

**Jennifer Lynn Cunningham Maeng, Ph.D.**  
**Curriculum Vitae**

Research Associate Professor  
Department of Curriculum, Instruction, and Special Education  
University of Virginia School of Education and Human Development  
405 Emmet St South, Charlottesville, VA 22904  
Phone: 434-924-0837, Email: jlc7d@virginia.edu

**Education**

- 2011 Ph.D. Science Education. University of Virginia  
*Dissertation:* Differentiating Science Instruction: Success Stories of High School Science Teachers (Randy L. Bell, Chairperson)
- 2003 M.T. Secondary Science Education. University of Virginia  
*Virginia Postgraduate Professional License.* Endorsement: Chemistry
- 2003 B.Sc. Chemistry, with distinction. University of Virginia

**Professional Experience**

**Research Associate Professor-General Faculty**, University of Virginia, School of Education and Human Development, June 2020-present.

**Research Assistant Professor-General Faculty**, University of Virginia, School of Education, August 2012-2020.

**Post-Doctoral Research Associate**, University of Virginia, Curry School of Education, May 2011-August 2012. Mentor: Randy L. Bell, Ph.D.

**Graduate Assistant**, University of Virginia, Curry School of Education, 2007-2011.

**Graduate Teaching Assistant**, University of Virginia, Chemistry Department, 2007-2011.

**Summer Faculty**, University of Virginia, Chemistry Department, 2004-2012.

**Science Teacher**, Charlottesville High School, Charlottesville, VA. 2003-2007.

**Science Teacher**, University of Virginia. Summer Enrichment Program, Summer 2003; Saturday Enrichment Program, Winter 2004.

**Scholarship**

**Peer-Reviewed Research Articles**, *\*denotes current or former graduate student or post-doctoral mentee*

- Maeng, J. L.**, Cornell, D. G., & Huang, F. (accepted). Teacher perceptions of school resource officers and associations with school safety. *Journal of School Violence*.
- Afolabi, K., Konold, T., & **Maeng, J.L.** (2022). Construct and structural equivalence of the English and Spanish versions of the Authoritative School Climate Survey. *Journal of Psychoeducational Assessment*, 0, 1-14. doi: 10.1177/07342829221125087
- Inkelas, K. K., **Maeng, J.**, Williams, A., & Jones, J. (2021). Another form of undermatching? A mixed methods examination of first-year engineering students' calculus placement. *Journal of Engineering Education*. doi:10.1002/jee.20406
- Navy, S. L., **Maeng, J. L.**, Bell, R. L., & Kaya, F. (2021). Beginning Secondary Science Teachers' Implementation of Process Skills, Inquiry, and Problem-Based Learning During the Induction Years: A Randomised Controlled Trial, *International Journal of Science Education*. doi: 10.1080/09500693.2021.1919334
- Debnam, K., Edwards, K., **Maeng, J. L.**, & Cornell, D. (2021). Educational leaders' perceptions and uses of school climate data. *Journal of School Leadership*. doi: 10.1177%2F10526846211001878
- \*St. Clair, T.L., **Maeng, J.L.**, & Wheeler, L.B., Bell, R.L., (2020). Mixed-methods analysis of science teacher educator professional development: A five-year longitudinal study. *Professional Development in Education*. doi: 10.1080/19415257.2020.1787191
- Maeng, J.L.**, \*Whitworth, B.A., Bell, R.L., & Sterling, D. (2020). The effect of professional development on elementary science teachers' understanding and classroom implementation of reform-based science instruction. *Science Education*. doi: 10.1002/sce.21562
- Maeng, J.L.**, \*Malone, M., & Cornell, D. (2020). Student threats of violence against teachers: Prevalence and outcomes using a threat assessment approach. *Teaching and Teacher Education*, 87. doi: 10.1016/j.tate.2019.102934
- Maeng, J. L.**, Cornell, D. C., & Huang, F., (2019). Student threat assessment as an alternative to exclusionary discipline. *Journal of School Violence*. doi: 10.1080/15388220.2019.1707682
- Wheeler, L. B., Mulvey, B. K., **Maeng, J. L.**, Librea-Cardon, M. R., & Bell, R.L. (2019). Teaching the teacher: Exploring STEM graduate students' nature of science conceptions in a teaching methods course. *International Journal of Science Education*. doi: 10.1080/09500693.2019.1647473
- Wheeler, L.B., Navy, S.L., **Maeng, J.L.**, & Whitworth, B.A. (2019). Development and validation of the classroom observation protocol for engineering design (COPED). *Journal of Research in Science Teaching*. DOI: 10.1002/tea.21557
- \*Navy, S. L., **Maeng, J. L.** & Bell, R. L. (2019). Learning from a state professional development conference for science teachers: Beginning secondary science teachers' experiences. *Journal of Science Teacher Education*. DOI: 10.1080/1046560X.2019.1584512
- \*Burnette, A.G., Huang, F., **Maeng, J.L.**, & Cornell, D. (2019). How does threat assessment differ from suicide assessment? *Psychology in the schools*, 56, 378-392 DOI: 10.1002/pits.22194

- \*Wheeler, L.B., Chiu, J.L., **Maeng, J.L.**, & Bell, R.L. (2019). An exploratory study of teaching assistants' motivation for inquiry-based teaching in an undergraduate laboratory context. *Chemistry Education Research and Practice*, 20, 53-67. DOI: 10.1039/c8rp00157j.
- Maeng, J. L.**, Bell, R. L., St. Clair, T. L., Gonczi, A. L. & Whitworth, B. A. (2018). Supporting elementary teachers' enactment of nature of science instruction: A randomized controlled trial. *International Journal of Science Education*. DOI:10.1080/09500693.2018.1528643
- \*Dyer, R.M., Venton, B.J., & **Maeng, J.L.** (2018). Chemistry learning through experimentation, awareness, and demonstration: Professional development workshops for elementary teachers led by graduate students. *Journal of Chemical Education*, 95, 1954-1959. DOI: 10.1021/acs.jchemed.8b00130
- Cornell, D., **Maeng, J.L.**, Huang, F., \*Shukla, K., & Konold, T. (2018). Racial/ethnic parity in discipline consequences using student threat assessment. *School Psychology Review*, 47, 183-195. DOI: 10.17105/SPR-2017-0030.V47-2
- \*Whitworth, B.A., **Maeng, J.L.** & Bell, R.L. (2018). Exploring practices of science coordinators participating in a targeted professional development. *Science Education*, 102, 474-497. DOI: 10.1002/sce.21337
- Cornell, D. & **Maeng, J.L.** (2017). Statewide implementation of threat assessment in Virginia K-12 schools. *Contemporary School Psychology*, 22, 116-124. DOI: 10.1007/s40688-017-0146-x
- \*Whitworth, B.A., Bell, R.L., **Maeng, J.L.** & \*Gonczi, A.L. (2017). Supporting the supporters: VISTA professional development for science coordinators. *Journal of Science Teacher Education*, 28, 699-723. DOI: 10.1080/1046560X.2017.1404814
- Cornell, D., **Maeng, J. L.**, \*Burnette, A. G., \*Jai, Y., Huang, F., Konold, T., \*Datta, P., \*Malone, M., Meyer, P. (2017). Student threat assessment as a standard school safety practice: Results from a statewide implementation study. *School Psychology Quarterly*, 33, 213-222. DOI: 10.1037/spq0000220
- Maeng, J.L.**, Whitworth, B.A., Wheeler, L. B., Gonczi, A.L., & Dubois, S. (2017). Elementary teachers' integration of engineering design into science instruction: Results from a randomized controlled trial. *International Journal of Science Education*, 39, 1529-1548. DOI: 10.1080/09500693.2017.1340688
- \*Gonczi, A. L., **Maeng, J. L.**, & Bell, R. L. (2017). Elementary teachers' science education simulation use: How can professional development promote instructional adoption? *Journal of Technology and Teacher Education*, 25, 155-184.
- \*Whitworth, B.A., **Maeng, J.L.**, \*Wheeler, L.B., & Chiu, J.L. (2017). Investigating the role of a district science coordinator. *Journal of Research in Science Teaching*, 54, 914-936. DOI: 10.1002/tea.21391
- \*Wheeler, L.B., **Maeng, J.L.**, & \*Whitworth, B.A. (2017). Characterizing teaching assistants' knowledge and beliefs following professional development activities within an inquiry-based general chemistry context. *Journal of Chemical Education*, 94, 19-28. DOI: 10.1021/acs.jchemed.6b00373

- \*Wheeler, L.B., **Maeng, J.L.**, Chiu, J.L., & Bell, R.L. (2017). Do teaching assistants matter? Investigating relationships between teaching assistants and student outcomes in undergraduate science laboratory classes. *Journal of Research in Science Teaching*, 54, 463-492. DOI: 10.1002/tea.21373
- \*Gonczi, A. L., Chiu, J. L., **Maeng, J. L.**, & Bell, R. L. (2016). Instructional support and implementation structure during elementary teachers' science education simulation use. *International Journal of Science Education*, 38, 1800-1834. DOI: 10.1080/09500693.2016.1217363
- \*Gonczi, A. L., **Maeng, J. L.**, Bell, R. L., & \*Whitworth, B.A. (2016). Situating computer simulation professional development: Does it influence instructional use? *Computers in Schools*, 33(3), 133-152. DOI: 10.1080/07380569.2016.1205351
- Maeng, J.L.** (2016). Using technology to facilitate differentiated high school science instruction. *Research in Science Education*, 47, 1075-1099. DOI:10.1007/s11165-016-9546-6
- Bell, R.L., Mulvey, B.K., & **Maeng, J.L.** (2016). Outcomes of nature of science instruction along a context continuum: Preservice secondary teachers' conceptions and instructional intentions. *International Journal of Science Education*, 38, 493-520. DOI: 10.1080/09500693.2016.1151960
- Maeng, J.L.** & Bell, R.L. (2015). Differentiating science instruction: Secondary science teachers' practices. *International Journal of Science Education*, 37, 2065-2090. DOI: 10.1080/09500693.2015.1064553.
- \*Wheeler, L.B., **Maeng, J.L.**, & \*Whitworth, B.A. (2015). Teaching assistants' perceptions of a training to support an inquiry-based general chemistry laboratory course. *Chemistry Education Research and Practice*, 16, 824-842.
- \*Wheeler, L.B., \*Whitworth, B.A., Bell, R.L., & **Maeng, J.L.** (2014). The science ELF: Assessing the enquiry levels framework as a heuristic for professional development. *International Journal of Science Education*, 37, 55-81. DOI: 10.1080/09500693.2014.961182
- Bell, R.L., **Maeng, J.L.**, & Binns, I.C. (2013). Learning in context: Technology integration in a teacher preparation program informed by situated learning theory. *Journal of Research in Science Teaching*, 50, 348-379. DOI: 10.1002/tea.21075
- Maeng, J.L.**, Mulvey, B.K., Smetana, L.K., & Bell, R.L. (2013). Preservice teachers' TPACK: Using technology to support inquiry instruction. *Journal of Science Education and Technology*, 22, 838-857. DOI: 10.1007/s10956-013-9434-z

**Peer-Reviewed Practitioner Articles**, \*denotes current or former graduate student or post-doctoral mentee

- Gonczi, A. L. & **Maeng, J. L.** (2020). Turn your PBL into an engineering-PBL! *Science Activities*, DOI: 10.1080/00368121.2020.1786659
- Maeng, J. L.** & Lahham, D. (2019). Do you see what I see? Plants and animals and habitats, oh my! *Journal of Virginia Science Education*, 12 (2), p.2-5.
- Maeng, J. L.** & Gonczi, A. L. (2019). Do Plants Breathe?, *The Science Teacher*, 86 (7), 28-34.

- Gonczi, A. L. & **Maeng, J. L.** (2019). RAFTing Ocean Acidification. *Journal of Virginia Science Education*, 12 (1), p. 13-16.
- Navy, S.L., Edmondson, E., **Maeng, J.L.**, Gonczi, A., & Mannarino, A. (2019). Building coherence and understanding of the problem-based learning planning process. *Science and Children*, 56 (5), 68-69.
- Edmondson, E., Navy, S.L., **Maeng, J.L.**, Gonczi, A., & Mannarino, A. (2019). Got energy: Is it enough? *Science and Children*, 56 (5), 49-55.
- Maeng, J.L.**, Lindgren, R.L., & Senchal, J. (2016). Supporting middle and high school science teachers' content and pedagogical knowledge development through technology-enhanced inquiry of light and optics concepts. *Virginia Mathematics Teacher*, 43(1).
- Maeng, J.L.** & Edmondson, E. (2016). Integrating science and literacy: VISTA ELIS professional development. *Virginia Mathematics Teacher*, 43(1).
- \*Wheeler, L.B., **Maeng, J.L.**, & Smetana, L.K. (2014). Incorporating argumentation through forensic science. *Science Activities. Classroom Projects and Curriculum Ideas*, 51(3), 67-77. DOI: 10.1080/00368121.2014.907233
- Maeng, J.L.** & Bell, R.L. (2013). Theories, Laws, & Hypotheses. *The Science Teacher*. 8(7). 38-43.
- \*Whitworth, B.A., **Maeng, J.L.**, & Bell, R.L. (2013). Differentiating inquiry. *Science Scope*. 37(2), 10-17.
- Bell, R.L., **Maeng, J.L.**, Peters, E.E., & Sterling, D.R. (2013). Teaching about scientific inquiry and the nature of science: Toward a more complete view of science. *The Journal of Mathematics and Science: Collaborative Explorations*, 13(1), 3-25.

### Peer-Reviewed Book Chapters

- Edmondson, E., Burgin, S., Tsybulsky, D., & **Maeng, J.L.** (2020). Learning Aspects of nature of science through authentic research experiences. In McComas, W. Ed. *Nature of science in science education: Rationales and strategies*. Springer: New York, New York.
- Maeng, J.L.** & \*Gonczi, A.L. (2015). Developing science teachers' TPACK: Technology integration is only the tip of the iceberg. In Myint Swe Khine, Ed. *New directions in technological and pedagogical content knowledge research: Multiple perspectives*. Information Age Publishing: Charlotte, NC.
- Bell, R.L., Mulvey, B., & **Maeng, J.L.** (2012). *Beyond understanding: Process skills as a context for nature of science instruction*. In Myint Swe Khine, Ed. *Advances in the Nature of Science Research: Concepts and Methodologies*. Springer: New York, New York.

### Papers in Progress

- McCoy, W., **Maeng, J. L.**, Gonczi, A. L., & Handler, R. (under review). Elementary student beliefs about engineering careers: Implications for instruction and future research.
- \*Whitworth, B. A., **Maeng, J. L.**, \*Gonczi, A. L. & Bell, R. L. (in progress). Supports and barriers encountered by science coordinators.

Wheeler, L.B., Chiu, J.L., **Maeng, J.L.**, & Bell, R.L. (under review) Exploring research on student outcomes in inquiry-based undergraduate science laboratory instruction: A mixed methods synthetic review.

\*Gonczi, A. L., **Maeng, J. L.** & Chiu, J. L. (in progress). Educational technology use in elementary and secondary engineering lessons.

## Grants

### Grants Funded

Cornell, D. G. (\$999,177, 2022-2024). *Impact and Effectiveness of School Threat Assessment*, National Institute of Justice, **Co-investigator, Project Director.**

**Maeng, J. L.** (\$100,000, 2021-2025). *Super PL: Building a Supervisor Professional Learning Model to Improve Internship Outcomes.* **Principal Investigator of subaward** from Northern Virginia Community College/NSF (PI: Labrie, J.)

**Maeng, J. L.** (\$5,000, 2021-2022). *Success in STEM Education and Outreach Across the Commonwealth: Promoting Models of Excellence in the Era of COVID-19.* 4 VA. **Principal Investigator of collaborative award** from James Madison University (PI: Webb, A.)

**Maeng, J. L.** (\$15,000, 2021-2022). *Cybersecurity Monitoring and Assurance Training Program for Safe and Secure Port Operations.* **Principal Investigator of subaward** from Old Dominion University/Commonwealth Cyber Initiative (PI: Shetty, S. S.)

Labrie, J. (2021-2024). *Supporting Instructors to Embed Design Thinking in Digital Fabrication Courses.* National Science Foundation: Advancing Technological Education. **Consultant, External Evaluator.**

Lawrence, L. & Nuss, S. (2020-2022). *Virginia Teachers Innovating and Designing Experiential Science: VA Tides.* NOAA B-WET. Virginia Institute for Marine Science. **Consultant, External Evaluator.**

**Maeng, J. L.** & Cornell, D. C. (\$595,845, 2021-2022) *Statewide implementation of school threat assessment in Florida.* National Institute of Justice. **Principal investigator.**

**Maeng, J.L.** & Konold, T. (\$818,363; 2019-2024). *Advancing rural computer science (ARCS).* U.S. Department of Education. **Principal Investigator (External Evaluator)** of subaward from Old Dominion University. US Department of Education: Education Innovation and Research. (PI: Chappell Moots, S.).

**Maeng, J.L.** & Konold, T. (\$1,198,260; September 1, 2019 – August 31, 2022). *Making engineering real (ME Real).* National Science Foundation: Innovative Technology Experiences for Teachers and Students. **Principal Investigator.**

Cornell, D. (\$598,637; October 1, 2019 – September 30, 2022). *National Center for School Safety.* U.S. Department of Justice. Subaward from University of Michigan. **Co-investigator, Project director.**

Cornell, D. (\$1 million; January 1, 2018 – December 31, 2021). *Improvement of school climate assessment in Virginia secondary schools.* US Department of Justice: National Institute of Justice. **Co-investigator, Project director.**

- Cornell, D. (\$2.4 million; January 1, 2015 – December 31, 2019). *Student threat assessment as a safe and supportive prevention strategy*. US Department of Justice: National Institute of Justice. **Co-investigator, Project director.**
- Kallivayalil, N. (\$754,824; August 1, 2015 – July 31, 2020) *CAREER: The dynamics of the Milky Way's local group substructure as the key to understanding dark matter and galaxy formation*. National Science Foundation: CAREER. **Evaluator, Broader Impacts.**
- Wheeler, L., & **Maeng, J.L.** (\$5,000; April, 1, 2019 – March 31, 2020). *Development of a blueprint for the Virginia stem ecosystem*. 4-VA Collaborative Research Grant. **Co-Investigator.**
- Maeng, J.L.** & Gates, J. (\$50,000; October 1, 2017 - September 30, 2018). *Crafting success for underrepresented scientists and engineers phase 2*. LMI: LMI Research Institute. **Co-Principal Investigator.**
- Maeng, J.L.**, Venton, J.B., & Murphy, E.E. (\$673,334; March 1, 2015 – September 30, 2018). *VISTA ELIS at UVa*. Virginia Department of Education: Math Science Partnership. **Principal Investigator.**
- Maeng, J.L.** (\$63,748; March 1, 2015 – September 30, 2018). *VISTA ELIS at VCU*. Virginia Department of Education: Math Science Partnership. **Principal Investigator of subaward** from Virginia Commonwealth University (PI: Edmondson, E.E., \$600,000)
- Edmondson, E.E. (\$450,000; March 1, 2015 – September 30, 2018). *VISTA MELIS at VCU*. Virginia Department of Education: Math Science Partnership. **Consultant, External Evaluator.**
- Lindgren, R., **Maeng, J.L.** & Mumba, F. (\$227,069; March, 2014 – September 30, 2015). *Developing grades 6-12 science teacher leaders' understanding of electricity, magnetism, and light via modeling and inquiry*. Virginia Department of Education: Math Science Partnership. **Co-Principal Investigator.**
- Venton, J., Presby, M., & **Maeng, J.L.** (\$20,000; January 2014-December 2015). *Expanding inquiry-based chemistry education at the elementary school level*. The Camille and Henry Dryfus Foundation, Inc. **Evaluator.**
- Bell, R.L. & Konold, T.K. (\$3.8 million; October 1, 2010 – September 30, 2015). *Virginia initiative for science teaching and achievement (VISTA)*. US Department of Education: Investing in Innovation. **Project director of subaward** from George Mason University (PI: Sterling, D.) U.S. Department of Education Investing in Innovation Fund, (\$28.5 million).
- Murphy, E., **Maeng, J.L.**, & Pyle, E. (\$245,172; July 1, 2013-September 30, 2014). *Blue Ridge collaborative for Earth Science*. State Council of Higher Education for Virginia: Improving Teacher Quality State Grants. **Co-principal investigator.**

### Grants Submitted

- Maeng, J. L.** (under review, \$2,289,013, 2023-2027). *Leveraging Teacher's Experience with Place to Demystify Systems and Systems Thinking (Place-S)*. **Principal Investigator of subaward** from Michigan Technological University/NSF (PI: Gonczi, A. L.)

- McCoy, W. N., **Maeng, J. L.** & Leath, S. (unfunded, 2022-2026). *Supporting STEM Identity Development and Racial Equity for Black Girls and Mothers through Community-Based Critical Literacy STEM Education*. National Science Foundation: Racial Equity in STEM. **Co-Principal investigator**. (PI: McCoy, W. N.)
- Cornell, D. G. (unfunded, \$694,252, 2022-2024). *Impact and Effectiveness of School Threat Assessment*, National Institute of Justice, **Co-investigator, Project Director**.
- Epstein, H. (unfunded, \$2,999,101, 2022-2027). *NRT-NNA: An Integrated approach to dynamic polar environments through Science, Engineering, and Design*. National Science Foundation: DGE - NSF Research Traineeship. **Senior Personnel** (External Evaluator).
- Maeng, J. L. (unfunded, \$105,698, 2021-2023). *Teacher Learning and Curriculum Implementation in the age of NGSS (TLC NGSS)*. **Principal Investigator (External Evaluator)** of subaward from Michigan Technological University/NSF (PI: Gonczi, A. L.)
- Maeng, J. L. (unfunded, \$30,000, 2022-2023). *Laying the Computer Science Foundation with Educative Curricula*. **Principal Investigator (External Evaluator)** of subaward from Michigan Technological University/NSF (PI: Gonczi, A. L.)
- Maeng, J. L. (unfunded, \$30,000, 2021-2023). *Ready to Teach CS: A High School Certification Program to Elevate Computer Science Through Teacher Leadership*. **Principal Investigator (External Evaluator)** of subaward from Michigan Technological University/NSF (PI: Gonczi, A. L.)
- Maeng, J. L. (unfunded \$83,754, 2022-2025). *PLEASE: Promoting Leadership and Equity to Advance STEM Education*. Spencer Foundation. **Principal Investigator of subaward** from Michigan Technological University (PI: Gonczi, A. L.)
- Maeng, J. L. (unfunded, \$547,643, 2021-2024). *CYBER TEAM: Engaging Teachers and Students in Cybersecurity Instruction*. Collaborative proposal with Northern Virginia Community College. US Department of Defense. (\$952,268, PI: Labrie, J.). **Principal Investigator**.
- Maeng, J. L. (unfunded, \$2,997,382 2020-2023). *ADD SySTEMic*. **Principal Investigator (External Evaluator)** of subcontract from Northern Virginia Community College. US Department of Defense. (PI: Labrie, J.).
- Cornell, D. (unfunded, \$1,399,980, 2020-2023). *Statewide implementation of school threat assessment in Florida*. U.S. Department of Education: **Co-investigator, Project director**.
- Urban, N. (in review, \$600,000, 2020-2022) *PLACE – Promoting Learning About Computational tools for Engineering*. National Science Foundation: RET, **Consultant, External Evaluator**.
- Maeng, J.L. (unfunded, \$201,333, 2020-2024). *Paving pathways to STEM careers through augmented reality career and technical education*. **Principal Investigator (External Evaluator)** of subcontract from Old Dominion University. National Science Foundation: ITEST. (PI: Chappell Moots, S).



- Wallace, C. (unfunded, \$1,358,463; 2019-2023). *Integrating computational modeling and simulation into a standards-based science and engineering network for middle schools*. National Science Foundation: STEM+C. **Consultant, External Evaluator.**
- Gonczi, A. L. (unfunded, \$2,669,255; 2019-2024). *Problem-based learning as a context to develop middle school students' computing skills and science achievement*. US Department of Education: Education Innovation and Research. **Consultant, External Evaluator.**
- Gonczi, A. L. (unfunded). *Promoting Career Readiness and Science Achievement Through 21st Century Problem Solving*. National Science Foundation. Subaward from Michigan Technological University. **Consultant, External Evaluator.**
- Maeng, J.L. (unfunded). *Technology-infused engineering education from elementary up (TIED-UP)*. National Science Foundation: Innovative Technology Experiences for Teachers and Students. **Principal Investigator of subaward** from Michigan Technological University (PI: Gonczi, A. L.)
- Maeng, J.L. (unfunded). *Discovering the impact of generating inquiry through algorithmic learning (DIGITAL) Evaluation*. US Department of Education Innovation and Research. **Principal Investigator (External Evaluator) of subaward** from Old Dominion University. (PI: Chappel Moots, S.).
- Wheeler, L.B. (unfunded). *Teaching to careers: Training in evidenced-based pedagogy as innovation for the development of diverse STEM career path*. National Science Foundation: Improving Graduate Education. **Co-investigator.**
- Cornell, D. (unfunded). *Longitudinal assessment of school climate and safety*. US Department of Justice: OJJDP Field-initiated research and evaluation program. **Co-Investigator, Project Director.**
- Venton, B.J. (unfunded). *Service learning and science communication for chemistry lab students*. Howard Hughes Medical Institute. **Co-Investigator.**
- Lindgren, R.L. & **Maeng, J.L.** (unfunded). *Physical science: Inquiry, technology, and performance-based assessment (PS:ITPA)*. State Council of Higher Education for Virginia: Improving Teacher Quality State Grants. **Co-principal investigator.**
- Venton, B.J. & **Maeng, J.L.** (unfunded, \$299,997). *Service learning and science communication for chemistry students*. National Science Foundation: Improving Undergraduate STEM education. **Co-principal investigator.**
- Edmondson, E. W., McDonnough, J.T., Robnolt, V., Williams, A. (unfunded). *Elementary literacy integrated with science: Problem-based learning as the driver for improved science and literacy achievement*. National Science Foundation: DR-K12. **Principal Investigator of subaward** from Virginia Commonwealth University.
- Maeng, J.L.,** Venton, J.B., Murphy, E.E., (unfunded) *Integrating elementary science and literacy through problem-based learning (IESL-PBL)*. State Council of Higher Education for Virginia: Improving Teacher Quality State Grants. **Principal Investigator.**

## Presentations

### International and National Peer-Reviewed Research Presentations

- Maeng, J. L.** & Cornell, D. G. (April 2022). *Statewide implementation of threat assessment in Florida schools*. A paper for the annual meeting of the American Educational Research Association, San Diego, CA.
- Nuss, S., **Maeng, J. L.**, Lawrence, L. & Edmondson, E. (January, 2022). *Building capacity for pre-service teachers to conduct meaningful field experiences in future classrooms*. A paper for the annual meeting of the Association for Science Teacher Education. Greenville, SC.
- Maeng, J. L.**, Gonczi, A. L., & McCoy, W. N. (January 2022). *Characterization of elementary teachers' integration of engineering*. A paper for the annual meeting of the Association for Science Teacher Education. Greenville, SC.
- Gonczi, A. L., **Maeng, J. L.**, & McCoy, W. (July 2021). *Digital technology and engineering: Teachers' understandings, beliefs, and practices*. A paper for the annual meeting of the American Society of Engineering Education, Virtual Conference.
- Brobst, J., **Maeng, J. L.**, & Garner, J.K. (April 2021). *Variations in rural elementary teachers' confidence and experience with Computer Science integration by teacher type*. A paper for the annual meeting of NARST, Virtual Conference.
- Navy, S. L., **Maeng, J. L.**, Bell, R. L., & Kaya, F. (2021, April). *Science teachers' process skills, inquiry, and problem-based learning during induction: A randomized controlled trial*. A paper for the annual meeting of NARST, Virtual Conference.
- McCoy, W., **Maeng, J. L.**, Gonczi, A. L., & Handler, R. (2021, April). *Elementary Teacher Beliefs, Understandings, and Confidence to Integrate Engineering: Implications and Opportunities*. A paper for the annual meeting of NARST, Virtual Conference.
- Maeng, J.L.**, Cornell, D.G., & Huang, F.L. (2021, March). *Teachers' perceptions of school resource officers' role in safety and discipline*. A paper for the annual meeting of the American Educational Research Association, virtual conference.
- McCoy, W., **Maeng, J. L.**, Gonczi, A. L., & Handler, R. (2021, January). *Elementary student beliefs about engineering careers: Implications for instruction and future research*. A paper for the annual meeting of the Association for Science Teacher Education, virtual conference.
- Maeng, J.L.** & Cornell, D. (2020, August). *Effects of online teacher professional development in school safety and threat assessment*. A paper for the annual meeting of the American Psychological Association, Washington, D.C., virtual conference.
- Maeng, J.L.**, Cornell, D., & Konold, T. (2020, July). *Statewide implementation of threat assessment in Virginia schools: Trends and challenges*. A paper for the annual meeting of the Society for Prevention Research, Washington, D.C., virtual conference.
- Maeng, J.**, Debnam, K. J., \*Edwards, K., & Cornell, D. (conference cancelled). *Educational leaders' perceptions of school climate data*. A paper for the annual meeting of the American Education Research Association, San Francisco, CA.
- Navy, S. L., **Maeng, J. L.**, Bell, R. L., & Kaya, F. (conference cancelled). *Beginning science teachers' contextualized and decontextualized inquiry implementation: A randomized controlled trial*. A paper for the annual meeting of the NARST, Portland, OR.

- Maeng, J.L.**, & Gonczi, A.L. (2020, January). *Novice elementary and secondary teachers' technology and engineering-enhanced science instruction*. A paper for the annual meeting of the Association for Science Teacher Education, San Antonio, TX.
- Debnam, K. J., \*Edwards, K., **Maeng, J.**, & Cornell, D. (2019, May). *Do Schools Really Use School Climate Data to Inform Decisions?* A presentation for the 2019 Society for Prevention Research Annual Meeting, San Francisco, CA.
- \*Navy, S., **Maeng, J.L.**, & Bell, R.L. (2019, April). *Confidence, understandings, and practices of new secondary science teachers: A randomized controlled trial investigation*. A paper presented at the annual meeting of National Association of Research in Science Teaching, Baltimore, MD.
- Gonczi, A.L. & **Maeng, J.L.** (2019, April). *Plants do what?! Using a conceptual change framework and computer simulation to understand respiration*. A paper presented at the annual meeting of National Association of Research in Science Teaching, Baltimore, MD.
- Wheeler, L., Navy, S. **Maeng, J.L.** & Whitworth, B.A. (2019, April). *Classroom Observation Protocol for Engineering Design (COPED): Instrument development, validation, and implications for use*. A paper presented at the annual meeting of National Association of Research in Science Teaching, Baltimore, MD.
- Maeng, J. L.** & Cornell, D. (2019, April). *School climate outcomes of schools implementing the VSTAG threat assessment model: A statewide effectiveness study*. American Educational Research Association. Toronto. CA.
- Inkelas, K. K., Williams, A., **Maeng, J.**, & Jones, J. (2019, April). *Another form of undermatching? A mixed methods examination of first-year engineering students' calculus placement*. American Educational Research Association. Toronto. CA.
- Maeng, J. L.** & Whitworth, B. A. (2019, April) *Debunking classroom myths: Learning styles edition*. National Science Teachers' Association. St. Louis, MO.
- Maeng, J. L.**, Edmondson, E. E., Gonczi, A. L., Wheeler, L. B. & Omole, I. (2019, January). *Problem-based learning: A context to support student and teacher learning and integration of literacy, NOS, and inquiry instruction*. A paper for the annual meeting of ASTE. Savannah, GA.
- Maeng, J.** & Cornell, D. (2018). *School violence: Using and enhancing knowledge to improve school safety*. American Society of Criminology. Atlanta, GA
- Maeng, J.**, Bell, R.L., St. Clair, T., Gonczi, A.L., Whitworth, B.A. (2018, January). *Elementary teachers' classroom nature of science instruction following PD: Results of a RCT*. A paper for the annual meeting of ASTE, Baltimore, MD.
- Wheeler, L.B., Navy, S., **Maeng, J.L.**, & Whitworth, B.A. (2018, January). *Development and validation of the Classroom Observation Protocol for Engineering Design (COPED)*. A paper for the annual meeting of ASTE, Baltimore, MD.
- Mulvey, B.K., Wheeler, L.B., **Maeng, J.L.**, & Bell, R.L. (2018, January). *STEM graduate students' changes in nature of science conceptions in a teaching methods course*. A paper for the annual meeting of ASTE, Baltimore, MD.

- Cornell, D., **Maeng, J.**, Huang, F., Konold, T., \*Burnette, A.G., \*Stohlman, S., \*Jie, Y., \*Datta, P., & \*Malone, M. (2017). *School safety approaches to prevent, identify and respond to threatening or concerning student behavior*. A presentation for the American Society of Criminology, Philadelphia, PA.
- Maeng, J.L.**, \*Malone, M., & Cornell, D. (2017, August). *Student threats of violence against teachers: Prevalence and outcomes of a threat assessment approach*. A paper presented at the annual meeting Annual Convention of the American Psychological Association. Washington, DC.
- \*Burnette, A.G., Huang, F., **Maeng, J.L.**, \*Datta, P., & Cornell, D. (2017, August). *How does threat assessment differ from suicide assessment?* A poster presented at the annual meeting Annual Convention of the American Psychological Association. Washington, DC.
- Cornell, D. & **Maeng, J.** (2017). *Student threat assessment as safe and supportive prevention strategy*. National Comprehensive School Safety Initiative Conference, Alexandria, VA.
- Maeng, J.L.**, \*Burnette, A.G, \*Jia, Y., & Cornell, D. (2017, April). *Student threat assessment as an innovative violence prevention strategy: Results from a statewide implementation study*. A poster for the annual meeting of the American Education Research Association, San Antonio, TX.
- \*St. Clair, T.L., Bell, R.L., **Maeng, J.L.**, & Wheeler, L.B. (2017, January). *Mixed-Methods analysis of science teacher educator professional development practices*. A paper for the annual meeting of ASTE, Des Moines, IA.
- Maeng, J.L.**, Whitworth, B.A., Wheeler, L. B., Gonczi, A.L., & Dubois, S. (2017, January). *Incorporating engineering design into elementary science instruction: Frequency, content, and process*. A paper for the annual meeting of ASTE, Des Moines, IA.
- Maeng, J.L.** & Edmonson, E. (2016). *Virginia Initiative for Science Teaching and Achievement (VISTA) Elementary Literacy Integrated with Science (ELIS)*. A poster for the annual Math Science Partnerships Conference, Baltimore, MD.
- Maeng, J.L.**, Bell, R.L., St.Clair, T., Whitworth, B.A., & Gonczi, A.L. (2016, April). *From professional development to practice: Elementary teachers' understandings and enactment of nature of science instruction*. A paper for the annual meeting of NARST, Baltimore, MD.
- \*Dubois, S., **Maeng, J.L.**, & Bell, R.L. (2016, April). *A statewide support program for beginning secondary science teachers: Results from a randomized-controlled trial investigation*. A paper for the annual meeting of NARST, Baltimore, MD.
- \*Wheeler, L.B., Chiu, J.L., **Maeng, J.L.**, & Bell, R.L. (2016, April). *Do teaching assistants matter? Assessment of teaching assistants' impact on student outcomes in a general chemistry laboratory*. A paper for the annual meeting of NARST, Baltimore, MD.
- \*Whitworth, B. A., **Maeng, J. L.**, \*Wheeler, L. B., & Chiu, J. L. (2016, April). *A foundational study of the district science coordinators' role in supporting science instruction*. A paper for the annual meeting of NARST, A paper for the annual meeting of NARST, Baltimore, MD.

- Gonczi, A. L. Chiu, J. L., **Maeng, J. L.** (2016, April). *Science teachers' computer simulation use to support engineering design*. A paper for the annual meeting of the American Education Research Association, Washington, DC.
- \*Whitworth, B.A., **Maeng, J.L.**, \*Wheeler, L.B., & Chiu, J.L. (2016, April). *Investigating the roles and responsibilities of district science coordinators*. A paper for the annual meeting of the American Education Research Association, Washington, D.C.
- Mulvey, B.K., **Maeng, J.L.**, & Bell, R.L. (2016, April). *Beyond a dichotomy for nature of science instruction: Outcomes of a science content context continuum*. A paper for the annual meeting of the American Education Research Association, Washington, D.C.
- \*Dubois, S., **Maeng, J.L.**, & Bell, R.L., (2016, January). *Learning from a state professional development conference for science teachers: Beginning secondary science teachers' experiences*. A paper for the annual meeting of The Association for Science Teacher Educators. Reno, NV.
- Mulvey, B.A., **Maeng, J.L.**, & Bell, R.L. (2016, January). *Outcomes of nature of science instruction along a context continuum: Preservice secondary science teachers' conceptions and instructional intentions*. A paper for the annual meeting of The Association for Science Teacher Educators. Reno, NV.
- \*Wheeler, L.B., Chiu, J.L., **Maeng, J.L.**, & Bell, R.L. (2016, January). *Inquiry-based professional development for general chemistry laboratory teaching assistants: Changes in teaching assistants' knowledge, beliefs, and practices*. A paper for the annual meeting of The Association for Science Teacher Educators. Reno, NV.
- \*Whitworth, B.A., \*Wheeler, L.B., **Maeng, J.L.** & Bell, R.L. (2016, January). *The relationship between science coordinator professional development and teacher change*. A paper for the annual meeting of The Association for Science Teacher Educators. Reno, NV.
- Cornell, D.C., Konold, T., & **Maeng, J.L.** (2015, May). *Statewide implementation of student threat assessment in Virginia public schools*. A paper for the annual meeting of the Society for Prevention Research, Washington, D.C.
- Bell, R.L., **Maeng, J.L.**, Konold, T., & \*Whitworth, B.A. (2015, April). *Professional development to support elementary teachers' understanding and implementation of reforms-based science: Randomized controlled trial*. A paper for the annual meeting of American Education Research Association, Chicago, IL.
- Bell, R.L., **Maeng, J.L.**, Konold, T., & \*Whitworth, B.A. (2015, April). *The effect of professional development on elementary teachers' understanding and implementation of reforms-based science instruction*. A paper for the annual meeting of NARST, Chicago, IL.
- \*Dubois, S.L., **Maeng, J.L.**, & Bell, R.L. (2015, April). *Learning reform-based science instruction: Results from a statewide professional development program for beginning science teachers*. A poster for the annual meeting of NARST, Chicago, IL.
- \*Gonczi, A.L., **Maeng, J. L.**, & Bell, R. L. (2015, April). *Science educational computer simulations and elementary science teachers*. A paper for the annual meeting of NARST, Chicago, IL.

- Maeng, J.L.** & \*Gonczi, A.L. (2015, April). *Elementary teachers' mindsets: Does situated professional development promote growth mindedness?* A paper for the annual meeting of NARST, Chicago, IL.
- \*St.Clair, T. L., **Maeng, J. L.**, Bell, R. L., & \*Wheeler, L. B. (2015, April). *Exploring science education faculty attitudes toward standardized testing.* A paper for the annual meeting of NARST, Chicago, IL.
- \*Wheeler, L.B., **Maeng, J.L.**, & \*Whitworth, B.A. (2015, April). *Assessing a professional development for teaching assistants in a project-based guided inquiry general chemistry lab.* A paper for the annual meeting of NARST, Chicago, IL.
- \*Whitworth, B. A., **Maeng, J. L.**, & Bell, R. L. (2015, April). *An exploration of science coordinator practices following professional development.* A paper for the annual meeting of NARST, Chicago, IL.
- \*Leach, J.S., **Maeng, J.L.**, Bell, R.L. (2015, January). *Watching what you say: Science discourse interactions between teachers and linguistically diverse elementary students.* A poster for the annual meeting of the Association of Science Teacher Educators, Portland, OR.
- Maeng, J.L.**, Bell, R.L. & \*Whitworth, B.A. (2015, January). *The effect of professional development on elementary science teachers' understanding and classroom implementation of reforms-based science instruction: A randomized controlled trial.* A paper for the annual meeting of the Association of Science Teacher Educators, Portland, OR.
- \*St.Clair, T. L., **Maeng, J. L.**, Bell, R. L., & \*Wheeler, L. B. (2015, January). *Science education faculty vexations and ventures with standardized testing.* A paper for the Annual Meeting of the Association of Science Teacher Educators, Portland, OR.
- \*Whitworth, B. A., **Maeng, J. L.**, \*Wheeler, L. B., & Chiu, J. L. (2015, January). *Critical factors impacting the role of a district science coordinator.* A paper for the Annual Meeting of the Association for Science Teacher Education, Portland, OR.
- \*Wheeler, L.B., **Maeng, J.L.**, & \*Whitworth, B.A. (2014, July). *Teaching assistant role and perceptions: Assessment of professional development to support project-based, guided inquiry approach in general chemistry labs.* A paper for the IUPAC International Conference on Chemistry Education, Toronto, Canada.
- Bell, R.L., & **Maeng, J.L.**, & \*St. Clair, T. (2014, March). *Statewide elementary science institute to support reforms-based science instruction: Results from three years of implementation.* A paper for the Annual meeting of NARST, Pittsburgh, PA.
- \*Whitworth, B. A., Chiu, J. L., **Maeng, J. L.**, & \*Wheeler, L.B. (2014, March). *Understanding the critical role of a district science coordinator.* A poster presented at the annual meeting of National Association of Research in Science Teaching, Pittsburgh, PA.
- \*Gonczi, A.L., **Maeng, J.L.**, Bell, R.L., & \*Whitworth, B.A. (2014, January). *Computer simulation professional development: Program elements that make a difference.* A paper for the Annual meeting of the Association for Science Teacher Education, San Antonio, TX.

- \*St. Clair, T., \*Wheeler, L.B., & **Maeng, J.L.** (2014, January). *Outcomes of the science education faculty academy professional development*. A paper for the Annual meeting of the Association for Science Teacher Education, San Antonio, TX.
- \*Shukla, K.D., **Maeng, J.L.**, & Konold, T. (2013, April). *Optimal reliability within resource constraints: Generalizability theory to inform reliability estimates for science pedagogy assessment*. A paper for the Annual meeting of the American Education Research Association, San Francisco, CA.
- Bell, R.L. & **Maeng, J.L.** (2013, April). *Results of two years of Virginia Initiative for Science Teaching and Achievement (VISTA) professional development*. A paper for the Annual meeting of NARST, San Juan, PR.
- Maeng, J.L.**, Mulvey, B., Smetana, L. & Bell, R.L. (2013, April). *Pre-service teachers' TPACK: Using technology to support inquiry instruction*. A paper for the Annual meeting of NARST, San Juan, PR.
- \*Wheeler, L.B., **Maeng, J.L.**, Bell, R.L., & Whitworth, B.A. (2013, April). *Understanding and scaffolding inquiry: A tale of three teachers*. A poster for the Annual Meeting of NARST, San Juan, PR.
- \*Whitworth, B. A., **Maeng, J. L.**, Bell, R. L. & \*Gonczi, A. L. (2013, April) *Supporting the supporters: A case study of professional development for science coordinators*. A poster for the Annual Meeting of NARST, San Juan, PR.
- \*Gonczi, A. L., Bell, R. L., **Maeng, J. L.**, & \*Wheeler, L. B. (2013, April). *Analysis of instructional computer simulation use by elementary and secondary teachers*. A poster for the Annual Meeting of NARST, San Juan, PR.
- Maeng, J.L.** (2013, January). *Differentiating science instruction: One secondary science teacher's experience*. A paper for the Annual Meeting of the Association of Science Teacher Educators, Charleston, SC.
- Bell, R.L. & **Maeng, J.L.** (2013, January). *Statewide professional development to support reform-based science instruction: Results from the first year of implementation*. A paper for the Annual Meeting of the Association of Science Teacher Educators, Charleston, SC.
- \*Whitworth, B.A., **Maeng, J.L.**, \*Gonczi, A.L. (2013, January). *Science coordinators experiences with VISTA professional development*. A paper for the Annual Meeting of the Association of Science Teacher Educators, Charleston, SC.
- \*Gonczi, A.L., Bell, R.L., **Maeng, J.L.**, & \*Wheeler, L.B. (2013, January). *VISTA and Gizmos<sup>TM</sup>: Analysis of simulation use in science instruction*. A paper for the Annual Meeting of the Association of Science Teacher Educators, Charleston, SC.
- Maeng, J.L.** & Bell, R.L. (2012, March). *Outcomes of the Virginia Initiative for Science Teaching and Achievement (VISTA) professional development*. A paper for the Annual meeting of the National Association of Research in Science Teaching, Indianapolis, IN.
- Mulvey, B., **Maeng, J.L.**, & Bell, R.L. (2012, March). *Developing preservice science teachers' NOS conceptions and commitment to NOS instruction using a process-skill-based approach*. A paper for the Annual meeting of the National Association of Research in Science Teaching, Indianapolis, IN.

- Maeng, J.L.** & Bell, R.L. (2012, January). *Secondary science teachers experiences differentiating science instruction*. A paper for the Annual Meeting of the Association of Science Teacher Educators, Clearwater, FL.
- Mulvey, B., **Maeng, J.L.**, & Bell, R.L. (2011, April). *Process skills as a bridge to the nature of science: Developing preservice science teachers' conceptions*. A paper for the Annual meeting of the American Educational Research Association, New Orleans, LA.
- Maeng, J.L.**, Mulvey, B., & Bell, R.L. (2011, April). *Models of instruction for technology-enhanced whole-class inquiry*. A paper for the Annual meeting of the National Association of Research in Science Teaching, Orlando, FL.
- Mulvey, B., **Maeng, J.L.**, & Bell, R.L. (2011, January). *Transforming preservice science teachers' views of the nature of science: A process skills-based approach*. A paper for the Annual Meeting of the Association of Science Teacher Educators, Minneapolis, MN.
- Maeng, J.L.**, & Bell, R.L. (2010, March). *Learning in context: Technology integration in a teacher preparation program informed by situated learning theory*. A paper presented at the Annual Meeting of the National Association of Research in Science Teaching, Philadelphia, PA.
- Maeng, J.L.**, Bell, R., & Mulvey, B. (2010, January). *Is one computer enough? Preservice teachers' use of technology to support whole-class inquiry*. A paper presented at the Annual Meeting of the Association for Science Teacher Education, Sacramento, CA.
- Bell, R., **Maeng, J.L.**, & Binns, I., (2009, January). *Context and content: Preparing teachers to use technology to support reforms-based instruction*. A paper presented at the Annual Meeting of the Association for Science Teacher Education, Hartford, CT.

### **Regional/State Peer-Reviewed Research Presentations**

- Cornell, D., **Maeng, J.L.**, & Edwards, K. (2021, October). *Equity in Student Threat Assessment. Paper presented at Improving Data for School Discipline Research*. University of Florida Education Policy Research Center. Gainesville, FL.
- Edmondson, E. & **Maeng, J. L.** (May, 2018). *Evaluating the impact of a professional development program, VISTA ELIS and MELIS, on teacher and student learning*. A paper presented at the Annual Meeting of the Virginia Academy of Science, Longwood, VA.
- \*Gonczi, A.L., **Maeng, J. L.**, & Bell, R. L. (September, 2014). *Computer simulation professional development for elementary science teachers: Attention to teachers' pedagogical knowledge cannot be overlooked* A paper presented at the Annual Meeting of the Mid-Atlantic Regional ASTE, Boone, NC.
- Maeng, J.L.** (2014, September). *A randomized controlled trial exploring the effect of professional development on elementary science teachers' understanding and classroom implementation of reforms-based science instruction*. A paper presented at the Annual Meeting of the Mid-Atlantic Regional ASTE, Boone, NC.
- Maeng, J.L.** (2013, September), *Using technology to facilitate differentiated high school science instruction*. A paper for the Annual Meeting of the Mid-Atlantic Regional ASTE Meeting, Glade Springs, WV.



\*Whitworth, B. A., \*Gonczi, A. L., Bell, R. L., & **Maeng, J. L.** (2013, February). *A case study of VISTA science coordinators*. A poster presented at the annual Curry Research Conference, Charlottesville, VA.

\*Wheeler, L. B., **Maeng, J.L.**, Bell, R.L., & \*Whitworth, B.A. (2013, February). *Secondary science teachers' understanding and practices of the levels of inquiry*. A poster for the Annual Curry Research Conference, Charlottesville, VA.

**Maeng, J.L.**, & Mulvey, B. (2010, January). *Using technology to support whole-class inquiry: A study of preservice science teachers*. A paper presented at the Curry Research Conference, Charlottesville, VA.

### **International and National Peer-Reviewed Practitioner Presentations**

Whitworth, B. A., Gonczi, A. L., & **Maeng, J. L.** (2019, April). *Is it engineering or not?* A paper for the national meeting of the National Science Teachers Association, St. Louis, MO

Whitworth, B. A. & **Maeng, J. L.** (2019, April). *Growing as a teacher: What do I want to be when I grow up?* A paper for the national meeting of the National Science Teachers Association, St. Louis, MO

Whitworth, B.A., & **Maeng, J.L.** (2016, April). *Exploring engineering practices*. A paper for the annual meeting of the National Science Teachers Association. Nashville, TN.

**Maeng, J.L.** & Whitworth, B.A. (2016, April). *Differentiating scientific practices through inquiry-based instruction*. A paper for the annual meeting of the National Science Teachers Association. Nashville, TN.

**Maeng, J.L.** & Bell, R.L. & Whitworth, B.A. (2012, March). *Alternatives to dissection in the digital age*. A paper for the annual meeting of the National Association of Science Teachers, Indianapolis, IN.

Smetana, L.K., **Maeng, J.L.** & Bell, R.L. (2012, March). *Digital resources in the science classroom: TPACK in action*. A paper for the annual meeting of the National Association of Science Teachers, Indianapolis, IN.

**Maeng, J.L.**, Mulvey, B., & Bell, R.L. (2011, March). *Integrating digital images and video in the science classroom*. A paper for the annual meeting of the National Association of Science Teachers, San Francisco, CA.

**Maeng, J.L.**, Mulvey, B., Smetana, L., & Bell, R.L. (2010, March). *CSI: Collaborative science inquiry*. A paper for the annual meeting of the National Association of Science Teachers, Philadelphia, PA.

### **Regional/State Peer-Reviewed Practitioner Presentations**

Gonczi, A. L. & **Maeng, J. L.** (November, 2020). *Get involved with JVSE! There is room for everyone*. A paper for the annual meeting of the Virginia Association of Science Teachers, virtual conference.

Peterson, A. & **Maeng, J. L.** (November, 2020). *VAST colleges and universities share session*. A paper for the annual meeting of the Virginia Association of Science Teachers, virtual conference.

- Maeng, J. L.** (November, 2020). *Exclusively for preservice teachers – What you need to know*. A paper for the annual meeting of the Virginia Association of Science Teachers, virtual conference.
- Navy, S. L., **Maeng, J. L.**, Bell, R. L., & Kaya, F. (Fall, 2020). *Moving from Inquiry to Problem-Based Learning: Coherences and Connections*. A paper for the regional meeting of the National Science Teachers' Association, Pittsburg, PA.
- Gonczi, A. L. & Maeng, J. L. (November, 2019). *Get involved with JVSE! There is room for everyone*. A paper for the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.
- Peterson, A. & Maeng, J. L. (November, 2019). *VAST colleges and universities share session*. A paper for the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.
- Shafer, A. & Maeng, J. L. (November, 2019). *Exclusively for preservice teachers – What you need to know*. A paper for the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.
- Navy, S. & **Maeng, J. L.** (November, 2019). *Strategies for planning problem-based learning units*. A paper for the regional meeting of the National Science Teachers' Association, Cincinnati, OH.
- Maeng, J. L.** & Gonczi, A. (November, 2018). *PBL and engineering design: A natural connection*. A paper for the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Gonczi, A. & **Maeng, J. L.** (November, 2018). *Supporting STEM and literacy learning through problem-based learning (PBL)*. A paper for the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Shafer, A. & **Maeng, J. L.** (November, 2018). *Specifically for preservice teachers: What you need to know*. A paper for the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Maeng, J. L.** Higdon, R., & Geller, H. (November, 2018). *VAST colleges and universities share session*. A paper for the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Maeng, J.L.** & Gonczi, A.L. (November, 2017). *PBL: Solving real-world problems with a literacy twist*. A paper for the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.
- Gonczi, A.L. & **Maeng, J.L.** (November, 2017). *Using computer simulations to support conceptual change*. A paper for the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.
- Gonczi, A.L. & **Maeng, J.L.** (November, 2016). *Using simulations to demystify earth-moon-sun relationships*. A paper for the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Maeng, J.L.**, Wheeler, L.B., & Gonczi, A.L. (November, 2015) *Using simulations and inquiry to teach nature of science*. A paper for the annual meeting of the Virginia Association of Science Teachers, Dulles, VA.

- Lindgren, R. & **Maeng, J.L.** (November, 2015) *Lesson plans for light and optics activities at the middle school level*. A paper for the annual meeting of the Virginia Association of Science Teachers, Dulles, VA.
- Lindgren, R. & **Maeng, J.L.** (November, 2015) *Lesson plans for electricity, magnetism, and energy transfer activities at the middle school level*. A paper for the annual meeting of the Virginia Association of Science Teachers, Dulles, VA.
- Maeng, J.L.**, Wheeler, L.B., & Gonczi, A.L. (November, 2014), *Inquiry inquiries: Differentiation & scientific practices*. A paper for the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.
- Maeng, J.L.** (October, 2014). *Differentiated instruction in secondary science classrooms*. A presentation for the Regional National Science Teachers Association Conference, Richmond, VA.
- Whitworth, B.A., Mandzak, M., Parks, G., Snell, P., & **Maeng, J.L.** (2013, November), *Investigating inquiry: Scaffolding inquiry instruction*. A paper for the annual meeting of the Virginia Association of Science Teachers, Norfolk, VA.
- Maeng, J.L.** & Bell, R.L. (2012, November). *Exploring nature of science: Patterns and creativity in science*. A paper for the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Whitworth, B.A., Wheeler, L.B., Barry, L., Chase, A., Tuska, A., Verner, M., **Maeng, J.L.** & Bell, R.L. (2012, November). *Differentiating inquiry*. A paper for the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Gonczi, A.L., Leach, J., **Maeng, J.L.** & Bell, R.L. (2012, November). *Effective use of computer simulations in biology*. A paper for the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Maeng, J.L.**, Henriksen, D. (2011, November). *Differentiating science in secondary classrooms*. A paper for the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.
- Maeng, J.L.**, Whitworth, B., Shaikh, I., Rock, C., Stewart, W., & Bell, R.L. (2011, November). *Digital alternatives to hands-on dissection*. A paper for the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.
- Bell, R.L., Sterling, D., **Maeng, J.L.**, & Peters, E. (2010, November). *Teaching about scientific inquiry and the nature of science*. A paper for the annual meeting of the Virginia Association of Science Teachers, Hampton, VA.
- Maeng, J.L.**, Brown, K., Lai, H., Palmer, B., Mulvey, B., & Bell, R.L. (2010, November). *Exploring the nature of science: Theories and laws*. A paper for the annual meeting of the Virginia Association of Science Teachers, Hampton, VA.
- Brown, K., Lai, H., Palmer, B., Mulvey, B., **Maeng, J.L.**, & Bell, R.L. (2010, November). *Inquiring about inquiry: Scaffolding inquiry instruction*. A paper for the annual meeting of the Virginia Association of Science Teachers, Hampton, VA.
- Maeng, J.L.**, Stocke, L., Frank, E., & Bell, R.L. (2009, November). *Teaching physical & earth science with digital media*. A presentation at the annual meeting of the Virginia Association of Science Teachers, Reston, VA.

- Maeng, J.L.**, Chapman, M., Egge, N., Hidy, M., & Bell, R.L. (2009, November). *Simulating biology: Computer simulations to promote learning*. A presentation at the annual meeting of the Virginia Association of Science Teachers, Reston, VA.
- Maeng, J.L.**, Baird, A., Culbert, K., Tonga, M., & Bell, R.L. (2008, November). *Bringing physical science to life digitally*. A presentation at the annual meeting of the Virginia Association of Science Teachers, Hampton, VA.
- Maeng, J.L.**, Hayne, K., Landauer, J., Smith, G., & Bell, R.L. (2008, November). *Collaborative science inquiry: The sequel*. A presentation at the annual meeting of the Virginia Association of Science Teachers, Hampton, VA.
- Cunningham, J.**, Buford, L., Justus, C., O'Conner, E., Zafrane, D., Farquhar, H., Smetana, L., & Bell, R.L. (2007, November). *CSI: Collaborative science inquiry*. A presentation at the annual meeting of the Virginia Association of Science Teachers, Williamsburg, VA.
- Cunningham, J.**, & Harrell, K. (2006, November). *Effective differentiation of a high school chemistry course*. A presentation at the annual meeting of the Virginia Association of Science Teachers, Roanoke, VA.

### Workshops and Invited Lectures

- Garner, J., Chappell-Moots, S., Brobst, J., Tennessee, K. & **Maeng, J. L.** (2021). *Developing elementary Computer Science microcredentials in an early phase project*. A presentation for the 2021 Education Innovation and Research Project Directors and Evaluators Technical Assistance Meeting: Moving Forward with Innovation. Virtual Conference. November, 2021.
- Maeng, J. L.**, Gonczi, A. L., & Handler, R. (2021). *Digital technology integration and engineering contexts to support elementary students' systems thinking*. A presentation for the 2021 ITEST Virtual PI Meeting. Virtual Conference, October, 2021.
- Maeng, J. L.** & Gonczi, A. L. (2021). *Teaching Nature of Science and Scientific Reasoning*. A workshop for the STEM faculty of Longwood University, Longwood, VA. October, 2021.
- Maeng, J.L.** (2019). *Teaching scientific inquiry*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August, 2019.
- Maeng, J. L.** & Evers, S. (2019). *School safety audit webinar*. Webinar for Virginia middle school principals. Virginia Center for School and Campus Safety (DCJS) and the University of Virginia. January, 2019.
- Maeng, J.L.** & Gonczi, A. L. (2018). *Scientific inquiry for all students*. Middle school breakout session for the Virginia Association of Science Teachers Donna Sterling Institute Preconference. Williamsburg, VA, November, 2018.
- Maeng, J.L.** (2018). *Teaching scientific inquiry*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August, 2018.
- Cornell, D. & **Maeng, J.L.** (2018). *How to maintain a safe school climate*. A workshop for the Virginia School Safety Training Forum, Hampton, VA, August 2018.

- Maeng, J.L.** (2018). *Investigate and create!* A workshop for the Virginia Pre-K Institute. Virginia Department of Education, Williamsburg, VA, July, 2018.
- Maeng, J.L.** (2018). *Science and literacy: A natural team.* A workshop for the Virginia Pre-K Institute. Virginia Department of Education, Williamsburg, VA, July, 2018.
- Maeng, J. L. & Evers, S.** (2018). *School safety audit webinar.* Webinar for Virginia high school principals. Virginia Center for School and Campus Safety (DCJS) and the University of Virginia. January, 2018.
- Maeng, J.L.** (2017). *Teaching scientific inquiry.* A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August, 2017.
- Maeng, J.L.** (2017). *High-quality curriculum workshop, Assessment workshop, responsive instruction workshop.* University of Virginia. Institute on Academic Diversity: Best Practices Institute. July 11, 12, and 13, 2017.
- Maeng, J.L.** (2017). *STEM theory and pedagogy.* U.S. K12 Education Program for Beijing Niulanshan First Secondary School. University of Virginia. March 29, 2017.
- Cornell, D., & **Maeng, J.L.** (2017, March). *School climate and threat assessment in Virginia schools.* Presentations at School Leader and Advanced Resource Office Forum for the Center for School and Campus Safety, Virginia Department of Criminal Justice Services. Presented in Prince William County, Chesterfield, and Virginia Beach, VA.
- Maeng, J.L.** (2017). *High-quality curriculum workshop, Assessment workshop.* University of Virginia. Institute on Academic Diversity: Best Practices Institute. March 9 and 10, 2017.
- Maeng, J. L. & Smith, J.** (2017). *School safety audit webinar.* Webinar for Virginia middle school principals. Virginia Center for School and Campus Safety (DCJS) and the University of Virginia. January, 2017.
- Maeng, J.L.** (2016). *Integrating science and literacy in the context of problem-based learning.* Invited session for the Monticello Reading Council Mini-Conference. November 3, 2016.
- Maeng, J.L.** (2016). *Using simulations and inquiry to teach nature of science.* A workshop for teachers. Culpeper County Public Schools. August 3, 2016.
- Maeng, J.L.** (2016). *Learning preference and interest differentiation in science instruction.* University of Virginia. Summer Institute on Academic Diversity: Best Practices Institute. July 14, 2016.
- Maeng, J.L.** (2016). *Readiness differentiation in science instruction.* University of Virginia. Summer Institute on Academic Diversity: Best Practices Institute. July 14, 2016.
- Maeng, J.L., Wheeler, L.B., & Gonczi, A.L.** (2016). *Using simulations and inquiry to teach nature of science.* MathScience Innovation Center. 2016 K-12 Educator Conference. June 23, 2016.
- Maeng, J.L.** (2015). *STEM theory and pedagogy.* U.S. K12 Education Program for Beijing Institute of Education. University of Virginia. October, 2015.

- Maeng, J.L.** (2015). *Teaching scientific inquiry*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August, 2015.
- Maeng, J.L.** (2015). *Using formative assessment to differentiate science content*. University of Virginia. Institute on Academic Diversity: Best Practices Institute. March 26 and 27, 2015.
- Maeng, J.L.** (2015). *Modeling science instruction*. U.S. K12 Education Program for Beijing Institute of Education. University of Virginia. March 11, 2015.
- Maeng, J.L.** (2015). *STEM theory and pedagogy*. U.S. K12 Education Program for Beijing Institute of Education. University of Virginia. March 3, 2015.
- Maeng, J.L.** (2014). *Integrating scientific practices across content areas*. A workshop for the teachers. Nathaniel Greene Primary and Elementary Schools, November 4, 2014.
- Maeng, J.L.** (2014). *Teaching scientific inquiry*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August 21, 2014.
- Maeng, J.L.** (2013). *Scientific inquiry and differentiated science instruction*. A workshop for teachers. Henrico County Public Schools, October 14, 2014.
- Maeng, J.L.** (2013). *Teaching scientific inquiry*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August 22, 2013.
- Maeng, J.L.** (2013). *Teaching nature of science and scientific inquiry*. A series of guest lectures for PHYS 6263: Electricity and Magnetism for Science Teachers. Jefferson Lab, Newport News, VA, July 16, 17, 23, 24, 2013.
- Maeng, J.L.** (2013). *Ways of knowing: Science and methods of science*. A series of guest lectures for Oceanography for Science Teachers. University of Virginia, Charlottesville, VA, June 25, 26, 2013.
- Maeng, J.L.** (2013). *Teaching science through scientific practices*. A guest lecture for ELED 501: STEAM: Integrated Units of Study, James Madison University, March 14, 2013.
- Maeng, J.L.** (2012). *Teaching successful science lab sections*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August 23, 2012.
- Bell, R.L., **Maeng, J.L.**, Gonczi, A., Wheeler, L., & Whitworth, B. (2011). *Simplifying inquiry instruction*. A workshop for teachers. Prince William County Public Schools, In-Service Training. August 31, 2011.
- Maeng, J.L.** (2011). *Successful teaching techniques to use in the lab*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August 17, 2011.
- Chiu, J., **Maeng, J.L.** & Mulvey, B. (2010). *Teaching science inquiry: Inquiry experiments and levels of inquiry*. A workshop for teachers. Fredrick County Public Schools, In-Service Training. November 1, 2010.

- Bell, R.L., & **Maeng, J.L.** (2010). *Teaching about the nature of science in your classroom: A process skills-based approach II*. A workshop presented at the Collegiate School Science Teacher Inservice, Richmond, VA. October 13, 2010.
- Maeng, J.L.** (2010). *Successful teaching techniques to use in the lab*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August 19, 2010.
- Bell, R.L., & **Maeng, J.L.** (2010). *Teaching about the nature of science in your classroom: A process skills-based approach*. A workshop presented at the Collegiate School Science Teacher Inservice, Richmond, VA. March 30, 2010.
- Maeng, J.L.** (2009). *Successful teaching techniques to use in the lab*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August 19, 2009.
- Bell, R.L., & **Cunningham, J.** (2008). *Inquiry experiments*. A workshop for teachers. Charlottesville City Schools, In-Service Training, August 13, 2008.
- Cunningham, J.** (2008). *Successful teaching techniques to use in the lab*. A workshop for graduate teaching assistants. University of Virginia, Teaching Resource Center, August 20, 2008.

## Other Scholarly Activities

### Technical Reports

- Cornell, D.G. & **Maeng, J.L.** (2021). *School Threat Assessment Experts Training and Practice Standards Report*. Charlottesville, VA: School of Education and Human Development, University of Virginia.
- Maeng, J. L.**, Cornell, D. G., & Warren, E. (2021). *Threat assessment training and implementation needs survey state report*. Charlottesville, VA: School of Education and Human Development, University of Virginia.
- Maeng, J. L.** & McCoy, W. N. (2021). *ARCS External Evaluation Year 2 Report*. Charlottesville, VA: School of Education and Human Development, University of Virginia.
- Cornell, D., **Maeng, J.**, Konold, T., Huang, F., Debnam, K., Edwards, K., Jai, Y. Stohlman, S., Crowley, B., Crichlow-Ball, C., Ruffa, B. (2021). *Improvement of School Climate Assessment in Virginia Secondary Schools: Final Technical Report*. Charlottesville, VA: School of Education and Human Development, University of Virginia.
- Cornell, D. & **Maeng, J. L.** (2020). *Initial survey of school threat assessment experts report*. Charlottesville, VA: School of Education and Human Development, University of Virginia
- Maeng, J. L.** & McCoy, W. N. (2020). *ARCS External Evaluation Year 1 Report*. Charlottesville, VA: School of Education and Human Development, University of Virginia.
- Cornell, D., **Maeng, J.**, Huang, F., Edwards, K., Crichlow-Ball, C., Crowley, B., Ruffa, B., Stohlman, S., (2020). *Technical report of the Virginia Secondary School Climate Survey*:

*2020 results for 9th–12th grade students and school staff.* Charlottesville, VA: School of Education and Human Development, University of Virginia.

- Cornell, D., & **Maeng, J.**, (2020). *Student Threat Assessment as a Safe and Supportive Prevention Strategy: Final Technical Report.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Byers, A. Cresawn, K. O., Edmondson, E. W., Jones, R. M., **Maeng, J. L.**, Magliaro, S. G., Newbill, P.; Seshaiyer, P., Webb, A. W., Wheeler, L. B. (2020). *Developing a Virginia STEM network: Recommendations from multi-sector perspectives.* A report to the Virginia STEM Commission. Blacksburg, VA: Virginia Tech.
- Cornell, D., **Maeng, J.**, Huang, F., Jia, Y., Edwards, K., Crowley, B., Stohlman, S., Crichlow–Ball, C., Burnette, A.G., & Konold, T. (2019). *Technical report of the Virginia Secondary School Climate Survey: 2019 results for 6<sup>th</sup>–8<sup>th</sup> grade students and school staff.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Inkelas, K.K., **Maeng, J.L.**, Jones, J., Williams, A., & Gates, J. (2018). *Final report: Crafting success for underrepresented scientists and engineers (CSUSE) research project.* LRI18C. LMI Research Institute: Tysons Corner, VA.
- Cornell, D. Huang, F., Jia, Y., **Maeng, J.**, Malone, M., Burnette, A.G., Stohlman, S., Crowley, B., Konold, T., & Meyer, P. (2018). *Technical report of the Virginia Secondary School Climate Survey: 2018 results for 9<sup>th</sup>–12<sup>th</sup> grade students and school staff.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Inkelas, K.K., Williams, A., & **Maeng, J.L.** (2018). *Crafting success for underrepresented scientists and engineers (CSUSE) research project: Interim technical report.* Charlottesville, VA: University of Virginia.
- Cornell, D., **Maeng, J.**, Stohlman, S., Burnette, A.G., & Jia, Y. (2017). *Statewide relations between threat assessment training and school climate and suspension rates.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Cornell, D. Huang, F., Konold, T., Jia, Y., Malone, M., Burnette, A.G. Datta, P., Meyer, P., Stohlman, S., & **Maeng, J.** (2017). *Technical report of the Virginia Secondary School Climate Survey: 2017 results for 6<sup>th</sup>–8<sup>th</sup> grade students and school staff.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Cornell, D., **Maeng, J.**, Burnette, A., Datta, P., Huang, F., & Jia, Y. (2016). *Threat assessment in Virginia schools: Technical report of the threat assessment survey for 2014-2015.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Cornell, D., **Maeng, J.**, Huang, F., Burnette, A., Datta, P., & Heilbrun, A. (2015). *Threat assessment in Virginia schools: Technical report of the threat assessment survey for 2013-2014.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Bell, R.L. Konold, T., **Maeng, J.L.** & Heinecke, W. (2015). *VISTA research and evaluation annual report.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Bell, R.L. Konold, T., **Maeng, J.L.** & Heinecke, W. (2014). *VISTA research and evaluation annual report.* Charlottesville, VA: Curry School of Education, University of Virginia.
- Bell, R.L. Konold, T., **Maeng, J.L.** & Heinecke, W. (2013). *VISTA research and evaluation annual report.* Charlottesville, VA: Curry School of Education, University of Virginia.



Bell, R.L. Konold, T., **Maeng, J.L.** & Heinecke, W. (2012). *VISTA research and evaluation annual report*. Charlottesville, VA: Curry School of Education, University of Virginia.

Bell, R., **Maeng, J. L.**, Peters, E. E., & Sterling, D. R. (2010, May). *Scientific inquiry and the nature of science task force report*. Richmond, VA: Virginia Mathematics and Science Coalition.

## Teaching/Mentoring Experience

### Instructor of record:

- Foundations of Chemical Principals (Spring 2017, Spring 2018, Spring 2019, Spring 2020, Spring 2022)
- Debunking Classroom Myths (Spring 2016, Spring 2017, Spring 2018, Spring 2019, Spring 2020, J-term 2021, Spring 2021, Spring 2022)
- Masters in Teaching Field Project Capstone (Summer 2015, Summer 2016, Summer 2017, Spring 2018)
- Secondary Science Methods II (Spring 2012, Spring 2013)
- Field Placement – Secondary Science (Spring 2012, Spring 2013)
- Secondary Science Teaching Associateship (Fall 2012, Fall 2013, Fall 2014)
- Student Teaching Associateship Seminar (Fall 2012, Fall 2013)
- Introduction to College Chemistry Lab I (Summer Sessions 2004-2012)
- Introduction to College Chemistry Lab II (Summer Sessions 2004-2012)
- Introduction to College Chemistry Lab for Engineers (Summer BRIDGE Academy 2004, 2006-2010)

### Graduate Teaching Assistant:

- Secondary Science Methods I and II: Fall 2007, Spring 2008, Fall 2009, Spring 2010, Spring 2011
- Secondary Science Methods Lab: Spring 2008, Spring 2009
- Secondary Science Teaching Associateship: Fall 2007, Fall 2008, Fall 2009
- Student Teaching Associateship Seminar: Fall 2007, Fall 2008, Fall 2009
- Introduction to College Chemistry Lab I and II: Fall 2007-Spring 2011
- Introduction to College Chemistry Lab for Engineers I and II: Fall 2001-Spring 2002, Spring 2003, Fall 2007-Spring 2011

### Mentoring and Advising

#### Post-Doctoral Research Associate:

Hamid Nadir, STEM Education, 2021-present  
Whitney McCoy, STEM Education, 2020-present  
Shannon Navy, Science Education, 2014-2015

#### Committees Served (Ph.D. or Ed.D.):

Caroline Crichlow-Ball – current  
Sarah Lilly – current  
Lindsay A. Wheeler, Science Education, graduated 2015  
Amanda L. Gonczi, Science Education, graduated 2015  
Brooke A. Whitworth, Science Education, graduated 2014

Master's in Teaching: 21 students in secondary science education, 2012-2014

Undergraduate Student Opportunities in Academic Research (USOAR) program: 6 work-study students, 2017-present

Curry Faculty: Sarah Fick, Research Assistant Professor, 2018-2020

## Professional Service

Board Member. *Virginia Mathematics and Science Coalition*. 2021- present.

Co-Editor. *Journal of Virginia Science Education*. 2019-present.

Colleges and Universities Committee Chair. *Virginia Association of Science Teachers*. 2018 – present.

Editorial Review Board. *Contemporary Issues in Technology and Teacher Education – Science*. 2017-present.

Editorial Review Board. *Journal of Science Teacher Education*. Term ends December, 2024.

Manuscript Reviewer. *American Educational Research Journal*. 2019-present.

Member-at-large (appointed position). Membership and Participation Committee. *Association for Science Teacher Education*, 2013-2016.

Secretary (elected position). *Mid-Atlantic Region Association for Science Teacher Education*, 2013-2015.

Manuscript Reviewer, *Teaching and Teacher Education*, 2017-present

Manuscript Reviewer, *The Science Teacher*, National Science Teachers Association, 2010 present.

Manuscript Reviewer, *School Science and Mathematics*, School Science and Mathematics Association, 2009-present.

Manuscript Reviewer, *Journal of Virginia Science Education*, Virginia Association of Science Teachers, 2009-2018.

Proposal Reviewer, Annual meeting of *NARST*.

Proposal Reviewer, Annual meeting of *Association for Science Teacher Education*.

Proposal Reviewer, *Society for Information Technology & Teacher Education International Conference*.

Member, Forum on Policy and Government Relations, *Association for Science Teacher Education*, 2012-2014.

Judge, *Piedmont Virginia Science Fair*. 2013, 2014.

Judge, Charlottesville Catholic School. *Science Night*. 2013, 2012.

Judge/Head Judge/Section Chairperson. *Virginia Junior Academy of Science Annual Research Symposium*, 2001-present.

## Awards and Honors

Curry School of Education (2019). Excellent in Scholarship Award.

NARST. Early Career Research Award (2019 nominee)

Association for Science Teacher Education. Award V: Implications of Research for Practice. Maeng, J., Bell, R.L., St. Clair, T., Gonczi, A.L., Whitworth, B.A. (2018). *Supporting Elementary Teachers' Enactment of Nature of Science Instruction: A Randomized Controlled Trial*. A paper for the annual meeting of ASTE, (January 2018, Baltimore, MD.)

Virginia Mathematics and Science Coalition Programs that Work (2018). *VISTA ELIS*

University of Virginia Faculty Senate. Dissertation Year Fellowship

Department of Chemistry. Excellence in Undergraduate Teaching in Chemistry Award

The Curry Foundation. Alice Gunter and Edgar J. Gunter Jr. Scholarship

Virginia Space Grant Consortium. Scholarship for Teacher Education

Alpha Chi Sigma. Chemistry Award

### **Professional Memberships**

American Educational Research Association

Association for Science Teacher Education

National Association for Research in Science Teaching

National Science Teachers Association

Virginia Association of Science Teachers