

Lori Rubino-Hare
Professional Development Coordinator
Center for Science Teaching and Learning
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Professional Preparation

Northern Arizona University, Elementary Education, B.S. Ed., Teacher Certification, 1994
Northern Arizona University, Special Education, Gifted, with Distinction, M.Ed., 2000

Professional Experience

2009 - Present *Professional Development Coordinator*, Center for Science Teaching and Learning, Northern Arizona University, Flagstaff, AZ
Responsibilities: Propose and lead grant-supported programs and projects including research, evaluation, and publication/dissemination of findings; design and deliver high quality science, technology, and engineering professional learning experiences for K-12 educators and college faculty; develop and sustain partnerships to further the mission and goals of the Center.

2008 - 2009 *Professional Development Associate*, Northern Arizona University, Center for Science Teaching and Learning, Flagstaff, AZ
Responsibilities: Design and deliver high quality science, technology, and engineering professional learning experiences for K-12 educators and college faculty.

2004 - 2008 *Math/Social Studies Teacher, 7-8*, Flagstaff Middle School, Flagstaff, AZ
2000 - 2004 *Gifted Education Instructor, K-8*, Flagstaff Unified School District
1997 - 1999 *Sixth Grade Teacher*, West Sedona School, Sedona, AZ
1996 - 1997 *Sixth Grade Teacher*, Big Park Community School, Sedona, AZ
1994 - 1996 *Advanced Learner Program Coordinator and Instructor, K-8*, Big Park Community School, Sedona, AZ

Grants, Awards and Achievements

2015- 2020 **Principal Investigator**, Power of Data Project (POD): Expanding Geospatial Technology Career Development for High School Students through Teacher Professional Development, Innovative Technology Experiences for Students and Teachers. Award DRL#1513287. National Science Foundation. Awarded \$1,936,772 to study the transferability of the successful Power of Data professional development model.

2016 - 2021 **Co-Investigator**, Planetary Learning that Advances the Nexus of Engineering, Technology, and Science (PLANETS). Award #15-SE CAN15-0035. National Aeronautics and Space Administration. Awarded \$3,380,749 to develop out of school time curricula and professional development materials that integrate planetary science and engineering.

2015 Esri Special Achievement in Geographic Information Systems Award
2014 - 2015 Northern Arizona University CSTL Exemplary Performer Award
2014 Power of Data Project recognized by Change the Equation as an exemplary STEM professional development program and listed in STEMWorks Database.

- 2013-2018 **Principal Investigator**, Geospatial Connections promoting Advancement to Careers and Higher Education (GEOCACHE) Advanced Technological Education. Award DUE #1304872. National Science Foundation. Awarded \$447,670 to facilitate geospatial technology professional development for secondary teachers and college faculty and study effects on student attitudes toward STEM careers.
- 2012-2014 **Principal Investigator**, Powerful Engineering and Physical Science Ideas (PEPSI) for Gilbert Public Schools, Arizona Department of Education Mathematics or Science Partnership Grant. Awarded \$178,057 to facilitate science and engineering professional development for elementary school teachers to increase their physical science content and pedagogical knowledge.
- 2009 - 2013 **Co-Principal Investigator**, the Power of Data (POD) Project, Innovative Technology Experiences for Students and Teachers. Award DRL #0929846. National Science Foundation. Awarded \$928,004 to facilitate geospatial technology professional development for pairs of secondary Career and Technical Education and Science and Math teachers and study effects on student attitudes toward STEM careers, the factors that influence implementation, and persisting teaching practices.
- 2009 - 2013 **Principal Investigator**, Harnessing the Power of Data, Math or Science Achievement Grant. Award #0412-09, Arizona Board of Education administered by Science Foundation Arizona. Awarded \$400,000 to partner with a Joint Technology District to facilitate geospatial technology professional development for pairs of secondary Career and Technical Education and Science and Math teachers and measure effects on student achievement.
- 2008 Middle School Distinguished Teaching Award, National Council for Geographic Education.
- 2007 First Place, University of Arizona, Center for Middle Eastern Studies Lesson Plan Competition.
- 2006 Korea Foundation's Korean Studies Workshop for American Educators Award Recipient, 2 Weeks, South Korea.
- 2004 Fulbright-Hays Project Award Recipient, University of Arizona, Center for Middle Eastern Studies, 4 weeks, Cyprus.
- 2002 Fulbright Memorial Fund Teacher Program Award Recipient, 3 weeks, Japan.
- 1995 Distinguished First Year Teacher of the Year, Yavapai County.

Related Professional Activities and Responsibilities

- 2015-2016 Facilitated science, leadership, and change professional development for elementary teachers and principals for Teachers and Principals Together – A Team Approach to Implementing Arizona's College and Career-Ready Standards in Mathematics and the Vision of Effective Science Education as Outlined in A Framework for K-12 Science Education. Arizona Department of Education Improving Teacher Quality Program.
- 2015-2016 Facilitated science professional development for elementary teachers for the Teaching Organisms through Modeling and Argumentation in Science, Arizona Department of Education Mathematics or Science Partnership with Gilbert Public Schools, JO Combs Elementary District, and Peoria Unified School District.
- 2014 – Present Endorsed Provider/Collaborator of Engineering is Elementary Teacher Educator Institutes. Museum of Science, Boston. Facilitated professional development across the nation for teacher educators to learn to facilitate EiE Teacher Workshops.
- 2014-2015 Facilitated science professional development to secondary teachers for the Exploring Energy and Matter Collaborative, Arizona Department of Education Mathematics or Science Partnership with Peoria Unified School District and Gilbert Public Schools.
- 2012-2016 Program Manager, Northern Arizona University Noyce Scholarship Program, Award, DUE #1035495. National Science Foundation.
- 2012 - Present Endorsed Provider of Professional Development for Engineering is Elementary

	Teacher Workshops. Museum of Science, Boston. Facilitated EiE Teacher Workshops across the nation.
2012-2016	Practicum Committee Member, Northern Arizona University graduate students.
2008-2010	Facilitated science professional development for elementary school teachers for the Yavapai County Mathematics and Science Partnership.
2009-2010	Facilitated science professional development for Navajo County Mathematics and Science Partnership.
2010-2011	Instructor, SCI599, Geospatial Technologies in Earth Sciences. Northern Arizona University.
2009	University Supervisor, Student Teachers, Northern Arizona University.
2009	Instructor, SCI508, Science Teacher Practicum, Northern Arizona University.
2007-Present	Teacher Consultant, Arizona Geographic Alliance
2007-2008	Microsoft Technology Peer Coach, Flagstaff Unified School District.
2004-2008	Mentor, pre-service students, Northern Arizona University-Flagstaff Partnership Program.
2007	Cooperating Teacher, Student Teacher, Northern Arizona University.
2000-2006	Coach and School Coordinator, International Odyssey of the Mind Competitions
2004	Facilitator, Northern Regional Tournament Odyssey of the Mind Competition
2003-2004	Coach, Space Day/Challenger Center's Design Challenges
2003-2004	Coach, NSTA/Toshiba Exploravision Contest
2000-2005	Coach, International Math Olympiad Competitions
1996-1999	Mentor, pre-service students, Northern Arizona University-Sedona Partnership Program
1994-2003	Coach, Science Olympiad

Additional Specialized Training

2018	Amplify Science Professional Learning Colleague
2017	Participant, WestEd Making Sense of Science Camp.
2017	Participant, WestEd Making Sense of Science Facilitator Academies. Dynamic Earth.
2014	Participant, WestEd Making Sense of Science Facilitator Academies. Force and Motion.
2015	Participant, WestEd Making Sense of Science Facilitator Academies. Organisms.
2012	Participant, Engineering is Elementary Teacher Educator Institute.
2009	Participant, Teachers Teaching Teachers GIS – T3G, Esri
2009	Participant, GEMS Associate Training.
2006	Teacher Participant, Coconino County Mathematics and Science Partnership.
2005-2006	Participant, NSF ITEST Eyes in the Sky Geospatial Technologies Professional Development Program
2004-2008	Northern Arizona Professional Development School, Mathematics Department.
2005	Participant, NASA Explorer Schools Sustainability Seminar & Space Camp
2000-2003	Participant US Geologic Survey/Willow Bend Teacher Field Experience
2002	Participant, Intel Teach to the Future Program
1995-1997	Participant, US West Technology, Environmental Education and Multimedia (TEEM) Project

Publications

Nolan, E., Whitworth, B. A., & **Rubino-Hare, L. A.** (2019, November 1). A lesson in Geospatial Inquiry. *The Science Teacher*, 87(4), 26–33.

- Whitworth, B. A., **Rubino-Hare, L.**, Bloom, N. E., Walker, M. C., & Arendt, K. (2019). Scaling professional development: Preparing professional development providers to lead Power of Data Teacher Workshops. <https://doi.org/10.1080/09500693.2019.1699975>
- Rubino-Hare, L.**, Bloom, N. & Whitworth, B. (2019). Implications from a scale up of geospatial technology professional development program for secondary teachers. In K. Graziano (Ed.), Proceedings of Society for Information Technology & Teacher Education International Conference (pp. 1348-1353). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved March 26, 2019 from <https://www.learntechlib.org/primary/p/207868/>.
- Bloom, N., Roberts, E. Clark, J., **Rubino-Hare, L.**, Cunningham, C. Archer, H. (2019). *How educators implement engineering curricula in OST settings*. A paper for the American Society for Engineering Education Annual Conference, Tampa, FL.
- Roberts, E., Bloom, N., Clark, J., **Rubino-Hare, L.**, Archer, H., San Antonio-Tunis, C. and Lachapelle, C. (2019). *Out-of-school-time educators linking youth funds of knowledge in a middle-school engineering and planetary science curriculum*. A poster for the annual meeting of National Association of Research in Science Teaching, Baltimore, MD.
- Clark, J. & **Rubino-Hare, L.** (2018). *Engagement of out-of-school time educators in the design of on-line professional development*. A poster for the annual meeting of American Geophysical Union, Washington, D.C.
- Vaughan, R.G., Edgar, L. Rumpf, M.E., Anderson, R., Gaither, T., Milazzo, M., **Rubino-Hare, L.**, Clark, J., Ryan, S., Sokol, K. (2018). *Water in the solar system: A science education activity focused on planetary exploration*. A poster for the annual meeting of American Geophysical Union, Washington, D.C.
- Bloom, N., Clark, J., Roberts, E., Archer, E., **Rubino-Hare, L.** (2018). *Identifying supports for youth development and learning in a planetary science and engineering out-of-school time program*. A poster for the annual meeting of American Geophysical Union, Washington, D.C.
- Whitworth, B. A., Bloom, N. E., Walker, M. C., & **Rubino-Hare, L.** (2018). *Training the trainers: Designing the Power of Data Facilitation Academies*. A poster for the annual meeting of the Association of Science Teacher Education, Baltimore, MD.
- Bloom, N. & **Rubino-Hare, L.** (2018). Using rubrics to demonstrate educator mastery in professional development. EvaluATE. <http://www.evaluate.org/blog/bloom-sep18/>
- NSF (2018). *Advanced technological education impacts: Twenty-five years of advancing technician education 2018-2019*. GEOCACHE p. 94. Available at https://atecentral.net/downloads/3916/ATE_Impacts_2018-2019.pdf
- Whitworth, B. A., **Rubino-Hare, L.**, Bloom, N. E., & Nolan, E. (2018, Submitted). *Integrity versus fidelity of implementation: Scaling professional development*. A paper for the annual meeting of National Association of Research in Science Teaching, Baltimore, MD.
- Engineering is Elementary (2018). *In good hands: Engineering space gloves. Materials engineering for out-of-school-time grades 3-5*. An Engineering Adventures curricular unit. Rubino-Hare, L (collaborator). <https://www.eie.org/engineering-adventures>
- Engineering is Elementary (2018). *Worlds apart: Engineering remote sensing devices. Remote sensing for out-of-school-time grades 6-8*. An Engineering Everywhere curricular unit. Rubino-Hare, L (collaborator). <https://www.eie.org/engineering-everywhere>
- Engineering is Elementary (2018). *Testing the Waters: Engineering a water reused process. Water resources engineering for out-of-school-time grades 6-8*. An Engineering Everywhere curricular unit. Rubino-Hare, L (collaborator). <https://www.eie.org/engineering-everywhere>
- Rubino-Hare, L.** & Croson, S. (2018). *Two steps toward geospatial inquiry: Incorporating geospatial thinking in any subject*. A poster for the annual conference of International Society for Technology Education. Chicago, IL.
- Bloom, N., **Rubino-Hare, L.**, Whitworth, B. (2018). *Findings from a scale-up of geospatial technology-integrated professional development*. A poster for the annual National Council for Geographic Education Conference. Quebec City, Canada.

- Rubino-Hare, L.,** Evans, E., Manone, M., Palmer, A., Sample, J.C. (2017). *Power of Data facilitation guide*. Facilitation guide for implementing Power of Data teacher workshops with integrity.
- Rubino-Hare, L.,** Evans, E., Manone, M., Palmer, A., Sample, J.C. (2017). *Power of Data teacher guide*. Teacher Guide for Power of Data Teacher Workshops.
- Rubino-Hare, L.,** Bloom, N., Bielefeldt, T., Blevins, K., Manone, M. (2017). *Using ISTE Standards to improve a PBL/geospatial technology professional learning program*. A poster for the annual meeting of the International Society for Technology in Education, San Antonio, TX.
- Rubino-Hare, L.,** Bloom, N., Whitworth, B.A. (2017). *Using the Power of Data to increase student engagement with geospatial technology and careers*. A poster for the International Cartographic Conference, Washington, D.C.
- Rubino-Hare, L., & Walker, M.** (2017). *POD program fuels student enthusiasm for STEM and GIS*. Directions Magazine. <http://www.directionsmag.com/entry/pod-program-fuels-student-enthusiasm-for-stem-and-gis/486789>
- Whitworth, B. A., Bloom, N. E., Walker, M. C. & **Rubino-Hare, L. A.** (2017). *Power of Data Facilitation Academy: Designing facilitator professional development*. A paper for the annual meeting of the National Association for Research in Science Teaching, San Antonio, TX.
- Rubino-Hare, L.,** Whitworth, B., Bloom, N., Claesgens, J., Fredrickson, K., Henderson-Dahms, C. & Sample, J.C. (September, 2016). Persistent teaching practices after geospatial technology professional development. *Contemporary Issues in Technology Education* 16(3). <http://www.citejournal.org/volume-16/issue-3-16/science/persistent-teaching-practices-after-geospatial-technology-professional-development/>
- Claesgens, J., **Rubino-Hare, L.,** Bloom, N., Fredrickson, K., Henderson-Dahms, C., Menasco, J. Sample, J.C. (2013). Professional development integrating technology: Does delivery format matter? *Science Educator*, 22(1), 10-18. <http://www.nsela.org/assets/Professional%20Development%20Integrating%20Technology-%20Does%20Delivery%20Format%20Matter.pdf>
- Rubino-Hare, L.,** Bloom, N., Claesgens, J., Fredrickson, K., Henderson-Dahms, C., Sample, J.C. (December, 2012). Combining project-based instruction, Earth science content, and GIS technology in teacher professional development: Is this holistic approach sustainable? Poster presentation at the annual meeting of the American Geophysical Union, San Francisco, CA.
- Rubino-Hare, L.,** Sample, J., Fredrickson, K., Claesgens, J., Bloom, N., Henderson-Dahms, C., Manone, M. (April 2012). The Power of Data Projects at Northern Arizona University. <https://www.youtube.com/watch?v=nXLRwOP27Zk&list=PLlCktO9DL5oMnsLvmLqyDSbssoo-p4u1M&feature=share&index=8>
- Rubino-Hare, L.,** Sample, J.C., Fredrickson, K., Claesgens, J., Bloom, N., Henderson-Dahms, C., Manone, M. (December, 2011). Holistic approach to secondary earth science teacher professional development: The triad of project-based instruction, earth science content, and GIS technology. Poster presentation at the annual meeting of the American Geophysical Union, San Francisco, CA
- Rubino-Hare, L.,** Claesgens, J., Cardenas, S. (March 2011). Go NAUTeach – Geospatial outreach for NAUTeach. Poster presentation at the HP Catalyst Summit, New Delhi, India. <http://istelearning.org/wp-content/uploads/submissions/LindaKeller-20110301100355.pdf>
- Rubino-Hare, L. (2007)** United we stand: a lesson on the division of Cyprus, Center for Middle Eastern Studies at the University of Arizona website. <http://cmes.arizona.edu/outreach/lessons#U>

Professional Presentations

- Rubino-Hare, L. & Hamlin, A.** (2019). In good hands: Designing space gloves to protect astronauts from space hazards. A presentation for the annual meeting of Arizona Center for Afterschool Excellence, Phoenix, AZ.
- Nolan, E., Whitworth, B. A., Manone, M., **Rubino-Hare, L.,** & Bloom, N., (2019, Accepted). Exploring how the design of professional development supports geospatial inquiry implementation in the classroom. A poster for the Association of Science Teacher Education, San Antonio, TX.

- Rubino-Hare, L.,** Bloom, N.E., Nolan, E., Whitworth, B.A. (2019, in review). Enhancing instruction through the Power of Data and Geospatial Inquiry. A presentation for the annual meeting of American Geophysical Union, San Francisco, CA.
- Bloom, N.E., **Rubino-Hare, L.,** Roberts, E., Clark, J. (2019, in review). Identifying supports for educators facilitating a planetary science and engineering out-of-school time program. for the annual meeting of American Geophysical Union, San Francisco, CA.
- Rubino-Hare, L.** (2019). Engineering is Elementary Teacher Workshop. Presented at Saint Catherine of Siena Catholic School, Phoenix, AZ.
- Rubino-Hare, L., & Clark, J.** (2019). Middle school space science workshop, Grades 6-8. Teacher Workshop presented at Northern Arizona University, Center for Science Teaching and Learning, Flagstaff, AZ.
- Rubino-Hare, L., Kesler, K., & Clark, J.** Science Teaching and Learning Institute (2019). Teacher Workshop for Dine Office of School Improvement presented at Northern Arizona University, Center for Science Teaching and Learning, Flagstaff, AZ.
- Rubino-Hare, L., & Clark, J.** (2019). Leading professional learning. Administrator Workshop presented at Knox Elementary School, Yuma, AZ.
- Rubino-Hare, L.** (2019). Lessons learned from the Power of Data SPREAD project. How technology is used to support relationships with partners: The Power of Data. A presentation at the STELAR NSF ITEST Principal Investigator and Evaluator Summit. Alexandria, VA.
- Rubino-Hare, L., Kesler, K., & Clark, J.** Arizona Science Standards Overview (2019). Teacher Workshop for Dine Office of School Improvement presented at Window Rock, AZ.
- Rubino-Hare, L., & Clark, J.** (2019). *Remote Sensing of Mars*. A presentation for the Space Exploration Educator Conference. Houston, TX.
- Roche, B., Schlemper, B., Bloom, N., **Rubino-Hare, L.,** McMillan-Culp, K. & Forsyth, S. (2019, Accepted). *Technology as an agent of change in teaching and learning*. A symposium for the annual meeting of the American Educational Research Association. Toronto, Canada.
- Rumpf, M.E., Vaughan, R.G., Anderson, R., Edgar, L., Gaither, T., Milazzo, M., **Rubino-Hare, L.,** Clark, J., Ryan, S., Sokol, K. (2018). *Planetary cards: An interactive card game for learning about water in the solar system*. A presentation for the annual meeting of American Geophysical Union, Washington, D.C.
- Rubino-Hare, L. & Kesler, K.** (2018) *That hits the spot: How scientists and engineers collaborate to find evidence of past life on Mars*. A presentation for the annual meeting of Arizona Center for Afterschool Excellence, Phoenix, AZ.
- Rubino-Hare, L. & Manone, M.** (2018). *How the Power of Data project built a bridge to encourage geospatial inquiry across the nation*. A presentation for the annual Esri Education User Conference, San Diego, CA.
http://proceedings.esri.com/library/userconf/educ18/papers/166_99.pdf
- Clark, J. & **Rubino-Hare, L.** (2018). *Planetary learning that advances the nexus between engineering, technology, and science (PLANETS): Taking out of school time engineering education to new heights*. A presentation at the Engineering is Elementary Symposium. Boston, MA.
- Rubino-Hare, L.,** Whitworth, B.A., Pasley, J. (2018). *Lessons learned from the Power of Data SPREAD project*. A presentation at the STELAR NSF ITEST Principal Investigator Summit. Alexandria, VA.
- Rubino-Hare, L., & Clark, J.** (2017). *Integrated engineering and planetary science activities for out-of-school time programs*. A presentation for the Space Exploration Educator Conference. Houston, TX.
- Ryan, S., & **Rubino-Hare, L.** (2017). *STEM changes everything*. A presentation for the annual meeting of National Summer Learning Association. Phoenix, AZ.
- Bycott, S., Hood, D., **Rubino-Hare, L.** (2016, November). *Transform science courses using student-centered, project-based strategies and GIS technology*. A presentation for the annual meeting of the Arizona Science Teachers Association, Phoenix, AZ.
- Ryan, S., & **Rubino-Hare, L.** (2016). Inspire a bright future with engineering & planetary science. A presentation for the annual meeting of Arizona Center for Afterschool Excellence.

- Hare, L.,** Cheepurupalli, R., Ortiz, E., Wellner, K., Bloom, N. & Bielefeldt, T. (2016). New experiences teaching projects with AGOL. Esri Education User Conference. San Diego, CA.
http://proceedings.esri.com/library/userconf/educ16/papers/2004_562.pdf
- Rubino-Hare, L.** & Clark, J. (March 2016). Meaningful integration. EiE online PD provider shareout webinar.
- Rubino-Hare, L.,** & Whitworth, B., (January, 2016). The power of data: Preparing the geospatial workforce of tomorrow. Presented at 21st Century STEM: Integrate to Innovate Conference. Phoenix, AZ.
- Rubino-Hare, L.,** & Clark, J. (January, 2016). Kids ask for science and reading! Engineering across the curriculum. Presented at 21st Century STEM: Integrate to Innovate Conference. Phoenix, AZ.
- Rubino-Hare, L.,** Clark, J. (November, 2015). Power of Data - Geospatial Tools for 21st Century Skills. Presented at Arizona Science Teachers Association Ready, Set, Science! Phoenix, AZ.
- Rubino-Hare, L.,** Clark, J. (November, 2015). Why do you think so? Asking effective questions in engineering activities. Presented at Arizona Science Teachers Association Ready, Set, Science! Phoenix, AZ.
- Manone, M., **Rubino-Hare, L.,** Blevins, K., (July, 2015). From Power of Data to GEOCACHE. Esri Education User Conference. San Diego, CA.
- Rubino-Hare, L.,** Clark, J. McManus, S., Sargianis, K. (August 2014 – July 2019). Engineering is Elementary teacher educator institute. Presented at Sunnyside School District, Tucson, AZ; Baltimore Public Schools, Baltimore, MD; Flagstaff, AZ; New York City Department of Education, New York, NY; Fountain-Fort Carson School District, Colorado Springs, CO; Mukwonago School District, Mukwonago, WI; Kent Intermediate School District, Grand Rapids, MI; DeKalb County School District, Atlanta, GA.
- Rubino-Hare, L.,** Clark, J. (January, April, 2015). Engineering is Elementary Teacher Workshop. Presented at Fountain Fort Carson School District, Colorado Springs, CO; Sedona-Oak Creek Unified School District, Sedona, AZ.
- Rubino-Hare, L.** (November, 2014). Making sense of student work: A protocol for teacher collaboration. Webinar. WestEd. Online.
- Rubino-Hare, L.,** Kesler, K. (November, 2014). Engaging students in PBL using mobile devices in the field: Gather, analyze and interpret spatial data in ArcGIS Online. Presentation at the Arizona Science Teachers' Association Conference, Let's Build Science! Phoenix, AZ.
- Rubino-Hare, L.,** Clark, J, Kirkley, J. (November, 2014). Engineering is Elementary - A focus on engineering practices in STEM. Presentation at the Arizona Science Teachers' Association Conference, Phoenix, AZ.
- Rubino-Hare, L.,** Blevins, K., Manone, M., Bloom, N., Kesler, K. (July, 2014). Geospatial connections promoting advancement to careers & higher ed. Presentation at the annual Esri Education User Conference, San Diego, CA.
http://proceedings.esri.com/library/userconf/educ14/papers/622_64.pdf
- Kesler, K. and **Rubino-Hare, L.** (January, 2014). Using inquiry to teach. Presented at the Navajo Nation Department of Dine Education Using Data Process Workshop. Phoenix, AZ.
- Rubino-Hare, L.** and Kesler, K. (January, 2014). Assessment – Science. Presented at the Navajo Nation Department of Dine Education Using Data Process Workshop. Phoenix, AZ.
- Rubino-Hare, L.** and Clark, J. (October, 2013). Using the power of data and PBI to enhance science instruction. 2013. Arizona Science Teachers Association (ASTA) Conference, Be Inspired! Learning Today for the Future. Phoenix, AZ.
- Rubino-Hare, L.,** Clark, J. (July, 2013). Engineering is Elementary: Connecting science, engineering and technology. Presented at the 2013 4th Annual Engineering is Elementary Symposium, Boston, MA.
- Rubino-Hare, L.,** Claesgens, J., Bloom, N., Fredrickson, K., Henderson-Dahms, C., Sample, J.C. (April, 2013). Investigating what pedagogical practices persist when professional learning institutes end. Presented at the 2013 National Association for Research in Science Teaching Annual International Conference, Rio Grande, Puerto Rico.
- Fredrickson, K. & **Rubino-Hare, L.** (December, 2012). GIS: Is it the last piece of the STEM

- puzzle? Presented at the National Science Teachers Association Phoenix Area Conference on Science Education. Phoenix, AZ.
- Rubino-Hare, L.**, Claesgens, J., Fredrickson, K., Bloom, N., Henderson-Dahms, C., Sample, J.C., Manone, M. (July 2012). Beyond professional learning institutes: Sustaining best practices teaching with GST. Presentation at the annual Esri Education User Conference, San Diego, CA.
- Rubino-Hare, L.** & Clark, J. (June and July, 2012; March 2013). Enhancing your kit-based science Instruction—Addressing the “T” and “E” in STEM. Teacher Workshop presented at Northern Arizona University, Center for Science Teaching and Learning, Flagstaff, AZ.
- Claesgens, J., **Rubino-Hare, L.**, Fredrickson, K., Bloom, N., Henderson-Dahms, C., Sample, J.C., Manone, M. (March, 2012). Professional development integrating technology - Does delivery format matter? Presentation at the 2012 National Association for Research in Science Teaching Annual International Conference, Indianapolis, IN.
- Rubino-Hare, L.**, Fredrickson, K., Bloom, N., Claesgens, J., Sample, J. (July, 2011) Claims and evidence: Teaching teachers to assess learning using ArcGIS. Presentation at the annual ESRI Education User Conference, San Diego, CA.
- Fredrickson, K., **Rubino-Hare, L.**, Henderson-Dahms, C., Bloom, N. (July 2011) GIS teacher professional development: Does delivery format make a difference? Presentation at the annual ESRI Education User Conference, San Diego, CA.
- Rubino-Hare, L.** and Fredrickson, K. (March, 2011). Harnessing the power of data: Using GIS and problem based instruction to promote STEM. Presentation at the Microcomputers in Education Conference, Tempe, AZ.
- Claesgens, J., Fredrickson, K., **Rubino-Hare, L.** (March 2011). Professional development programs employing geospatial technologies and problem based instruction to promote scientific inquiry. Two sessions presented at the NSTA Research and Dissemination Conference, San Francisco, CA.
- Austin, B., Fredrickson, K., **Rubino-Hare, L.** and Vannette, T. Misconceptions: What do you do with them? (2009) Short course presented at the National Science Teachers Association Phoenix Area Conference on Science Education, Phoenix, AZ.
- Rubino-Hare, L.** and Kirkley, J. (2009) Teaching inquiry and using inquiry to teach science, Short course presented at the National Science Teachers Association Phoenix Area Conference on Science Education, Phoenix, AZ.
- Fredrickson, K., Kirkley, J., **Rubino-Hare, L.** and Vannette, T., (2008). Science Curriculum Topic Study. Presented at the Arizona Science Teachers Association annual meeting in Phoenix, AZ.
- Rubino-Hare, L.**, Jauron, L., Menasco, J. and Kirkley, J. (2008, 2009, 2010, 2011, 2012, 2014). GEMS Space Science Sequence workshop, Grades 3-5 and Grades 6-8. Teacher Workshops presented at Northern Arizona University, Center for Science Teaching and Learning and other NAU sites around Arizona.

Professional Organizations and Service

2019	Participant, Arizona Summit on Science Education
2019	Esri ArcGIS Online State Competition Leadership Team
2019	Participant, Geo Tech Center K14Geospatial Technology Educator Certification Forum
2010 - present	Member, American Geophysical Union
2017 – present	Member, Society for Information Technology and Teacher Education
2016-present	Member, NAU Service Professional Advisory Council
2016	NASA Review Panel
2016	NSF Review Panel
2015	Member, CSTL Web Designer Search Committee
2014-present	Member, Arizona Technology in Education Association
2014-present	Member, Arizona Association for Teachers of Mathematics
2014-2015	Esri Education Community Advisory Board Member.
2014	Member, CSTL PD Associate Search Committee
2013-2015	Region XI Director Arizona Science Teachers Association (elected)
2013-2015	Member, National Association for Research in Science Teaching
2013-2014	Member, Arizona Partnership for Assessment of Readiness for College and Careers (PARCC) Educator Leader Cadre
2012	Field tester, Tying Words and Images to Science Teaching Research, BSCS
2011-present	Associate Member of the HP Catalyst Initiative Pedagogy 3.0 consortia
2011-present	Member, International Society for Technology in Education
2011-2015	Member, National Science Education Leadership Association
2012-2013	Esri Education Community Advisory Board Member
2010-present	Member, Learning Forward, National Staff Development Council
2009-present	Member, National Science Teacher Association
2008-2009	Member, National Council for Geographic Education
2008-present	Member, Arizona Science Teachers Association
2007-2009	Member, Arizona Technology in Education Alliance
2006-2008	Middle School Representative, Career Ladder Steering Committee, Elected.