. Smith, M. Borge, E. Mercier, & K. Y. Lim (Eds.), *Proceedings of the 12th International Conference on Computer Supported Collaborative Learning (CSCL 2017)* (Vol. 1, pp. 447-454). ISLS: Philadelphia, PA.
- Walkoe, J., **Wilkerson, M.**, & Elby, A. (2017). Technology-mediated teacher noticing: A goal for classroom practice, tool design, and professional development. In B. K. Smith, M. Borge, E. Mercier, & K. Y. Lim (Eds.), *Proceedings of the 12th International Conference on Computer Supported Collaborative Learning (CSCL 2017)* (Vol. 1, pp. 65-70). ISLS: Philadelphia, PA.
- Wilkerson, M.** & Laina, V.\* (2017). Youth reasoning with interactive data visualizations: A preliminary study. In P. Blikstein & D. Abrahamson (Eds.), *Proceedings of the 16th Interaction Design and Children Conference (IDC 2017)* (pp. 411-416). Stanford, CA. doi: 10.1145/3078072.3084302
- Laina, V.\* & **Wilkerson, M.** (2016). Distributions, trends, and contradictions: A case study in sensemaking with interactive data visualizations. In C-K. Looi, J. Polman, U. Cress, & P. Reimann (Eds.), *Proceedings of the 11th International Conference of the Learning Sciences (ICLS 2016)* (Vol. 2, pp. 934-938). ISLS: Singapore.
- Wilkerson, M.** (2016). DataSketch: A tool to turn student sketches into data-driven visualizations. Short Emerging Technology Paper in *Proceedings of the 2016 Conference for Pen and Touch Technology in Education (CPTTE 2016)*. Providence, RI, USA.
- Wilkerson-Jerde, M.**, Gravel, B. & Macrander, C.\* (2013). SiMSAM: An Integrated Toolkit to Bridge Student, Scientific, and Mathematical Ideas Using Computational Media. Poster in *Proceedings of the 10th International Conference on Computer Supported Collaborative Learning (CSCL2013)*; Vol. 2, pp. 379-381). ISLS: Madison, WI.
- Bautista, A., **Wilkerson-Jerde, M.**, Tobin, R. & Brizuela, B. (2013). Diversity in middle school mathematics teachers' ideas about mathematical models: The role of educational background. In *Proceedings of the Eighth Congress of European Research in Mathematics Education (CERME 8)* (pp. 960-969). Middle East Technical University: Antalya, Turkey.
- Wilkerson-Jerde, M.** & Wilensky, U. (2011). Designed and emergent pedagogical supports for coordinating quantitative and agent-based descriptions of complex dynamic systems. In *Proceedings of the 2011 meeting of the Psychology of Mathematics Education – North American Chapter (PME-NA)* (pp. 2083-2087). Reno, NV.
- Lesh, R., Brady, C. & **Wilkerson-Jerde, M.** (2011). Models and Modeling Working Group. Workshop in *Proceedings of the 2011 meeting of the Psychology of Mathematics Education–North American Chapter (PME-NA)* (pp. 638-647). Reno, NV.
- Wilkerson-Jerde, M.** & Wilensky, U. (2010). NetLogo HotLink Replay: A tool for exploring, analyzing and interpreting mathematical change in complex systems. Poster in K. Gomez & J. Radinsky (Ed.), *Proceedings of the 9th International Conference of the Learning Sciences (ICLS 2010)* (Vol 2, pp. 374-375). Chicago, IL.
- Wilkerson-Jerde, M.** & Wilensky, U. (2010). Seeing change in the world from different levels: Understanding the mathematics of complex systems. In M. Jacobson (Org.), U. Wilensky (Chair), and P. Reimann (Disc.), *Learning about Complexity and Beyond: Theoretical and Methodological Implications for the Learning Sciences*. In K. Gomez & J. Radinsky (Ed.), *Proceedings of the 9th International Conference of the Learning Sciences (ICLS 2010)* (Vol 2, pp. 187-194). Chicago, IL.
- Wilkerson-Jerde, M.** & Wilensky, U. (2010). Restructuring change, interpreting changes: The deltatick modeling and analysis toolkit. In J. Clayson & I. Kalas (Eds.), *Proceedings of Constructionism 2010* (p. 97-107). Paris, France.
- Stonedahl, F., **Wilkerson-Jerde, M.** & Wilensky, U. (2009). Reconceiving introductory computer science curricula through agent based modeling. In *Proceedings of the Autonomous Agents and Multiagent Systems (AAMAS 2009) Workshop on Educational Uses of Multi-Agent Systems (EduMAS '09)* (pp. 63-70). Budapest, Hungary.
- Wilkerson-Jerde, M.** & Wilensky, U. (2009). Understanding proof: Tracking experts' developing understanding of an unfamiliar proof. In *Proceedings of the International Commission on Mathematical Instruction (ICMI) Study 19, Proof and proving in mathematics education* (Vol. 2, pp. 268-274). Taipei, Taiwan: National Taiwan Normal University.

**Wilkerson, M.** & Wilensky, U. (2008). How do mathematicians learn mathematics? In *Proceedings of the Joint Meeting of the International Group for the Psychology of Mathematics Education (PME 32/PME-NA XXX)* (Vol. 4, 409-416). Morelia, Mexico: PME.

**Wilkerson, M.**, Sengupta, P., & Wilensky, U. (2008). Perceptual supports for sensemaking: A case study using multi agent based computational learning environments. Poster in *Proceedings of the 8<sup>th</sup> International Conference of the Learning Sciences (ICLS 2008)*, (Vol. 3, pp. 151-152). Utrecht, The Netherlands: ICLS.

Denning, T., Griswold, W. G., Simon, B. & **Wilkerson, M.** (2006). Multimodal communication in the classroom: What does it mean for us? In *SIGCSE '06: Proceedings of the 37th SIGCSE technical symposium on computer science education* (pp. 219-223). Houston, TX: ACM Press.

**Wilkerson, M.**, Griswold, W. G. & Simon, B. (2005). Ubiquitous presenter: Increasing student access and control in a digital lecturing environment. In *SIGCSE '05: Proceedings of the 36th SIGCSE technical symposium on computer science education* (pp. 116-120). St. Louis, MO: ACM Press.

## INVITED TALKS

### ACADEMIC PRESENTATIONS

**Gordon Research Conference on Visualization in Science and Education Plenary** (Planned August 2021). Title TBA.

**Plenary at 2020 Online Seminar Series on Programming in Mathematics Education** (July 2020). Computing with Data as a Window on the World. Western University, London, Ontario, Canada.

**Keynote at 2019 Conference on Mathematics and its Connections to Arts and Science** (May 2019). Putting Artistic and Mathematical Expression into Conversation Through Computing. McGill University, Quebec, Montreal, Canada.

**Data Science Education Technology Webinar Series** (November 2017). Data Moves and Data Stories. Concord Consortium, Concord, MA, USA.

**Keynote at the Computational Thinking and Mathematics Education Symposium** (October 2017). Computational Integration to Support Expression, Refinement, and Collective Knowledge in Classroom Communities. University of Ontario Institute of Technology, Ontario, Canada.

**SRI International STEM Education Colloquium Series** (May 2017). Tools to Support Scientific Expression, Exploration, and Progress in K-12 Classrooms. SRI International, Menlo Park, CA.

**Michigan State University CREATE for STEM Science Seminar Series** (April 2017). Putting Student Ideas to Work: Tools to Support Scientific Expression and Progress in K-12 Classrooms. Michigan State University, East Lansing, MI.

**Modeling and Model-Based Reasoning in STEM Conference** (Aug 2016). Student Authorship and Computational Tools in K-12 Models-Based Education. Purdue University, IN.

**California Academy of Sciences** (July 2016). Supporting Data Visualization Literacy in Middle School. Teacher and Youth Engagement Team. San Francisco, CA.

**Stanford University** (April 2016). Classroom Computational Modeling Ecologies. Weiman & Schwartz Research Groups, Stanford, CA.

**Gordon Research Conference on Visualization in Science and Education Plenary** (August 2015). Expressive technologies and learning by building visualizations. Bates College, Lewiston, ME.

**University of Maryland** (March 2015). Coordinating mathematical, representational, and domain-specific knowledge in data visualization design. Center for Math Education Colloquium Series. College Park, MD.

**Cyberlearning 2015: Connect, Collaborate, and Create the Future** (January 2015). DataSketch: Exploring youths' data visualization competencies [Short Talk]. Washington, DC.

**2014 Cyberlearning Summit** (June 2014). Connecting young people's expressive activities with the tools of math and science. Wisconsin Union, University of Wisconsin-Madison, WI.

**Massachusetts Bay Community College** (October 2012). Speaking mathematically: Exploring how students align mathematical language with narrative description. Seminar for NSF STEP UP presentation series, Wellesley, MA.

**University of New Hampshire** (November 2011). Connecting mathematics to meaning: Examples from mathematicians and high school students. Seminar for STEM Education Colloquium series, Durham, NH.

**Michigan State University** (March 2011) The emergence of mathematical meaning: Coordinating individual and collective levels of description through computational modeling. College of Education, East Lansing, MI.

**University of Akron** (February 2011). The emergence of mathematical meaning: Coordinating individual and collective levels of description through computational modeling. College of Education, Akron, OH.

## PRESS & PUBLIC OUTREACH

**2016 NSF Advancing STEM Learning for All Video Showcase.** Wilkerson, M. H. & Laina, V.\* (2016). DataSketch: Exploring computational data visualization in the middle grades. [Video]. Retrieved from <http://stemforall2016.videohall.com/presentations/683>

**2015 NSF Teaching and Learning Video Showcase.** Wilkerson-Jerde, M. H., Andrews, C.\*, Gravel, B. E., & Shaban, Y.\* (2015). The SiMSAM project. [Video]. Retrieved from <http://resourcecenters2015.videohall.com/presentations/566>

**WGBH Forum on Digital Media for STEM Learning.** Wilkerson-Jerde, M. H. (2014). Connecting young people's expressive activities with the tools of math and science. WGBH Studios, Boston, MA. Video accessible from <https://www.youtube.com/watch?v=5AK0hSbuHqI>

## REFEREED CONFERENCE PRESENTATIONS

### PAPER PRESENTATIONS

**Wilkerson, M. H.,** Laina, V\*. (accepted/conference cancelled). Students' strategies for reasoning about complex systems using aggregate data sources. Paper in S. Levy (Org.) & M. Jacobson (Disc.), Restructuring concepts and tools through a complexity perspective. Symposium accepted at the 2020 Annual Meeting of the American Educational Research Association (AERA).

Lopez, L.\*, Gutiérrez, K., & **Wilkerson, M. H.** (accepted/conference cancelled). Epistemic actors: Double binds and the negotiation of epistemic participation. Accepted as a roundtable paper at the 2020 Annual Meeting of the American Educational Research Association (AERA).

**Wilkerson, M. H.,** Shareff, R. L.\*, & Lanouette, K.\* (2019). Learning to transform data: A longitudinal interview study. Long presentation at the Eleventh International Research Forum on Statistical Reasoning, Thinking, and Literacy (SRTL-11).

Lopez, L.\*, **Wilkerson, M. H.,** & Laina, V.\* (2019). Data as proxy: Sociomaterial supports and constraints on the use of data for epistemic agency. Paper presented at the 2019 Annual Meeting of the National Association for Research in Science Teaching (NARST).

Laina, V.\*, & **Wilkerson, M. H.** (2019). Seeing things differently: A form and function analysis of student-generated dynamic data visualizations. Paper presented at the 2019 Annual Meeting of the American Educational Research Association (AERA).

**Wilkerson, M. H.** & Lanouette, K.\* (2019). Making data useful: A longitudinal examination of young adults' developing data transformation processes. Poster presented at the 2019 Annual Meeting of the American Educational Research Association (AERA).

Lopez, M. L.\*, Laina, V.\*, & **Wilkerson, M. H.** (2019). Agentive use of public quantitative data in scientific argumentation: A case study. Roundtable paper presented at the 2019 Annual Meeting of the American Educational Research Association (AERA).

Shareff, R. L.\* & **Wilkerson, M. H.** (2018). Grounding computational modeling experience in fertile soil: A design project with middle school science teachers and students. In A. Wagh (Org.) & J. Kolodner (Discussant), Bridging computational modeling tools & practices into the existing structures of k-16 environments in science education. Symposium to be presented at the 2018 Annual Meeting of the American Educational Research Association. New York, NY, USA, April 13-17.

**Wilkerson, M. H.** & Lanouette, K.\* (2017). Connecting research and creating frameworks: A report from the youth, learning, and data science summit. Short presentation at SRTL-10: The Tenth International Research Forum on Statistical Reasoning, Thinking, and Literacy. Rotorua, New Zealand, July 2-8.

Laina, V.\* & **Wilkerson, M. H.** (2017). Modeling data by visualizing it. Long presentation at SRTL-10: The Tenth International Research Forum on Statistical Reasoning, Thinking, and Literacy. Rotorua, New Zealand, July 2-8.

**Wilkerson, M. H.** & Laina, V.\* (2017). Designing to support data visualizations as an exploratory tool in science. Paper to be presented as part of M. Gresalfi (Org.) and D. Clark (Chair), Designing digital environments to support mathematical and scientific reasoning: Theoretical and disciplinary perspectives. AERA 2017, San Antonio, TX.

Finzer, W., Erickson, T., & **Wilkerson, M.** (2016). Data Science Games—Rapid Iteration through Game, Data, Model. Annual meeting of the Center for Innovative Research in Cyberlearning, 2016.

**Wilkerson, M. H.** & Gravel, B. E. (2016). Tools, problem spaces, and epistemic games. In K. Chase & D. Abrahamson (Orgs.), Discovery-based learning 2.0: Are we there yet? Symposium presented at the 2016 Annual Meeting of the American Educational Research Association, Washington, DC.

**Wilkerson-Jerde, M. H.**, Gravel, B. E., Andrews, C.\*, & Shaban, Y.\* (2015). Teacher attention and pedagogical goals in a computational modeling-focused professional development workshop. Presented at the 2015 Annual Meeting of the American Educational Research Association. Chicago, IL, April 16-20.

**Wilkerson-Jerde, M. H.** (2015). Stories of our city: Coordinating youths' mathematical, representational, and community knowledge through data visualization design. Presented at the 2015 Annual Meeting of the American Educational Research Association. Chicago, IL, Apr 16-20.

**Wilkerson-Jerde, M. H.**, & Gravel, B. E. (2015). Mapping the influence of participant groups and contexts in participatory design-based research. To be presented as part of S. Grover (Org.), Design-based research for the learning sciences: A coming of age?. Symposium at the 2015 Annual Meeting of the American Educational Research Association. Chicago, IL, April 16-20.

**Wilkerson-Jerde, M. H.** & Head, E.^ (2015). Designing data visualizations to promote mathematics learning and identity development. Brief Research Report to be presented at the 2015 National Council of Teachers of Mathematics Research Pre-session, Boston, MA, April 15.

**Wilkerson-Jerde, M.** (2014). "Calculus lied to us!": Functional reasoning about complex systems. In C. Hagen (Org.) & M. Carlson (Discussant), Developing understandings of mathematical functions: perspectives on learning across the grades. Symposium at the 44th Annual Conference of the Jean Piaget Society, San Francisco, CA. May 24-27.

**Wilkerson-Jerde, M.**, Gravel, B. & Macrander, C.\* (2014). Exploring shifts in middle school learners' modeling activity while drawing, animating, and simulating molecular diffusion. Presented at the 2014 Annual Meeting of the American Educational Research Association. Philadelphia, PA, April 3-7.

**Wilkerson-Jerde, M.**, Gravel, B., Macrander, C.\*, Bell, A.\*, & Krouwer, M.\* (2013). Grain of sand strand: Developing SiMSAM, an integrated animation, simulation, and data analysis toolkit. Presented in Rick, J., Horn, M., & Martinez-Moldonado, R. (Orgs.) CSCL 2013 Pre-Conference Workshop Human-Computer Interaction and the Learning Sciences. Madison, WI. July 14.

Macrander, C.\*, **Wilkerson-Jerde, M.** & Gravel, B. (2013). Nested framings and the pursuit of authentic scientific inquiry. Paper presented at the 43rd Annual Meeting of the Jean Piaget Society, Chicago, IL. June 7-9.

**Wilkerson-Jerde, M.** & Wilensky, U. (2011). Designing for multiple access points to powerful mathematics. In Veeragoudar Harrell, S. & **Wilkerson-Jerde, M.** (Chairs), Wilkerson-Jerde, M. & Veeragoudar Harrell, S. (Orgs.) & C. Lee (Disc.), Rethinking STEM Content, Access, and Agency for Broad Participation: A Designer/Practitioner Dialogue. Symposium and paper presented at the 2011 Annual Meeting of the American Educational Research Association, New Orleans, LA.



**Wilkerson-Jerde, M. & Wilensky, U. (2011).** New tools for modeling quantitative variation in complex systems: A design and preliminary classroom study. Paper presented at the 2011 Annual Meeting of the American Educational Research Association, New Orleans, LA. April 8-12.

**Wilkerson-Jerde, M. & Wilensky, U. (2010).** Qualitative calculus of systems: Exploring students' understanding of rate of change and accumulation in multiagent systems. Presented at the 2010 Annual Meeting of the American Educational Research Association, Denver, CO, April 30 - May 4. SIG Learning Sciences/Advanced Technologies for Learning Best Student Paper Award.

**Wilkerson-Jerde, M. & Wilensky, U. (2010).** Reflected abstraction and knowledge reconstruction in expertise: Tracking mathematicians' sensemaking around unfamiliar mathematical ideas. Presented at the 40th Annual Meeting of the Jean Piaget Society, St Louis, MO, June 3-5.

**Wilkerson-Jerde, M. & Wilensky, U. (2010).** Deltatick: Using agent-based modeling to learn the calculus of complex systems. In U. Wilensky (Chair). *Small Steps for Agents... Giant Steps for Students?: Learning with Agent-Based Modeling.* Presented at Constructionism 2010. Paris, France, Aug 16-20.

**Wilkerson-Jerde, M. & Wilensky, U. (2009).** Complementarity in equational and agent-based models: A pedagogical perspective. In M. Jacobson (Org.), *Complexity, Learning, and Research: Under the Microscope, New Kinds of Microscopes, and Seeing Differently.* Presented at the 2009 Annual Meeting of the American Educational Research Association, San Diego, CA, April 13-17.

**Wilkerson, M. & Wilensky, U. (2008).** Embedding environments as a mechanism for mathematical reasoning: An expert study. Presented at the 2008 Annual Meeting of the American Educational Research Association, New York, NY, March 24-28.

Sengupta, P., **Wilkerson, M. & Wilensky, U. (2007).** On the relationship between spatial knowledge and learning electricity: Comparative case studies of students using 2D and 3D emergent, computational learning environments. Presented at the 2007 Annual Meeting of the American Educational Research Association, Chicago, IL, April 9-13.

#### POSTERS & OTHER PRESENTATIONS

Jamarillo, J. \*, **Wilkerson, M. H.**, & Lopez, M. L. (2020/cancelled due to COVID-19). Overcoming the teacher-student script—student persistence in light of constraints on epistemic data agency. Interactive poster to be presented at the 2020 Annual Meeting of the National Association for Research on Science Teaching, Portland, OR.

**Wilkerson, M. H.**, Lopez, L.\*, & Jamarillo, J.\* (2020/cancelled due to COVID-19). Making “data claims” as an (inter)disciplinary practice in the science classroom. Poster in J. M. Rosenberg & B. Chen (Orgs.), V. Lee (Disc.), *Exploring data science across the curriculum and across grade levels.* Symposium to be presented at the 2020 Annual Meeting of the American Educational Research Association.

**Wilkerson, M. H. (2019).** First steps in research: Watching high-school students making data moves—and then what? In T. Erickson (Org.), *Data science education at the school level.* Invited panel presentation at the Joint Statistical Meeting (JSM 2019), Denver, Colorado. July 27-August 1.

**Wilkerson, M. H.**, Deitrick, E. \*, & Simoneau, E. ^ (2017). Integrating computational thinking in high school statistics through data modeling with R. In B. Litts & **M. Wilkerson** (Orgs.), *Stories from the field: Integrating computational thinking across curricular domains.* AERA 2017, San Antonio, TX. April 27-May 1.

**Wilkerson, M. H. (2017).** Using a drawing, animation, and simulation sequence to scaffold student production of scientific models. In A. Karan & D. Clark (Orgs.), *Supporting science as a modeling practice in the classroom through the lens of NGSS.* Poster presented at AERA 2017, San Antonio, TX. April 27-May 1.

**Wilkerson, M. & Laina, V.\* (2016).** How do youth reason about dynamic data visualizations? A preliminary study. Poster presented at the Society for Research in Child Development Special Topic Meeting: Technology and Media in Children's Development, Irvine, CA. October 27-30.

Laina, V.\* & **Wilkerson, M. (2016).** DataSketch: A tool for youth to create dynamic data visualizations with ink sketches. Demonstration presented at the Society for Research in Child Development Special Topic Meeting: Technology and Media in Children's Development, Irvine, CA. October 27-30.

Shaban, Y.\* & **Wilkerson-Jerde, M.** (2016). Looking beyond cues in understanding the co-construction of epistemological framing during interviews: A case study. Poster presented at the 2016 Annual Meeting of the American Educational Research Association, Washington, DC. April 8-12.

Walkoe, J., **Wilkerson-Jerde, M.**, & Elby, A. (2016). Technology-mediated teacher noticing: A goal for classroom practice, tool design, and professional development. Poster presented at the 2016 Annual Meeting of the American Educational Research Association, Washington, DC. April 8-12.

**Wilkerson-Jerde, M.** & Maldonis, J.\* (2013). Patterns in students' processes for representing quantitative change across multiple scenarios with multiple media. Poster presented at the 2013 Annual Meeting of the American Educational Research Association, San Francisco, CA. May 24-27.

**Wilkerson-Jerde, M.**, Bautista, A., Brizuela, B. & Tobin, R. (2013). "Because that word model is loaded": What count as models and modeling for middle school mathematics teachers. Poster presented at the 2013 National Council of Teachers of Mathematics (NCTM) Research Pre-session. Denver, CO. April 15-17.

**Wilkerson-Jerde, M.** (2012). The Category Creator: An Interactive Online Gallery for Bridging Student-Generated Artifacts and Whole-Classroom Reflection. Poster presented at the 2012 Annual Meeting of the American Educational Research Association, Vancouver, BC. April 13-17.

**Wilkerson-Jerde, M.**, Jacobs, A., & Wilensky, U. (2009). Getting the whole picture: Tracking expert learning over time with networks. Presented at the Annual Northwestern Institute on Complex Systems Complexity Conference, Evanston, IL. September 2. Best Student Poster Award.

Jacobs, A.\*, **Wilkerson-Jerde, M.**, Sengupta, P., & Wilensky, U. (2009). When does 3D visualization work?: In search of design principles for three-dimensional visuospatial agent-based models. Student poster presented at the Annual Meeting of the American Association for the Advancement of Science Southwestern and Rocky Mountain Division (AAAS-SWARM), March 29.

**Wilkerson, M.** (2004). Knot theory fashion: Brunnian style, infinite possibilities. Presented at Student Poster Session, Southern California & Nevada Section of the Mathematical Association of America, San Diego. March 6. Best Student Poster Award.

## SOFTWARE PRODUCTS (open source code available for starred items)

<b>DataSketch*</b> (with Radiant Llama; Agile Global Solutions) Data visualization toolkit; digital ink objects programmed to respond to live or archival datasets.	2014-Present
<b>SiMSAM*</b> (with Brian Gravel; Geisel Software) Integrated stop-action moviemaking, simulation, and measurement toolkit for scientific modeling.	2012-2017
<b>DeltaTick*</b> (With Aditi Wagh and Uri Wilensky) Domain-specific block-based programming interface for the NetLogo modeling environment.	2010-2012
<b>Categorizer</b> Interactive online gallery to allow learners to share, classify & compare computational artifacts.	2009-2011
<b>NetLogo Models Library Contributions*</b> Vee Flocking (with Forrest Stonedahl), 3D GasLab Suite, Chaos Suite, Surface Walking.	2006-2011
<b>Ubiquitous Presenter</b> (with Beth Simon and William Griswold) Tablet-based slide annotation and student response tool for large lecture-based classrooms.	2004-2005

## TEACHING (\*FA20 ANTICIPATED)

### COURSES

UGIS/EDUC c122: Research Methods for K-12 Mathematics and Science Teachers (CalTeach)	SP20
EDUC 223B: STEM Education Support Seminar (New Course)	FA19, SP20
EDUC 293V: Video Analysis Methods (Course Redesign)	SP18

EDUC 223B: CoRE Research Group	SP16, FA16, SP17, FA17, SP18, SP19
EDUC 223B: CoRE Writing Support (New Course)	FA17, SP18, FA19; SP20
EDUC 290C/235A: Scientific Thinking and Learning (Course Redesign)	FA16, FA17
EDUC 295B: Technology, Curriculum, and Instruction (Course Redesign)	SP17, SP19, SP20
SESAME 210: Practicum in Science and Math Education (Co-taught with Lloyd Goldwasser)	FA16
EDUC 290C: Epistemic Forms, Games, and Fluency (New Course)	SP16

#### At Tufts

ED130: Introduction to Human Development and Learning	FA15
ED222/223: STEM Ed Graduate Program Seminar <i>Co-taught with Bárbara Brizuela</i>	2012-2013, 2013-2014 2011-2012
ED291: Intro. to Educational Design and Design-Based Research (New Course)	SP12, FA14
ED112: Mathematics Learning Environments <i>Co-taught with Judah Schwartz</i>	FA12, FA13, FA14, FA15 FA11
ED121/122/125: The Practice of Teaching: Science, Mathematics, and Engineering <i>Co-taught with Brian Gravel</i>	SP13
<i>Co-taught with Mary Caddle and Brian Gravel</i>	SP12

#### WORKSHOPS AND TUTORIALS

<b>Writing Data Stories Professional Learning Summer Workshop</b> Online seminar + asynchronous modules for in-service middle school teachers.	2020
<b>Data Science Education Webinar Series</b> Data Moves and Data Stories. Webinar series sponsored by Concord Consortium.	2017
<b>DataSketch Teacher Professional Development Workshop</b> Three day workshop on data analysis in science for in-service teachers. Attended by 21 participants.	2017
<b>Participatory Design and Technology in Schools</b> One and a half hour workshop on participatory design methods for school leaders visiting Berkeley as part of the BI Norway exchange.	2016
<b>Data Science Games Teacher Professional Development Workshop</b> With William Finzer, Tim Erickson. San Francisco Unified School District workshop on NGSS alignment, data analysis, and visualization technologies.	2016
<b>What is Data Science?</b> With William Finzer, Tim Erickson. Cyberlearning 2016 Expertise Exchange. Washington, DC.	2016
<b>Social Justice &amp; Youth in STEM</b> With Tamara Clegg. Cyberlearning 2015 Envisioning Group. Washington, DC.	2015
<b>SiMSAM Teacher Professional Development Workshop</b> With Brian Gravel. Tufts University STEM Elementary Education Module.	2013, 2014
<b>Finding Evidence of Student Thinking</b> Leader with Poincaré Institute members. Poincaré (Mathematics Professional Development Program) Cohort 2 Course 2 Kickoff Workshop.	2013
<b>What Are My Students Thinking? And, Modeling Data with Functions</b> With Poincaré Institute members. Poincaré Cohort 1 Course 3 Kickoff Workshops.	2012
<b>NetLogo Demo and Professional Development Session</b> Virtual School Symposium, Intern'tl Assoc. for K-12 Online Learning (iNACOL), Glendale, AZ.	2010
<b>Agent-Based Modeling with NetLogo: Exploring, Designing, and Building</b> With members of the Center for Connected Learning. Constructionism 2010. Paris, France.	2010

## NetLogo Workshops at Northwestern University

2010

Led 3 workshops for curriculum designers, teachers, complexity science researchers.

## MENTORING AND ADVISING

### DOCTORAL STUDENTS

Jacob Barton (Education w/ Ranney); Erin Foley (SPED); Lisette Lopez (LLC w/ Gutiérrez)	2019 –
Collette Roberto (Education)	2018 –
Nicole Bulalacao (EMST)	2017 –
Vasiliki Laina (SME)	2016 –
Becca Shareff (DMS)	2016 – Anticipated 2020

### MASTERS STUDENTS

Sheila Afnan, Luis Hernández, Sean Li, Alex Paauwe, Jane Sadetsky, Yixiao Zhang (MACSME)	2019
Jim Han, Alyssa Kehlenbach, Annie Lu, Nathan Usselman (MACSME)	2018
Sydney Aardhal, Eugenia Clark, Tarah Kirnan, Sierra Flynn, Sierra Reyburn (MACSME)	2017
Katrina Halle (MACSME)	2016

### UNDERGRADUATE MENTEES

Maya Ito (McNair Scholar)	2020-Present
Ashley Quiterio (CalNERDS Program); Julio Jamarillo (CalTeach)	2019-Present
William McEachen (URAP)	2017-2019
Prathyusha Charagondla, Thuyvi Nguyen, Lakshmi Ramesh, Shuya Zhan (URAP)	2017-2018
Asami Takagi, Georgia Calhoun (URAP)	2016-2017

### COMMITTEES

#### Dissertation

Elena Duran (SME); Leah Rosenbaum (EMST)	Ongoing
Emily Harrison (SME); Korah Wiley (SME)	2020
Kathryn Lanouette (HD)	2019
Sara Tischhauser (SME), Beth McBride (SME), Erin Palmer (SME), Thomas Reinhardt (LEEP)	2018
Bona Kang (DMS)	2017
Jennifer King Chen (SME), Anna Casey (HD)	2016

#### Outside Member, Dissertation

Caroline Hagen (Tufts)	2020
Elise Deitrick (Tufts), Yara Shaban (Tufts)	2019

#### Master of Arts

Melissa Mainini (PLI)	2020
Chad Lesausky (PLI)	2016

#### Qualifying Examination

Elena Leib (Psychology)	2020
Laura Armstrong (SME); Elena Duran (SME)	2019
Amelia Farid (EMST), Emily Harrison (SME)	2018
Anna Zarkh (SME)	2017
Erin Palmer (SME), Kathryn Lanouette (HD), Thomas Reinhardt (LEEP), Sarah Tischhauser (SME)	2016

#### At Tufts

#### Advisor, Master of Arts in Teaching

Jasmine Mills, Khiry Walker, Eric Semple, Jaclyn Snell, Kendal Schwarz	2014
Laura Nixon, Arielle McCoy, Noah Jefferson, Micaela Harris, Katherine Gruzynski	2013

#### Advisor, Independent Studies and Undergraduate Research

Mahsa Hayeri, James Maldonis, Sabrina Gordon, Amanda Bell, Ian Dumais

**University Supervision for Credential Program**

Laura Nixon, Arielle McCoy, Micaela Harris, Katherine Gruzynski, Elsa Head, Elena Rose Murray

**Qualifying Paper**

Ying Cao (2), Lama Jaber, Caroline Hagen, Jennifer Radoff

**Masters Thesis**

Amanda Borow (Educational Studies), Dylan Portelance (Child Development)

**Dissertation**

Lama Jaber, Ying Cao

**SERVICE**

## LEADERSHIP

Editorial Board Member, <i>Journal of the Learning Sciences</i>	2017-Present
Editorial Board Member, <i>Information and Learning Sciences</i>	2016-Present
Associate Editor (Math Snapshots Column) <i>Digital Experiences in Mathematics Education</i>	2015-Present
Organizer (with Victor Lee, Joseph Polman, Tapan Parikh) NSF Workshop: Youth, Learning, and Data Science Summit. (youthdatascience.org) August 11-12, University of California—Berkeley.	2015-2016
Program Chair, AERA Special Interest Group for Adv. Tech. for Learning	2013-2014
Editor in Charge (3 articles), Review Board Member Math Snapshots Column, Technology, Knowledge, and Learning	2013
Chair, AERA Special Interest Group for Advanced Technologies for Learning	2012-2013

## RESEARCH ADVISORY COMMITTEE MEMBERSHIP

<b>Narrative Modeling with StoryQ</b> PIs Jie Chao, Carolyn Rosé, Shiyang Jiang; DRL-1949110	2020-2023
<b>Project CAMPS: Computing and Math in Play Spaces</b> PIs Melissa Gresalfi, Corey Brady; DRL-1742257	2018-2021
<b>Science Projects Integrating Computing and Engineering (SPICE)</b> PIs Satabdi Basu, Kevin McElhane, Gautam Biswas, Jennifer Chiu; DRL-1742195	2017-2020
<b>Designing and Exploring a Model for Data Science Learning for Middle School Youth</b> PI Andee Rubin; DRL-1742255	2017-2020
<b>Computing with R for Mathematical Modeling</b> PIs Jie Chao, Eric Simoneau, Benjamin Galluzzo; DRL-1742083	2017-2020
<b>Developing Crosscutting Concepts in STEM with Simulation Theaters for Embodied Learning</b> PI Robb Lindgren; IIS-1441563	2014-2018
<b>Learning Science Through Technology Enhanced Play (STEP)</b> PIs Noel Enyedy, Carlos Wagnmister, Jeffrey Burke, Joshua Danish; IIS-1323767	2015-2018

## EXTERNAL COMMITTEES AND PANELS

Award Committee, Special Interest Group in Advanced Technologies for Learning and Learning Sciences Best Student Paper	2014-Present
Program Committee, International Conference of the Learning Sciences (ICLS)	2018, 2020
Program Committee, Cyberlearning Synthesis & Envisioning Meeting	2015
Volunteer Coordinator, Interaction, Design and Children Conference	2015
Faculty Mentor, AERA Div. C Graduate Student Seminar	2014
Program Committee, Fablearn	2013, 2014
Program Committee, Constructionism	2012, 2014
Program Committee, Interaction, Design & Children	2010, 2012
Panelist, Games for Learning Science in Informal Environments (GLS-IE) Invited Meeting June 11-12 in Madison, WI	2010

## INTERNAL COMMITTEES

GSE Personnel Committee	2019-Present
GSE Masters Program Committee	2020-Present
Chair, Barbara White Bequest Committee	2017-Present
Chair, Randi Engle Award Committee	2018-Present
Curriculum Committee (formerly Academic Review Committee)	2016-2018
SESAME Faculty Committee	2016-Present
STEM Education Faculty Search Committee	2017-2018
Ad Hoc Curriculum Committee	2017
UC Grant Reviews: Peder Sather Fund, Berkeley-France Fund, AISL Limited Submission	

### *At Tufts*

Social, Behavioral, and Educational Research Institutional Review Board	2014-2015
Critical Literacy Job Search Committee	2014-2015
Departmental Work/Life Liaison	2013-2015
Master of Arts in Teaching Program Committee	2011-2015
STEM Education Program Committee	2011-2015

### *At Northwestern*

Computational Literacy Job Search Committee	2009-2010
Computational Literacy Job Search Committee	2007-2008

## REVIEWING [EDITORIAL BOARDS]

*Journal of the Learning Sciences*  
*Digital Experiences in Mathematics Education*  
*Information and Learning Sciences*

## REVIEWING [AD HOC WITHIN PAST 3 YEARS]

National Science Foundation Grant Review Panel at least once per year since 2012

*Digital Experiences in Mathematics Education [Associate Editor/Editorial Board]*  
*Information and Learning Sciences [Editorial Board]*  
*Journal of the Learning Sciences [Editorial Board]*  
*Cognition and Instruction*  
*Educational Studies in Mathematics*  
*Infancia y Aprendizaje (Journal for the Study of Education and Development)*  
*Instructional Science*  
*Journal of Educational Psychology*  
*Journal of Engineering Education*  
*Journal of Mathematical Behavior*  
*Journal of Science Education and Technology*  
*Learning, Media, and Technology*  
*Mathematical Thinking and Learning*  
*Science Education*  
*ZDM: International Journal of Mathematics Education*

*International Conference for the Learning Sciences (ICLS) [Metareviewer 2018; 2020]*  
*American Educational Research Association (AERA) [SIG-ATL Program Chair, 2014; Program Co-Chair, 2013]*  
*Interaction, Design, and Children (IDC)*  
*Association of Computing Machinery – Special Interest Group in Human-Computer Interaction (SIG-CHI)*  
*International Conference for Computing Education Research (ICER)*