Laura A. Guertin

Curriculum Vitae

Earth Sciences	office: (610) 892-1427
Penn State Brandywine (formerly Delaware County)	email: guertin@psu.edu
25 Yearsley Mill Road	http://about.me/drlauraguertin/
Media, Pennsylvania 19063	http://blogs.agu.org/geoedtrek/

Education

Ph.D., Marine Geology and Geophysics, University of Miami, Rosenstie	l School of Marine &
Atmospheric Science, Miami, Florida	1998
Dissertation: A Late Cenozoic Mixed Carbonate/Siliciclastic System, South Florida:	
Lithostratigraphy, Chronostratigraphy, and Sea-Level Record	
B.A., Geology, Bucknell University, Lewisburg, Pennsylvania	1992
Oceanography field program, Wallops Island Field Station, VA	(Summer 1990)
Boston University Marine Program, Woods Hole, MA	(Fall semester, 1990)

National Awards and Honors

- 2020 Journal of Geoscience Education Outstanding Reviewer Award
- 2019 Selected as part of the American Geophysical Union's Voices for Science Advocacy Program, to amplify the voice of science and build valuable dialogues and relationships with communities, journalists and stakeholders
- 2016 SEG Wiki Champion Award, from the Society of Exploration Geophysicists
- 2015 INSIGHT Into Diversity Inspiring Women in STEM Award (Top 100 Women in STEM)
- 2015 Elected Fellow, Geological Society of America
- 2015 United States Senate Certificate of Special Recognition, from U.S. Senator Patrick Toomey, for participation in NOAA's 2014 Field Season
- 2015 Dean's List of 50 Must-Read Higher Education IT Blogs (for AGU Blogosphere GeoEd Trek) from *EdTech: Focus on Higher Education*
- 2009 Biggs Earth Science Teaching Award, the Geoscience Education Division's named award for the Geological Society of America
- 2008 U.S. Congressional citation honoree, awarded a Congressional Citation by Delaware County U.S. Representative Joe Sestak for civic and community engagement efforts
- 2003 Nominated and selected as part of Project Kaleidoscope's Faculty for the 21st Century Network (PKAL-F21)
- 1997 Merit Award, American Association of Petroleum Geologists (AAPG) [graduate school]
- 1997 TEXACO fellowship for outstanding doctoral dissertation research [graduate school]
- 1993 SEPM (Society for Sedimentary Geology) SED (Student Excellence and Development) award, presented to an outstanding student in sedimentary geoscience [graduate school]

State Award

- 2018 Pennsylvania Environmental Resource Consortium (PERC) Campus Sustainability Champion (for work as co-chair of campus Sustainovation Team)
- 2015 Distinguished Teacher Award, Pennsylvania Geographical Society

Penn State Awards and Honors

Teaching and Research Awards

- 2020 The President's Award for Excellence in Academic Integration, Pennsylvania State University (university-wide award for integration of teaching, research, and creative accomplishments)
- 2019 Teaching and Learning with Technology Impact Award, Pennsylvania State University (university-wide teaching award)
- 2015 The Distinguished Teacher Award, Penn State Brandywine
- 2013 The George W. Franz Advising and Mentoring Award, Penn State Brandywine
- 2013 The Faculty Research Program Award, Penn State Brandywine
- 2010-2013 Jane E. Cooper Memorial Faculty Fellowship, Penn State Brandywine
- 2010-2011 Teaching and Learning with Technology Faculty Fellow with Education Technology Services, Pennsylvania State University (university-wide fellowship)
- 2009 Undergraduate Research Mentor Award (first recipient), Penn State Brandywine
- 2006 George W. Atherton Award for Excellence in Teaching, Pennsylvania State University (university-wide teaching award)
- 2005-2007 Fellow in Dutton e-Education Institute, College of Earth and Mineral Sciences, Pennsylvania State University
- 2005 Award for Teaching Excellence, Penn State Commonwealth College (college award)

Additional Education/Teaching Certificates

Training programs I have completed that offer certificates of completion, going back to 2011

- Adobe Professional Development: certificates for Explainer Videos (June 2019), Video Ads (March 2019), Visual Reports & Essays in the Classroom (May 2018), Podcasting in the Classroom (April 2018)
- edX course through SmithsonianX: ENVR1.1x: #EarthOptimism2018 (April 2018)
- Coursera course through Penn State University: Maps and the Geospatial Revolution (January 2018)
- ESRI Training: Creating Story Maps with ArcGIS (June 2017)
- National Geographic Educator Certification (online program, completed Aug-Dec 2016)
- Certificate for Online Teaching, World Campus Faculty Development Program, Penn State (2013)
- Mapping with Google, presented by Google (MOOC, online, June 10-24, 2013)
- Teaching with Technology Certificate, Penn State Univ. (2011)

Service Awards

2018 - Teamwork Award, Penn State Brandywine

- 2018 Club Adviser of the Year, Penn State Brandywine
- 2012 Student Affairs Excellence Award, Penn State Brandywine
- 2008 Club Adviser of the Year, Penn State Brandywine
- 2006 Club Adviser of the Year, Penn State Delaware County
- 2006 Student Government Association: Most Involved on Campus, Penn State Delaware County
- 2004 Woman of the Year, Penn State Delaware County Women's Commission
- 2002 Student Government Association Outstanding Service Award, Penn State Delaware County

Employment History

2015-present: Professor, Penn State Brandywine (PA)

2007-2015: Associate Professor, Penn State Brandywine (formerly Delaware County) (PA)

- 2001-2007: Assistant Professor, Penn State Delaware County (PA)
- 2000-2001: Professional Academic Adviser, University of Colorado at Boulder (CO)
- 1998-2000: Senior Lecturer, Mary Washington College (VA)
- 1992-1996: Graduate Student Teaching Assistant, University of Miami (FL)

1992: Undergraduate Student Teaching Assistant, Bucknell University (PA)

Teaching Experience

• Earth and Mineral Sciences, Penn State Brandywine (2001 – present)

- Teaching primarily introductory-level courses for non-science majors in the disciplines of Earth science, Environmental Science, Environmental Studies, Environmental Resource Management, Geography, Geoscience, Honors, Science/Technology/Society, and First-Year Seminar

- <u>Senior Lecturer</u>, Department of Environmental Science and Geology, Mary Washington College [renamed University of Mary Washington] (1998 2000)
- Introductory Geology, Evolution of the Earth, Marine Coastal Processes, Paleontology
- <u>Teaching Assistant</u> with introductory-level courses, Department of Geological Sciences, University of Miami (1992-1996)

- The Solid and Fluid Earth, Physical Geology, Origin and Evolution of Planet Earth, Evolution of the Modern Earth's Environment

- <u>Teaching Assistant</u>, Department of Geology, Bucknell University (1992)
- Historical Geology

Additional Teaching Opportunities and Educational Activities (since employed at Penn

State University)

- <u>Instructor</u> for STEM Options, A math and science career day for 7th grade girls, focusing on hydrography and oceanographic careers. Penn State Brandywine (May 2016, 2017, 2018, 2019)
- <u>Instructor</u> for *Math Options*, A Math and Science Career Day for 7th Grade Girls, PSU Delaware County (May 2002, 2003, 2004, 2005, 2006, 2008, 2009)
- <u>Scientist pen pal</u> for middle school girls as part of the Letters to a Pre-Scientist program (2015-2018)
- <u>Scientist interaction</u> with *Signals of Spring*, where I reviewed student expert analysis journal entries and provide feedback via internet. Students are using NASA and other earth imagery to explain the migration of animals tracked by satellites, http://www.signalsofspring.net/ (Spring 2002, 2003, 2004)
- <u>Student Poster Session Judge</u>: Undergraduate Geoscience Research and Outreach (virtual session at the American Geophysical Union Annual Meeting, December 2013, December 2015); Bright STARS (middle/high school international students, December 2020)
- <u>Youth Science Judge</u> at: The Meredith School Science Fair [middle school] (Philadelphia, June 17, 2013); George Washington Carver Science Fair [middle school] (Philadelphia, February 26, 2008); Delaware County Science Fair [high school] (Pennsylvania, Spring 2002)
- <u>Career Day participant</u>: Delaware County Juvenile Detention Center (March 31, 2004; November 6, 2003)

Current Funding from Outside Research Grants

• National Science Foundation: "Collaborative Research: Student Produced Audio Narratives (SPAN)." Principal Investigator. DUE-IUSE. 2017-2021. Award #1708646. Amount: \$66,860.

Past Funding from Outside Research Grants

- National Science Foundation: "Targeted Math Science Partnership: Middle Grades Earth and Space Science Education." Co-Principal Investigator. MSP Targeted Awards & Geoscience Education. 2010-2017. Award #096792. Amount: \$7,310,927.
- National Science Foundation: "Developing Undergraduate Research at Community Colleges: Tapping the Potential of All Students." Senior Personnel. NSF-DUE, CCLI-Type 2 (Expansion), Advanced Tech Education Programming, S-STEM. 2009-2014. Award #0920083. Amount: \$359,590.
- National Science Foundation: "UNH GEO-Teach: Transforming Earth System Science Education." Funded subcontractor to co-lead summer workshops and mentor graduate students in ESS education. NSF GEO-TEACH. 2006-2012. Award #0631377. Amount: \$3,251,664.
- National Science Foundation: "Faculty Development Workshops to Support Engagement in Undergraduate Research." Co-Principal Investigator. NSF CCLI-Phase I (Exploratory). 2008-2014. Award #0841267. Amount: \$49,000.
- National Science Foundation: "Collaborative Proposal: Building and Maintaining a Pipeline for Diversity: A Track2 Proposal." Co-Principal Investigator. NSF GEO Opportunity for Enhancing Diversity & Education and Human Resources. 2005-2012. Award #0503521. Amount: \$900,872.
- National Science Foundation: "The Role of Two-Year Colleges in Education and Broadening Participation in the Geosciences: A Planning Workshop." Co-Principal Investigator. NSF GEO – Opportunity for Enhancing Diversity. 2009-2011. Award #0939671. Amount: \$47,290.
- National Science Foundation: "A Workshop to Design a Digital Research/Education Forum and "Pathway" for the Geosciences." Senior Personnel. NSF-DUE, National SMETE Digital Library. 2009-2011. Award #0842177. Amount: \$146,995.
- National Collegiate Honors Council Portz Fund: "Establishing a Base Collection of Library Resources on Professional Research Skills." Principal Investigator. 2008. Amount: \$200
- National Science Foundation: "Building a Pipeline for Diversity." Co-Principal Investigator. NSF GEO – Catalyzing New International Collaborations, Geoinformatics, Environmental Social & Behavior Science, Opportunities for Enhancing Diversity, Engineering Education. Two years (2003-2005). Amount: \$92,726
- Environmental Protection Agency: "SPHERES! (Science Programming HERE, Scouts!) at Penn State Delaware County." Principal Investigator. One year (2005-2006). Amount: \$9,535
- Society of Women Environmental Professionals: "Concern and Care for the Earth: An Essay Writing Contest for Girls." Principal Investigator. One year (2006). Amount: \$1,000
- Scholars in Service to PA, AmeriCorps Education Award program, awarded three AmeriCorps positions for Penn State Delaware County. PI on proposal. Multiple years (2006-2007, 2007-2008, 2008-2009, 2009-2010). Amounts: \$3,750, \$6,250, \$11,750, \$8,250

Grants Awarded from Penn State

- Sustainable Communities Collaborative (SCC) Pepsi Challenge Mini-Grant, Penn State Sustainability Institute. Co-Principal Investigator. (2017-2021, \$15,000)
- Education Technology Services/Teaching & Learning with Technology/Information Technology Services, iBooks for Education and Outreach of Earth Science (Summer 2012, \$5,800)

- Schreyer Honors College Course Development/Enhancement Award (Fall 2008, \$1,500)
- Global Funds grant, University College (Spring 2008, \$1,600)
- Constitution Day grant, Laboratory of Public Scholarship and Democracy (Fall 2008, \$1,000)
- Faculty Enhancement Grant (PSU-ITS, 2007)
- Public Scholarship Course Enhancement Grant (2006, 2007)
- Multicultural Teaching Academy participant and grant recipient (2006)
- Schreyer Institute for Teaching Excellence Innovation Incentive Grant (Spring 2004-Fall 2005; Fall 2009-Spring 2010)
- Teaching Development Grant, Penn State (Commonwealth College 2003, 2004, 2005; Brandywine -2007, 2008)
- Campus Collaborative Teaching/Learning Project (PSU Brandywine) (2001, 2002)

Publications

<u>Guertin, L.</u>, Nguyen, A. A Mini-Podcast Series Highlighting Global Warming Solutions in Pennsylvania. *Pennsylvania Geology*. Undergraduate co-author. *In review, submitted May 2020*.

Kraal, E., Sirrakos, G., <u>Guertin, L.</u>, Epstein, A., Simmens, G. Impact of Student Produced Audio Narrative (SPAN) assignments on students' perceptions and attitudes toward science in introductory geoscience courses. *Journal of Geoscience Education*. Undergraduate student co-author. *Accepted*, *December 2020*.

<u>Guertin, L.</u>, Jansen, A., Berkey, J. Developing multiple literacies and foundational research skills in students through audio narratives on global warming solutions. *Scholarship and Practice of Undergraduate Research (SPUR)*. Accepted, to be published 2021.

<u>Guertin, L.</u>, Theveny, K., Barber, D. (2020). Virtual community building via nature-themed podcast discussions. *Bulletin of the Ecological Society of America*. Undergraduate student co-author. *Accepted, September 2020, published early online (not assigned to an issue yet)*. https://doi.org/10.1002/bes2.1798

<u>Guertin, L.</u>, Briseño, I. (2020). The Power of New Online Opportunities to Connect to the Ocean: The Journey of a Research Student and Mentor. *Current: The Journal of Marine Education*, *34*(3): 18-20. http://doi.org/10.5334/cjme.60

<u>Guertin, L.</u>, Theveny, K., Esparragoza, I. (2020). How An Arboretum Outreach Activity Changed Students' Attitudes Towards Sustainable Development. *Journal of Sustainability Education, 24:* 13 pages. Available at: http://www.susted.com/wordpress/content/how-an-arboretum-outreach-activity-changed-students-attitudes-towards-sustainable-development_2020_12/

Nguyen, A., <u>Guertin, L</u>. (2020). An Audio Journey Through Solutions to Global Warming in Pennsylvania. *Journal of Sustainability Education*, 24: 4 pages. Available at: http://www.susted.com/wordpress/content/an-audio-journey-through-solutions-to-global-warming-inpennsylvania_2020_12/ Undergraduate lead author.

<u>Guertin, L.</u> (2020). Audio and video clips provide connections between authentic voices, social justice, and global water challenges. *Science Education and Civic Engagement: An International Journal, 12*(2): 34-35.

Fortner, S., Manduca, C., <u>Guertin, L.</u>, Szymanski, D., Villalobos, J. (2019). Teaching for Earth resilience: A strategy for increased diversity and equity. *GSA Today*, 29: 2 pages. https://doi.org/10.1130/GSATG388GW.1

Schaefer, G., <u>Guertin, L.</u> (2018). Air and surface temperature change during the August 2017 partial solar eclipse in Delaware County. *Proceedings of the Delaware County Institute of Science*, *14*(1): 12-15. Undergraduate student lead author.

<u>Guertin, L.</u> (2016). Starting students on the pathway to ocean literacy with a first day class activity. *Current: The Journal of Marine Education*, *30*(2): 20-24.

<u>Guertin, L.</u> (2016). Showcasing the lives of women scientists through the #365scienceselfies social media project. *Earthzine* (IEEE Oceanic Engineering Society). Available at: http://earthzine.org/2016/10/05/showcasing-the-lives-of-women-scientists-through-the-365scienceselfies-social-media-project/

Bowen, K., <u>Guertin, L.</u> (2016). Using the citizen science Picture Post Project for schoolyard environmental monitoring. *The Earth Scientist, 32*(Special Edition): 10-13. Undergraduate student lead author.

<u>Guertin, L.</u>, Clements, N. (2016). Improving student ocean science literacy through collaboration with a librarian. *In the Trenches*, 6(2): 5-6.

Elgin, S., Bangera, G., Decatur, S., Dolan, E., <u>Guertin, L.</u>, Newstetter, W., San Juan, E., Smith, M., Weaver, G., Wessler, S., Brenner, K., Labov, J. (2016). Insights from a convocation: integrating discovery-based research into the undergraduate curriculum. *CBE/Life Sciences Education*, *15*(2). 7 pages.

<u>Guertin, L</u>. (2016). Generating SEG Wiki articles to improve student geoscience content and literacy. *The Leading Edge, 35*(3): 274-276.

Clements, N., <u>Guertin, L</u>. (2016). Science literacy meets information literacy: Using Zotero as a teaching tool. *College & Research Libraries News*, 77(1): 14-16.

<u>Guertin, L.</u>, Clements, N. (2015). Ocean literacy: can students learn the Essential Principles? *Current: The Journal of Marine Education*, 29(3): 35-38.

<u>Guertin, L</u>. (2015). Engaging students before, during, and after visits to informal science education centers. *In the Trenches*, *5*(1): 10-11.

<u>Guertin, L</u>. (2015). IN HER OWN WORDS: Sharing my experience as a Woman in STEM: Pass it on. *Women in Higher Education*, 24(2): 5, 19.

Guertin, L. (2014). Why students should listen. Journal of College Science Teaching, 44(2): 8-9.

<u>Guertin, L.</u> (2014). PAESTA – A professional organization for Pennsylvania's K-12 Earth science teachers. *Pennsylvania Geology*, *44*(2): 11-12.

Pollock, M., <u>Guertin, L</u>. (2013). Online guide encourages undergraduate research using social media. *CUR Quarterly, 34*(2): 14. (*CUR = Council on Undergraduate Research*)

<u>Guertin, L</u>. (2013). Community-based research with podcasting in introductory geoscience courses. CURQ On The Web, 34(2): 13. (CUR = Council on Undergraduate Research)

Dufoe, A., <u>Guertin, L.</u> (2013). Using iBooks Author to create Earth science classroom content for the iPad. *The Earth Scientist, 29*(2): 29-31. Undergraduate student lead author.

Lewis-King, T., <u>Guertin, L.</u> (2013). The successes and challenges of establishing PAESTA, a new professional community for teachers. *The Earth Scientist*, *29*(2): 41-45. Teacher lead author.

Licona, P., McDonald, S., Furman, T., <u>Guertin, L.</u> (2013). Student conceptions of the cause and locations of earthquakes. *The Earth Scientist*, 29(2): 50-54. Graduate student lead author.

Pickard, M., <u>Guertin, L</u>., Furman, T. (2013). Student and teacher conceptions of the Earth's interior structure. *The Earth Scientist*, 29(2): 55-58. Graduate student lead author.

<u>Guertin, L.</u>, Furman, T. (2013). Mentoring middle school and high school Earth science teachers to publish. *In the Trenches*, 3(1): 4-5.

<u>Guertin, L.A.</u>, Stubbs, C., Millet, C., Lee, T.K., Bodek, M.J. (2012). Enhancing geographic and digital literacy with a student-generated course portfolio in Google Earth. *Journal of College Science Teaching*, 42(2): 32-37.

Bembenic, M., Cratsley, C., Hartwell, B., <u>Guertin, L.</u>, Furman, T. (2012). Adaptable inquiry-based activities about national patterns of coal and energy use. *Science Scope*, 35(9): 49-55. Graduate student lead authors.

Cole, H., Furman, T. <u>Guertin, L.</u>, Endress Cratsley, C. (2011). Engaging students in learning ecosystembased biogeochemical cycles. *The Earth Scientist*, 27(2): 13-16. Teacher lead author, graduate student co-author.

Endress Crastley, C., <u>Guertin, L.</u>, Furman, T. (2011). Promoting geographic literacy of African Environments through map exercises. *The Earth Scientist*, 27(2): 27-32. Graduate student lead author.

<u>Guertin, L.A.</u> (2011). Classroom integration of Earth and Space Science news stories through audio. *The Earth Scientist*, 27(2): 41-45.

Furman, T., <u>Guertin, L.</u>, Pickard, M. (2011). Now what? Experienced teachers reflect on their unplanned transitions to teach Earth Science. *The Earth Scientist*, 27(2): 9-12. Graduate student co-author.

Neville, S., <u>Guertin, L.</u> (2011). Ten examples of utilizing existing gigapixel panoramas in the Earth and Space Science classroom. *The Earth Scientist*, 27(2): 46-49. Undergraduate student lead author.

Neville, S., <u>Guertin, L.</u> (2011). Three guided student explorations of Sky in Google Earth. *The Earth Scientist*, 27(2): 33-36. Undergraduate student lead author.

Tait, K., Pickard, M., <u>Guertin, L.</u>, Furman, T. (2011). Dispelling middle school student misconceptions of Grand Canyon formation through hands-on activities. *The Earth Scientist*, 27(2): 22-26. Teacher lead author, graduate student co-author.

Guertin, L.A. (2011). Pre-recorded online audio review sessions. College Teaching, 59(1): 45.

<u>Guertin, L.A.</u>, Neville, S.E. (2011). Utilizing Google Earth to teach students about global oil spill disasters. *Science Activities: Classroom Projects and Curriculum Ideas*, 48(1): 1-8. Undergraduate student co-author.

Scholtz, L.A., <u>Guertin, L.A.</u> (2010). Using tombstone records from Centralia, PA, to evaluate the effects of mining activities on male survivorship. *The Pennsylvania Geographer*, 48(1): 3-15. Undergraduate student lead author.

Guertin, L.A. (2010). Creating and using podcasts across the disciplines. *Currents in Teaching and Learning*, 2(2): 4-12.

DiLauro, A., Meyers, T., <u>Guertin, L.A.</u> (2010). The value of extending the honors contract beyond one semester: a case study with Smithsonian Dinosaurs. *Honors in Practice*, 6: 109-115. Undergraduate student lead authors.

Charles, L., Klein, C., Narkiewicz, M., <u>Guertin, L.</u>, Furman, T. (2009). Improving Earth Science instruction with an integrated Earth systems science matrix. *The Earth Scientist*, 25(4): 19-22. Teacher lead authors, graduate student co-author.

Dorsch, A., Furman, T., <u>Guertin, L.</u> (2009). Five activities for differentiated instruction on humaninduced climate change. *The Earth Scientist*, 25(4): 7-9. Teacher lead author.

Drozynski, D., Ellis, J., Furman, T., <u>Guertin, L.</u> (2009). Students' inquiry in and about the Earth Science classroom. *The Earth Scientist*, 25(4): 10-13. Teacher lead author, undergraduate student co-author.

Hartwell, B., Schoch, K., <u>Guertin, L.</u>, Furman, T. (2009). Understanding the rock cycle through a Choose Your Own Adventure® classroom activity. *The Earth Scientist*, 25(4): 23-26. Graduate student lead author, teacher co-author.

Hoffman, J., Vishio, N., Bembenic, M., <u>Guertin, L.</u>, Furman, T. (2009). Designing sustainable communities: an inquiry-based approach to teaching Earth systems science. *The Earth Scientist*, 25(4): 35-39. Teacher lead authors, graduate student co-author.

Nelson, W.R., Furman, T., <u>Guertin, L.</u> (2009). The rewards and challenges of integrating graduate student teaching fellows into the middle and high school classroom. *The Earth Scientist*, 25(4): 27-30. Graduate student lead author.

Neville, S.E., <u>Guertin, L.A.</u> (2009). Integrating Google Earth with the QUEST for Earth Science Literacy. *The Earth Scientist*, 25(4): 31-34. Undergraduate student lead author.

Woodruff, J.B., Acuna, E.B., Silano, R.L., <u>Guertin, L.A.</u> (2009). Enhanced podcast of Pennsylvania tree biodiversity in Ridley Creek State Park. *Journal of the Pennsylvania Academy of Science*, 83(2/3): 90-93. Undergraduate student lead authors.

<u>Guertin, L.A.</u>, Young, C.L. (2009). Using Flickr to connect a multi-campus honors community. *Journal of the National Collegiate Honors Council*, 10(2): 57-60.

<u>Guertin, L.A.</u> (2009). Dinosaur science for hospitalized children. *Academic Exchange Quarterly*, 13(3): 133-137.

<u>Guertin, L.A.</u>, Zappe, S.E., Kim, H. (2007). Just-in-Time Teaching (JiTT) exercises to engage students in an introductory-level dinosaur course. *Journal of Science Education and Technology*, *16*: 507-514. Graduate student co-author.

<u>Guertin, L.A.</u>, Sealy, A. (2007). The challenges of establishing an environmental science essay contest for girls. *Journal of the Pennsylvania Academy of Science*, *81*(1): 35-38. Undergraduate student co-author.

<u>Guertin, L.A.</u>, Bodek, M.J., Zappe, S.E., Kim, H. (2007). Questioning the student use of and desire for lecture podcasts. *Journal of Online Learning and Teaching*, *3*(2): 133-141. http://jolt.merlot.org/vol3no2/guertin.pdf Graduate student co-author.

<u>Guertin, L.A.</u> (2006). Integrating handheld technology with field investigations in introductorylevel geoscience courses. *Journal of Geoscience Education*, *54*(2): 143-146.

<u>Guertin, L.A.</u> (2006). An examination of student learning geoscience content through printed notes versus virtual lectures. *Journal of College Science Teaching*, *35*(4): 36-41.

<u>Guertin, L.A.</u>, Downey, E.A. (2006). Bringing Absolutely Incredible Kid Day! to the classroom and campus community. *The Journal for Civic Commitment, Issue 6*, URL: http://www.mesacc.edu/other/engagement/Journal/Issue6/Guertin.shtml

<u>Guertin, L.A.</u> (2005). Using virtual lectures to educate students on plagiarism. *First Monday*, *10*(9): URL: http://www.firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1277/1197

<u>Guertin, L.A.</u> (2005). Student reactions to required service learning. *The National Teaching and Learning Forum*, *14*(5): 1-3.

<u>Guertin, L.A.</u> (2005). An indoor shopping mall building stone investigation with handheld technology for introductory geoscience students. *Journal of Geoscience Education, 53*(3): 253-256.

<u>Guertin, L.A.</u>, Cao, E.T., Craig, K.A., George, A.E., Goldson, S.T., Makatche, S.P., Radusevich, B.T., Sandor, C.W., Takos, A.T., Tuller, R., Williams, J.K., Williams, M.A. (2004). Bringing dinosaur science to the Junior Girl Scouts through a college service learning project. *Journal of Science Education and Technology*, *13*(4): 523-531. Undergraduate student co-authors.

<u>Guertin, L.A.</u>, Rufo, J.L. (2004). A positive science and technology experience for Junior Girl Scouts through a college service learning project. *Journal of Women and Minorities in Science and Engineering*, *10*(1):79-88. Undergraduate student co-author.

<u>Guertin, L.A.</u>, Nguyen, C. (2003). Combining a historical geology project with a campus student organization's fundraising efforts. *Journal of Geoscience Education*, *51*(4): 378-380. Undergraduate student co-author.

<u>Guertin, L.A.</u> (2003). News updates on handheld technology in introductory-level courses. *The Successful Professor*, 2(3), p. 10-11.

Cunningham, K.J., Locker, S.D., Hine, A.C., Bukry, D., Barron, J.A., <u>Guertin, L.A.</u> (2003). Interplay of Late Cenozoic siliciclastic supply and carbonate response on the southeast Florida platform. *Journal of Sedimentary Research*, *73*: 31-46.

<u>Guertin, L.A.</u> (2001, November 05). Enhancing academic advising with a monthly newsletter. *The Mentor: An Academic Advising Journal, 3* (http://dus.psu.edu/mentor/old/articles/011105lg.htm).

<u>Guertin, L.A.</u> (2000). Using logic problems in introductory-level geoscience courses to develop critical reasoning and basic quantitative skills. *Journal of Geoscience Education, 48*: 423-427.

<u>Guertin, L.A.</u>, Missimer, T.M., McNeill, D.F., Cunningham, K.J. (2000). *Hiatal duration of correlative sequence boundaries from Oligocene-Pliocene mixed carbonate/siliciclastic sediments of the south Florida Platform.* Sedimentary Geology, v. 134/1-2, p. 1-26.

<u>Guertin, L.A.</u>, McNeill, D.F., Lidz, B.H., Cunningham, K.J. (1999). *Chronologic model and transgressive-regressive signatures in the late Neogene siliciclastic foundation (Long Key Formation) of the Florida Keys.* Journal of Sedimentary Research, v. 69, p. 653-666.

Cunningham, K.J., McNeill, D.F., <u>Guertin, L.A.</u>, Scott, T.M., Ciesielski, P.F., de Verteuil, L. (1998). *A new Tertiary stratigraphy for the Florida Keys and southern peninsula of Florida*. Geological Society of America Bulletin, v. 110, p. 231-258.

Books, Book Chapters and Reviewed Book Contributions

<u>Guertin, L.A.</u> (2018). Social media hashtags and campaigns showcasing female geoscientist selfies and stories. In B. Johnson (Ed.), Women and Geology: Who Are We, Where Have We Come From, and Where Are We Going?: Geological Society of America Memoir 214, p. 87–94, https://doi.org/10.1130/2018.1214(09).

<u>Guertin, L.A.</u>, Clements, N. (2018). *Starting the research process with information literacy in introductory-level Earth science courses*. In: N. Hensel (Ed.), Course-Based Undergraduate Research – Educational Equity and High-Impact Practice. Virginia: Stylus Publishing, 25-34.

Committee for Convocation on Integrating Discovery-Based Research into the Undergraduate Curriculum (<u>Guertin</u> and 11 others), Division on Earth and Life Studies, Division of Behavioral and Social Sciences and Education, and the National Academies of Sciences, Engineering, and Medicine. (2015). *Integrating Discovery-Based Research into the Undergraduate Curriculum: Report of a Convocation*. Washington DC: National Academies Press. http://www.nap.edu/catalog/21851

<u>Guertin, L.A.</u> (2015). Undergraduate research as a teaching practice in the first two years of university coursework. In: S. Brown (Ed.), Learning, Teaching and Assessment in Higher Education – Global Perspectives. United Kingdom: Macmillan Publishers Limited, 40-41.

<u>Guertin, L.A.</u> (2014). *Introducing university students to authentic, hands-on undergraduate geoscience research in entry-level coursework*. In: V. Tong (Ed.), Geoscience Research and Education: Teaching at Universities. Netherlands: Springer, 215-221.

Lee, T.-K., <u>Guertin, L.A.</u> (2012). *Building an educational game with the Google Earth Application Program Interface to enhance geographic literacy*. In: S. Whitmeyer, J. Bailey, D. De Paor, T. Ornduff (Eds.), Geological Society of America Special Paper 492: Google Earth, Virtual Globes, and Virtual Visualizations: Modern Approaches to Geoscience Inquiry and Research. Colorado: Geological Society of America, 395-402.

<u>Guertin, L.A.</u>, Cerveny, N. (2012). *Undergraduate research and the two-year college*. In: J. Kinkead & L. Blockus (Eds.), Undergraduate Research Offices and Programs: Models and Practices. DC: Council on Undergraduate Research, 165-180.

<u>Guertin, L.A.</u> (2012). *Utilizing existing gigapixel panoramas for virtual fieldtrips*. In: R.K. Morgan & K.T. Olivares (Eds.), Quick Hits for Teaching with Technology. In: Indiana University Press, 43-44.

<u>Guertin, L.A.</u> (2009). *Using Just-in-Time Teaching in the Geosciences*. In: S. Simkins & M.H. Maier (Eds.), Just-in-Time Teaching (JiTT) Across the Disciplines, Across the Academy. VA: Stylus Publishing, LLC, 101-116.

<u>Guertin, L.A.</u>, Esparragoza, I.E. (2009). *Building skills, connections, and a culture of research with freshman and sophomore students*. In: M.K. Boyd & J.L. Wesemann (Eds.), Broadening Participation in Undergraduate Research: Fostering Excellence and Enhancing the Impact. DC: Council on Undergraduate Research, 89-100.

<u>Guertin, L.A.</u> (2007). *Preparing students for research at the introductory-level with technology*. In: K.K. Karukstis & T.E. Elgren (Eds.), Developing & Sustaining a Research-Supportive Curriculum: A Compendium of Successful Practices. United States: Council on Undergraduate Research, 112-113.

McNeill, D.F., Cunningham, K.J., <u>Guertin, L.A.</u>, Anselmetti, F.S. (2004). *Depositional themes of mixed carbonate-siliciclastics in the south Florida Neogene: application to ancient deposits*. In: G.M. Grammer, P.M. Harris & G.P. Eberli (Eds.), AAPG Memoir 80: Integration of Outcrop and Modern Analogs in Reservoir Modeling. United States: AAPG, 23-43.

Cunningham, K.J., Bukry, D., Sato, T., Barron, J.A., <u>Guertin L.A.</u>, Reese, R.S. (2001). *Sequence stratigraphy of a south Florida carbonate ramp and bounding siliciclastics (Late Miocene-Pliocene. in:* Missimer, T.M., Scott, T.M. (eds.), Geology and Hydrology of Lee County, Florida, Durward H. Boggess Memorial Symposium, Florida Geological Survey Special Publication No. 49, p. 35-66.

Cunningham, K.J., Locker, S.D., Hine, A.C., Bukry, D., Barron, J.A., <u>Guertin, L.A.</u> (2001). *Surface-geophysical characterization of ground-water systems of the Caloosahatchee River basin, southern Florida*. U.S. Geological Survey Water-Resources Investigations Report 01-4084, 76 pp.

McNeill, D.F., Cunningham, K.J., <u>Guertin, L.A.</u>, Hickey, D. (2000). *Geology of Everglades National Park: Fieldtrip Guidebook*. Miami Geological Society, 55 pages.

McNeill, D.F., Cunningham, K.J., <u>Guertin, L.A.</u>, Melim, L.A., Warzeski, E.R., Anselmetti, F.S., Ginsburg, R.N., Eberli, G.P., Swart, P.K. (1996). *Data Report: Tertiary-Quaternary cores from the Florida Keys & Everglades*. Miami Geological Society, 98 pages.

Pedagogical Portals, Encyclopedia/Wiki Entries & Newsletter Articles

Select contributions to the National Association of Geoscience Teachers (NAGT) Teach the Earth Portal – a resource that supports the teaching and learning of Earth sciences (reviewed)

- Rally Speeches for Coastal Optimism (co-authored with A. Jansen and J. Berkey) (2020), https://serc.carleton.edu/240117
- Student-Generated Earth Science Podcasts for a Community Partner (selected for the On the Cutting Edge Exemplary Teaching Collection) (2019), https://serc.carleton.edu/130575
- Examining Short-Term Tree Growth and Environmental Variables near Philadelphia, Pennsylvania (selected for the On the Cutting Edge Exemplary Teaching Collection) (2014), https://serc.carleton.edu/88732

New Wikipedia and Society of Exploration Geophysicists (SEG) Wiki pages

- <u>Guertin, L.</u> (2020, August 16). Lydia Jennings (new Wikipedia page for Native American female soil scientist, completed as part of the ACS Women Chemist Committee Edit-a-Thon). In *Wikipedia*. https://en.wikipedia.org/wiki/Lydia_Jennings
- <u>Guertin, L.</u> (2020, June 18). Karen Von Damm (new Wikipedia page for female oceanographer, completed as part of the 500 Women Scientists Wiki Scholar program). In *Wikipedia*. https://en.wikipedia.org/wiki/Karen_Von_Damm
- <u>Guertin, L.</u> (2020, May 30). Deborah Kelley (new Wikipedia page for female oceanographer, completed as part of the 500 Women Scientists Wiki Scholar program). In *Wikipedia*. https://en.wikipedia.org/wiki/Deborah_Kelley
- <u>Guertin, L.</u> (2020, May 19). Rana Fine (new Wikipedia page for female oceanographer, completed as part of the 500 Women Scientists Wiki Scholar program). In *Wikipedia*. https://en.wikipedia.org/wiki/Rana_Fine
- <u>Guertin, L.</u> (2015). Earth system science. In *Society of Exploration Geophysicists (SEG) Wiki*. Society of Exploration Geophysicists. http://wiki.seg.org/wiki/Earth_system_science

- <u>Guertin, L.</u> (2015). Layers of the Earth. In *Society of Exploration Geophysicists (SEG) Wiki*. Society of Exploration Geophysicists. http://wiki.seg.org/wiki/Layers_of_the_Earth
- <u>Guertin, L.</u> (2015). Water cycle. In *Society of Exploration Geophysicists (SEG) Wiki*. Society of Exploration Geophysicists. http://wiki.seg.org/wiki/Water_cycle

Newsletter articles

- <u>Guertin, L.</u> (2020). United Nations celebrations kicking off in 2021. *Bulletin of the Eastern* Section of the National Association of Geoscience Teachers, 70(4): 7.
- <u>Guertin, L.</u>, Briseño, I. (2020). A resource for exploring the power of connections for the UN Ocean Decade with ArcGIS StoryMaps. *Bulletin of the Eastern Section of the National Association of Geoscience Teachers*, 70(4): 8. Undergraduate student co-author.
- <u>Guertin, L.</u>, Barber, D. (2020, February). Listen to This: Science Communications Through Podcasting. *The Connection: NCSE Essay for the National Council for Science and the Environment*. https://www.ncseglobal.org/ncse-essays/listen-science-communications-through-podcasting Undergraduate student co-author.
- <u>Guertin, L.</u>, Smith, J. (2016, March). AGU's Virtual Poster Showcase a faculty/student experience. *Foundations: Newsletter of the Geo2YC Division of the National Association of Geoscience Teachers*, 5(1): 2-3. Undergraduate student co-author.
- <u>Guertin, L.</u> (2016). Ice and Snow: Did glaciers shape Tyler's landscape? Tyler Topics (newsletter of Tyler Arboretum). Tyler Arboretum, Media, PA.
- <u>Guertin, L.</u> (2016). Tyler's landscape: Geology of Tyler. Tyler Topics (newsletter of Tyler Arboretum). Tyler Arboretum, Media, PA.

Additional contributions (editorial review only)

• <u>Guertin, L.</u> (2020, June). International Year of Planet Health, 2020 [Perspective]. Proceedings of the Delaware County Institute of Science, 25(1): 2.

Undergraduate Research Mentorship & Internship Supervision

In my time at Penn State Brandywine (2001 thru Fall 2020), I have supervised 54 unique undergraduate students on 50 unique independent/group projects outside of course-based projects, with some students completing more than one project with me. I have mentored twenty-seven undergraduate students as lead/co-authors on publications (peer-reviewed journals to reviewed magazine articles for independent and course-based projects). Over 50 conference presentations have students as presenters and/or co-authors.

From May 2005 to July 2014, I served as the <u>honors thesis advisor</u> for 8 Cooper and Schreyer Honors College scholars at Penn State Brandywine/Penn State University Park in the disciplines of environmental inquiry, STS (science, technology & society), information science & technology, and civic engagement. Selected thesis titles include:

- Two Hundred Years of Discovery: Using Google Earth to Raise Awareness of Scientific Research at the Academy of Natural Sciences of Drexel University
- Message in a Bottle: Creating an Oceanographic Google Earth Tour Using Spreadsheet Mapper
- Living Walls: Varieties, Benefits and Global Distribution
- Educating Young Women About Water Science and Geoscience Careers

From January 2012 to May 2013, I supervised 7 students completing 8 <u>internships</u> under the Penn State Brandywine Laboratory for Civic Engagement (which I coordinated during this period). The internships focused on fair trade, communications, and the community.

Professional Activities

Mentoring for students and faculty outside of Penn State University

- Society of Women in Marine Science (SWMS) Mentoring Program, 2018-2019 (1 graduate student)
- American Geophysical Union (AGU) Science Communication Mentoring Program, December 2015-2018 (3 graduate students)
- American Geophysical Union (AGU) Undergraduate Mentoring Program, December 2015-2017 (1 student 2015, 1 new student 2016)
- Women in Geology Career Pathways Mentor, Geological Society of America, Denver, Colorado, September 25, 2016
- National Science Foundation (NSF) Geoscience Ideas Lab, Leesburg, Virginia, March 3-7, 2014
- Project Kaleidoscope (PKAL)'s Summer Leadership Institute for STEM faculty, Crestone, Colorado, July 17-22, 2012

Advisory board member for federally-funded grant programs

- NSF grant (##2013318), Promoting Geoscience Research, Education, Success, and Equity Through Mentoring (2010-present)
- NSF grant (#1431795), Improving the recruitment and persistence of women in the Geosciences: Exploring deliberate mentoring approaches aimed at undergraduate students - PROGRESS (PROmoting Geoscience Research Education & SuccesS) Program (2016-2018)
- Department of Education Title V Collaborative Grant, Research in Action (virtual lectures for undergraduate research training courses) for City University of New York/John Jay College (March 2015-September 2015, November 2015-December 2019)
- NSF grant (#1244881), Research-Informed Curricula: Creating and Evaluating a Cutting-Edge, Research-Based Physical Geology Textbook (2014-2016)
- NSF grant (#1122592), Supporting and Advancing Geoscience Education in Two-year Colleges through Workshops and Web Resources (SAGE 2YC) (2011-2016)

Editing and reviewing

- Council on Undergraduate Research (CUR) Editorial Board member for peer-reviewed journal CUR Quarterly (2014-2018)
- Content adviser/reviewer for WGBH Education/PBS LearningMedia "Bringing the Universe to America's Classroom (April-July 2017, March 2020- September 2020) https://whyy.pbslearningmedia.org/universe/
- Guest co-editor for three special issues of *The Earth Scientist*
 - 12 papers (Summer 2013); 9 papers (Summer 2011); 8 papers (Winter 2009)
- Reviewer of proposals submitted to federal programs
 - Single proposals submitted to NSF ATE (2020); NSF EAR GEO/EAR Earth Sciences (2015); NSF DUE Geo (2014)
 - Two proposals submitted to NASA's Global Climate Change Education (GCCE): Research Experiences, Teaching & Learning (2009)

- Participant on NSF Review Panels: ATE (2020), REU (2017), IUSE (2014, 2015), CCLI-A&I (2003, 2004, 2005), CCLI-EMD (2002), STEMTP (2001), Washington D.C. and virtual
- Panel reviewer of proposals submitted to Scholarship America, Inc.'s 2018 Goldwater Review Committee (2018)
- Reviewer of individual manuscripts submitted to journals
 - Current: The Journal of Marine Education (2020), Marine and Freshwater Research (2019), Journal of Geoscience Education (2000, 2004, 2005, 2016, 2019, 2020); CUR Quarterly (2013, 2014); The Earth Scientist (2013, 2014); The International Journal of Historical Archaeology (2011); Journal of Women and Minorities in Science and Engineering (2004, 2005)
- Reviewer of book chapters/proposals and miscellaneous
 - Reviewer of American Chemical Society Symposium Series Chapter (2017)
 - Reviewer of geoscience content in book *The Half-True Lies of Cricket Cohen* by Catherine Lloyd Burns (Macmillian Children's Publishing Group, 2016)
 - Geoscience educational video script for Mosa Mack Science (September 2015)
 - Book proposal submitted to National Science Teachers Association Press (2014)
 - Five book chapters for *Geoscience Research and Education* (Springer, 2012)
 - Two book chapters for *Google Earth, Virtual Globes, and Virtual Visualizations: Modern Approaches to Geoscience Inquiry and Research* (Geological Society of America, 2011)
 - PBS-NOVA/NSF-funded movie *The Botany of Desire* (2011)
 - Nature/science movie for Knight-Williams assessment group (2011)
 - Member of National Geographic Book Ideas Panel (2011-2016)
 - Book chapter for *Field Geology Education--Historical Perspectives and Modern Approaches* (Geological Society of America, 2008)
 - Chernicoff/Fox/Tanner's *Physical and Historical Geology* textbook (Houghton Mifflin, 2000)
 - Plummer/McGeary/Carlson's *Physical Geology* textbook (WCB/McGraw-Hill, 1998)
- Asked by department chair to write letter of support for dossier for tenure and promotion candidate at a university outside of Penn State (Summer 2016).
- External reviewer of faculty dossier for promotion from Lecturer to Senior Lecturer, for a university outside of Penn State (Summer 2016)
- Peer review of Penn State Brandywine tenure-line faculty going for promotion (2016, 2018, 2019, 2020); peer review of fixed-term faculty going for promotion (2017); peer review of part-time faculty (2016, 2019); provided support letter for faculty librarian up for review (2017, 2019)

Workshop organization/leadership/facilitation, panelist (select examples)

- For the American Geophysical Union (AGU)
 - <u>Organizer/presenter</u> for AGU Town Hall session (w/ J. Ryan and P. Asher) on "National Academy of Sciences Convocation Report: Integrating Discovery-Based Research Experiences into the Undergraduate STEM Curriculum." AGU Fall Meeting, San Francisco, CA, December 16, 2015. Abstract TH33E.
- For the Geological Society of America (GSA)

- <u>Co-leader</u> for GSA full-day workshop, "Teaching Controversial Issues I: Climate and Energy," and "Teaching Controversial Issues II: Evolution of Life and Earth," Denver, CO, Geological Society of America Annual Meeting, October 26, 2013
- <u>Invited panelist</u> for "Geoscience Career Exploration," Student and Early Career Professional Workshop, Geological Society of America Section Meeting (March 2016, 2017); Invited panelist for National Meeting (October 2020)
- <u>Invited panelist</u> for session "Mid-Career Faculty: Issues, Challenges, and Opportunities," Geological Society of America Annual Meeting, October 6, 2008

- For the Council on Undergraduate Research (CUR)

- <u>Facilitator</u> for OK-INBRE event (funded by NIH), CUR Workshop Program on Institutionalizing Undergraduate Research for State Systems and Consortia, April 10-12, 2015
- <u>Co-leader</u> for CUR workshop "Institutionalizing Undergraduate Research at the Community College at Monroe Community College," Rochester, NY, June 12-13, 2008
- <u>Co-leader & Presenter</u> for CUR half-day workshop at AGU Fall Meeting, "Getting Started in Undergraduate Research," San Francisco, CA (December 15, 2009; December 3, 2012; December 9, 2013); Presenter-only (December 15, 2014; December 14, 2015; December 12, 2016)
- <u>Co-leader</u> for CUR workshop at Geological Society of America Annual Meeting: "Establishing and Sustaining an Undergraduate Research Program: A Professional Development Workshop for New and Future Faculty," Charlotte, NC (November 3, 2012) and Portland, OR (October 17, 2009); also "Starting out in Undergraduate Research and Education: A Professional Development Workshop for Young Faculty," Houston, TX (October 4, 2008)
- <u>Co-leader</u> for CUR Workshop at Association of American Geographers conference in Seattle, WA (April 12, 2011) and Las Vegas, NV (March 23, 2009)
- <u>Co-leader</u> for CUR workshop "Developing Undergraduate Research at Community Colleges: Tapping the Potential of All Students,"
 - Johnson County Community College, Kansas City, KS, April 27-29, 2012
 - Jefferson State Community College, Birmingham, AL, March 4-6, 2011
 - Mesa Community College, Mesa, AZ, February 4-6, 2011
 - Malcolm X College, Chicago, IL, October 1-3, 2010
- Other programs
 - <u>Co-leader</u> for workshop on "Engaging Students in Scientific Research in Your Course." Earth Educators' Rendezvous 2015, Boulder, CO, July 16-17, 2015
 - <u>Invited panelist</u> for NAGT-SAGE 2YC webinar "The Spectrum of Student Research in Geoscience in Two-Year Colleges: Some Examples," Friday, October 24, 2014
 - <u>Invited speaker</u> at PKAL/CCIC workshop at Yale University, "Building a Connecticut College and University STEM Network: Supporting Pedagogies of Engagement," October 24, 2008
 - <u>Facilitator/Invited speaker</u> for PKAL/MnSCU workshop at Marshall College, "Keeping Students Engaged in STEM," April 25-26, 2008
 - <u>Co-leader</u> for workshop "Planning for the Future of Geo-cybereducation," Washington DC, funded by the National Science Foundation, January 6-8, 2010
 - <u>Local host</u> for CUR-NSF workshop at PSU Brandywine, "Institutionalizing Undergraduate Research," September 28-30, 2007
 - <u>Facilitator</u> for CUR/NCIA NSF-ATE Conversation on Undergraduate Research with Community College Students, Redlands Community College, El Reno, OK, June 5-6, 2007

• <u>Workshop team leader</u> for Project Kaleidoscope 2002 Summer Institute, "Advising and Mentoring Students for the Future" in session "Strengthening Undergraduate Earth & Planetary Science Programs" (2002)

Conference organization/leadership

- <u>Session co-organizer and primary chair</u>, Imagining Ocean Science: Education and Outreach Using Visualization, Storytelling, and the Arts (2 eLightning sessions, 1 poster session), Ocean Sciences Meeting 2020, February 17, 2020.
- <u>Session co-organizer and co-chair</u>, Narrative as Pedagogy: Using Science Storytelling in Earth and Space Science Teaching (oral and poster sessions), American Geophysical Union Fall 2018 Meeting, December 14, 2018.
- <u>Session organizer and co-chair</u>, Implementing Discovery-Based Research Experiences in Undergraduate Geoscience Courses and Curricula, Geological Society of America Fall 2016 Meeting, September 28, 2016.
- <u>Session organizer and co-chair</u>, Connecting K-12 and Higher Education: What Teachers Need, What Faculty Can Offer, Geological Society of America Northeast Section 2016 Meeting, March 21, 2016.
- <u>Session organizer and co-chair</u>, Research on Teaching and Student Learning in the K-12 Earth Science Classroom, Geological Society of America Fall 2015 Meeting, November 3, 2015.
- <u>Session co-organizer and co-chair</u>, Audio for Earth and Space Science Education and Outreach (poster session), AGU Fall 2014 Meeting, December 16, 2014
- <u>Session co-organizer and chair</u>, Geoscience Education (oral session), Northeast Section of the Geological Society of America Spring Meeting, March 23, 2014
- <u>Session co-organizer and co-chair</u>, Undergraduate Geoscience Research and Outreach (poster and virtual poster sessions), AGU Fall 2013 Meeting, December 11, 2013
- <u>Session co-organizer and co-chair</u>, Models of Successful Undergraduate Research Programs in the Earth Sciences, AGU Fall 2013 meeting, December 10, 2013
- <u>Session co-organizer and co-chair</u>, Changes in the Undergraduate Research Experience Over Time: Perspectives from Individual Mentors, Departments, and Institutions, GSA Fall 2013 Meeting, October 28, 2013
- <u>Session co-organizer and co-chair</u>, Undergraduate Geoscience Research Highlights, AGU Fall 2012 Meeting, December 4, 2012
- <u>Session co-organizer and co-chair</u>, Teaching Controversy in the K-16 Earth Science Classroom, GSA Fall 2012 Meeting, November 4, 2012
- <u>Session co-organizer and co-chair</u>, Identifying and Addressing K-16 Student Misconceptions in the Earth Science Classroom, GSA Fall 2011 Meeting, October 9, 2011
- <u>Session co-organizer and co-chair</u>, Faculty and Student Perspectives on Undergraduate Research: Models, Challenges, and Best Practices, Northeast/North-Central GSA Spring 2011 Meeting, March 20, 2011
- <u>Session co-organizer and co-chair</u>, Teaching and Research Challenges and Successes for Solitary Geologists in Academia, GSA Fall 2009 Meeting
- <u>Session co-organizer and co-chair</u>, Innovative Teacher Training Programs in Earth Science, AGU Fall 2007 Meeting
- <u>Session organizer and co-chair</u>, Early Undergraduate Research Experiences, GSA Fall 2007 Meeting

- <u>Session co-organizer and co-chair</u>, Effective Online Strategies for Teaching Geoscience at a Distance, GSA Fall 2006 Meeting
- <u>Session co-chair</u>, REU at 25: Its Impact on Undergraduate Education, GSA Fall 2005 Meeting
- Session co-chair, Geoscience Education Oral Session, GSA Fall 2004 Meeting
- <u>Session co-organizer and co-chair</u>, Field and Research Experiences for Students at Two-Year Colleges, GSA Annual Meeting 2003
- <u>Session organizer and co-chair</u>, Educational Issues in Teaching and Research at Two-Year Colleges, GSA Annual Meeting 2002
- <u>Session organizer and moderator</u> for Council on Undergraduate Research's 2002 National Conference, "Research at Two-Year Campuses." (2002)
- Session Chair, Geoscience Education Poster Session, AGU Spring 2000 Meeting

Professional Workshops/Short Courses (select examples, as a participant)

- 500 Women Scientists Wiki Scholar Program (May-June 2020)
- NASA ARSET (Applied Remote Sensing Training) An Inside Look at how NASA Measures Air Pollution, online, May 26 & 28, 2020
- Service Learning in Undergraduate Geosciences (National Academies of Sciences, Engineering and Medicine), Washington DC, April 20-21, 2016
- Participated in the 1st and 2nd Summit on the Future of Undergraduate Geoscience Education (sponsored by the National Science Foundation), Austin, TX, January 8-10, 2016, January 10-12, 2014
- AGU Heads and Chairs Workshop, American Geophysical Union Fall Meeting 2015, San Francisco, CA, December 14, 2015
- Participated in ScienceOnline conferences: Together (Raleigh, NC, February 26-March 1, 2014); Oceans (Miami, FL, October 11-13, 2013); Climate (Washington, DC, August 15-17, 2013)
 - Ocean science in sixty seconds or less, ScienceOnline Oceans, Miami, FL, October 11, 2013
- Windows of Opportunity for Undergraduate Research Program Directors, led by the Council on Undergraduate Research, Orange, CA, June 22-23, 2013
- AGU URECAS (Unique Research Experiences for Two-Year College Faculty and Students), Washington DC, July 11-13, 2012
- Gateways to Best Practices for Undergraduate Research Program Directors, led by the Council on Undergraduate Research, St. Louis, MO, June 14-16, 2011
- The Fine International Conference on Gigapixel Imaging for Science, Carnegie Mellon University, Pittsburgh, PA, November 11-13, 2010
- "Geology of Coastal Ecosystems Workshop," sponsored by the National Park Service, USGS, and the Geological Society of America, Ocean City, MD (1999)
- "April Dialogue Opportunities and Issues in Research and Education," sponsored by the Council on Undergraduate Research, National Science Foundation (1999)
- "Sequence Stratigraphy of Prograding Complexes" short course, CSPG/SEPM Joint Convention, Calgary, Alberta, Canada, by John Armentrout (1997)
- "Sequence Stratigraphy and Sedimentology of Reef and Carbonate Platforms" short course, Univ. of Miami, by Wolfgang Schlager and Gregor Eberli (1994)
- Pedagogical & Professional Development (select examples)

I have attended educational short courses/workshops through professional organizations (in-person and online) and annual conferences since 1994. Listed here are a sample listing of workshops from 2011:

- National Association of Geoscience Teachers (NAGT) webinars: Developing a Sense of Place During Distance Learning (November 17, 2020); Science Communication for Social Justice (August 27, 2020)
- Conferences focused on podcasting: Podcast Movement (August 2019); Sound Education [podcasting in higher education] (October 2019)
- Scicomm essentials for successful storytelling, American Geophysical Union (AGU) Sharing Science Network (online, March 27, 2018)
- Documenting student success through ePortfolios, AGI/AGU Heads and Chairs webinar (online, March 23, 2018)
- Science storytelling in multimedia, American Geophysical Union (AGU) Communications Workshop (New Orleans, December 10, 2017)
- Sustainability Competencies, Sustainability Curriculum Consortium (online, October 25, 2017)
- Sustainability Curriculum Consortium Faculty Conference 2017, Sustainability Curriculum Consortium (Philadelphia, June 26-27, 2017)
- Teaching About Natural Hazards and Risk, InTeGrate webinar from SERC (online, August 31, 2016)
- Completed The Pennsylvania State University online course "OL 4000: Effective Online Course Design" (January-February 2016)
- Tackling the Gender Gap in Wikipedia Through Course Assignments, webinar presented by the Wiki Education Foundation (online, April 30, 2015)
- Dynamic Mars: A Virtual, Interactive Professional Opportunity for College and University Faculty, online by NASA (January 13-22, 2015)
- Attended Undergraduate Research in Earth Science Classes: Engaging Students in the First Two Years (NAGT/SERC/On The Cutting Edge – Professional Development for Geoscience Faculty), Bozeman, MT (August 10-13, 2014)
- Incorporating Sustainability Into the Curriculum Webinar, presented by AASHE (online, May 29, 2013)
- Geophotography Webinar Series (NAGT/SERC/On The Cutting Edge Professional Development for Geoscience Faculty, online series, February-April 2013)
- Smithsonian Tree Banding Project: "Climate, Classrooms and Trees," presented by SHOUT Smithsonian Education (online, January 26, 2011)

Field seminars and programs

- OCEANDOTCOMM, by the Louisiana Universities Marine Consortium (LUMCON) (Louisiana, March 15-20, 2018)
- NOAA Teacher at Sea, a hydrographic survey on the NOAA Ship *Thomas Jefferson* (North Atlantic Ocean, September 2014)
- Walking Tour of the Downtown Raleigh Stormwater Tunnels, led by Scott Huler at the ScienceOnline Conference (North Carolina, 2014)
- Geological Society of America Penrose/American Geophysical Union Chapman conference, Coastal Processes and Environments Under Sea-Level Rise and Changing Climate: Science to Inform Management (Galveston, TX, April 14-19, 2013)
- History of Paleontology at the Florissant Fossil Beds National Monument, led by the National Park Service, Geological Society of America Annual Conference (Colorado, 2013)

- Shark tagging research with the University of Miami's RJ Dunlap Marine Conservation Program (Florida, 2013)
- Marcellus Shale Drilling Site and the Grand Canyon of Pennsylvania, led by the PA Department of Conservation and Natural Resources and the Eastern Section of the National Association of Geoscience Teachers (Pennsylvania, 2013)
- Exploring Iceland's Physical Geography and Geomorphology, Chautauqua Program led by Jim Wysong (Iceland, 2013)
- Geological Society of America Penrose conference, Google Earth: Visualizing the Possibilities for Geoscience Education and Research (Mountain View, CA, January 4-8, 2011)
- "Stewardship of Public Lands," led by the American Democracy Project/AASCU (Yellowstone National Park, WY, 2007)
- Dinosaur Provincial Park, led by D. Eberth, GeoSciEd IV meeting (Calgary, 2003)
- Folly Beach, South Carolina: Tomorrow's Coastal Problems, Today, led by G. Lennon, Geological Society of America Southeastern Section Meeting (Charleston, 2000)
- Geology and Geomorphology of Stone Mountain, Georgia, led by J.A. Whitney, J. Dennison, and P. Gore, Geological Society of America Southeastern Section Meeting (Athens, 1999)
- Jurassic Morrison Dinosaurs of Utah and Colorado, led by D.D. Gillette, AAPG Annual Meeting (Salt Lake City, 1998)
- Miocene Phosphate Deposits of Florida, led by J.S. Compton, 1st SEPM Congress on Sedimentary Geology "Linked Earth Systems" (St. Petersburg Beach, 1995)
- Carbonate Sedimentology of Great Bahama Bank, led by R.N. Ginsburg (Bahamas, 1993)
- Participant in the Northern Baja Global Positioning System (GPS) Experiment, Baja California, Mexico, through the Jet Propulsion Laboratory (JPL) in Pasadena, California (Spring 1993)
- Summer intern in nautical and aeronautical charting and surveying, GPS field experience, Field Photogrammetry Unit, National Ocean Service, NOAA (Summers 1991, 1992)

Penn State Committees

• <u>Campus level, Academic Affairs</u>: College representative for College of Earth and Mineral Science (2001-present); Campus coordinator for the Environmental Inquiry Minor (2010-present); Campus coordinator for the Earth Sustainability Certificate (2018-present); Campus coordinator of the Civic and Community Engagement Minor (2005-2009, 2011-2013)

Additional campus committee work includes: Campus Faculty Senate (Chair 2017-2018, Chair-Elect 2016-2017, Past Chair 2018-2020 (served extra term as past chair due to faculty retirement)); Campus Promotion & Tenure Committee (2008-2010, 2016-2018); Campus Strategic Planning Committee (2014-2018, Co-Chair 2016-2017); Campus Faculty Executive Committee Member (2002-2004, 2009-2011, 2016-2010); Member and Chair of Campus Curricular Affairs (2015-2016); Women's Commission (2018-2019); Sustainovation Task Force (co-chair, 2017-2020); Coordinator for the Laboratory for Civic Engagement (2011-2013); STEM Options Committee (2016-2020, Chair 2017-2020); Blue and White Ball Committee (2015-2016); Campus Undergraduate Research Committee (2009-2013, 2014-2015, Chair 2014-2015); Honors program coordinator for campus (2006-2011); Campus Schreyer Honors Coordinator (2009-2012); Honors Faculty Committee (2003-2012); Campus Green/Sustainability Committee (co-chair, 2009-2010, member 2017-present); Campus Common Read Committee (2011-2012); Capital Campaign Committee (2009); Faculty search committees (DAA, tenure-line, instructor, librarian; Chair of chemistry search in 2017); Additional search committees (Registrar, Director of Center for Ethics and Civic Engagement); Faculty Awards Committee (2013-2016); Faculty Admissions Advisory Committee (2007-2008); Technology Advisory Committee (2003-2009); Online Teaching and Course Task Force (2015-2016); EURECA (campus student research symposium, Spring 2003-Spring 2005, 2008-2009, 2013); Organizer of Clarence D. Bell Public Service Lecture Series (4 lectures in each 2006, 2007, 2008); Organizer of Voices of Innovation Seminar Series (3-4 lectures in Fall 2008, 2009, 2010); Faculty Advisory Group for Student Life (2002-2004)

- <u>Campus level, Service/Volunteer</u>: Faculty Adviser for Sustainovation Club (2017-2020); Faculty Adviser for We Are Penn State MADE (Making A Difference Everyday) (2004-2007, 2011-2013); Co-chair of Knittany Lion Needleworks (2003-2013); Overseas Coupon Program campus coordinator (2007-2012); Faculty Adviser for THON, Penn State Dance Marathon (2003-2013); TEDxPSU Watch Party co-organizer (Fall 2010, Fall 2011); 40th Anniversary Campus Committee and Chair of 40 Acts of Kindness Sub-committee (2006-2008); Take Our Daughters and Sons to Work Day Working Group (2004); Earth Day Working Group (2004)
- <u>College level</u>: University College P&T Committee member (2018-2019); Served on P&T committee for candidates at the Penn State DuBois campus (2 for 2009, 2 for 2010, 3 for 2012, 1 for 2016, 1 for 2017, 1 for 2019) and one candidate at Beaver (2011, 2012) and one for Schuylkill (2017), one for Lehigh Valley (2019); performed a pre-promotion review for faculty seeking promotion to full professor (1 faculty in 2020; 2 faculty in 2017); Review of transfer syllabi for the College of Earth and Mineral Sciences (2016-present); Royer Center's Ubiquitous Computing Committee (2003-2004); member of Technical Review Committee, First Undergraduate Research Poster Session/Division of Science/Commonwealth College/Penn State University (2002)
- <u>University level</u>: Co-PI of PepsiCo Mini-Grant through the Penn State Sustainability Institute (2017-2021); Review Committee for The President's Award for Excellence in Academic Integration Award (2021); Stewarding Our Planet's Resources Steering Committee for Strategic Planning (2020-present); Review Committee for Teaching with Technology Award (2019-2020); Reimagining Information Technology (2019); ScholarSphere Users Group/University Libraries (2013-2015); IT Strategic Planning Committee (2012-2013); Co-chair of intercollege minor on civic and community engagement (2006-2010); Laboratory for Public Scholarship and Democracy Advisory Council (2006-2007); Faculty Advisory Committee for the Schreyer Honors College (Fall 2007-Spring 2012); Reader of essays for prospective Schreyer Honors Scholars (Fall 2006-Spring 2009)

Leadership Roles on Local/National Committees

- American Geophysical Union (AGU)
 - AGU Meetings Committee (April 2015 December 2018, March 2020-present)
 - Chair/member of Virtual Engagement and Sustainable Meetings Advisory Group (March-December, 2020)
 - AGU Talent Pool Strategy Task Force (2017-2018)
 - o Educational consultant, AGU Affiliation and Engagement Task Force (April-May 2016)
 - Member of search committee for Fall Meeting Chair (Fall 2016, Spring 2019)

- Council on Undergraduate Research (CUR)
 - Councilor for Geosciences Division (elected position, 2003-2018)
 - Chair of CUR Geoscience Division (2008-2010)
 - Co-founder and member of GeoCUR Undergraduate Research Mentor Award Committee (2011-2017)
 - Co-founder and member of GeoCUR Award for Excellence in Student Research (2013-2018)
 - Member of search committee for editor of CUR Quarterly (Fall 2013)
- National Association of Geoscience Teachers (NAGT)
 - Member of NAGT Teach the Earth Committee (2020-2023)
 - Member of search committee for editor of publication *In The Trenches* (July-November 2016)
 - Councilor-at-large, National Association of Geoscience Teachers (2006-2009)
- Volunteer Coordinator for combined Northeast/Southeast Geological Society of America Section Meeting (March 13-16, 2010)
- Member of National Science Teacher Association (NSTA)'s Multicultural/Equity Science Education Committee (2003-2006)
- Pennsylvania Earth Science Teachers Association (PAESTA)
 - Co-founder of the organization (2010)
 - President, 2 terms (2012-2013, 2014-2015)
 - o President-Elect, 2 terms (2011-2012, 2013-2014)
 - Executive Committee member (2011-2016)
 - Newsletter editor (2012-2017), Elementary edition editor (2013-2016)
- Delaware County Institute of Science (DCIS)
 - Lecture Series coordinator (2020-2021)
 - Board of Editors for the *Proceedings of the Delaware County Institute of Science* (November 2017-2020)
- Board of Trustees for Tyler Arboretum, Media, PA (2011-2020)
 - Chair of Education Committee (2012-2020); Member of Education Committee (2012-2020)
 - Member of search committee for Director of Public Programs position (2013)
 - Secretary and Member of Executive Committee (2014-2020)
 - Member of Strategic Planning Committee (2015-2018)
 - Member of Technology Committee (2015-2016)
 - Member of Succession Planning/Executive Director Search (2014-2016, 2018-2019)
- 500 Women Scientists Philly Pod
 - Bi-Weekly newsletter co-editor (2019-2020)
 - Social media manager (2020-present)

Memberships

- National Association of Geoscience Teachers (NAGT) (1993-present)
- Geological Society of America (GSA) (1993-present)
 - Campus representative (2002-present)
- American Geophysical Union (AGU) (1994-present)
- Council on Undergraduate Research (CUR) (1994-present)
 - Campus representative (2001-present)

- Earth Science Women's Network (2015-present)
- 500 Women Scientists (2017-present); 500 WS Philly Pod (2017-present)
- National Marine Educators Association (2013-present)
- Society of Women in Marine Science (2018-present)
- The Oceanography Society (2020-present)
- Sigma Xi (1996-present)
- Pennsylvania Academy of Science (PAS) (2005-2006, 2008-present)
- Pennsylvania Earth Science Teachers Association (PAESTA) (2010-present)
- Association of Women Geoscientists (2012-present)
- International Association for Geoscience Diversity (2013-present)
- American Association for the Advancement of Science (2017-present)
- Pennsylvania Geographical Society (PGS) (became lifetime member in 2008)
- National Science Teachers Association (NSTA) (1998-2018)
- National Earth Science Teachers Association (NESTA) (2008-2019)

Abstracts (conferences/reviewed/published)

Conferences where the abstracts are reviewed and published are listed for recent years (2006-present). Additional conferences have included the Pennsylvania Academy of Sciences, Northeastern/Southeastern Geological Society of America Meeting, GeoSciEdIV (International Conference on Earth Science Education), American Association of Petroleum Geologists Annual Meeting, Florida Academy of Sciences

<u>Guertin, L.</u>, Theveny, K., Barber, D. (2020). Keeping the science conversations going with an arboretum-university educational partnership via virtual podcast discussions. Abstract SY041-10, presented at the 2020 Fall Meeting AGU, online, 11 Dec.

Briseño, I., <u>Guertin, L.</u> (2020). Educating with ArcGIS StoryMaps to promote ocean literacy and to highlight connections between generations, cultures, and disciplines. Abstract SY008-10, presented at the 2020 Fall Meeting AGU, online, 7 Dec. Student presenter.

<u>Guertin, L.</u> (2020). Capturing and communicating stories of adaptation and resilience in coastal Louisiana through science art. Abstracts with Programs (Geological Society of America), v. 52, n. 6, doi: 10.1130/abs/2020AM-358169

<u>Guertin, L.</u> (2020). Countering stereotypes and showcasing diversity: students share preferred pathway to broadening their views of scientists. Abstracts with Programs (Geological Society of America), v. 52, n. 6, doi: 10.1130/abs/2020AM-358314

<u>Guertin, L.</u>, Berkey, J., Jansen, A. (2020). Student-produced coastal optimism rally speeches: going beyond the doom and gloom for stories of resilience and hope. Abstract ED11B-08, presented at the 2020 Ocean Sciences Meeting, San Diego, CA, 17 Feb.

<u>Guertin, L.</u> (2020). Stitching hope for the Louisiana coast: science storytelling with quilts. Abstract ED24B-3606, presented at the 2020 Ocean Sciences Meeting, San Diego, CA, 18 Feb.

Losco, R., <u>Guertin, L</u>., Kraal, E. (2019). Engaging students in introductory-level Earth science courses through Student Produced Audio Narratives (SPAN). Abstracts with Programs (Geological Society of America), v. 51, n. 5, doi: 10.1130/abs/2019AM-337459

Kraal, E., <u>Guertin, L.</u>, Sirrakos, G., Epstein, A. (2019). Student Produced Audio Narratives. 2019 STEM For All Video Showcase, by National Science Foundation. May 13-20, 2019. Available at: https://stemforall2019.videohall.com/presentations/1513

<u>Guertin, L.A.</u>, Jansen, A., Berkey, J. (2018). Attitudinal changes towards the United Nations Sustainable Development Goals (SDGs) through student-generated sustainability stories anchored in science and information literacies. Abstract ED53F-0765, presented at the 2018 Fall Meeting AGU, Washington DC, 14 Dec.

<u>Guertin, L.A.</u> (2018). Quilting stories of coastal optimism – but do they provide hope for the Louisiana coast? Abstract ED43C-1260, presented at the 2018 Fall Meeting AGU, Washington DC, 13 Dec.

<u>Guertin, L.A.</u> (2017). Utilizing crochet to showcase temporal patterns in temperature records from one location to spark a climate conversation. Abstract PA43A-0315, presented at the 2017 Fall Meeting, AGU, New Orleans, LA, 14 Dec.

<u>Guertin, L.A.</u>, Aitala, E. (2017). Making climate and energy educational resources accessible through the Pennsylvania Earth Science Teachers Association (PAESTA). Abstracts with Programs (Geological Society of America), v. 49, n. 2, doi: 10.1130/abs/2017NE-291536

<u>Guertin, L.A.</u> (2017). Representing women geoscientists with selfies and stories. Abstracts with Programs (Geological Society of America), v. 49, n. 2, doi: 10.1130/abs/2017NE-291595

<u>Guertin, L.A.</u> (2016). It starts with a hashtag... the #365scienceselfies Project. Abstract PA31C-2211, presented at the 2016 Fall Meeting AGU, San Francisco, CA, 14 Dec.

<u>Guertin, L.A.</u>, Farley, I., Geary, A. (2016). Developing student science and information literacy through contributions to the Society of Exploration Geophysicists (SEG) Wiki. Abstract ED21A-0764, presented at the 2016 Fall Meeting AGU, San Francisco, CA, 13 Dec.

Bralower, T.J., <u>Guertin, L.A.</u> (2016). New sustainability programs and their impact at a large public state university. Abstract ED13E-0952, presented at the 2016 Fall Meeting AGU, San Francisco, CA, 12 Dec.

<u>Guertin, L.</u> (2016). Who am I? Just a female scientist taking #365scienceselfies. Abstracts with Programs (Geological Society of America), v. 48, n. 7, doi: 10.1130/abs/2016AM-276632 **Invited presentation.**

Hand, B., <u>Guertin, L.</u>, Marquit, J. (2016). Penn State Brandywine Tree Removal Eco-Services Impact Survey. 92nd Annual Meeting of the Pennsylvania Academy of Science. Delaware Valley University, Doylestown, PA, April 3, 2016. Student presenter Hand.

<u>Guertin, L.</u>, Farley, I., Geary, A. (2016). The Society of Exploration Geophysicists (SEG) Wiki – A geoscience content resource for teachers and middle/high school students. Abstracts with Programs (Geological Society of America), v. 48, n., 2, doi: 10.1130/abs/2016NE-271828

Yeh, M.K.C., Toshtzar, A, <u>Guertin, L</u>., Yan, Y. (2016). Using spaced repetition and gamification to enhance K-12 student science literacy with on-demand mobile short reads. 2016 IEEE Frontiers in Education Conference (FIE), Erie, PA, p. 1-4. doi: 10.1109/FIE.2016.7757361

<u>Guertin, L.</u>, Tait, K. (2015). You Asked, We Answered! A podcasting series by scientists for K-12 teachers through the Pennsylvania Earth Science Teachers Association (PAESTA). Abstract ED53G-05, presented at the 2015 Fall Meeting AGU, San Francisco, CA, 18 Dec.

<u>Guertin, L.</u>, Ambos, E., Brenner, K., Asher, P., Ryan, J. (2015). Integrating discovery-based research experiences into the undergraduate STEM curriculum: A convocation report form the National Academies of Sciences, Engineering and Medicine. Abstract ED11A-0851, presented at the 2015 Fall Meeting AGU, San Francisco, CA, 14 Dec.

<u>Guertin, L.</u> (2015). Bringing the Google 80/20 Model to an introductory-level environmental course: a student opportunity for creativity, innovation, and investigation. Abstracts with Programs (Geological Society of America), v. 47, n. 7, p. 475. **Invited presentation.**

Clements, N., <u>Guertin, L.</u> (2015). Laying the foundation for information literacy in introductory-level Earth science courses. Abstracts with Programs (Geological Society of America), v. 47, n. 7, p. 475.

<u>Guertin, L.</u> (2014). Student contributions to citizen science programs as a foundation for independent and classroom-based undergraduate research in the Earth sciences. Abstract ED21D-3473, presented at the 2014 Fall Meeting AGU, San Francisco, CA, 15-19 Dec.

Bowen, K., <u>Guertin, L.</u> (2014). Using the citizen science Picture Post project as the foundation for campus environmental monitoring by undergraduate student researchers. Abstract ED53A-3464, presented at the 2014 Fall Meeting AGU, San Francisco, CA, 15-19 Dec.

<u>Guertin, L.</u> (2014). Helping students open doors to undergraduate research experiences upon transfer. Abstracts with Programs (Geological Society of America), v. 46, n. 6, p. 245.

Fox, L.K., <u>Guertin, L.</u> (2013). Faculty development workshops to support establishing and sustaining undergraduate research programs in the Earth sciences. Abstract ED23E-05, presented at 2013 Fall Meeting AGU, San Francisco, CA, 9-13 Dec.

<u>Guertin, L.</u> (2013). The Journeys of Dr. G: a blog designed for students to learn about the life of a faculty member in the Earth sciences. Abstract ED43D-0788, presented at 2013 Fall Meeting AGU, San Francisco, CA, 9-13 Dec.

<u>Guertin, L.A.</u>, Furman, T., Mundry, S., Lewis-King, T., McDonald, S. (2013). Teacher professional development through the Pennsylvania Earth Science Teachers Association (PAESTA). Abstracts with

Programs (Geological Society of America), v. 45, n. 7, p. 659.

<u>Guertin, L.A.</u> (2013). How new technologies advance mentoring practices with non-residential undergraduate researchers. Abstracts with Programs (Geological Society of America), v. 45, n. 7, p. 364.

Fox, L.K., <u>Guertin, L.A.</u>, Manley, P.L., Pollock, M. (2013). Undergraduate research as effective pedagogy supported by the geosciences division of the Council on Undergraduate Research (GeoCUR). Abstracts with Programs (Geological Society of America), v. 45, n. 7, p. 733.

Manley, P., <u>Guertin, L.A.</u>, Fox, L.K., Ambos, E. (2013). Undergraduate research as a teaching practice: Geosciences division of the Council on Undergraduate Research. Abstracts with Programs (Geological Society of America), v. 45, n. 7, p. 205.

McDonald, S., Bembenic, M., <u>Guertin, L.</u>, Licona, P., Preston, S., and Furman, T. (2013). Developing a Hypothetical Learning Progression for Plate Tectonics. Poster presented at the annual meeting of the National Association for Research on Science Teaching (NARST), April 5-9, Rio Grande, PR.

Fox, L., <u>Guertin, L.</u>, Manley, P., Fortner, S. (2012). The Geoscience Division of the Council on Undergraduate Research (GeoCUR): supporting faculty that mentor undergraduate researchers. Abstract ED51C-0902, presented at 2012 Fall meeting, AGU, San Francisco, CA, 3-7 Dec.

Dufoe, A., <u>Guertin, L.</u> (2012). Controversies in the Hydropshere: an iBook exploring current global water issues for middle school classrooms. Abstract ED23B-0758, presented at 2012 Fall Meeting, AGU, San Francisco, CA, 3-7 Dec.

<u>Guertin, L.</u> (2012). VoiceThread as a peer review and dissemination tool for undergraduate research. Abstract PA23B-07, presented at 2012 Fall Meeting AGU, San Francisco, CA, 3-7 Dec.

<u>Guertin, L.</u> (2012). Community-based research projects with podcasting in introductory-level geoscience courses. Abstracts with Programs (Geological Society of America), v. 44, n. 7, p. 611. **Invited presentation.**

<u>Guertin, L.</u> (2012). Introducing students to the controversies surrounding the ownership and sale of fossils. Abstracts with Programs (Geological Society of America), v. 44, n. 7, p. 45.

Pollock, M., <u>Guertin, L.</u> (2012). Enhancing undergraduate research with social media. Abstracts with Programs (Geological Society of America), v. 44, n. 7, p. 611.

van der Hoeven Kraft, K., <u>Guertin, L.A.</u>, Filson, R.H., Macdonald, H., McDaris, J. (2011). Issues, challenges, and opportunities in geoscience education and broadening participation in the geosciences at two-year colleges. Abstract ED11E-07, presented at 2011 Fall Meeting, AGU, San Francisco, CA, 5-9 Dec.

Baer, E., Macdonald, H., McDaris, J.R., Granshaw, F., Wenner, J.M., Hodder, J., van der Hoeven Kraft, K., Filson, R., <u>Guertin, L.A.</u>, Wiese, K. (2011). Professional development opportunities for two-year

college geoscience faculty: Issues, opportunities, and successes. Abstract ED42A-05, presented at 2011 Fall Meeting, AGU, San Francisco, CA, 5-9 Dec.

<u>Guertin, L.</u> (2011). Student-Generated Google Earth Course Portfolios in Earth Science Courses. Abstracts with Programs (Geological Society of America), v. 43, n. 5, p. 477.

<u>Guertin, L.</u>, Licona, P., Pickard, M. (2011). Middle and High School Teacher Misconceptions of Geologic Time. Abstracts with Programs (Geological Society of America), v. 43, n. 5, p. 67.

Pickard, M., Licona, P., <u>Guertin, L.</u> (2011). Upper Elementary through High School and Teacher Misconceptions of the Interior of the Earth. Abstracts with Programs (Geological Society of America), v. 43, n. 5, p. 66.

Licona, P., Pickard, M., <u>Guertin, L.</u> (2011) Upper Elementary through High School and Teacher Misconceptions of the Causes of the Breakup of Pangaea. Abstracts with Programs (Geological Society of America), v. 43, n. 5, p. 67.

Pickard, M., Furman, T., <u>Guertin, L.</u>, Bembenic, M.A., Endress, C.A., Neville, S. Hartwell, B.J. (2011). Using geoscience graduate students to develop and implement inquiry-based K-12 Earth Science lessons. Abstracts with Programs (Geological Society of America), v. 43, n. 1, p. 80.

Neville, S., <u>Guertin, L.</u> (2011). Sky in Google Earth as a tool for student inquiry and exploration. Abstracts with Programs (Geological Society of America), v. 43, n. 1, p. 79.

Neville, S., Mookerjee, L., <u>Guertin, L.</u> (2011). Uses of existing GigaPan images in the Earth and Space Science classroom. Abstracts with Programs (Geological Society of America), v. 43, n. 1, p. 79.

<u>Guertin, L.A.</u> (2011). Benefits and strategies for adding scientific audio news stories to the K-12 classroom. Abstracts with Programs (Geological Society of America), v. 43, n. 1, p. 79.

Macdonald, R.H., Filson, R.H., <u>Guertin, L.A.</u>, Van Der Hoeven Kraft, K. (2010). Results of a workshop on the role of two-year colleges in geoscience education and broadening participation in the geosciences. Abstracts with Programs (Geological Society of America), v. 42, n. 5, p. 156.

Bembenic, M., Endress, C., Hartwell, B., <u>Guertin, L.</u>, Furman, T. (2010). An adaptable unit for educating students about coal for today and tomorrow. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 96.

Bembenic, M., Hartwell, B., Endress, C., <u>Guertin, L.</u>, Furman, T. (2010). More than memorization: giving physical and geological meaning to the rock cycle. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 132.

Dorsch, A., Furman, T., <u>Guertin, L</u>. (2010). Inquiry-based activities for differentiated instruction on human-induced climate change. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 96.

Drozynski, D., Furman, T., Ellis, J., <u>Guertin, L.</u> (2010). Using student questions to guide Earth Science inquiry in middle school. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 131.

<u>Guertin, L.</u>, Neville, S. (2010). Enhancing middle and high school student understanding of Earth system science through a Google Earth QUEST. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 132.

<u>Guertin, L.</u>, Neville, S., Hartline, J. (2010). The benefits of utilizing Google Earth as an undergraduate research tool for non-science majors. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 75.

Hoffman, J., Vishio, N., Bembenic, M., <u>Guertin, L.</u>, Furman, T. (2010). Designing sustainable communities: an inquiry based approach to teaching Earth systems science. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 132.

Shafer, B., Endress, C., Furman, T., <u>Guertin, L.</u> (2010). Eliminating students' misconceptions of radioactive decay and radiometric dating through hands-on activities. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 131.

Tait, K., Pickard, M., <u>Guertin, L.</u>, Furman, T. (2010). Dispelling middle school misconceptions of Grand Canyon formation through hands-on activities. Abstracts with Programs (Geological Society of America), v. 42, n. 1, p. 131.

<u>Guertin, L.A.</u> (2009). Using an online photo-sharing tool (Flickr) to connect students during Earth Science Week. *EOS, Trans. AGU, 90*(52), Fall Meet. Suppl., Abstract ED14A-08.

Neville, S.E., <u>Guertin, L.A.</u> (2009). Using a Google Earth QUEST to improve Earth Science, reading, and geographic literacy. *EOS, Trans. AGU, 90*(52), Fall Meet. Suppl., Abstract ED53A-0533.

Endress, C., Bembenic, M.A., Hartwell, B.J., <u>Guertin, L.A.</u>, Furman, T. (2009). Utilizing graduate student teaching fellows to bring Big Ideas in a local context to middle and high school students. Abstracts with Programs (Geological Society of America), v. 41, n. 7, p. 713.

<u>Guertin, L.A.</u>, Neville, S.E. (2009). Adapting Google Lit Trips for the geosciences. Abstracts with Programs (Geological Society of America), v. 41, n. 7, p. 499.

<u>Guertin, L.A.</u> (2009). Broadening the definition of geosciences research to the introductory level. Abstracts with Programs (Geological Society of America), v. 41, n. 7, p. 537. **Invited presentation.**

<u>Guertin, L.A.</u> (2009). Cemeteries as sites of multidisciplinary research for undergraduate students. Association of American Geographers Annual Meeting, http://communicate.aag.org/eseries/aag_org/program/AbstractDetail.cfm?AbstractID=22756

<u>Guertin, L.A.</u>, Bodek, M.J. (2008). Student use and perceptions of handheld computers for geoscience fieldwork and in-class quizzing. Abstracts with Programs (Geological Society of America), v. 40. Invited speaker.

Narkiewicz, M.R., Charles, L., Klein, C., Furman, T., <u>Guertin, L.A.</u> (2008). Improving high school Earth science instruction through integrating an Earth systems science matrix. Abstracts with Programs (Geological Society of America), v. 40.

Nelson, W.R., Narkiewicz, M.R., Alexander, G.W., Furman, T., <u>Guertin, L.A.</u> (2008). Transforming Earth System Science Education (TESSE): the rewards and challenges associated with integrating graduate students into the classroom. Abstracts with Programs (Geological Society of America), v. 40.

Alexander, G.W., Narkiewicz, M.R., Nelson, W.R., Furman, T., <u>Guertin, L.A.</u> (2008). Online inquirybased Earth system science resource for engaging middle and high school students. Abstracts with Programs (Geological Society of America), v. 40.

<u>Guertin, L.A.</u>, Bodek, M.J. (2008). Utilizing enhanced podcasts and Google Earth to create Earth science virtual tours. Abstracts with Programs (Geological Society of America), v. 40.

Graham, K., Henderson, S., Bryce, J., Finkel, L., <u>Guertin, L.A.</u>, Varner, R., Johnson, J., Furman, T., Darwish, A., Porter, W. (2008). Enhancing middle and high school geoscience teacher preparation through research experience, foundational coursework, and classroom collaboration with university graduate students. Abstracts with Programs (Geological Society of America), v. 40.

Finkel, L., Varner, R., Froburg, E., Smith, M., Graham, K., Hale, S., <u>Laura, G.</u>, Brown, D., Bryce, J., Darwish, A., Furman, T., Johnson, J., Porter, W., Von Damm, K. (2007), Supporting inquiry-based Earth System Science instruction with middle and high school Earth Science teachers, *EOS*, *Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract ED44A-03. (*NOTE: my name was entered incorrectly on the abstract form, where my first name was placed where my last name should be)

Graham, K.J., Bryce, J.G., Brown, D., Darwish, A., Finkel, L., Froburg, E., Furman, T., <u>Guertin, L.</u>, Hale, S.R., Johnson, J., Porter, W., Smith, M., Varner, R., Von Damm, K. (2007), The transforming Earth System Science Education (TESSE) Program, *EOS, Trans. AGU, 88*(52), Fall Meet. Suppl., Abstract ED51A-0123.

Varner, R., Furman, T., Porter, W., Darwish, A., Graham, K., Bryce, J., Brown, D., Finkel, L., Froburg, E., <u>Guertin, L.</u>, Hale, S., Johnson, J., Von Damm, K. (2007), Providing authentic research experiences for pre-service teachers through UNH's Transforming Earth System Science Education (TESSE) Program, *EOS, Trans. AGU, 88*(52), Fall Meet. Suppl., Abstract ED51A-0124.

<u>Guertin, L.A.</u>, Ashbridge, S.E., Scholtz, L.A., 2007. *Cemeteries as sites for introductory-level Earth science research*. Abstracts with Programs (Geological Society of America), v. 39, n. 6, p. 247.

<u>Guertin, L.A.</u>, Bodek, M.J., 2007. *Questioning the student preparation, use of and desire for geoscience podcasts*. Abstracts with Programs (Geological Society of America), v. 39, n. 6, p. 549.

Didlake, T.J., <u>Guertin, L.A.</u>, 2006. *Comparison of modern anthropogenic and natural beach scallops in Ocean City, MD*. Abstracts with Programs (Geological Society of America), v. 38, n. 7, p. 352.

<u>Guertin, L.A.</u>, Furman, T., Bodek, M.J., Luck, A., 2006. *Adapting quantitative in-class exercises for online geoscience delivery*. Abstracts with Programs (Geological Society of America), v. 38, n. 7, p. 79.

Zappe, S., <u>Guertin, L.A.</u>, Kim, H., 2006. *Just-in-Time Teaching: A web-based method of integrating classroom assessment and instruction*. American Educational Research Association.

Presentations – academic conferences & webinars

Conferences where the abstracts are reviewed but not published are listed going back to 2011. Additional conferences have included the Lilly Conference on College and University Teaching, Annual Conference of the National Collegiate Honors Council, National Conference of the Council on Undergraduate Research, National Outreach Scholarship Conference, International Society for the Scholarship of Teaching and Learning, Annual Conference of the International Society for Exploring Teaching and Learning, Eastern Communication Association Annual Conference, National Conference on Geography Education

• *Of note:* Invited panelist for AGU-JpGU Great Debate: Geoscience and Society (joined by Naomi Oreskes, Yoshisuke Kumano, Peter Kelemen, and moderated by Denis-Didier Rousseau). American Geophysical Union Fall Meeting Union Session U24A, San Francisco, CA (December 13, 2016)

Sirrakos, G., Simmens, G., Kraal, E., Guertin, L., Epstein, A. (2020). Student produced audio narratives: an inclusive pedagogy. Kutztown University – District Partnership Joint Conference on English Learner Education, Kutztown, PA. (abstract reviewed and accepted, conference cancelled due to COVID).

Guertin, L. (2020). It starts with students: setting a foundation with information literacy & audio. National Council for Science and the Environment (NCSE) Annual Conference. Washington, DC (January 8, 2020).

Nguyen, A., Guertin, L. (2020). Pennsylvania-themed podcasts on reversing global warming. National Council for Science and the Environment (NCSE) Annual Conference. Washington DC (January 8, 2020). Student presenter.

Losco, R., Guertin, L. (2019). Student produced audio narratives: an innovative approach to student engagement. e-Learning Conference 3.0. University of the Sciences, Philadelphia, PA. (May 14, 2019).

Disipio, S., Guertin, L. (2019). Measuring impacts of ice melt (calcium magnesium acetate) on water chemistry in a Penn State Brandywine stream. 30th Annual Saint Joseph's University Sigma Xi Student Research Symposium, Philadelphia, PA. April 5, 2019. Student presenter Disipio.

Guertin, L.A. (2019). The Next NASA Golden Record anchored in science, information, and digital literacies. AAAS Annual Meeting, Washington DC. (February 15, 2019).

Losco, R., Guertin, L. (2019). Student produced audio narratives: an innovative approach to student engagement. 2019 SoTLA Conference (Scholarship of Teaching, Learning and Assessment). West Chester University, West Chester, PA. (January 18, 2019).

Guertin, L., Theveny, K. (2018). Measuring student attitudes towards sustainable development with a one-semester Sustainovation. 2018 Association for the Advancement of Sustainability in Higher Education (AASHE) Conference and Expo, Pittsburgh, PA. (October 3, 2018).

Theveny, K., Guertin, L. (2018). Expanding the mission of a CanstructionU competition to include partnerships for hunger awareness. 2018 Association for the Advancement of Sustainability in Higher Education (AASHE) Conference and Expo, Pittsburgh, PA. (October 3, 2018).

Ballreich, I., Boger, P., Fishman, A., Guertin, L., Theveny, K. (2018). Lifting up the UN SDG's in Pennsylvania: the power of the Penn State Sustainable Communities Network. 2018 Association for the Advancement of Sustainability in Higher Education (AASHE) Conference and Expo, Pittsburgh, PA. (October 3, 2018).

Guertin, L., Clements, N. (2018). The essential role of information literacy in basic undergraduate research skills. CUR 2018 Biennial Conference, Washington, DC. (July 1, 2018).

Epstein, A., Kraal, E., Guertin, L., Sirrakos, G. (2018). Student-Produced Audio Narratives as a Pedagogical Tool. Eleventh Annual Symposium on Engineering and Liberal Education, Union College, Schenectady, NY (June 2, 2018).

Fortner, S., Guertin, L., Brown, K. (2018). Addressing critical issues in your community: examples for introductory courses. InTeGrate webinar series (all authors were presenters, February 28, 2018).

Asher, P., Guertin, L. (2017). Introducing Virtual Poster Showcase into your curricula and research programs. American Geophysical Union (AGU) webinar (June 7, 2017).

Hand, B., Guertin, L. (2017). Six Americas global warming survey as applied to a university population. American Geophysical Union Virtual Poster Showcase (December 2017). Student presenter Hand.

Rosenberg, A., Guertin, L. (2017). Impact of changing temperature and air quality on the participants in the Broad Street Run and Philadelphia Marathon, Pennsylvania. American Geophysical Union Virtual Poster Showcase (December 2017). Student presenter Rosenberg.

Schaefer, G., Guertin, L. (2017). Measurements of air and surface temperature changes in southeast Pennsylvania during the August 2017 solar eclipse. American Geophysical Union Virtual Poster Showcase (December 2017). Student presenter Schaefer.

Bralower, T., Guertin, L. (2016). New sustainability programs and their impact at a large public state university. Earth Educators Rendezvous 2016, Madison, WI. July 21, 2016.

Guertin, L., Ambos, E., Ryan, J. (2016). Integrating discovery-based research into the undergraduate STEM curriculum: a convocation report from NAS. CUR 2016 Biennial Conference, Tampa, FL. June 27, 2016.

Hand, B., Guertin, L., Marquit, J. (2016). Penn State Brandywine tree removal eco-services impact survey. 27th Annual Saint Joseph's University Sigma Xi Student Research Symposium, Philadelphia,

PA. April 15, 2016. Student presenter Hand.

Smith, J., Mylonas, S.M., Guertin, L. (2015). Generating geoscience content accessible to all audiences through the Society of Exploration Geophysicists (SEG) Wiki. Presented at the 2015 American Geophysical Union Undergraduate Virtual Poster Showcase, Washington DC. Student presenter Smith.

Mylonas, S.M., Smith, J., Fredricks, S.M., Guertin, L. (2015). Community building through the Society of Exploration Geophysicists (SEG) Wiki. Pennsylvania Communication Association 76th Annual Convention, York, PA. October 10, 2015. Student presenter Mylonas.

Guertin, L. (2014). Levels of Leadership for Teachers in Educator-Based Organizations: An Example from the Pennsylvania Earth Science Teachers Association. National Science Teachers Association National Conference, Boston, MA, April 6, 2014.

Guertin, L. (2013). A Review of Careers in the Earth Sciences and Available Resources Through the Pennsylvania Earth Science Teachers Association (PAESTA). Pennsylvania Science Teachers Association Annual Conference, State College, PA, December 5, 2013.

Guertin, L. (2013) The Tyler Arboretum Experience. Pennsylvania Chapter of the American Chestnut Foundation Fall Meeting, Media, PA, November 2, 2013. **Invited presentation.**

Fresta, E., Guertin, L. (2012). Charting the Health History of Middletown Township, Pennsylvania through a Study of the Cumberland Cemetery Internment Records. Pennsylvania Historical Association, Harrisburg, PA, November 1-3, 2012. Student presenter Fresta and **Award Winner for Outstanding Student Poster**.

Guertin, L., Pollock, M. (2012). Social Media Tools for Networking, Collaborating, and Disseminating Undergraduate Research. Council on Undergraduate Research Conference - Leveraging Uncertainty: Toward a New Generation of Undergraduate Research, Ewing, NJ, June 23-26, 2012.

Clements, A., Guertin, L. (2012). Going global: Google Earth as a tool for teaching world music. New Jersey Music Educators Association Annual Conference, East Brunswick, NJ, February 24, 2012. Copresenter. **Invited presentation**.

Guertin, L. (2011). Scavenger Hunts with GPS and Google Earth. Pennsylvania Science Teachers Association Annual Conference, Hershey, PA, December 1, 2011.

Merkel, C., Guertin, L. (2011). Earth and Space Science Web-Based Resources for Pennsylvania Educators. Pennsylvania Science Teachers Association Annual Conference, Hershey, PA, December 1, 2011.

Clements, A., Guertin, L. (2011). Teaching World Music with Geospatial Technology. Education Section Forum at the Society for Ethnomusicology Annual Conference, Philadelphia, PA, November 17, 2011.

Mookerjee, L., Guertin, L. (2011). Teaching world music with Google Earth. International Society of Technology in Education (ISTE) Annual Conference, Philadelphia, PA, June 28, 2011. Student presenter Mookerjee.

Neville, S., Guertin, L. (2011). Teaching STEM with Google Earth: Multidisciplinary Approaches to Geospatial Technology. International Society of Technology in Education (ISTE) Annual Conference, Philadelphia, PA, June 27, 2011. Student presenter Neville.

Clements, A., Guertin, L., Yerger, T., Mookerjee, L. (2011). Going global: Google Earth as a tool for teaching world music. Pennsylvania Music Educators Association Annual Conference, Hershey, PA, April 15, 2011. All authors presenters, including student Mookerjee.

Guertin, L.A., Stubbs, C., Millet, C., Lee, T.K., Bodek, M.J. (2011). *Enhancing geographic and digital literacy with an "Amazing Race" and student-generated course portfolio in Google Earth.* Geological Society of America Penrose Conference, Google Earth: Visualizing the Possibilities for Geoscience Education and Research, Mountain View, CA, January 4-8, 2011.

Presentations – at Penn State University

Presentations at The Pennsylvania State University, University Park Presentations are listed going back to 2011

Guertin, L. Countering Stereotypes About Scientists: Students Share Preferred Technology for Learning. The Pennsylvania State University's Learning Design Summer Camp, Zoom, July 20, 2020.

Guertin, L, Foster, D., Beckman, M. *Active Learning Strategies Faculty Panel*. The Pennsylvania State University Teaching and Learning with Technology (TLT), University Park, PA/Zoom, October 9, 2018. Faculty panel.

Bodek, M., Guertin, L. *Adobe Creative Cloud @ Brandywine*. The Pennsylvania State University's Learning Design Summer Camp, University Park, PA, July 17, 2018. Co-presenters.

Clements, N., Guertin, L. *At Sea with Zotero*. The Pennsylvania State University's Symposium for Teaching and Learning with Technology, University Park, PA, March 21, 2015. Co-presenters.

Guertin, L., Dufoe, A., Bodek, M. *The iPad as a data collection tool for fieldwork and dissemination of student-created content with iBooks Author*. The Pennsylvania State University's Symposium for Teaching and Learning with Technology, University Park, PA, March 16, 2013. Co-presenters Guertin and Dufoe (undergraduate student).

Guertin, L.A., *Amazing Race to geographic literacy*. Penn State ITS Training Services – Educational Gaming Brownbag, The Pennsylvania State University, January 25, 2012.

Guertin, L.A., Stubbs, C., Millet, C., Lee, T.K., *Enhancing geographic and digital literacy with a student-generated course portfolio and "Amazing Race" in Google Earth*. Penn State Symposium for Teaching and Learning with Technology, The Pennsylvania State University, March 26, 2011.

Presentations at Penn State Brandywine

Presentations are listed going back to 2011

Mendez-Gallardo, V., Dudkin, E., Guertin, L. *Voices of Women in STEM: Women's History Month.* Faculty Forum, Penn State Brandywine, March 28, 2018.

Guertin, L. *Trees (not Trash) for Earth*. Campus Lecture Series and Campus Common Read joint event for Earth Day, Penn State Brandywine, April 12, 2016.

Guertin, L. At Sea with Zotero. Faculty Forum, Penn State Brandywine, October 5, 2015.

Hartle, L., Guertin, L. Engaged Scholarship. Faculty Forum, Penn State Brandywine, March 18, 2015.

Guertin, L., Gallagher, J. Civic engagement. Faculty Forum, Penn State Brandywine, October 3, 2012.

Presentations - local community/national gatherings, academic institutions

Presentations are listed going back to 2011

- *Of note:* Selected speaker on "Stitching Through Science Communication With Quilts" for Ignite@AGU, sponsored by NASA [virtual] (December 2, 2020)
- *Of note:* Invited speaker on coastal optimism for The Story Collider/Disaster Response Event, organized by The Story Collider with the Gulf of Mexico Research Initiative (GoMRI), San Francisco, CA (December 12, 2019)
- Of note: Invited speaker for March for Science/Rally for Science, Philadelphia, PA (April 14, 2018)

Academic venues

Guertin, L., and two additional panelists. *Careers in STEM by Women in STEM*. Virtual panel hosted by the American Helicopter Museum & Education Center (Girls in Science & Technology Program (GIST)), West Chester, PA, November 21, 2020.

Guertin, L., *Careers in oceanography and what everyone should know about the ocean*. American Helicopter Museum & Education Center (Girls in Science & Technology Program (GIST)), West Chester, PA, November 2, 2019.

Guertin, L., Berkey, J., Jansen, A. *Going beyond the "doom and gloom" with students writing & recording coastal optimism rally speeches*. Start Talking Science, Science History Institute, Philadelphia, PA, September 26, 2019.

Guertin, L., *Telling science stories with quilts*. Saturday Speaker Series, Science History Institute, Philadelphia, PA, September 14, 2019.

Guertin, L., *Stitching Hope for the Coast: Communicating coastal optimism for Louisiana*. Start Talking Science, Science History Institute, Philadelphia, PA, September 27, 2018.

Guertin, L., *Visualizing Philadelphia's temperature history through crochet*. Start Talking Science, Chemical Heritage Foundation, Philadelphia, PA, September 28, 2017.

Guertin, L., *Tyler Arboretum's geologic history*. Tyler Arboretum's Public Programs on Nature Studies, Media, PA, January 20, 2016.

Guertin, L., *Being an oceanographer out to sea*. TechniGals CreateSpace STEM Summer Camp (for middle school girls), Middletown Free Library, Media, PA, August 6, 2015.

Guertin, L., DeBow, S.P. *The search for Captain America began with surveying the ocean!* Experts Are In, Smithsonian National Museum of Natural History (Q?Rius) program, Washington, DC, June 17, 2015. **Invited presentation.**

Guertin, L., *Aboard the NOAA ship Thomas Jefferson for a Hydrographic Survey of Eastern Long Island Sound.* Delaware County Institute of Science lecture series, Media, PA, February 9, 2015.

Guertin, L., *What everyone should know about the oceans (and how we know what we know!)*. The Agnes Irwin School, Rosemont, PA, January 7, 2015.

Guertin, L., *Philadelphia's Dinosaur History*. Delaware County Institute of Science lecture series, Media, PA, March 14, 2011.

Non-academic venues

Guertin, L. #SciArt Spotlight. Taste of Science Instagram Live session (online), May 4, 2020.

Guertin, L., *Weather, climate, and crocheting*. Upper Darby Landsdowne Rotary Club (online), May 13, 2020.

Guertin, L., *Did dinosaurs ever roam through Tyler Arboretum?* Tyler on Tap, Media, PA, August 9, 2019.

Guertin, L., *Hydrographic surveying for Captain America on the ocean floor*. Taste of Science Philadelphia, PA, April 24, 2018.

Guertin, L., Hurricane 101. The Penn State Club of Maris Grove, Glen Mills, PA, November 21, 2017.

Guertin, L., *The Search for Captain America Began with Surveying the Ocean Floor!* Nerd Nite Philadelphia, PA, April 6, 2016.

Guertin, L., Aboard the NOAA Ship Thomas Jefferson for a Hydrographic Survey of Eastern Long Island Sound. The Penn State Club of Maris Grove, Glen Mills, PA, July 21, 2015.

Guertin, L., *Collecting data for nautical charts: a hydrographic survey on the NOAA Ship Thomas Jefferson*. White Horse Village Cultural Encounters Lecture Series, Newtown Square, PA, October 16, 2014.

Guertin, L., *A tour of the College of Earth and Mineral Sciences*. The Penn State Club of Maris Grove, Glen Mills, PA, March 18, 2014.

Guertin, L., *How volcanoes make our lives exciting – even on the East coast*. Nerd Nite Philadelphia, PA, March 12, 2014.

Guertin, L., *Leadership and civic engagement*. Delaware County Youth Leadership Academy, Penn State Brandywine, May 9-11, 2011.

Impact in Society/Media Mentions/Science Communication Activities

- Weekly blogger for the AGU Blogosphere geoscience education blog titled GeoEd Trek, first post May 9, 2014. http://blogs.agu.org/geoedtrek/
 - Invited presenter for AGU webinar, "So, You Wanna Start a Science Blog?" (September 9, 2019)
 - Panelist for AGU's Ask the Experts in Science Communication (December 13, 2017)
 - Panelist for AGU's Bloggers Forum (December 2013, 2014, 2015, 2016)

Media mentions/interviews (outside of Penn State University)

- Interviewed for LabOratory Podcast, "Episode 10: Ocean Sciences 2020, Part 1", for my conference presentation on quilting science stories (published April 18, 2020)
- Quoted in article "Knitters Chronicle Climate Change One Stitch at a Time", The New York Times (February 22, 2020)
- Interviewed for article "Crafting takes a dark turn in the age of climate crisis", from Fast Company (January 11, 2019)
- Quoted in article "The scary and promising future of a digital world. Here's what the experts predict", from Deseret News (April 25, 2018)
- Quoted in article "The expanded edition: the future of well-being in a tech-saturated world", Pew Research Center (April 17, 2018)
- Media mention in "Science Art Collaborations Emerge at American Geophysical Union Meeting", from SciArt Magazine, volume 29 (February 2018)
- Interviewed for article "Penn State Brandywine tracks quake in Mexico", from The Delaware County Daily Times (September 8, 2017)
- Interviewed for article "Gearing up for fall semester", from EOS American Geophysical Union (August 14, 2017) https://eos.org/features/gearing-up-for-fall-semester
- Interviewed by CBS Evening News about the March for Science (April 18, 2017)
- Interviewed for article "Report stresses the need for real research in undergraduate classes", from EOS American Geophysical Union (February 3, 2016) https://eos.org/articles/report-stresses-need-for-real-research-in-undergraduate-classes
- Media mention in "State of the Net: Content is King", from The Leading Edge (Society of Exploration Geophysicists) (November 2015)
- Interviewed for SEG Wiki Chat Geoscience education and educational technology (June 30, 2015)

- Interviewed for article "Google+ in the Classroom, One Year Later," The Chronicle of Higher Education Wired Campus article (August 8, 2012) http://chronicle.com/blogs/wiredcampus/google-in-the-classroom-one-year-later
- Interviewed for article "Cemetery Science: Gravestones Record Acid Rain Effect," LiveScience article from February 27, 2012. http://www.livescience.com/18681-cemetery-gravestones-weathering-acid-rain.html
- Media mention of my presentation on using Flickr as a collaborative tool for Earth Science Week was featured in the article "Using Web 2.0 to Engage and Recruit the Future Geoscience Workforce," in Recruitment Special, the annual magazine by the European Association of Geoscientists and Engineers (EAGE) about recruitment issues in the oil & gas industry. http://issuu.com/amanda75/docs/recruitmentspecial2010
- My journal article on podcasting was featured in Tomorrow's Professor email newsletter, from the Stanford Center for Teaching and Learning (message #1026, May 21, 2010)
- My research in Just-in-Time Teaching was the focus of an article in Hispanic Outlook in Higher Education, 11/02/2009, titled "Just-in-Time Teaching" Another Strategy for Engaging Students, p. 24-25.
- My research was the focus of an article in the October 1998 issue of AAPG Explorer titled "Florida Study Shows Mixed Systems - Swamp, Keys Yield Sediment Clues"

Online profiles

- Profiled by the American Geophysical Union An Oceanographer's Journey: Meet Dr. Laura Guertin, Professor of Earth Science (February 2019), https://blogs.agu.org/onthejob/2019/02/07/an-oceanographers-journey-meet-dr-laura-guertin-professor-of-earth-science/
- Profiled by Leading Women in Marine Science Interview Series, Professor Laura Guertin (August 2018), https://leadingwomeninmarinescience.wordpress.com/2018/08/10/professor-laura-guertin-leading-women-in-marine-science/
- Profiled by Rock-Head Sciences, Earth Science Professor, Dr. Laura Guertin @guertin: A Day in the GeoLife Series (February 2018), http://rockheadsciences.com/guertin-earth-science/
- Profiled by the March for Science Philadelphia, "Anyone can be a scientist Laura Guertin" (March 2017), https://marchforsciencephl.tumblr.com/post/158640506352/anyone-can-be-a-scientist-laura-guertin
- Profiled by Girls Into Geoscience (Plymouth University, UK), Dr. Laura Guertin (October 2016), https://girlsintogeoscience.wordpress.com/2016/10/05/laura-guertin/
- Profiled by "Promoting Geoscience Education, Research & Success (PROGRESS)" (September 2015), https://geosciencewomen.org/get-involved/identify-with-a-scientist/laura-guertin/

Invited/Guest blog posts

- Guest blogger for Wiki Education (WikiEdu), post titled, "Adding biographies of female oceanographers" from August 6, 2020. https://wikiedu.org/blog/2020/08/06/adding-biographies-of-female-oceanographers/
- Guest blogger for 500 Women Scientists Philly Pod, post titled, "My journey as a 500 Women Scientists Wiki Scholar" from July 31, 2020. https://medium.com/@500womensciphilly/my-journey-as-a-500-women-scientists-wiki-scholar-86cf82677236
- Guest blogger for PLOS Sci-Ed, post titled "The NBA Family Tree," from March 24, 2014. http://blogs.plos.org/scied/2014/03/24/gust-post-nba-family-tree/

 Invited to guest blog on the Geological Society of America's "Speaking of Geoscience" blog for a post titled "Coastal Processes and Environments Under Sea-Level Rise and Changing Climate: Science to Inform Management," (May 3, 2013), http://geosociety.wordpress.com/2013/05/03/coastal-processes-and-environments-under-sealevel-rise-and-changing-climate-science-to-inform-management/

Social Media

- Manager of American Geophysical Union (AGU) Instagram account during one-week Instagram takeover (July 9-July 11, 2016), shared images and communicated glacial geology content relating to Alaska's environments while on location; AGU Sharing Science one-day Twitter takeover (2017, 2020)
- Manager of Bucknell University's Instagram account during one-week Instagram takeover
- Previous manager of the Twitter (2010-2018) and Instagram (2016-2018) accounts for the Geoscience Division of the Council on Undergraduate Research (@curgeosciences)
- 500 Women Scientists Philly Pod Social media manager (2020-present)

Updated December 2020