Julie A. Luft, Ph.D.
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Abbreviated Vita

Professional Experience

2017-current	Adjunct Professor, Biochemistry and Molecular Biology Franklin College of Arts and Sciences University of Georgia, Athens, GA
2016-current	SEER Center, Core Faculty, Owens Institute of Behavioral Research
2012-current	Athletic Association Professor of Science and Mathematics Education College of Education University of Georgia, Athens, GA
2012-2015	Senior Sustainability Scientist, & Adjunct Professor, School of Life Sciences, Arizona State University
2005-2011	Professor, Science Education School of Life Sciences/ Mary Lou Fulton Teachers College Senior Sustainability Scientist, Global Institute of Sustainability Arizona State University, Tempe, AZ
2002-2005	Associate Professor, Science Education College of Education The University of Texas, Austin, TX
2001-2002	Unit Head, Teaching and Teacher Education The University of Arizona, Tucson, AZ
1994-2002	Assistant -Associate Professor, Science Education The University of Arizona, Tucson, AZ
1991-1994	Research Assistant, Teaching Assistant Science Education Center The University of Iowa, Iowa City, IA
1986-1991	Middle School and High School Science Teacher Jordan School District, Sandy, UT

Education

1991-1994	The University of Iowa, Iowa City, IA Ph.D. Science Education; supporting areas of Ecology and Statistics Dissertation: The effects of a demonstration classroom on elementary teachers involved in a problem solving in-service program (Edward Pizzini, Advisor)
1987-1990	New Mexico Institute of Mining and Technology, Socorro, NM M.S.T. Science Education, Ecology
1981-1985	University of New Mexico, Albuquerque, NM B.S.Ed., Life Sciences

Selected Awards and Honors

College of Education, University of Georgia – Aderhold Professor Award, 2019
University of Georgia - Award for Creative Instruction, 2017
National Science Teachers Association Fellow, 2017
Fulbright Fellow - Vietnam, 2017
Association of Science Teacher Educators - Implications of research for educational practice, 2016
University of Georgia-Writing Fellow, 2015-2016
Association of Science Teacher Educators - Mentor of the year, 2013
National Science Teachers Association, Research worth reading, 2013
Journal of Research in Science Teaching Award 2012, Most significant publication in the *Journal of Research in Science Teaching* during 2011
Association of Educational Publishers Award – Outstanding professional development/school improvement book, 2010
Association of Science Teacher Educators - Outstanding science teacher educator of the year, 2010
American Association for the Advancement of Science Fellow, 2010
The University of Texas-Marshall Field Fellowship, 2003
College of Education, University of Arizona, Graduate mentor award, 2002
University of Arizona-Student Showcase, Honorable Mention, Director's Award, 1998
ACT Award, The University of Iowa, 1992
McBride Scholarship for natural study, Biology Department, The University of Iowa, 1992

Teaching

Undergraduate courses

ASU 101
Biology for Middle School Teachers
Classroom Interactions
Explorations in Science Education
How Students Learn Science

Knowing and Learning
Methods of Secondary Science Instruction
Student Teaching Supervision

Graduate courses

Academic Writing
Advanced Science Methods
Curriculum and Instruction in Science or Mathematics/Science Education
Environmental Education
History and Philosophy of Science for Science Teachers
Introduction to Science Education
Knowing and Learning
Mixed Methods Research
Research in Science Education
Reform in Science Education
Science Education Seminar
Staff Development
STEM Undergraduate Education: Research and Policy
Supervision, Mentoring and Induction in Science Education
Teaching

Scholarship

Edited Books

Luft, J.A., & Dubois, S. (Eds.) (2015). *Newly hired teachers of science: A better beginning*. Rotterdam, Netherlands: Sense Publications. (pp. 212)

Evans, R., Luft, J.A, Czerniak, C., & Pea, C. (Eds.) (2014). *The role of science teachers' beliefs in international classrooms: From teacher actions to student learning*. Rotterdam, Netherlands: Sense Publications. (pp. 225)

Gess-Newsome, J., Luft, J.A., & Bell, R.L. (Eds.) (2009). *Reforming secondary science instruction*. Arlington, VA: National Science Teachers Association. (pp. 127)

Luft, J.A., Bell, R.L., & Gess-Newsome, J. (Eds.) (2008). *Science as inquiry in the secondary setting*. Arlington, VA: National Science Teachers Association. (Second Printing 2009) (pp. 149)

Bell, R.L., Gess-Newsome, J., & Luft, J.A. (Eds.) (2007). *Technology in the secondary science classroom.* Arlington, VA: National Science Teachers Association. (pp. 112)

Chapters in Books –Handbook/Yearbook Chapters

Luft, J.A., Diamond, J., Zhang, C., & White, D.Y. (accepted). K-12 STEM professional development programs: Building teacher knowledge and practice through the lens of transfer. In M. Schoeder, C. Johnson, & T. Moore (Eds.), *Handbook of research on STEM education*, London: Routledge.

Luft, J.A, & Hewson, P.W. (2014). Research on teacher professional development programs in science. In S.K. Abell & N. Lederman (Eds.), *Handbook of research in science education 2nd edition* (pp. 889-909). New York: Routledge.

Luft, J.A. (2012). Subject-specific induction programs: Lessons from science. In T. Smith, L. Desimone, & A. Porter (Eds.), *National society for the study of education, 111th Yearbook, volume 2* (pp. 417-442). New York: Teachers College Press.

Selected Chapters in Books – Editorial Review (over 25 chapters)

Price, A., Vale, C., Porsch, R., Esti, R., Faulkner, F., Riordain, M.N., Crisan, C., & Luft, J.A. (2019). Teaching across specialisations internationally. In L. Hobbs & G. Törner (Eds.), *Examining the phenomenon of "teaching out-of-field": International perspectives on teaching as a non-specialist* (pp. 53-83). Singapore: Springer.

duPlessis, A., Hobbs, A., Luft, J.A., & Vale, C. (2019). The out-of-field teacher in context: The impact of the school context and environment. In L. Hobbs & G. Törner (Eds.), *Examining the phenomenon of "teaching out-of-field": International perspectives on teaching as a non-specialist* (pp. 217-243). Singapore: Springer.

Luft, J.A., & Idsardi, R. (2018). Building a foundation for 3D instruction through bridging practices in the secondary methods classroom. In J. Rhoton (Ed.), *Preparing teachers for three-dimensional instruction* (pp. 107-115). Arlington, VA: NSTA Press.

Luft, J.A., & Dubois, S. (2016). Effective pedagogies for the teaching of science. In K.S. Taber & B. Akpan (Eds.), *Science education: An international comprehensive course companion* (pp. 235-245). Rotterdam, Netherlands: Sense Publishers.

Bang, E.J., & Luft, J.A. (2015). Practices and emerging identities of beginning science teachers in online and off line communities of practice: A longitudinal mixed methods study. In Avraamidou, L. (Ed.), *Studying science teacher identity* (pp. 261-294). Rotterdam, Netherlands: Sense Publishers.

Editor, Special Journal Issues

Hobbs, L., Porsch, R., & Luft, J.A. (Eds.) (tentative publication date, 2020). Special issue: Teaching out-of-field: Challenges and possibilities for teacher education. *European Journal of Teacher Education.*

Luft, J.A., Hobbs. L., & Hanuscin, D. (Eds.) (tentative publication date, 2020). Special issue: The consequence and potential of teaching science out-of-field. *Journal of Science Teacher Education.*

Luft, J.A. (Ed.) (2010). Research informing practice. Virtual Issue: *Journal of Research in Science Teaching*. https://onlinelibrary.wiley.com/page/journal/10982736/homepage/all_virtual_issues.htm#Aug2010

Selected Reviewed Journal Articles (over 70 published peer-reviewed articles)

Navy, S., Nixon, R., Luft, J.A., & Jurkiewicz, M. (2020). Accessed or latent resources? Exploring new secondary science teachers' networks of resources. *Journal of Research in Science Teaching,* 57, 184-208.

Nixon, R., Toerien, R., & Luft, J. (2019). Knowing more and better than their students: Characterizing secondary science teachers' subject matter knowledge. *School Science and Mathematics, 119*(3), 150-160.

Luft, J.A., Whitworth, B., Berry, A., Navy, S. & Kind, V. (2019). Trajectories of science teacher learning: Charting the course for teachers, educators, researchers, and policy makers. *Journal of Science Teacher Education, 30*(1), 63-79.

Idsardi, R., Hahn, D., Bokor, J., & Luft, J.A. (2019). An authentic investigation of climate change with preservice teachers. *Journal of College Science Teaching, 48*(5)14-21.

Luft, J.A., & Whitworth, B.A. (2019). Reaching for the future: Building a professional trajectory. *The Science Teacher, 86*(5), 34-39.

Dubois, S., Luft, J., Toerien, R., & Hewson, P. (2018). Practices influenced by policy? An exploration of newly hired science teachers in South Africa and the United States. *International Journal of Science Education, 40*(8), 919-939.

Adams, K., & Luft, J.A. (2018). Beginning chemistry teachers' depiction of chemistry content. *International Journal of Environmental and Science Education,* 13(1), 69-95.

Nixon, R., Hill, K., & Luft, J.A. (2017). Secondary science teachers' subject matter knowledge across the first five years. *Journal of Science Teacher Education, 28*(7), 574-589.

Nixon, R., Luft, J.A., & Ross, R. (2017). Prevalence and predictors of out-of-field teaching in the first five years. *Journal of Research in Science Teaching, 54(9),* 1197-1218.

Nixon, R. S., Campbell, B. K., & Luft, J.A. (2016). Development of new chemistry teachers subject matter knowledge with classroom experience. *International Journal of Science Education, 38*(10), 1636-1654.

Luft, J.A., & Dubois, S. (2016). Science teacher leadership: Learning from a three-year leadership program. *Science Educator, 25*(1), 1-9.

Nixon, R. S., Campbell, B. K., & Luft, J.A. (2016). Development of new chemistry teachers subject matter knowledge with classroom experience. *International Journal of Science Education, 38*(10), 1636-1654.

Luft, J.A., & Dubois, S. (2016). Science teacher leadership: Learning from a three-year leadership program. *Science Educator, 25*(1), 1-9.

Luft, J.A., Dubois, S., Nixon, R., & Campbell, B. (2015). Supporting newly hired teachers of science: Attaining professional teaching standards. *Studies in Science Education, 51(1)*, 1-48.

Luft, J.A., Nixon, R., Dubois, R., & Campbell, B. (2014). Supporting newly hired science teachers: Using Research to inform practice. *The Science Teacher*, 81(6), 67-71.

Dubois, S., & Luft, J. A. (2014). Science teachers without classrooms of their own: A study of the phenomenon of floating. *Journal of Science Teacher Education, 25*(1), 5-23.

Wong, S., Firestone, J., Luft, J.A., & Weeks, C. (2013). Beginning secondary science teachers' laboratory practices: A five-year study. *Science Educator*, 22(1), 1-9. * *Identified by NSTA as research worth reading in 2014*

Bang, E.J. & Luft, J.A. (2013). Secondary science teachers' use of technology in the classroom during their first 5 years. *Journal of Digital Learning in Teacher Education,* 29(4), 118-126.

Luft, J.A., Firestone, J., Wong, S., Adams, K., Ortega, I., & Bang, E.J. (2011). Beginning secondary science teacher induction: A two-year mixed methods study. *Journal of Research in Science Teaching,* 48(10), 1199-1224. **Most significant research in JRST, JRST Award 2012*

Luft, J.A., Wong, S., & Semken, S. (2011). Rethinking recruitment: The comprehensive and strategic recruitment of science teachers. *Journal of Science Teacher Education, 22*(5), 459-474.

Fletcher, S., & Luft, J.A. (2011). Early career secondary science teachers: A longitudinal study of beliefs in relation to field experiences. *Science Education, 95(6),* 1124-1146.

Luft, J.A. (2009). Beginning secondary science teachers in different induction programs: The first year of teaching. *International Journal of Science Education,* 31(17), 2355-2384.

Lee, E., & Luft, J.A. (2008). Experienced secondary science teachers' representation of pedagogical content knowledge. *International Journal of Science Education*, 30(10), 1343-1363.

Luft, J.A., Bang, E.J., & Roehrig, G. (2007). Supporting beginning science teachers. *The Science Teacher, 74*(5), 24-29.

Luft, J.A. (2007). Minding the gap: Needed research on beginning or newly qualified science teachers. *Journal of Research in Science Teaching, 44*(4), 532-537.

Luft, J.A., Lee, E., Fletcher, S., & Roehrig, G. (2007). Growing or wilting? Beginning biology teachers in a science-focused induction program. *American Biology Teacher, 69*(6), 336-341.

Lee, E., Brown, M., Luft, J.A., & Roehrig, G. (2007). Assessing beginning secondary science teachers' PCK: Pilot year results. *School Science and Mathematics, 107*(2), 418-426.

Roehrig, G.H., & Luft, J.A. (2006). Does one size fit all? The experiences of beginning teachers from different teacher preparation programs during an induction program. *Journal of Research in Science Teaching,* 43(9), 963-985.

Luft, J.A., & Roehrig, G. (2005). Enthusiasm is not enough: Beginning secondary science teachers in primarily Hispanic schools. *School Science and Mathematics*, 105(3), 116-126.

Roehrig, G.H., & Luft, J.A. (2004). Constraints experienced by beginning secondary science teachers in implementing scientific inquiry lessons. *International Journal of Science Education,* 26(1), 3-24.

Selected Additional Published Works

National Academies of Sciences, Engineering, and Medicine (2015). *Science teachers learning: Enhancing opportunities, creating supportive contexts.* Committee on Strengthening Science Education through a Teacher Learning Continuum. Board on Science Education and Teacher Advisory Council, Division of Behavioral and Social Science and Education. Washington, DC: The National Academies Press.

Erol, M., Idsardi, B., Luft, J.A., Meyers, D., & Lemons, P.P. (2015). *Creating active learning environments in undergraduate STEM courses*. University of Georgia: University of Georgia Research Foundation, Inc. DOI: 10.13140/RG.2.1.2787.9121

Nadelson, L., Luft, J.A., & Scantlebury, K. (2010). Bridging research and practice: Research briefs for science educators. *NSTA Reports*, pg 14-15. Arlington, VA: National Science Teachers Association.

Luft, J.A. (2007). *Beginning secondary science teachers in different induction programs: Considering instructional performance and persistence.* National Commission on Teaching and America's Future, Washington, DC.

Presentations

Selected and Recent Invited Presentations/Keynote addresses (over 60)

Luft, J.A. (April, 2020). Keynote, *Hidden in plain sight: Important issues for science education leaders to consider when working with teachers*. NSELA Leadership Summit, Boston, MA.

Luft, J.A. (June, 2019). Invited speaker, *Creating explanations in undergraduate courses to promote student thinking*. University of Pretoria; Mamelodi Campus, Pretoria, South Africa.

Luft, J.A. (May, 2019). Invited speaker, *Theoretical frameworks 101: An essential part of educational research.* ASCB Regional Meeting, Athens, GA.

Luft, J.A. (June, 2018). Needed areas of science teaching research. SIEC 2018, Round Table on Science Teaching. International Congress (Online meeting).

Luft, J.A. (February, 2018). Invited speaker, Newly hired science teachers in the United States: An essential group to study and support. East China Normal University, Shanghai, China.

Luft, J.A. (February, 2018). Invited speaker, Professional development programming for science teachers in the United States: What we should consider as teacher educators. Beijing Normal University, Beijing, China.

Luft, J.A., (April, 2017). Invited speaker, Studying STEM faculty in active learning environments. St. Edwards University, Austin, TX.

Luft, J.A. (March, 2016). Invited speaker, Strengthening science education through a teacher learning continuum: A national academies report. NSELA/ASTE, Luncheon, NSTA conference. Nashville, TN.

Luft, J.A., & Houseal, A. (March, 2016). Invited webinar presenter, sponsored by NARST, Supporting the implementation of the NGSS through research: Professional development. Nationally broadcast by NSTA.

Luft, J.A. (February, 2016). Invited speaker, Supporting new science teachers: What the research says. Institute for the Promotion of Teaching Science and Technology, Bangkok, Thailand.

Luft, J.A. (February, 2016), Invited workshop, Creating explanations from evidence and with collaboration in the science classroom to enhance science instruction. Institute for the Promotion of Teaching Science and Technology, Bangkok, Thailand.

Luft, J.A. (January, 2016). Keynote, Studying newly hired teachers of science: Essential indicators for science teacher education. Korean Association of Science Education, Daegu, South Korea.

Luft, J.A., & Dubois, S. (August, 2015). Invited speaker, Supporting newly hired science teachers: Attaining professional standards. In Ryder, J., The contribution of extended literature reviews within science education research: Exemplars from the journal *Studies in Science Education*. European Science Education Research Association meeting, Helsinki, Finland.

Luft, J.A. (April, 2015). Keynote, At the crossroads: New directions for science and mathematics teacher professional development. International Mathematics and Science Education Conference, Antalya, Turkey.

Erduran, S. (September, 2013). NARST sponsored session at ESERA: Contemporary issues in science education-perspectives from the NARST community. Invited presentation: J. Luft & P.W. Hewson, Science teacher professional development: Research, policy and practice. ESERA, Cyprus.

Luft, J. (July, 2013). Conducting mixed methods research in science and mathematics education: An overview. South African Association for Research in Science, Technology, Engineering, and Mathematics Education. Goudini Spa, South Africa.

Luft, J.A. (May, 2012). PCK or the knowledge to teach science (Biology): An exploration of two processes. Science Education Research Group, University of Vienna, Vienna, Austria.

Luft, J.A. (June, 2010). The development of beginning science teachers: What we have learned by following beginning science teachers. University of the Witwatersrand, Johannesburg, South Africa.

Luft, J.A. (April, 2010). Learning from beginning science teachers: New directions for education. UT3 Conference, Toledo, OH.

Luft, J.A. (March, 2010). Beginning secondary science teachers: Strengthening, sustaining, or sinking? Regional Noyce Conference, Indianapolis, IN.

Luft, J.A. (February, 2010). Testimony on science as inquiry. US House of Representatives, Commerce, Justice and Science –Subcommittee –STEM, Washington, DC.

Selected and Recent National/International Presentations (over 250)

Singh, H., Worth, E., & Luft, J.A. (accepted). Learning against all odds: A case study of an out-of-field science teacher in a small rural school. NARST: A Global Organization for Improving Science Education through Research. Portland, OR.

McNeil, L., Lin, M-Y, & Luft, J. (February, 2020). How students perceive the process of building explanations in small group discussions in undergraduate chemistry. Research Association of Minority Professors Conference, Austin, TX.

Singh, H., Worth, E., & Luft, J.A. (January, 2020). An analysis of research on out-of-field teaching. Association of Science Teacher Educators, San Antonio, TX.

Idsardi, R., Hahn, D., & Luft, J. (November, 2019). Using a 5E Lesson format to adapt scientific research into course lesson. Transforming STEM Higher Education, AACU Conference, Chicago, IL.

Luft, J.A., Worth, E., & Singh, H. (September, 2019). Out-of-field teaching in science: A layered perspective. Teaching Across Specializations Conference, Hamburg, Germany.

Luft, J.A., Lemons, P.P., White, D.Y., Worth, E.B., Przybyla-Kuchek, J.E., & Whitt, B. (September, 2019). A 360 view of a secondary science teacher education program: Recruiting and preparing well-started teachers. European Science Education Research Association, Bologna, Italy.

Singh, H., Luft, J.A., & Napier, J. (September, 2019). Activities and laboratory work of out-of-field teachers: An indicator or PCK. European Science Education Research Association, Bologna, Italy.

Luft, J.A., & Lemons, P.P. (July, 2020). Georgia educators in mathematics and science (GEMS): A capacity building grant. Noyce National Conference, Washington, DC.

Navy, S., Nixon, R., Luft, J., & Jurkiewicz, M. (April, 2019). Activation and interaction of a network of resources by new secondary science teachers. American Education Research Association, Toronto, Canada.

Luft, J.A., Diamond, J., White, D., Idsardi, R., & Zhang, C. (April, 2019). Prepared for the future? What a literature review reveals about K-12 STEM professional development programs. American Education Research Association, Toronto, Canada.

Luft, J.A., Worth, E., Singh, H., Wang, L., & Hanuscin, D., (March, 2019). Hidden in plain sight: What national and state data reveal about out-of-field teaching in science. National Association for Research on Science Teaching, Baltimore, MD.

Singh, H., Napier, J., & Luft, J.A. (March, 2019). A little knowledge can be a dangerous thing: How out-of-field teachers develop over time. National Association for Research on Science Teaching, Baltimore, MD.

McNeil, L., Atkinson, M., Luft, J., & West, A. (February, 2019). An exploration in building knowledge in small group discussions in undergraduate chemistry. Research Association of Minority Professors Conference, New Orleans, LA.

Luft, J.A., Lemons, P., White, D., Whitt, B., Worth, E., McElheny, C., & Przybyla-Kuchek, J. (January, 2019). A cross-college approach to encourage discussion of the recruitment, preparation, and induction of science teachers. Association of Science Teacher Educators, Savannah, GA.

Bennett, J., Singh, H., & Luft, J.A. (September, 2018). The instructional practices of newly hired out-of-field teachers in the United States. Teaching Across Specializations Conference, Bolzano, Italy.

Singh, H., Bennett, J., & Luft, J.A. (September, 2018). PCK of newly hired out-of-field teachers during their first three years of teaching. Teaching Across Specializations Conference, Bolzano, Italy.

Atkinson, M., Krishnan, S., McNeil, L., Luft, J.A., & Pienta, N.J. (June, 2018). Creating explanations during and outside of a non-majors chemistry class. Biennial Conference on Chemistry Education, Notre Dame, IN.

Atkinson, M., Krishan, S., McNeil, L., Luft, J.A., & Pienta, N.J. (March, 2018). Student attitudes and self-concepts in an active learning preparatory chemistry classroom utilizing the construction of explanations to promote understanding. American Chemical Society Meeting, New Orleans, LA.

Navy, S., Nixon, R., Luft, J.A., & Jurkiewicz, M. (March, 2018). Availability and activation of contextual resources by new secondary science teachers. National Association for Research in Science Teaching, Atlanta, GA.

Krishnan, S., Atkinson, M., McNeil, L., & Luft, J.A. (March, 2018). Constructing explanations to aid in conceptual chemistry learning in an active learning environment. National Association for Research in Science Teaching, Atlanta, GA.

Bennett, J., Singh, H., & Luft, J. (March, 2018). Constraining secondary science teacher development: An examination of teaching out-of-field. National Association for Research in Science Teaching, Atlanta, GA.

Luft, J.A., Whitt, B., Idsardi, R., Wingfield, J., Barriga, P., Lang, J., & Brown, T. (March, 2018). Does subject area matter? Differences in instruction between different content area faculty. National Association for Research in Science Teaching, Atlanta, GA.

Idsardi, R., Wingfield, J., Whitt, B., Barriga, P., Lang, J., & Luft, J.A. (March, 2018). Faculty conceptions of student learning during engagement in different professional development programs. National Association for Research in Science Teaching, Atlanta, GA.

Knox, J. Luft, J.A., Shepherd, M., Knox, P., & Wiegert, C. (March, 2018). The August 2017 Eclipse “Blackout” event at the University of Georgia. American Meteorological Society Meeting, Austin, TX.

Luft, J.A., Whitworth, B., Berry, A., Kind, V., & Navy, S. (January, 2018). Trajectories for science teachers to follow. Association of Science Teacher Educators, Baltimore, MD.

Martin-Hansen, L., Luft, J.A., Tillotson, J., Hanuscin, D., & Olson, J. (January, 2018). Teacher education in the NGSS era. Association of Science Teacher Educators, Baltimore, MD.

Whitt, B., & Luft, J.A. (July, 2017). Assessing the influence of physical classroom configuration on the adoption of active learning instruction in undergraduate STEM. Society for the Advancement of Biology Education Research, Minneapolis, MN.

Barriga, P., & Luft, J.A. (July, 2017). Underrepresented minority students' perspectives on active learning. Society for the Advancement of Biology Education Research, Minneapolis, MN.

Luft, J.A., & Nixon, R. (April, 2017). Exploring subject matter knowledge among science teachers: The potential of concept sketches. National Association for Research on Science Teaching, San Antonio, TX.

Wingfield, J. L., Idsardi, R., Whitt, B., Barriga, P., Lemons, P., Brickman, M., & Luft, J.A. (April, 2017). Supporting undergraduate STEM educators' instruction: Examining the participation of faculty/instructors in professional development program. National Association for Research on Science Teaching, San Antonio, TX.

Idsardi, R., Wingfield, J. L., Whitt, B., Barriga, P., Lemons, P., Brickman, M., & Luft, J. A. (April, 2017). Congruence of faculty perceptions of learning and instruction prior to engagement in professional development programs. National Association for Research on Science Teaching, San Antonio, TX.

Whitworth, B., Dubois, S., Luft, J.A., Kind, V., & Berry, A. (March, 2017). NARST sponsored session: What can I do and how do I get there? Trajectories of science teacher learning. National Science Teachers Association, Los Angeles, CA.

Martin-Hansen, L., Luft, J.A., Tilltolson, J., Hanuscin, D., & Olson, J. (March, 2017). ASTE sponsored session: Teacher education in the NGSS era. National Science Teachers Association, Los Angeles, CA.

Luft, J.A., Dubois, S., Whitworth, B., Kind, V., & Berry, A. (October, 2016). NARST sponsored session: What can I do and how do I get there? Trajectories of science teacher learning. National Science Teachers Association, Minneapolis, MN.

Idsardi, R., Wingfield, J., Luft, J.A., Brickman, P., & Lemons, P. (July, 2016). Faculty perceptions of student learning while engaged in professional development programs. Society for the Advancement of Biology Education Research, Minneapolis, MN.

Wingfield, J., Lemons, P., Brickman, P, Idsardi, R., & Luft, J.A. (July, 2016). Supporting undergraduate STEM educators instruction: Evaluating the impact of different professional development programs on educators use of active learning. Society for the Advancement of Biology Education Research, Minneapolis, MN.

Berry, A., Luft, J.A., Whitworth, B., Dubois, S., & Kind, V. (June, 2016). From carnival to coherence: Conceptualizing trajectories of science teacher learning. Australian Science Education Research Association, Canberra, Australia.

Luft, J.A., Whitworth, B., Dubois, S., Kind, V., & Berry, A. (April, 2016). A trajectory of science teacher learning: Charting the course for researchers, educators, and teachers. National Association for Research in Science Teaching, Baltimore, MD.

Luft, J.A., Hill, K., Nixon, R., & Campbell, B. (April, 2016). Beginning secondary science teachers' subject matter knowledge: Additional explorations and implications. American Educational Research Association, Washington, DC.

Campbell, B., & Luft, J. (January, 2016). Students' perceptions of the classroom instruction of their early career teachers. Association of Science Teacher Educators, Reno, NV.

Nixon, R., Ross, R., & Luft, J.A. (January, 2016). Prevalence and predictors of out-of-field teaching in the first five years. Association of Science Teacher Educators, Reno, NV.

Luft, J.A., Isardi, R., Erol, M. Lemons, P., & Brickman, P. (January, 2016). Initiating instructional change of STEM faculty at a large research institution. Association of Science Teacher Educators, Reno, NV.

Erol, M., & Luft, J.A. (October, 2015). Six reasons to teach undergraduate physics courses in SCALE-UP classrooms: Suggestions for higher education authorities and instructors. International Higher Education Studies Conference, Istanbul, Turkey.

Luft, J.A., & Zembal-Saul, C. (September, 2015). A national academies report: Strengthening science education through a teacher learning continuum. European Science Education Research Association, Helsinki, Finland.

Hanuscin, D., et al. (April, 2015). Publishing research for practitioner audiences: Tips and strategies. National Association for Research in Science Teaching, Chicago, IL.

Campbell, B., Nixon, R., & Luft, J. (April, 2015). Context and constraints on noticing in classrooms of early career science teachers. National Association for Research in Science Teaching, Chicago, IL.

Dubois, S., et al. (April, 2015). Transcending national contexts: Cross-national and comparative science education research. National Association for Research in Science Teaching, Chicago, IL.

Firestone, J., Wong, S., Bang, E.J., & Luft, J.A. (April, 2015). Preservice experiences on science teacher attrition. National Association for Research in Science Teaching, Chicago, IL.

Luft, J.A., Dubois, S., Nixon, R., & Campbell, B (April, 2015). Supporting newly hired teachers of science: Attaining teacher professional standards. National Association for Research in Science Teaching, Chicago, IL.

Lederman, N.G., et al. (April, 2015). The Handbook of Research on Science Education: An Overview. National Association for Research in Science Teaching, Chicago, IL.

Luft, J.A., Dubois, S., Nixon, R., & Campbell, B. (March, 2015). Supporting New Science Teachers: What the research says about how to support new science teachers. National Science Teachers Association, Chicago, IL.

Luft, J.A., Hill, K. A., Nixon, R., Campbell, B., & Dubois, S. (January, 2015). The knowledge needed to teach science: Approaches, implications and potential research. Association for the Education of Teachers of Science, Portland, OR

Nixon, R., Campbell, B., & Luft, J. A. (January, 2015). Knowledge use when in- or out-of-field: Exploring beginning chemistry teacher content knowledge. Association for the Education of Teachers of Science, Portland, OR

Luft, J.A. (July, 2014). Newly hired science teachers: A five year study. Australian Science Education Research Association, Melbourne, Australia.

Luft, J.A., Kaufmann, J., Plank, L., Koba, S., & Dubois, S. (April, 2014). Science teacher leadership: Learning from a three-year leadership program. National Association for Research in Science Teaching, Pittsburgh, PA.

Luft, J.A. (Discussant) (April, 2014). If we support them will they stay? Studying online mentoring for beginning science teachers. National Association for Research in Science Teaching, Pittsburgh, PA.

Bang, E.J., Wong, S.S., Firestone, J., & Luft, J.A. (April, 2014). Online mentoring programs and beginning science teachers. National Association for Research in Science Teaching, Pittsburgh, PA.

Luft, J.A., & Calabrese-Barton, A. (Presider) (April, 2014). Poster Symposium – Sandra K. Abell scholar poster session. National Association for Research in Science Teaching, Pittsburgh, PA.

Adams, K.A., & Luft, J.A. (April, 2014). Beginning chemistry teachers' representations of the chemistry curriculum. National Association for Research in Science Teaching, Pittsburgh, PA.

Bang, E.J., Wong, S.S., & Luft, J.A. (April, 2014). Metaphors in teaching exhibited by first-year science teachers in online mentoring dialogues. National Association for Research in Science Teaching, Pittsburgh, PA.

Dubois, S., Jurkiewicz, M., Brennan, A., Campbell, B., & Luft, J. A. (January, 2014). The point of Punnett squares: Early career biology teachers' approaches to teaching heredity. Association for Science Teacher Education, San Antonio, TX.

Nixon, R., Dubois, S., Jurkiewicz, M., Toerien, R., Campbell, B., & Luft, J.A. (January, 2014). Science knowledge for teaching: Characterizations from biology and chemistry teachers. Association for Science Teacher Education, San Antonio, TX.

Adams, K., & Luft, J.A. (January, 2014). Beginning chemistry teachers' development of a more responsive repertoire. Association for Science Teacher Education, San Antonio, TX.

Luft, J.A., Campbell, B., Dubois, S., Nixon, R., & Bang, E.J. (January, 2014). Newly qualified teachers: What the research says. Association for Science Teacher Education, San Antonio, TX.

Grants

Selected National Grants

Georgia Educators in Mathematics and Science (GEMS). PI with co-PIs Hunsu, Lemons, and White, submitted to the National Science Foundation at $1,199,998 (07/20-06/24).

Undergraduate Biology Education Research V3 (UBERV3) (in negotiation). co-PI with Brickman (PI), submitted to the National Science Foundation at $367,848 (05/20-04/23).

Science Coordinators Advancing a Framework for Outstanding Leadership Development (SCAFFOLD). PI with co-PI Whitworth (University of Mississippi), funded by the National Science Foundation at $1,370,197 (05/19-05/23).

Georgia Educators in Mathematics and Science (GEMS). PI with co-PI Lemons, funded by the National Science Foundation at $75,000 (06/18-05/19).

Conference on Out-of-Field Teaching in K12 STEM Education. PI, funded by the National Science Foundation at $99,567 (06/18-05/19).

Undergraduate Biology Education Research V2. Co-PI with Stanton (PI), funded by the National Science Foundation at $259,170 (5/16-5/19).

Georgia Educators in Mathematics and Science. PI with co-PI Lemons, submitted to the National Science Foundation for $75,000 (06/18-05/19).

Conference on Out-of-Field Teaching in K12 STEM Education. PI, submitted to the National Science Foundation for $99,567 (06/18-05/19).

Undergraduate Biology Education Research V2. Co-PI with Stanton (PI), funded by the National Science Foundation for $259,170 (5/16-5/19).

Study of STEM Professional Development Programs, PI, with co-PIs Brickman and Lemons, funded by the National Science Foundation at $75,000 (5/16-5/17).

Sandra K. Abell Summer Research Institute, 2013. PI with Calabrese Barton, funded by the National Association for Research in Science Teaching for $38,000 (10/12-10/13).

Persistent, Enthusiastic, Relentless; Study of Induction Science Teachers (PERSIST), PI, with Thompson funded by the National Science Foundation at $875,000 (5/10-5/15).

Visiting Scholars and Graduate Students

Visiting Scholars and Visiting Graduate Student**s**

Audrey Msimanga, Witwatersrand University, Johannesburg, South Africa
Mustafa Erol, Bozok University, Turkey
Tugba Tufal, Gazi University, Turkey
Selcan Kutucu, Middle Eastern Technical University, Turkey
Betül Ekiz, Doctoral Student, Middle Eastern Technical University, Turkey
Ozel, Murat, Doctoral Student, Gazi University, Turkey
Chunlei Zhang, East China Normal University, China
Ilbilge Dokme, Gazi University, Turkey

Former Doctoral Students and Current Positions

Robert Idsardi, Eastern Washington University, Spokane, WA
Ryan Nixon, Brigham Young University, Provo UT
Shannon Dubois, Kent State University, OH
Kathy Hill, Pennsylvania State University, State College, PA
Krista Adams, University of Nebraska, Lincoln, NE
Jonah Firestone, Washington State University, Richland, WA
Ira Ortega, University of Alaska, Anchorage, AK
Sissy S. Wong, University of Houston, Houston, TX
EunJin Bang, Iowa State University, Ames, IA
Steve Fletcher, St. Edwards University, Austin, TX
Mike Lebec, Northern Arizona University, Flagstaff, AZ
Gillian Roehrig, University of Minnesota, Minneapolis, MN
Nancy Patterson, Bowling Green State University, Bowling Green, OH
Toby Brooks, Texas Tech University, Lubbock, TX

Selected Service

Associate Editor, *Journal of Research in Science Teaching* (12/01-12/05; 6/10- 1/15)
Associate Editor, *Electronic Journal of Science Education* (3/06-6/08)
Associate Editor, *School Science and Mathematics* (09/07-02/2009)
Association for the Education of Teachers of Science, President-Elect, President, Past-President, Board of Directors (1/00-1/06)
National Association for Research in Science Teaching: Board member, NSTA representative (4/08-4/11)
National Association for Research in Science Teaching: Summer Research Institute Mentor & Sandra K. Abell Institute Mentor (July, 2009; July, 2011; July, 2013)
National Association for Research in Science Teaching: Sandra K. Abell Institute Co- coordinator (2012-2013; 2016-2017)
National Research Council, Committee on Strengthening Science Education through a Teacher Learning Continuum, Committee member (2012-2014)
National Science Teachers Association, NSTA Visiting Scholar (1/09-5/09)
National Science Teachers Association, Research Division Director (6/08-6/11)
National Science Teachers Association, Board Member (6/08-6/11)
Scientists Engaged in Educational Research (SEER) Center, UGA, Executive Committee member (current)
South African Association for Research in Mathematics, Science, and Technology Education Summer Research Institute Mentor (June, 2010; June, 2013; June 2016; June 2020)

Professional Memberships

American Association for the Advancement of Science
American Educational Research Association
American Educational Research Association, SIG – Science Education
American Educational Research Association, SIG –Research on Induction
Association of Science Teacher Education
Association for Supervision and Curriculum Development
Georgia Science Teachers Association
Georgia Science Supervisors Association
National Association for Research in Science Teaching
National Association of Biology Teachers
National Science Teachers Association
Phi Delta Kappan
School Science and Mathematics Association