1994-1996

Curriculum Vitae

Jacqueline S. McLaughlin, Ph.D. Associate Professor of Biology, CHANCE Founding Director The Pennsylvania State University-Lehigh Valley, 2809 Saucon Valley Road, Center Valley, PA 18034; 610.285.5109; jshea@psu.edu

PROFESSIONAL PREPARATION

Rutgers University/UMDNJ Florida State University	,	evelopmental Biology evelopmental Biology
New College	,	B.A., Biology
APPOINTMENTS		
• Special Counselor to the Vice Rector of Research, University	of Bucharest,	2021-Present
Bucharest, Romania		
• Foreign Affairs Consultant, U.S. Department of State,		2020-2021
Office of Science and Technology Cooperation, Washington I	D.C.	
• U.S. Science Liaison, U. S. Embassy Bucharest, Romania		2020
 Senior Science Advisor, U.S. Department of State, 		2019-2020
Bureau of Oceans and International Environmental and Scien	ntific Affairs, Washing	gton D.C.
• Visiting Teaching Professor, Jiangnan University, Wuxi, Chir	na	2011-2018
• Founding Director, CHANCE, The Pennsylvania State University		2004-Present
Associate Professor of Biology (Tenured),		2008-Present
Penn State University College, Penn State Lehigh Valley		
• Assistant Professor of Biology (Tenure Track),		2002-2008
Penn State Lehigh Valley, Department of Biology		
• Assistant Professor of Biology (Non-Tenure Track),		1996-2002
Penn State Lehigh Valley Department of Biology		

- Penn State Lehigh Valley, Department of Biology
 Lecturer in Biology, Penn State Lehigh Valley, Department of Biology
 Research Assistant, Rutgers University/UMDNJ,
- Research Assistant, Rutgers University/UMDNJ, 1988-1991
 Department of Pathology
 Teaching Assistant, Florida State University, 1982-1984

Department of Biology

PROFESSIONAL AFFILIATIONS

American Society for Cell Biology (ASCB); Association of International Educators (NAFSA); Council for Undergraduate Research (CUR); Forum on Education Abroad; National Association of Biology Teachers (NABT); National Science Teachers Association (NSTA); North American Society for Environmental Education (NAAEE); Pennsylvania Academy of Science (PAS); Sigma Xi; Society for Conservation Biology (SCB)

THESES WRITTEN

Doctoral Thesis - Chick Corneal Development: The Migration and Differentiation of Periocular Neural Crest Cells, advisor David Birk, Ph.D. (Rutgers University / Robert Wood Johnson Medical School). **Master's Thesis** - Involvement of Dynein in the Pronuclear Movements of Sea Urchin Fertilization, advisor Gerald Schatten, Ph.D. (Florida State University).

Undergraduate Thesis - A Scanning Electron Microscope Analysis of Molluscan Mantle and Shell Growth, advisor John Morrill, Ph.D. (New College of the University of South Florida).

HONORS, AWARDS, FELLOWSHIPS, SCHOLARSHIPS

2021	Visiting Research Fellowship, University of Bucharest, Romania	
2020	Embassy Science Fellowship, U.S. Department of State	
2019	Meritorious Honor Award, U.S. Department of State Jefferson Science Fellowship, U.S. National Academies of Sciences	
2018	Teaching Excellence Award, Penn State Lehigh Valley	
2017	<i>Commonwealth of Pennsylvania Citation</i> , Pennsylvania House of Representatives <i>Higher Education Educator of the Year</i> , North American Association for Environmental Education (NAAEE)	
2015	Outstanding Contribution in Research and/or Service, Penn State Lehigh Valley Penn State W. LaMarr Kopp International Achievement Award, The Pennsylvania State University	
2013	Penn State Award for Community Engagement and Scholarship, Penn State Outreach	
2012	<i>Outstanding Environmental Education Program Award</i> , Pennsylvania Association of Environmental Education.	
2010	David A. Portlock Outstanding International Educator Award, Pennsylvania Council for International Education	
2009	Spirit of Internationalization Award, The Pennsylvania State University, Office of Global Programs	
2007	Outstanding Research and/or Creative Accomplishment Award, Penn State Lehigh Valley	
2005	Bringing the World to Pennsylvania, Pennsylvania Council of International Education (PaCIE)	
2003	<i>George W. Atherton Award for Excellence in Teaching</i> , The Pennsylvania State University	
2002	Penn State Teaching and Learning Consortium Teaching and Learning Hall of Fame, The Pennsylvania State University	

2001	Alumni Award: Outstanding Teacher, Penn State Berks-Lehigh Valley College Four-Year College and University Outstanding Teacher Award, National Association of Biology Teachers Student Appreciation and Recognition Award (S.A.R.A.), Penn State Lehigh Valley
1998	Teaching Excellence Award, Penn State Lehigh Valley
1996	Student Appreciation and Recognition Award (S.A.R.A.), Penn State Lehigh Valley
1988	Center for Advanced Biotechnology and Medicine (CABM) Training Fellowship, Rutgers University
1986	Summer Research Scholarship, University of Baltimore/Jones Institute of Reproductive Biology
1982	Summer Scholarship in Electron Microscopy Training, Duke University
1981	Summer Scholarship in Biochemistry, Drexel University
1978	New College Four-year Foundation Scholarship, New College

INTERNATIONAL COURSES AND/OR PROGRAMS DEVELOPED

- McLaughlin, J. S. Embedded International Field Course, "<u>Global Conservation:</u> <u>Environmental Challenges Facing the Danube River.</u>" (spring/summer 2022). SC 497/SUST 496 and SC 494/SUST 495.
- McLaughlin, J. S. Embedded International Field Course, "<u>Global Conservation:</u> <u>Environmental Challenges Facing the Danube River.</u>" (spring/summer 2021). SC 494 or SUST 495.
- McLaughlin, J. S., Embedded International Field Course, "<u>Sustainability and Conservation:</u> <u>Citizen Science and Service Learning in Australia.</u>" (spring/summer 2018). BIOL 296, 496 or SUST 495.
- McLaughlin, J. S., Embedded International Field Course, "<u>CHANCE: Environmental</u> <u>Protection, Conservation, and Sustainability of Cuban Ecosystems with a Field Practicum</u> <u>in Cuba.</u>" (spring/summer 2017). BIOL 496 or SUST 495.
- McLaughlin, J. S., Embedded International Field Course, "<u>Conservation and Sustainability of</u> <u>the Tropical Rainforest with a Field Practicum in Costa Rica.</u>" (spring/summer 2017). Biology 296 and 496.
- McLaughlin, J. S., Embedded International Field Course, "<u>Conservation Biology and</u> <u>Sustainability of Select Tropical Ecosystems with a Field Practicum in Costa Rica.</u>" (spring/summer 2016). 496A/296B and 496B/296C.
- McLaughlin, J. S., Embedded International Field Course, "<u>China's Water Realities and</u> <u>Sustainable Solutions with a Field Practicum in China.</u>" (spring/summer 2015). BIOL 496F/496I and CE 497A/497D; In conjunction with Jiangnan University and Nanjing University.

- McLaughlin, J. S., Embedded International Field Course, "<u>Conservation Biology and</u> <u>Sustainability of Select Tropical Ecosystems with a Practicum in Costa Rica and Panama.</u>" (spring/summer 2015). BIOL 296C/296E and 496B/496E.
- McLaughlin, J. S., Embedded International Field Course, "<u>Conservation Biology and</u> <u>Sustainability of Select Tropical Ecosystems with a Practicum in Costa Rica and</u> <u>Panama.</u>" (spring/summer 2014). Biology 496B and 496C.
- McLaughlin, J. S., Embedded International Field Course, "<u>Global Climate Change:</u> <u>Sustainability of Select Tropical Ecosystems with a Practicum in Panama.</u>" (spring/summer 2013). BIOL 297F/297I and BIOL 497F/498I.
- McLaughlin, J. S., Embedded International Field Course, "Yellowstone Wildlife Ecology, Land Preservation, and Water Management with a Field Practicum in Yellowstone National Park." (August 2012). Developed for Jiangnan University, Wuxi, China; accredited through Jiangnan University.
- McLaughlin, J. S., Embedded International Field Course, "<u>Global Environmental</u> <u>Sustainability: A Field Course in China,</u>" (spring/summer 2011). BIOL 497C.
- McLaughlin, J. S., Embedded International Field Course, "<u>Environmental Science and</u> <u>Conservation Biology: A Field Course in the Biodiversity of Costa Rica.</u>" (spring/summer 2010). BIOL 297A/497E.
- McLaughlin, J. S., Embedded International Field Course, "<u>Environmental Science and</u> <u>Economic Principles with a Field Practicum in China.</u>" (spring/summer 2010). BIOL 497G.
- McLaughlin, J. S., Embedded International Field Course, "<u>Environmental Science and</u> <u>Conservation Biology: A Field Course in the Biodiversity of Costa Rica.</u>" (spring/summer 2009). BIOL 297A/497E.
- McLaughlin, J. S., Embedded International Field Course, "<u>Environmental Science and</u> <u>Conservation Biology: A Field Course in the Biodiversity of Costa Rica.</u>" (spring/summer 2007). BIOL 297A/497E.
- McLaughlin, J. S., Doss, S., Program, "The Ecology of China." (December 2006). Faculty development program for academics throughout the U.S. hosted by Holbrook Travel.
- McLaughlin, J. S., Embedded International Fields Course, "<u>Environmental Science and</u> <u>Conservation Biology - A Field Course in the Biodiversity of Costa Rica.</u>" (spring/summer 2006). BIOL 297A/497E.
- McLaughlin, J. S., & Zervanos, S. M., Embedded International Field Course, "From Savanna to Volcano: A Field Study in the Biodiversity of Tanzania." (December 2005). BIOL 297/497.
- McLaughlin, J. S., & Zervanos, S. M., Embedded International Field Course, "<u>From Volcano</u> to <u>Rainforests: A Field Study in the Biodiversity of Costa Rica.</u>" (December 2004). BIOL 297/497.
- McLaughlin, J. S., & Zervanos, S. M., Course, "Conservation Issues of the 21st Century." (December 2005). Fall 2005, BIOL 497H.

McLaughlin, J. S., Program, "2004 CHANCE Program (<u>Connecting Humans And Nature</u> <u>through Conservation Experiences</u>)." (August 2004), CHANCE is a Penn State international environmental education program. Its goals are to educate future scientists, teachers, leaders, and citizens about ecosystems and achieving sustainability. CHANCE features short-term study abroad courses for Penn State undergraduates and Pennsylvania high school teachers who, together, tackle issues through field-based research, typically alongside foreign students and researchers.

RESEARCH AND/OR SCHOLARLY PUBLICATIONS

Refereed Journal Articles

- Smith, M. A., Olimpo, J. T., Santillan, K. A., & McLaughlin, J. S. (2022). <u>Addressing</u> foodborne illness in Cote d'Ivoire: Connecting the classroom to the community through a non-majors Course-based Undergraduate Research Experience. *Journal of Microbiology* and Biology Education, 23(1): 1-9.
- McLaughlin, J. S., Perry, G., Manuel, K. B., Soluri, K. S. & Hebbeler, A. M. (2021). <u>The</u> <u>U.S. Embassy Science Fellows program: Implementations and impacts.</u> *Science & Diplomacy, 10*(3): Fall 2021 (online).
- McLaughlin, J. S. (2021). <u>Teaching environmental sustainability while transforming study</u> <u>abroad.</u> *Sustainability*, 13(1): 1-13.
- McLaughlin, J. S., Patel, M. & Slee, J. B. (2020). <u>A CURE using cell culture-based research</u> <u>enhances career-ready skills in undergraduates</u>. *Scholarship and Practice of Undergraduate Research (SPUR)*, 4(2): 49-52.
- Hussain, S., Babar, Z., Hadid, J. & **McLaughlin, J. S**. (2020). <u>Coating polyurethane with palmitoleic acid and bovine serum albumin to prevent the host response to foreign materials.</u> *American Journal of Undergraduate Research*, *16*(4): 5-14.
- Slee, J. B. & McLaughlin, J. S. (2019). <u>Making it stick: A CURE designed to introduce students</u> to the scientific process and the host response to foreign materials. *Biochemistry and Molecular Biology Education (BAMBed), 47*(4): 417-425.
- McLaughlin, J. S., Patel, M. A., Johnson, D. K. & de la Rosa, C. L. (2018). <u>The impact of a short- term study abroad program that offers a course-based undergraduate research experience and conservation activities.</u> *Frontiers: The Interdisciplinary Journal of Study Abroad, XXX*(3): 100-118.
- McLaughlin, J. S., & Patel, M. (2017). <u>An authentic research experience for undergraduates in the</u> <u>developmental biology and physiology laboratory using the chick embryonic heart.</u> *The American Biology Teacher*, 79(8), 645-653.
- McLaughlin, J. S., Favre, D. E., Weinstein, S. E., & Goedhart, C. M. (2017). <u>The impact of a four-step laboratory pedagogical framework on biology students' perceptions of laboratory skills, knowledge, and interest in research.</u> *Journal of College Science Teaching, 47*(1), 83-91.
- Goudsouzian, L. K., **McLaughlin, J. S.,** & Slee, J. B. (2017). <u>Using yeast to make scientists: A</u> <u>six-week self-guided research project for the cell biology classroom.</u> *CourseSource*, 1-10.

- McLaughlin, J. S., & Coyle, M. S. (2016). <u>Increasing authenticity and inquiry in the cell and</u> molecular biology laboratory. *The American Biology Teacher*, 78(6), 492-501.
- Goedhart, C. M., & McLaughlin, J. S. (2016). <u>Student scientists: Transforming the undergraduate</u> research laboratory into a research environment. *The American Biology Teacher*, 78(6), 502-508.
- McLaughlin, J. S., & Metz, A. S. (2016). Vision and change: Why it matters. *The American Biology Teacher*, 78(6), 456-462.
- Gonzalez, S. M., Afzal, F. I., & McLaughlin, J. S. (2015). Direct and indirect effects of pseudoephedrine on the intrinsic conduction system of the embryonic chicken heart. *American Journal of Undergraduate Research*, 12(3), 53-62.
- Adams, T. M., Anwar, R., Mfarej, M. G., Rundatz, T., & McLaughlin, J. S. (2015). <u>Nutritional stress of cultured Vero cells causes altered growth and morphology as seen in</u> <u>neoplastic transformation</u>. *American Journal of Undergraduate Research*, 12(3), 63-76.
- McLaughlin, J. S., Cheng, X., & Liu, H. (2012). <u>Using field research in China as a catalyst</u> for effectively promoting global environmental awareness and stewardship. *Biology International (IUBC)*, 50, 30-44.
- McLaughlin, J. S., & Munsell, D. (2012). Evolving on-line pedagogy: Developing researchbased multimedia learning tools for the high school and undergraduate biology 'classroom'. International Journal of Online Pedagogy and Course Design (IJOPCD), 2(1), 1-20.
- McLaughlin, J. S. (2010). <u>Re-imagining new programs and pedagogical tools for the 21st</u> century classroom: Blending research with teaching. *Educause Review*, 33(1).
- McLaughlin, J. S., & Seaquist, S. (2008). Using a virtual tissue culture system to assist students in understanding life at the cellular level. *The American Biology Teacher*, 70(7), 415-420.
- McLaughlin, J. S., & Arbeider, D. A. (2008). Evaluating multimedia-learning tools based on authentic research data that teach biology concepts and environmental stewardship. *Contemporary Issues in Technology and Teacher Education.*, 8(1), 1-19.
- McLaughlin, J. S., & Johnson, D. K. (2006). <u>Assessing the "Field Course Experiential</u> <u>Learning Model": Transforming collegiate short-term study abroad experiences into rich</u> <u>learning environments.</u> *Frontiers: The Interdisciplinary Journal of Study Abroad, 13*, 65-85.
- McLaughlin, J. S. (2006). <u>The CHANCE program Promoting learning for teachers and</u> <u>students through experiences and inquiry</u>. *The American Biology Teacher*, 68(4), 17-24.
- McLaughlin, J. S. (2006). Using technology to blend teaching and basic research. *The Science Teacher*, 73(8), 48-53.
- McLaughlin, J. S., & Zervanos, S. M. (2003). <u>Teaching biodiversity and evolution through</u> <u>travel course experiences</u>. *The Journal of College Science Teaching*, 65, 683-688.
- McLaughlin, J. S. (2001). <u>Breaking out of the box: Teaching biology with web-based active</u> <u>learning modules</u>. *The American Biology Teacher*, 64, 110-115.

- Doane, D. J., **McLaughlin, J. S.**, Ting, W., & Birk, D. E. (1996). <u>Spatial and temporal variations</u> in extracellular matrix of periocular and corneal regions during corneal stromal <u>development.</u> *Experimental Eye Research*, 62.
- McLaughlin, J. S., Linsenmayer, T. F., & Birk, D. E. (1989). <u>Type V collagen synthesis and</u> deposition by chicken corneal fibroblasts in vitro. *Journal of Cell Science*, 94, 371-379.

Refereed Parts of Books

- McLaughlin, J. S., & Baker, R. M. (2013). Environmental science education in the 21st century: Addressing the challenges and opportunities both globally and at home through online multimedia innovation. In M. Thomas, (Ed.), Pedagogical Considerations and Opportunities for Teaching and Learning on the Web. [A volume in the Advances in Educational Technologies and Instructional Design (AETID) Book Series.] (pp. 235 -254). Hershey, PA: IGI Global.
- McLaughlin, J. S. (2012). <u>CHANCE program in China: Transforming students into 'Global-Minded' scientific investigators and citizens.</u> In Diana Oblinger (Ed.), *Game Changers: Education and Information Technology* (pp. 313 321). Washington D.C.: EDUCAUSE.
- McLaughlin, J. S., & Fadigan, K. A. (2010). <u>The CHANCE (Connecting Humans and Nature</u> <u>Through Conservation Experiences) Program: Transitioning from simple inquiry-based</u> <u>learning to professional science practice.</u> In Robert E. Yager (Ed.), *Exemplary Science Programs: Science for Resolving Societal Challenges* (pp. 83 - 109). Arlington, Virginia: NSTAPress.
- McLaughlin, J. S. (2010). Multimedia learning tool that allows high school teachers and their students to engage in scientific research. In J. Yamamoto, C. Penny, J. Leight, & S. Winterton (Eds.), *Technology Leadership in Teacher Education: Integrated Solutions and Experiences* (pp. 185 202). Hershey, PA: IGI Global. Peer-reviewed/refereed.

Refereed Conference Proceedings

- McLaughlin, J. S., Favre, D. E., Weinstein, S. E., & Goedhart, C. M. (2016). "<u>Authentic</u> <u>Research Experience in the Introductory Biology Laboratory Improves Student Perception</u> <u>of Laboratory Skills, Knowledge and Interest in Scientific Research.</u>" Proceedings of the 2016 National Association of Biology Teachers (NABT) Research Symposium, (pp. 1 - 20 online). Denver, CO. NABT.
- McLaughlin, J. S., Fadigan, K. A., & Munsell, D. S. (Illinois Institute of Technology). (January 5, 2011)."Blending Open' Inquiry-based Learning with Teaching in Embedded International Field-Courses: Extension of the Field Course Experiential Learning Model," Hawaii International Conference on Education HICE). 2011 HICE Conference Proceedings, (pp. 2265 - 2273), Honolulu, Hawaii.
- Pepperdine University, University of Louisville, Hong Kong Teacher's Association, California State University.
- McLaughlin, J. S., & Goedhart, C. M. (2015). An Educative Mentoring Framework to Transform the Undergraduate Biology Lab Experience. *Proceedings of the 8th Annual Mentoring Conference, The Mentoring Institute at the University of New Mexico, Albuquerque, NM.* (pp. 1 - 12). Albuquerque, NM:University of New Mexico.

- Jeyaretnam, V. (Student Author), & McLaughlin, J. S. (2013). In Haiduke Sarafian (Ed.), "Chronotropic Effects of Select Cardiovascular Drugs on the Developing Vertebrate Heart." 2012 John T. and Paige S. Smith Undergraduate Research Symposium Proceedings. 5, (pp. 1 - 6). York, PA: Penn State York.
- McLaughlin, J. S., & Johnson, K. D. (2006). In R. N. Johnson and R.J. Stoller, editors (Eds.), "The Costa Rica Experience: Learning about Biodiversity in a Rich Contextual Environment." *Proceedings of the Third Schreyer National Conference*. 3, (pp. 213 - 233). State College, PA. Penn State Schreyer College.
- McLaughlin, J. S. (2000). In C.A. Goldman (Ed.), "The Botany Field Site (WWW): An Herbarium Project and a Guide Through the Northeastern Deciduous Forest." *Tested Studies for Laboratory Teaching. Proceedings of the 21st Workshop/Conference of the Association for Biology Laboratory Education (ABLE).* 21, (pp. 472 473). Lincoln, NE: ABLE.
- McCain, E. R., & McLaughlin, J. S. (1999). In C.A. Goldman (Ed.), "Developmental and Physiological Aspects of the Chicken Embryonic Heart." *Tested Studies for Laboratory Teaching. Proceedings of the 21st Conference of the Association for Biology Laboratory Education (ABLE).* 20, (pp. 85 - 100). Tallahassee, FL: ABLE.
- McLaughlin, J. S., & McCain, E. R. (1998). In C.A. Goldman (Ed.), "<u>In Vivo and in Vitro</u> <u>Development of the Chicken Heart.</u>" *Tested Studies for Laboratory Teaching. Proceedings of the 19th Workshop/Conference of the Association for Biology Laboratory Education* (*ABLE*). 19, (pp. 331 - 332). ABLE.

Non-refereed Journal Articles

- Goedhart, C. M., & McLaughlin, J. S. (2015). <u>Overcoming the barrier to implementing</u> <u>authentic research experiences through faculty mentorship (editorial)</u>. *CBE—Life Sciences Education (LSE)*. 14(2), 2.
- McLaughlin, J. S. (2009). In tribute to my mentors (editorial). *The American Biology Teacher*. 71(3), 134-136.
- McLaughlin, J. S. (2008). The kingdom fungi, food chains, and plastic pollution (editorial). *The American Biology Teacher*. 70(4), 201.
- McLaughlin, J. S. (2006). <u>A gentle reminder that a hypothesis is never proven correct nor is a</u> <u>theory everproven to be true (editorial).</u> *The Journal of College Science Teaching. 36*(1), 60-62.
- McLaughlin, J. S. (2004). <u>Classrooms without walls (editorial)</u>. *The Journal of College Science Teaching*. 34(4), 5-6.

Magazine/Trade Publication

- McLaughlin, J. S. (2010). "Undergrads take on environmental problems in China." *International Mosaic Magazine.*, 14(2). State College, PA: Penn State Global Programs.
- McLaughlin, J. S., Tzafaras, N., & McCollough, J. D. (2008). "Designing an interdisciplinary short-term program in China." *International Educator.*, 17(2), (pp. 65 - 70). Washington, D.C.: NAFSA: Association of International Educators.

McLaughlin, J. S. (2005). "<u>Classrooms without walls: a banana plantation, a turtle nest, and</u> the random fallen tree (editorial)." *International Educator Magazine.*, 14(1), (pp. 52 - 54).

Washington D.C.: NAFSA: Association of International Educators.

- McLaughlin, J. S. (2000). "Coaching biology students into web-based active learning." *Strategies for Success.*, 33, (pp. 6 7). Pearson Publishing, Inc.
- McLaughlin, J. S. (1998). "Experimentation and the web." *Strategies for Success.*, 28, (pp. 7). Pearson Publishing, Inc.

Non-refereed Conference Proceedings

McLaughlin, J. S. (2006). "A Reflection on Interdependence." *Preparing Students for Democratic Citizenship in an Interdependent World.*, 1, (pp. 1). State College, PA: Penn State Global Programs.

New Media

- Mclaughlin, J. S. (2020). "Developing Course-based Undergraduate Research Experiences." The Pennsylvania State University, Undergraduate Research and Fellowship Mentoring Office website, <u>https://urfm.psu.edu/mentors/developing-course-based-undergraduate-research-experiences.</u>
- Mclaughlin, J. S. (Editor) (2014 present). <u>Penn State CHANCE Website</u>. State College, PA: The Pennsylvania State University. Penn State online educational website, <u>www.chancepsu.org</u>.
- *McLaughlin, J. S., O'Neil, R., Clark, D. A., & Alley, R. B. (2010). In McLaughlin, J. S. (Eds.), "Global Warming: Turning Up the Heat." CHANCE Multimedia-Based Research Module, Penn State CHANCE Program. State College, PA: Penn State Teaching and Learning with Technology.

Instructional Designers: Patrick Besong and Zak Zidak

- *McLaughlin, J. S., Kepner, S. J., Polignone, J., Yerkes, P. S., Eckert, K. L., & Eckert, S. A. (2009). "The Biology and Plight of the Leatherback." CHANCE Multimedia-Based Research Module, Penn State CHANCE Program. State College, PA: Penn State Teaching and Learning with Technology. Web Design: Patrick BeSong and Daniel Arbeider
- *McLaughlin, J. S. (2008). "Raptor Migration: Local, Cooperative and Global." CHANCE Multimedia- Based Research Module, Penn State CHANCE Program. State College, PA: Penn State Royer Center.Instructional Designers: Daniel Arbeider and Pavlo Dmytrenko
- *McLaughlin, J. S., Paukovitch, J., Goodenow, G., Crump, M., & Relyea, R. M. (2007). In McLaughlin, J. S. (Eds.), "Amphibians as Indicators of Environmental Change." CHANCE Multimedia-Based Research Module, Penn State CHANCE Program. (pp. online). State College, PA: Penn State Royer Center. Web Design: Daniel Arbeider, Pavlo Dmytrenko
- *McLaughlin, J. S., Gover, A. E., & Hoskins, M. G. (2006). In McLaughlin, J. S. (Eds.), "Invasive Plant Species in Pennsylvania." CHANCE Multimedia-Based Research Module, Penn State CHANCE Program. State College, PA: Penn State Royer Center. Web Design: Jeffrey L. Stine and Daniel Arbeider

- *McLaughlin, J. S., Lohman, R. C., & Lohmann, K. J. (2005). In McLaughlin, J. S. (Eds.), "Sea Turtle Hatchling Orientation from Nest to Ocean." CHANCE Multimedia-Based Research Module, Penn State CHANCE Program. State College, PA: Penn State Royer Center. Web Design: Jeffrey Stine
- *McLaughlin, J. S., Aaron, E. E., & Dugan, T. R. (2004). In McLaughlin, J. S. (Eds.), "Stratification and Biodiversity in Pennsylvania's Northeastern Deciduous Forest." CHANCE Multimedia-Based Research Module, Penn State CHANCE Program. State College, PA: Penn State Royer Center. Web Design: Jeffrey L. Stine
- McLaughlin, J. S. (Story-boarder and Content Contributor) (2003). "Interactive WWW modules which supplement the textbook, Biology: Exploring Life Publishers. Exploring Life (1st Ed) by Campbell, N., Williamson, B., & Heyden, R." Biology: Exploring Life. Upper Saddle River, NJ: Prentice Hall Publishers.
- McLaughlin, J. S. (Story-boarder and Content Contributor) (2000). "Cardiovascular II: The Vascular Highway." The Biology Place. Pearson Education, Inc. http://www.phschool.com/science/biology_place/biocoach/cardio2/intro.html
- McLaughlin, J. S. (Story-boarder and Content Contributor) (1999). "Cardiovascular I: Beating heart." The Biology Place. Pearson Publishing, Inc. <u>http://www.phschool.com/science/biology_place/biocoach/cardio1/intro.html</u>
- McLaughlin, J. S. (Story-boarder and Content Contributor) (1998). Bicoid Gene and Drosophila Development. Interactive Study Guide CDROM, Biology, N.A Campbell, 5th Edition. Hoboken, NJ:Pearson Publishing, Inc.

*Module Flash technology now obsolete; technology no longer available on WWW.

Newspapers

- McLaughlin, J. S. (2008). "To really learn science, let students do research (Op/Ed)." *The Morning Call.* Allentown, PA.
- McLaughlin, J. S. (2008). "Pacific's plastic pollution threatens our food chain (Op/Ed)."*The Morning Call.* Allentown, PA.
- McLaughlin, J. S. (2007). "Global warming is a theory backed by facts (Op/Ed)." *The Morning Call.* Allentown, PA.
- McLaughlin, J. S. (2006). "Science teachers should think outside the textbook (Op/Ed)." *The Morning Call.* Allentown, PA.

Peer-Reviewed Online Publication

McLaughlin, J. S., & McCain, E. R. (2005). <u>Development and physiological aspects of the</u> <u>chicken embryonic heart.</u> *BEN, National Science Digital Library (NSDL) Pathway for biological sciences education.* (pp. online). Washington D.C.: NSF/AAAS.

Editorial Responsibilities

- *Frontiers: The Interdisciplinary Journal of Study Abroad*, Editorial Board. (February 2019 Present). <u>https://frontiersjournal.org/index.php/Frontiers/about/editorialTeam.</u> The Frontiers Editorial Board, a body responsible for providing guidance to the Editor, reviewing manuscript submissions, evaluating special issue proposals, and working to promote and deliver innovative, academic content through the journal.
- *IK: Other Ways of Knowing (ISSN: 2377-3413)*, Editorial Board. (March 2015 2019). <u>https://journals.psu.edu/ik/about/editorialTeam.</u>

DISTINGUISHED LECTURES/KEYNOTES/PANELS/ROUND TABLES

Distinguished Lectures

- McLaughlin, J.S. (July 2, 2021). "CHANCE Romania: Where We Are Now, and Plans for the Future," Faculty (College) of Biology, University of Bucharest, ROMANIA.
- McLaughlin, J. S. (January 28, 2020). "A Retrospective, Mixed Methods Impact Analysis of the U.S. Embassy Science Fellows Program," U.S. National Academy of Sciences, Washington, D.C.
- McLaughlin, J. S. (January 13, 2020). "International Exchanges and Partnerships in Higher Education that Promote Transformative Undergraduate Research Experiences in Environmental Science and Conservation," The Romanian Institute for Education Sciences (ISE), Bucharest, ROMANIA.
- McLaughlin, J. S. (November 19, 2019). "The Penn State CHANCE Program Utilizes International Course-based Undergraduate Research Experiences to Transform Environmental Education," Universidad Catolica Boliviana "San Pablo," Tarija, BOLIVA.
- McLaughlin, J. S. (October 5, 2018). "Exposing Students to Environmental Realities: The Merit of International Course-based Undergraduate Research Experiences," Alabama Water Institute Seminar Series, University of Alabama, Tuscaloosa, Alabama.
- McLaughlin, J. S. (July 22, 2014). "The Penn State CHANCE Program: Exploring, Researching, and Conserving Biodiversity Worldwide through Innovative Outdoor and Online Teaching Strategies," Endangered Species Course, University of Jersey and Durrell Conservation Academy, Jersey Island, UNITED KINGDOM.

Keynotes/Plenary Addresses

- McLaughlin, J. S. (Keynote). (April 24, 2019). "New Places, Faces and Spaces," Penn State Lehigh Valley Awards Convocation, Center Valley, Pennsylvania.
- McLaughlin, J. S. (Keynote). (August 14, 2018). "Exposing Students to Environmental Realities: Developing, Implementing, and Evaluating International Course-based Undergraduate Research Experiences (I-CURES)," International Arid Lands Conference, Texas Tech University, Office of International Affairs, Lubbock, Texas.
- McLaughlin, J. S. (Keynote). (April 20, 2017). "Overcoming Barriers to Implementing Authentic Research Experiences," 7th Annual Penn State Eastern Regional Undergraduate Research Symposium, Penn State Brandywine, Media, Pennsylvania.

- McLaughlin, J. S. (Keynote). (January 26, 2017). "My Personal Perspective on Mentoring: A Story of Tribute and Longevity," Educative Mentoring Professional Development Workshop, West Chester University, West Chester, Pennsylvania.
- McLaughlin, J. S. (Keynote). (July 1, 2016). "The Story of Penn State CHANCE: Teaching Conservation through Experiences," Exploring Field Spaces and Learning Places Symposium, James Cook University, Townsville, AUSTRALIA.
- McLaughlin, J. S. (Plenary Address). (July 12, 2015). "CHANCE: Connecting Humans and Nature through Conservation Experiences," 2015 CHANCE China Field Practicum Opening Ceremony, Jiangnan University, Wuxi, CHINA.
- McLaughlin, J. S. (Keynote). (April 16, 2015). "Penn State CHANCE: A Model of Engaged Scholarship," Penn State Regional Undergraduate Research Symposium, Penn State Schuylkill, Schuylkill Haven, Pennsylvania.
- McLaughlin, J. S. (Keynote). (August 16, 2014). "Girl Scouts: A STEM Where ALL Girls Can Reach Their Potential to Better the World," 2014 Kick-Off Event – Building a Better World, Girl Scouts of Orange County, CA, University of Irvine, California.
- McLaughlin, J. S. (Plenary Address). (July 15, 2014). "The Penn State CHANCE Program: Exploring, Researching, and Conserving Biodiversity Worldwide through Innovative Outdoor and Online Teaching Strategies," 2nd Annual ICOLE International Conference, International Conference on the Outdoor Learning Environment, Martin Luther University, Halle, GERMANY.
- McLaughlin, J. S., Fadigan, K. A. (Penn State Abington), & Munsell, D. (Illinois Institute of Technology). (Keynote) (June 24, 2011). "CHANCE: Empowering K-12 Science Education throughInquiry," Smithsonian Tropical Research Institute (STRI) Professional Development Workshop, Smithsonian Tropical Research Institute (STRI), Panama City, PANAMA.
- McLaughlin, J. S. (Keynote). (May 20, 2011). "Connecting Humans And Nature through Conservation Experiences (CHANCE)," Jiangnan University and Penn State University International Workshop on the Water Environment and Ecological Restoration of Lake Tai, Jiangnan University, Wuxi, CHINA.
- McLaughlin, J. S. (Keynote). (May 21, 2010). "Biodiversity of Our World's Biomes: Water is Life,"CHANCE 2010 China Field Program Kick-Off, Jiangnan University, Wuxi, CHINA.
- McLaughlin, J. S. (Plenary Address). (July 27, 2008). "CHANCE Interactive On-Line Modules," Pennsylvania's Governor's Institute for Environment & Ecology Educators, Pennsylvania Department of Education, Champion, Pennsylvania.

Lectures

Mclaughlin, J. S. (April 5, 2021). "The Impact of a Short-Term Study Abroad Program that Offers a Course-Based Undergraduate Research Experience and Conservation Activities." Natural Resource Management Class (NRM547), Texas Tech University, Lubbock, Texas.

- McLaughlin, J. S. (April 5, 2019). "The Global Realities of Conservation and the Need for Systemic Advocacy." OES/STC Lunch Lecture Series, U.S. Department of State, Bureau of Oceans and International Environmental and Scientific Affairs (OES), Office of Science and Technology Cooperation (STC), Washington D.C.
- Mclaughlin, J. S. (October 23, 2019). "The Global Realities of Conservation and the Need for Systemic Advocacy," Psychology of Activism Class, Moravian College, Bethlehem, Pennsylvania.
- McLaughlin, J. S. (October 11, 2001). "The Beat Goes On: The Cardiovascular System, "Mini-Medical School Program, Lehigh Valley Hospital and Health Network, Allentown, Pennsylvania.
- McLaughlin, J. S. (May 8, 2001). "The Musculoskeletal System: Our Body's Framework for Life," Mini-Medical School Program, Penn State Lehigh Valley Hospital and Health Network, Allentown, Pennsylvania.
- McLaughlin, J. S. (March 25, 2002). "Australia's Great Ecosystems," Faculty Lecture Series, Penn State Lehigh Valley, Fogelsville, Pennsylvania.
- McLaughlin, J. S., & Zervanos, S. M. (March 9, 2002). "A Penn State Galapagos Adventure," Community Lecture Series, Whitaker Center for Science and the Arts, Harrisburg, Pennsylvania.

Panels

- McLaughlin, J.S., Perry, G. (Texas Tech University), LoSecco, J., (University of Notre Dame), Sen, S. (University of Buffalo). (December 9, 2020). "Fellow to Fellow: Conversation with JSF at USAID & State," Jefferson Science Fellowship 2021 Interview Week Virtual Orientation, National Academies of Science, Engineering, and Medicine (NASEM), Washington, D.C.
- McLaughlin, J. S., Moore, D. (Department of State), Jacobs, S. (Department of State), & McDuffee, B. (Department of State) (July 16, 2019). "Providing STEM Education to Underserved and Vulnerable Groups," Canadian International Leadership Panel, U.S. Department of State, Bureau of Educational and Cultural Affairs (ECA), Washington D.C.
- McLaughlin, J. S., Cantalupo, B. A., & Michalec, B. (November 6, 2018). "Lewis Thomas: The Lives of a Cell," Reading Anew: Voices from the Past, Penn State Lehigh Valley, Center Valley, Pennsylvania.
- McLaughlin, J. S., Silverberg, L. J., Vess, T., Nelson, K., & Defelice, M. R. (April 29, 2017). "Course- based Undergraduate Research Experiences," 2017 Annual University College Science Meeting, Penn State Eberly College of Science, State College, Pennsylvania
- McLaughlin, J. S. (Moderator), Greig, E. (Cornell Lab of Ornithology), King, C. (Museum Volunteers for the Environment (MuVE), & Blair, R. (University of Minnesota). (November 14, 2015). "Global Perspectives Committee 3rd Annual Workshop: Citizen Science Teaching Conservation Panel Discussion," NABT Professional Development Conference, National Association of Biology Teachers (NABT), Providence, Rhode Island.

- McLaughlin, J. S., Kackley-Dutt, K. E., Kiani, M., Huang, T.-Y., & Ealy, J. B. (April 22, 2015). "Special Panel on STEM Education," Penn State Commission for Women (CFW) Annual Meeting, Penn State Lehigh Valley, Center Valley, Pennsylvania.
- McLaughlin, J. S., De Rosa, M., Guertin, L., & Williams, D. (May 3, 2014). "The Importance and Realities of Undergraduate Research at Penn State," Science Meeting, Penn State University College, Penn State University, State College, Pennsylvania.

Roundtable

- McLaughlin. J. S., & Slee, J. B. (DeSales University) (December 4, 2020) "Using CUREs to Impart Career Ready Skills Needed in the American Workforce," Cell Bio Virtual 2020 Meeting, American Society for Cell Biology (ASCB) and the European Molecular Biology Organization (EMBO), Washington, D.C.
- Barthell, J., Buckmaster, M., Frohlich, E., Hall, E., Idris, M., Ketcham, C., McLaughlin, J., Patch, K., Sutton, S., Vandermaas-Peeler, M. & Whitehead, D. (October 17, 2019)
 "Mentoring Undergraduate Research in Global Contexts," American Association of Colleges & Universities (AAC&U), Elon University Center for Global Engagement, and The Forum on Education Abroad, Hyatt Regency, San Antonio, Texas.

PRESENTATONS/POSTERS/WORKSHOPS

Presentations (refereed)

- Mclaughlin, J. S. & Cruz, L. E. (Penn State University) (October 7, 2021). "Re-inventing Short-term Study Abroad Using a High Impact, Online CURE," American Association of Colleges and Universities (AAC&U) Conference on Global Learning (virtual), Washington, D.C.
- Mclaughlin, J. S. & Slee, J.B. (June 6, 2021). "Course-Based Undergraduate Research Experiences (CUREs) Impart Career Ready Skills Needed in the American Workforce," The Teaching Professor Annual Conference – Global Learning Reimagined, New Orleans, Louisiana.
- Mclaughlin, J. S. (September 21, 2020). "Research Reveals the Importance of Reflection in Undergraduate Research," 47th Annual National Society for Experiential Education (NSEE) Conference (virtual), Mount Royal, New Jersey.
- Mclaughlin, J. S. (June 29, 2020). "A CURE that Imparts Career Ready Skills in Preparation for the American Workforce," Council for Undergraduate Research (CUR) Virtual Biennial Conference (VBC), Washington, D.C.
- McLaughlin, J. S. (July 24, 2019). "Undergraduate Students' Environmental Policy Research in Cuba:Outcomes and Opportunities," 29th International Congress for Conservation Biology, Society for Conservation Biology (SCB), Kuala Lumpur, MALAYSIA.
- McLaughlin, J. S., Patel, M., Slee, J. B. (June 29, 2019). "A CURE Centered on the Host Response to Foreign Materials," Council for Undergraduate Research (CUR) Undergraduate Research Programs Conference, Ohio State University, Columbus, Ohio.

- Slee, J. B. (DeSales University), & McLaughlin, J. S. (January 6, 2019). "Making it Stick: A CURE Designed to Introduce Students to the Scientific Process and the Host Response to Foreign Materials," Annual Meeting for the Society for Integrative & Comparative Biology (SICB), Tampa, Florida.
- McLaughlin, J. S., & Esparza, D. (University of Texas, El Paso). (January 5, 2019) "Learning Outcomesof a Short-Term Study Abroad Program in Cuba that Offers Research Experience in Environmental Policy and Conservation Realities," Hawaiian International Conference on Education (HICE), Honolulu, Hawaii.
- McLaughlin, J. S., & Esparza, D. (University of Texas, El Paso). (June 14, 2018). "Learning Outcomes of an International Program in Cuba that Offers Undergraduates Opportunities in Authentic Research in Environmental Policy," 5th European Congress for Conservation Biology, Society for Conservation Biology (SCB), Jyvaskyla, FINLAND.
- McLaughlin, J. S., & de la Rosa, C. (Organization of Tropical Studies (OTS)/La Selva). (July 27, 2017)."Learning Outcomes Associated with a Unique Short-term Study Abroad Program in Costa Rica Enriched with Undergraduate Research," International Congress for Conservation Biology (ICCB), Society for Conservation Biology (SCB), Cartagena, COLOMBIA.
- Goudsouzian, L. K. (DeSales University), McLaughlin, J. S., & Slee, J. B. (DeSales University). (July 22, 2017). "A CURE in Need of a Cure: Refining and Evaluating a Course-Based Undergraduate Research Experience," Society for the Advancement of Biology Education Research (SABER) National Meeting, University of Minnesota, Twin Cities, Minnesota.
- McLaughlin, J. S., Favre, D. E., Weinstein, S. E., & Goedhart, C. M. (Citrus College). (November 5, 2016). "Authentic Research Experience in the Introductory Biology Laboratory Improves Student Perception of Laboratory Skills, Knowledge and Interest in Scientific Research," National Association of Biology Teachers (NABT) Education Research Symposium, Denver, Colorado.
- McLaughlin, J. S. (July 1, 2016). "The Story of Penn State CHANCE and the Chang Jiang," Conservation Asia 2016 Conference, Society for Conservation Biology Asia Section, University of Singapore, SINGAPORE.
- McLaughlin, J. S. (March 31, 2015). "Penn State CHANCE: A Model of Engaged Scholarship," Penn State Engaged Scholarship Symposium, Council on Engaged Scholarship Expo and Symposium Committee, State College, Pennsylvania.
- McLaughlin, J. S., Coyle, M. S., & Baker, R. M. (December 6, 2014). "Transforming the Undergraduate Biology Laboratory Environment into an Authentic Cell and Molecular Biology Research Experience," American Society for Cell Biology (ASCB) Annual Meeting, Philadelphia, Pennsylvania.
- Coyle, M. S., & McLaughlin, J. S. (November 22, 2013). "Transforming an Undergraduate Biology Laboratory Experience into a Research Environment," NABT National Summit: Implementing Visionand Change in the Biology Classroom, National Association of Biology Teachers (NABT) and the National Science Foundation (NSF), Atlanta, Georgia.

- Goedhart, C. M. (Citrus College), Coyle, M. S., & McLaughlin, J. S. (November 14, 2014).
 "Bringing an Inquiry-Based Research Experience to a General Biology Laboratory Course: A Partnership between a 4-Year University and a 2-Year College," National Association of Biology Teachers (NABT) Undergraduate Biology Professional Development Summit, Cleveland, Ohio.
- McLaughlin, J. S. (October 17, 2014). "Transforming Undergraduate Biology Laboratories into Authentic Research Experiences," Northeast Regional ASTE Meeting, Association of Science Teacher Educators, Teachers College, Columbia University, New York, New York.
- McLaughlin, J. S. (February 8, 2014). "The Penn State CHANCE program Environmental Education for the Lehigh Valley and the World," Lehigh Valley Association of Independent Colleges (LVAIC) Campus Sustainability Conference, Lehigh University, Bethlehem, Pennsylvania.
- Coyle, M. S., Baker, R. M., & **McLaughlin, J. S.** (March 15, 2013). "Implementation of Vision and Change to Transform Undergraduate Science Education in the Biological Laboratory.," Penn State Shenango Teaching Conference, Penn State Schreyer Institute, Shenango, Pennsylvania.
- McLaughlin, J. S., & Baker, R. M. (January 18, 2013). "Global Environmental Science Education in the 21st Century: Addressing the Challenges and Opportunities that Face China through Online Innovation," EDUCAUSE Mid-Atlantic Regional Conference, EDUCAUSE, Baltimore, Maryland.
- McLaughlin, J. S. (October 2, 2012). "Empowering Science Education Through Outreach, Technology, and Globalization," National Outreach Scholarship Conference, University of Alabama, Tuscaloosa. Alabama.
- McLaughlin, J. S. (August 31, 2012). "Taking a CHANCE: Undergraduates Confront International Environmental Realities through Innovative Research Environments in the Field or Online," 3rd European Congress of Conservation Biology, European Section of the Society for Conservation Biology (ECCB), Glasgow, SCOTLAND.
- McLaughlin, J. S., Liu, H. (Jiangnan University), & Cheng, X. (Jiangnan University). (July 6, 2012). "Empowering Science Education by Blending Scientific Research with Teaching The Jiangnan University & Penn State University Global Environmental Field Course," International Union of Biological Sciences (IUBS) 31st General Assembly, Suzhou, CHINA.
- McLaughlin, J. S. (May 8, 2012). "Using Interactive Web-based Learning Modules to Transform the Biology Lecture," Teaching and Learning Consortium Colloquy III, Penn State University, State College, Pennsylvania.
- McLaughlin, J. S. (March 17, 2012). "Accidental Researcher: Virtual Exploration of Climate Change Data," Pennsylvania Association of Environmental Educators (PAEE) Annual Conference, Entriken, Pennsylvania.
- McLaughlin, J. S. (October 14, 2011). "Organizing Your Embedded International Field Course Online, "National Association of Biology Teachers (NABT) Faculty Professional Development Summit, Anaheim, California.

- McLaughlin, J. S., & Fadigan, K. A. (June 1, 2011). "The 21st Century Field Course: Emulating Professional Science and Conservation Practices," Association of International Educators (NAFSA) Annual Conference and Expo, Vancouver, CANADA.
- McLaughlin, J. S., & Hardison, R. C. (November 5, 2010). "A Novel On-Line Pedagogical Tool: The 'Research Module'," National Association of Biology Teachers (NABT) Professional Development Conference, Minneapolis, Minnesota.
- McLaughlin, J. S. (October 15, 2010). "Empowering Science Education and Sustainability throughScientific Research and Conservation Experiences," Penn State Shenango Schreyer Teaching Conference, Penn State Shenango, Sharon, Pennsylvania.
- McLaughlin, J. S. (October 2, 2010). "The Future of Science Education: Use of Technology to Link Educators and Research Scientists from Around the World," Pennsylvania Council for International Education (PaCIE) Annual Conference, Harrisburg, Pennsylvania.
- McLaughlin, J. S. (October 23, 2009). "CHANCE Helps Pennsylvania High Schools Meet the 3 R's on a Global Scale.," Northeast - Association of Science Teacher Education (NE-ASTE) Regional Meeting, Pocono Environmental Education Center, Delaware Water Gap National Recreation Area, Pennsylvania.
- McLaughlin, J. S. (October 2, 2009). "CHANCE Helps Pennsylvania High Schools Meet the 3 Rs on a Global Scale," PA Council of International Education (PaCIE) Annual Conference, Hilton Harrisburg, Harrisburg, Pennsylvania.
- McLaughlin, J. S., & Fadigan, K. A. (September 5, 2009). "CHANCE Puts Current Scientific Research Data into the Hands of Teachers and Students," 2nd European Congress of Conservation Biology (ECCB), Society for Conservation Biology (SCB), Prague, CZECH REPUBLIC.
- McLaughlin, J. S., & Besong, P. (April 18, 2009). "Customized Multimedia-Learning Tools that Put Current Research Data into Students' Hands," Teaching and Learning with Technology (TLT) Symposium, Penn State University, State College, Pennsylvania.
- McLaughlin, J. S. (March 20, 2009). "Making Teaching More Scientific: Evidence Shows the Use of Real-World Research Data Improves Student Learning," National Science Teachers Association (NSTA) Annual Conference/ Society of College Science Teachers (SCST) Annual Conference, New Orleans, Louisiana.
- Hinkle, J., & McLaughlin, J. S. (March 19, 2009). "Use of an Improved Isolated Chicken Embryonic Heart *In Vitro* System to Study Vertebrate Heart Development and Physiology," NSTA Annual Conference/SCST Annual Conference, National Science Teachers Association/Society of College Science Teachers, New Orleans, Louisiana.
- McLaughlin, J. S. (December 5, 2008). "CHANCE: Rekindling the Spirit of Experimentation through Research," Pennsylvania Science Teachers Association (PSTA) Annual Conference, Pennsylvania Science Teachers Association, Hershey, Pennsylvania.
- McLaughlin, J. S., Tabery, P. P., & Waller, P. (March 27, 2008). "So You Want to Run A Cutting Edge Professional Development Workshop?" National Science Teachers Association (NSTA) Annual Conference/Society of College Science Teachers (SCST) Annual Conference, Boston, Massachusetts.

- McLaughlin, J. S. (March 15, 2008). "The CHANCE Research Module: Use of "Real-World" Research Data Improves Student Learning," National Association of Biology Teachers (NABT) Annual Professional Development Conference, Memphis, Tennessee.
- McLaughlin, J. S., & Dreher, T. (November 28, 2007). "Use Customized Multimedia-Learning Tools Based on Real-Life Research Data to Teach Science Concepts," National Association of Biology Teachers (NABT) Annual Conference, Atlanta, Georgia.
- McLaughlin, J. S. (September 29, 2007). "CHANCE: Connecting Humans and Nature through Conservation Experiences," Pennsylvania Council of International Education (PaCIE) Annual Conference, Harrisburg, Pennsylvania.
- McLaughlin, J. S. (December 13, 2006). "Bringing the World to Pennsylvania by CHANCE," Pennsylvania International Education Forum: Preparing PA Students to Lead and Serve, Pennsylvania Department of Education, HACC Wildwood Conference Center, Harrisburg, Pennsylvania.
- McLaughlin, J. S., & Dreher, T. (November 29, 2006). "How to Enhance the Way You're Teaching and the Way Students are Learning using Real-World Research Data," Pennsylvania Science Teachers Association (PSTA) Annual Conference, Pennsylvania Science Teachers Association, Hershey, Pennsylvania.
- McLaughlin, J. S. (November 8, 2006). "Coming Full Circle: The In-Service Teacher, International Courses, and Demonstrating Learning Outcomes," Council on International Educational Exchange (CIEE) Annual Conference), Seville, SPAIN.
- McLaughlin, J. S. (October 11, 2006). "Imagine if biology was made real in high school?," NABT Annual Conference, National Association of Biology Teachers, Albuquerque, New Mexico.
- McLaughlin, J. S. (October 27, 2005). "Classrooms Without Walls by CHANCE," National Society for Experiential Education (NSEE) Annual Conference, Philadelphia, Pennsylvania.
- McLaughlin, J. S. (October 5, 2005). "CHANCE A Program that Promotes Learning for Teachers and Students Using Inquiry," National Association of Biology Teachers (NABT) Annual Professional Development Conference, Milwaukee, Wisconsin.
- McLaughlin, J. S. (September 23, 2005). "Curriculum Integration and Study Abroad: A Case Study in Science," The Pennsylvania Council for International Education (PaCIE) Annual Conference, Philadelphia, Pennsylvania.
- McLaughlin, J. S., & Johnson, D. K. (November 12, 2004). "Enhancing Student Learning of Biodiversity and Conservation Using a Field Course Experiential Learning Model," National Association of Biology Teachers (NABT) Annual Professional Development Conference, Chicago, Illinois.
- McLaughlin, J. S. (March 13, 2004). "The Costa Rica Experience An International Model and Assessment Strategy for Teaching and Learning," Penn State's 3rd Annual Schreyer National Conference - Innovations in International Education, Penn State Schreyer Institute, State College, Pennsylvania.

- McLaughlin, J. S., & Johnson, D. K. (October 9, 2003). "The Costa Rica Experience -Learning about Biodiversity in a Rich Contextual Environment," National Association of Biology Teachers (NABT) Annual Professional Development Conference, Denver, Colorado.
- McLaughlin, J. S. (November 1, 2002). "Using Interactive Web-based Learning Modules to Teach Ecology in the Classroom," National Association of Biology Teachers (NABT) Annual Professional Development Conference, Cincinnati, Ohio.
- McLaughlin, J. S. (June 12, 2002). "Biodiversity of Australian Ecosystems: A Video Presentation," Association of Biology Laboratory Educators (ABLE) Annual Conference, Louisiana State University, Baton Rouge, Louisiana.
- McLaughlin, J. S. (November 8, 2001). "Alaska A Video Adventure," National Association of Biology Teachers (NABT) Annual Professional Development Conference, Montreal, CANADA.
- McLaughlin, J. S., & Zervanos, S. M. (June 20, 2001). "From the Temperate Rainforests to Glaciers: A Video Adventure of Alaska," Association for Biology Laboratory Educators (ABLE) Annual Conference, University of Chicago, Chicago, Illinois.
- McLaughlin, J. S. (October 25, 2000). "Revitalizing the Cardiovascular System Lecture: Webbased Interactive Modules that Engage the Biology Student," National Association of Biology Teachers (NABT) Annual Professional Development Conference, Orlando, Florida.
- McLaughlin, J. S. (June 8, 2000). "From the Rainforests to the Galapagos: A Video Adventure," Association for Biology Laboratory Educators (ABLE) Annual Conference, Clemson University, Clemson, South Carolina.
- McLaughlin, J. S. (April 10, 1999). "The Botany Fieldsite (WWW): A Guide through the Northeastern Deciduous Forest," Teaching and Learning with Technology Symposium, Penn State University, State College, Pennsylvania.
- McLaughlin, J. S. (April 5, 1997). "Using Computer Technology and the Scientific Method to Foster Scientific Method to Foster Scientific Thinking," Teaching and Learning with Technology Symposium, Penn State University, State College, Pennsylvania.

Posters (Refereed)

- McLaughlin, J. S., Mit, P. (Medical College of Wisconsin), & Slee, J. B. (DeSales University). (December 8, 2019). "Making It Stick: The Story of a CURE that Imparts Career Ready Skills," Joint Meeting for the American Society for Cell Biology (ASCB) and European Molecular Biology Organization (EMBO), Washington D.C.
- McLaughlin, J. S., Sarah, E. E., Esparza, D. (University of Texas at El Paso), & Patel, M. (Medical College of Wisconsin). (May 29, 2019). "Undergraduate Students' International Environmental Policy Research: Outcomes and Opportunities," 2019 NAFSA Annual Conference, Washington D.C.

- McLaughlin, J. S., Patel, M. (Wisconsin College of Medicine), Johnson, K. D. (Perdue University at Fort Wayne), & de la Rosa, C. (Organization of Tropical Studies - La Selva). (February 5, 2019). "Undergraduate Research and Conservation Activities Enrich Short-Term Study Abroad Outcomes," NAFSA Online Poster Fair, NAFSA Intercultural and Communication Training Network.
- McLaughlin, J. S., & Esparza, D. (University of Texas, El Paso). (October 11, 2018). "Learning Outcomes of an International Program that Offers Undergraduates Authentic Research in Environmental Policy," 47th North American Association of Environmental Education (NAAEE) Conference, NAAEE, Spokane, Washington.
- Goudsouzian, L. K. (DeSales University), McLaughlin, J. S., & Slee, J. B. (DeSales University). (June 20, 2017). "A Using Yeast to Make Scientists: A Six-Week Student-Driven Research Project for the Cell Biology Laboratory," Transforming Undergraduate Education in the Molecular Life Science, American Association for Biochemistry and Molecular Biology (AABMB), Tampa, Florida.
- McLaughlin, J. S. (August 3, 2015). "CHANCE: Impacting Student Learning, Attitudes, Behaviors, and Career Choices through Real World Conservation Experiences," 27th International Congress for Conservation Biology (ICCB) and the 4th European Congress for Conservation Biology (ECCB), Society for Conservation Biology, Montpellier, FRANCE.
- McLaughlin, J. S. (November 13, 2014). "CHANCE: Impacting Student Learning, Attitudes, Behaviors, and Career Choices through Real World Conservation Experiences," NABT Global Perspectives Committee 2nd Annual Poster Session, National Association of Biology Teachers (NABT), Cleveland, Ohio.
- McLaughlin, J. S., Cheng, X. (Jiangnan University), & Liu, H. (Jiangnan University). (November 21, 2013). "CHANCE: Promoting Environmental Education in China through Research.," National Association of Biology Teachers (NABT) Global Perspectives Committee Inaugural Poster Session, Atlanta, Georgia.
- McLaughlin, J. S., Cheng, X. (Jiangnan University), & Liu, H. (Jiangnan University). (November 2,2013). "CHANCE: Promoting Environmental Education in China through Research.," 1st Annual Western Pennsylvania Conservation Conference, The Western PA Chapter of the Society for Conservation Biology (WPASCB), Clarion University, Clarion, Pennsylvania.
- McLaughlin, J. S., Fadigan, K. A., & Munsell, D. (Illinois Institute of Technology). (February 3, 2013). "Open Inquiry-Based Learning in an International Field Course: Students as Research Scientists and Global Citizens.," The 1st International Conference of the Outdoor Learning Environment, Weizmann Institute of Science, Rehovot, ISRAEL.
- McLaughlin, J. S. (October 4, 2011). "International Embedded Field-Courses: Emulating Professional Science Practice while Embracing Conservation," National Outreach Scholarship Conference, Michigan State University, Lansing, Michigan.
- McLaughlin, J. S. (October 5, 2010). "Taking a CHANCE to Empower Science Education through Research," National Outreach Scholarship Conference, North Carolina State University, Raleigh, North Carolina.

- McLaughlin, J. S. (October 3, 2008). "Connections: Why Field Research is the Key to Successful International Programming," PA Council of International Education (PaCIE) Annual Conference, The Pennsylvania State University, State College, Pennsylvania.
- Hinkle, J. C., & McLaughlin, J. S. (July 26, 2008). "Use of an Improved Isolated Chicken Embryonic Heart *In Vitro* System to Study Vertebrate Heart Development and Physiology," Society for Developmental Biology (SDB) Annual Meeting, University of Pennsylvania, Philadelphia, Pennsylvania.
- Seaquist, S., & McLaughlin, J. S. (March 27, 2008). "Using a Virtual Tissue Culture System to Assist Students in Understanding Life at the Cellular Level," National Science Teachers Association (NSTA) Annual Conference/Society of College Science Teachers (SCST) Conference, Boston, Massachusetts.
- Arbeider, D. A., & McLaughlin, J. S. (October 21, 2006). "A Technology-Enriched Learning Object to Enhance Student Learning of Core Biological Concepts and Real-World Environmental Issues," Smith Undergraduate Science Research Symposium, Penn State York, York, Pennsylvania.
- McLaughlin, J. S., Dugan, T. R., Stine, J. L., & Arbeider, D. A. (October 10, 2006). "CHANCE Empowers Pennsylvania's Teachers to Return to Their Classrooms to Better Educate Our Youth," NABT K-12 Outreach Symposium, National Association of Biology Teachers, Albuquerque, New Mexico.
- McLaughlin, J. S., & Heyden, R. (Pearson Publishing, Inc). (2003). "Gametes, Fertilization, and Embryogenesis Come Alive: Biology-Exploring Life Promises True Interactivity," Society for Developmental Biology Annual National Conference, SDB Education Committee, Boston, Massachusetts.
- McLaughlin, J. S. (June 15, 1999). "*In Vivo* and *In Vitro* Development of the Chicken Heart," Society for Developmental Biology (SDB) Annual Conference, Society for Developmental Biology, University of Virginia, Charlottesville, Virginia.

Presentations (non-refereed)

- Mclaughlin, J. S. & Jarsen, J. M. (March 2, 2022). "How to Design a Research Poster," Undergraduate Research Workshop Series (virtual), Penn State Lehigh Valley, Center Valley, Pennsylvania.
- Mclaughlin, J. S. (March 25, 2021). "CHANCE: Global Conservation Efforts to Preserve the Danube Delta," 2021 Penn State Water Forum (virtual), Penn State Water Initiative, State College, Pennsylvania.
- McLaughlin, J. S. (September 19, 2019). "The Global Impact of the United States Embassy Science Fellows Program," Embassy Science Fellow Reception, U.S. Department of State, Harry S. Truman Building, Washington D.C.
- McLaughlin, J. S. and Hogan, S. M. (June 25, 2019). "Boots on the Ground: The U.S. Embassy Science Fellows Program," Overseas Corps Orientation Seminar, Department of Energy (DOE), Washington D.C.

- McLaughlin, J. S. (June 14, 2017). "Penn State CHANCE: Connecting Students to Nature through Conservation Experiences," Lehigh University Environmental Initiative (EI), Lehigh University/The Nurture Nature Center, Lehigh University, Bethlehem, Pennsylvania.
- McLaughlin, J. S. (January 18, 2017). "Undergraduates Mature into Research Scientists and Conservationists through CHANCE International Field Work," Faculty Invitational Lecture Series, Penn State Schuylkill, Schuylkill Haven, Pennsylvania.
- McLaughlin, J. S. (October 12, 2016). "The Story of Penn State CHANCE and the Chang Jiang," Higher Education Lecture Series, Jiangnan University Institute of Higher Education, Wuxi, CHINA.
- McLaughlin, J. S. (March 31, 2016). "Authentic Research in Undergraduate Biology Education: Building Frameworks to Transform both Formal and Informal Learning Environments," Department of Biological Sciences Colloquium Seminar Series, Lehigh University, Bethlehem, Pennsylvania.
- Coyle, M. S., Baker, R. M., & **McLaughlin, J. S.** (February 6, 2014). "Transforming an Undergraduate Laboratory Experience into a Research Environment," Penn State Lehigh Valley (PSLV) Innovations in Teaching and Learning, Center Valley, Pennsylvania.
- McLaughlin, J. S. (October 29, 2013). "Taking a CHANCE," Penn State Schuylkill Campus Public Scholarship Program, Schuylkill Haven, Pennsylvania.
- McLaughlin, J. S., & Baker, R. M. (September 28, 2013). "Using Environmental Education in China as a Learning Laboratory," Global Penn State: Internationalizing the Curriculum Conference, Penn State Global Programs, State College, Pennsylvania.
- McLaughlin, J. S. (June 13, 2012). "Taking a CHANCE to Empower Science Education by Blending Scientific Research with Teaching," Penn State Council on Engagement, Penn State Outreach, State College, Pennsylvania.
- McLaughlin, J. S. (May 18, 2012). "The CHANCE Research Module," Institute for Energy & Environmental Research of Northeastern Pennsylvania, Wilkes University, Wilkes-Barre, Pennsylvania.
- McLaughlin, J. S. (November 17, 2010). "Water and Life: Snapshots from a Traveling Biology Professor," CHANCE Idol Assembly, Northwest Area High School, Shickshinny, Pennsylvania.
- McLaughlin, J. S. (October 17, 2009). "CHANCE: Connecting Humans and Nature through Conservation Experiences," CHANCE International Meeting, Nanjing University, Nanjing, CHINA.
- McLaughlin, J. S. (September 29, 2009). "Supplementing High School Science Textbook Material with Interactive, Experience-based Research Modules Enhances High-School Students Performance and Fosters Meaningful Learning," Teaching, Learning, and Technology Program and Lehigh Environmental Initiative (EI), Lehigh University, Bethlehem, Pennsylvania.
- McLaughlin, J. S. (April 30, 2009). "Biodiversity: Connecting with Life," Project Earth Lecture Series, Lehigh Carbon Community College, Schnecksville, Pennsylvania.

- McLaughlin, J. S. (October 15, 2008). "Reasons We Teach Biology," NABT Annual Professional Development Conference, Memphis, Tennessee.
- McLaughlin, J. S. (November 15, 2005). "Giving Pennsylvania a CHANCE," Northampton Community College Science Club (NCC) Science Club Lecture Series, Northampton Community College Science Club, Bethlehem, Pennsylvania.
- McLaughlin, J. S. (May 12, 2004). "Designing Field Experiences that Increase High-Order Cognitive Gains In and Across Disciplines," Colloquy X: Making Connections - Cultures that Foster Student Learning, Penn State University, State College, Pennsylvania.
- McLaughlin, J. S. (May 9, 2001). "Breaking Out of the Box: Teaching Biology with Active Learning Modules," Celebrating Teaching Colloquium, Penn State Berks-Lehigh Valley College, Berks, Pennsylvania.
- McLaughlin, J. S. (September 20, 1996). "Using Computer Technology and the Scientific Method to Foster Scientific Thinking in the Biology Laboratory," Empower 2 Convocation, Penn State University, State College, Pennsylvania.

Workshops (refereed and non-refereed)

- Mclaughlin, J. S. & Slee, J. B. (DeSales University), (November 13, 2021). "Incorporating Authentic Research into a Course Through CUREs (Course-based Undergraduate Research Experiences)," National Association of Biology Teachers (NABT) Professional Development Conference, Atlanta, Georgia.
- McLaughlin, J. S., (February 12, 2021). "CUREs Promote Student Equity, Autonomy, Workforce & STEM-specific Skills," American Association of Colleges and Universities (AAC&U) 2021 Conference on General Education, Pedagogy, and Assessment (virtual), Washington, D.C.
- McLaughlin, J. S. (August 14, 2018). "Collaboration Workshop: Teaching Environmental WaterRealities," International Arid Lands Conference, Texas Tech University, Lubbock, Texas.
- McLaughlin, J. S. (May 22, 2014). "Transforming an Undergraduate Biology Laboratory Experience into a Real-World Research Environment," STEM Professional Development Workshop, Jiangnan University, Wuxi, CHINA.
- McLaughlin, J. S. (May 20, 2014). "The Penn State CHANCE Program: Exploring. Researching, and Conserving Our World's Ecosystems," STEM Professional Development Workshop, Jiangnan University, Wuxi, CHINA.
- McLaughlin, J. S. (May 3, 2013). "Implementation of Research-Based Practices to Transform Undergraduate STEM Education," Higher Education Professional Development Workshop, Jiangnan University, Wuxi, CHINA.
- McLaughlin, J. S., & Metz, A. M. (Southern Illinois Medical School), Singer, S. (National Research Council), & Labov, J. (National Academy of Sciences). (November 2, 2012).
 "From Vision to Change: An Interactive Workshop," National Association of Biology Teachers (NABT) Faculty Development Summit, National Association of Biology Teachers, Dallas, Texas.

- McLaughlin, J. S. (April 14, 2012). "Motivate Students through Online Research Modules," Professional Resources in Science and Mathematics (PRISM) Workshop, Montclair State University, Montclair, New Jersey.
- McLaughlin, J. S. (July 13, 2011). "Taking a CHANCE to Empower Science Education by Blending Scientific Research with Teaching," AYP Conference: 21st Century School Improvement & AYP –Ensuring Competence and Growth Opportunities for All Students, including Students with Disabilities, Pennsylvania Training and Technical Assistance Network (PaTTAN), State College, Pennsylvania.
- McLaughlin, J. S. (June 5, 2010). "Technology as a Catalyst to Empower Science Education: Using CHANCE Modules Workshop," EDUCAUSE Southeast Regional Conference, EDUCAUSE, Atlanta, Georgia.
- McLaughlin, J. S. (March 10, 2010). "Taking a CHANCE: Multimedia-based Pedagogical Tools for High-Impact Learning Workshop," National Science Teachers Association (NSTA) National Conference, Philadelphia, Pennsylvania.
- McLaughlin, J. S. (November 13, 2009). "The 21st Century Undergraduate Classroom: Multimedia Meets the 3 R's on a Global Scale," National Association of Biology Teachers (NABT) Professional Development Conference, Denver, Colorado.
- McLaughlin, J. S. (May 15, 2009). "Teaching Biology with Technology: The CHANCE Module Workshop," CHANCE Module Workshop, Bremont High School, Bremont, Texas.
- Tabery, P. P., McLaughlin, J. S., & Waller, P. L. (May 15, 2008). "Business and Education Collaboration = Successful Professional Development Workshop," National Association of Biology Teachers (NABT) Annual Professional Development Conference, Memphis, Tennessee.
- McLaughlin, J. S. (December 7, 2007). "Use CHANCE Multimedia Research Modules to Teach Science Concepts," Pennsylvania Science Teachers Association (PSTA) Annual Conference, Hershey, Pennsylvania.
- McLaughlin, J. S., Pamela, T., & Waller, P. (December 6, 2007). "Defining Life: Viruses -Living or Non-living," PSTA Annual Conference, Pennsylvania Science Teachers Association, Hershey, Pennsylvania.
- McLaughlin, J. S., Pamela, T., & Waller, P. (April 14, 2007). "Defining Life: Viruses -Living or Non-living?" NABT - Sanofi Pasteur Northeast Regional Workshop, Sanofi Pasteur, Swiftwater, Pennsylvania.
- McLaughlin, J. S. (March 29, 2007). "Using Technology to Blend Teaching and Basic Research Workshop," National Science Teachers Association (NSTA)/Society of College Science Teachers (SCST), Annual Conference, Anaheim, St. Louis, Missouri.
- McLaughlin, J. S., & Dreher, T. T. (July 25, 2006). "The CHANCE Modules Workshop," The Pennsylvania Governor's Institute for Environment and Ecology Educators, Pennsylvania Department of Education, Champion, Pennsylvania.

- McLaughlin, J. S. (April 5, 2006). "Giving High Schools a CHANCE: Training Teachers and Students in Environmental Science and Conservation Biology through Inquiry," National Science Teachers Association (NSTA)/Society of College Science Teachers (SCST) Annual Conference, Anaheim, California.
- McLaughlin, J. S. (July 27, 2005). "Giving Pennsylvania a CHANCE Integrating Technology into the Classroom Workshop," The Pennsylvania Governor's Institute for Environment and Ecology Educators, Pennsylvania Department of Education, Champion, Pennsylvania.
- McLaughlin, J. S. (June 3, 1999). "The Botany Fieldsite (WWW): A Guide through the Northeastern Deciduous Forest," Association for Biology Laboratory Educators (ABLE) Annual Conference, University of Nebraska, Lincoln, Nebraska.
- McCain, E. R. (Muhlenberg College), & **McLaughlin, J. S.** (June 10, 1998). "Developmental and Physiological Aspects of the Chicken Embryonic Heart," Association for Biology Laboratory Educators (ABLE) Annual Conference, Florida State University, Tallahassee, Florida.
- McLaughlin, J. S., & McCain, E. R. (Muhlenberg College). (June 1997). "*In Vivo* and *In Vitro* Development of the Chicken Heart," Association for Biology Laboratory Educators (ABLE) Annual Conference, The University of Calgary, Alberta.
- McLaughlin, J. S. (April 22, 1997). "Biology 110 IRP Website at Penn State Allentown," Computers in Teaching Workshop, Eberly College, Biology Department, Penn State University, State College, Pennsylvania.
- McLaughlin, J. S., & McCain, E. R. (Muhlenberg College). (April 18, 1997). "*In Vivo* and *In Vitro* Development of the Chicken Heart: An Undergraduate Laboratory Teaching Approach," Northeast Region Developmental Biology Meeting, Society for Developmental Biology, Marine Biological Laboratory, Wood Hole, Massachusetts.

FUNDED FELLOWSHIPS AND GRANTS

Peer-Reviewed Fellowships and Grants

- Postolache, C., (Coordinator, UB) & Mclaughlin, J. S. (Penn State, Coordinator) "CIVIS CHANCE: Undergraduate Research Experiences on the Stationarity of the Danube River and its Delta through Global Engagement," <u>CIVIS - A European Civic University</u>. Total Awarded: 15,840 Euros. (Submitted September 18, 2021; date funded December 21, 2021).
- CIVIS grant funds awarded to UB such that McLaughlin and CHANCE team can implement a fall 2022 CHANCE professional development workshop to select faculty from Aix Marseilles University (FRANCE), National and Kapodistrian University of Athens (GREECE), and Universite Libre de Bruxelles (BELGIUM) in high impact CURE and short-term study abroad practices to expand the CHANCE model throughout the European Union.
- **McLaughlin, J.S.**, Fellowship, "Research Fellowship for Visiting Professors," Research Institute, University of Bucharest, Bucharest, Romania.. Total Awarded: \$4,500. (July 8 – July 26, 2021).

- Fellowship awarded to implement the 2021 CHANCE Roman short-term study abroad field program and to provide professional development to UB faculty in CUREs pertaining to the Danube delta.
- McLaughlin, J. S., Fellowship, "Jefferson Science Fellowship," National Academy of Sciences, Nonprofit Foundations. Total awarded: \$60,000.00. (January 2019 January 2020).

Award Announcement:

https://sites.nationalacademies.org/PGA/Jefferson/PGA_176905?fbclid=IwAR1sw5GlOBr A0PqiBLp ADYSXCfn-nC9XDk5BTTAB6tnUuPUBUcghc64gWuU

U.S. State Department Profile:

https://sites.nationalacademies.org/PGA/Jefferson/PGA_176868

- McLaughlin, J. S., & Slee, J. B., Fellowship, "Mentoring in Active Learning and Teaching (MALT) Fellowship," American Society for Cell Biology (ASCB) - Education Committee, Associations, Institutes, Societies and Voluntary Health Agencies. Total requested: \$1,155.00. Total awarded: \$1,155.00. (submitted: December 11, 2017, date funding awarded: December 14, 2017, funded: December 14, 2017 - 2019).
- McLaughlin, J. S. (Co-Principal Investigator), Metz, A. (Co-Principal Investigator),
 "Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics (TUES) – Grant. *Vision and Change*: An NABT Professional Development Summit #1249774," National Science Foundation, Federal. Total requested: \$17,800.00.
 Total awarded: \$17,800.00. (submitted: July 5, 2012, funding awarded: August 15, 2012).
- McLaughlin, J. S. Grant, "2009 NABT/Sanofi Pasteur Northeast Regional Workshop," Sanofi Pasteur, Corporations. Total requested: \$16,000.00. Total awarded: \$16,000.00. (submitted: September 15, 2008, funded: January 1, 2009 - April 30, 2009).

Grants and Donations for Instructional Improvement

- McLaughlin, J. S., Donation. "Penn State CHANCE Romania," ATAS International, Inc., Corporations. Total requested: \$10,000.00. Total awarded: \$10,000. (submitted: October 6, 2021, funded: January 1, 2022).
- McLaughlin, J. S., Grant. "Penn State Sustainability Workshop Series and Grant," Penn State Global and Penn State Sustainability Institute. Total awarded: \$2,000. (submitted: October 6, 2021, funded: December 1, 2021).
- McLaughlin, J. S., Donation. "Penn State CHANCE General Funds," ATAS International, Inc., Corporations. Total requested: \$10,000.00. Total awarded: \$4,500. (submitted: November 2020, funded: January 2021).
- McLaughlin, J. S., Donation. "Penn State CHANCE General Funds," ATAS International, Inc., Corporations. Total requested: \$10,000.00. Total awarded: \$11,800.00. (submitted: November 2017, funded: January 2018).
- McLaughlin, J. S., Grant. "A Proposal to Sanofi Pasteur to Support Penn State CHANCE," Sanofi Pasteur, Corporations. Total requested: \$20,000.00. Total awarded: \$20,000.00. (submitted: March 2017, funded: June 2017).

- McLaughlin, J. S., Grant. "Penn State CHANCE Field Course Fund," Philadelphia Foundation, Nonprofit Foundations. Total requested: \$9,000.00. Total awarded: \$9,000.00. (submitted: November 2016, funded: February 2017).
- McLaughlin, J. S., Grant. "A Proposal to Sanofi Pasteur to Support Penn State CHANCE," Sanofi Pasteur, Corporations. Total requested: \$30,000.00. Total awarded: \$9,000.00. (submitted: March 2016, funded: June 2016).
- McLaughlin, J. S., Donation. "Penn State CHANCE Conservation Fund," O² EMC, Corporations. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted: January 2016, funding period: May 2016).
- McLaughlin, J. S., Donation. "Penn State Field Course Fund," Burkert Fluid Control Systems, Inc. Total requested: \$10,000.00. Total awarded: \$10,000.00. (submitted: January 2016, funded: May 2016).
- McLaughlin, J. S., Donation. "Penn State CHANCE Field Course Fund," ATAS International, Inc., Corporations. Total requested: \$7,500.00. Total awarded: \$7,500.00. (submitted: January 2016, funded: April 2016).
- McLaughlin, J. S., Funding Request. "Penn State Regional Undergraduate Research Symposium Support," Penn State University College, Universities and Colleges. Total requested: \$2,500.00. Total awarded: \$2,500.00. (submitted: January 2016, funded: February 2016).
- McLaughlin, J. S., Grant. DOW Chemical (China), Corporations. Total requested: \$2,000.00. Total awarded: \$2,000.00. (funded: January 2015, funded: December 2015).
- McLaughlin, J. S., Donation. "CHANCE 2015 China's Water Realities and Sustainable Solutions," The Chiang Family, Private. Total requested: \$1,000.00. Total awarded: \$1,000.00. (submitted: November 2014, funding period: February 2015).
- McLaughlin, J. S., Donation. "CHANCE 2015 China's Water Realities and Sustainable Solutions," Cavotec, Corporations. Total requested: \$1,000.00. Total awarded: \$1,000.00. (submitted: September 2014, funded: January 2015).
- McLaughlin, J. S., & Liu, H., Funding Request. "CHANCE 2015 China's Water Realities and Sustainable Solutions," Jiangnan University, Universities and Colleges. Total requested: \$30,000.00. Total awarded: \$30,000.00. (submitted: September 2014, funded: January 2015).
- McLaughlin, J. S., Donation. "CHANCE 2015 China's Water Realities and Sustainable Solutions," The Fowler Family, Private. Total requested: \$10,000.00. Total awarded: \$10,000.00. (submitted: September 2014, funded: January 2015).
- McLaughlin, J. S., Donation. "CHANCE Programing in Costa Rica and China," Burkert Fluid Control Systems, Corporations. Total requested: \$40,000.00. Total awarded: \$40,000.00. (submitted October 2014, funded: December 2014).
- McLaughlin, J. S., Grant. "China's Vanishing Water Supply, Desertification, and Sustainable Solutions,"Penn State Global Programs, Penn State. Total requested: \$4,000.00. Total awarded: \$4,000.00. (submitted: February 2014, funded: April 2014).

- McLaughlin, J. S., Donation. "CHANCE," Burkert Fluid Control Systems, Corporations. Total requested: \$15,000.00. Total awarded: \$15,000.00. (submitted October 2013, funded: January 2014).
- McLaughlin, J. S. & Liu, H., Funding Request. "CHANCE USA Yellowstone Wildlife Ecology, Land Preservation, and Water Management," Jiangnan University, Universities and Colleges. Total requested: \$6,000.00. Total awarded: \$6,000.00. (submitted: November 2011, funded: January 2012).
- McLaughlin, J. S., Liu, H., Funding Request. "Internationalizing the Engineering Classroom in China," Jiangnan University Office of International Programs, Universities and Colleges. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted: November 2011, funded: January 2012).
- McLaughlin, J. S., & Liu, H., Funding Request. "CHANCE 2011 Global Environmental Sustainabilityin China," Jiangnan University, Universities and Colleges. Total requested: \$25,000.00. Total awarded: \$25,000.00. (submitted: January 2011, funded: April 2011).
- McLaughlin, J. S., Grant. "CHANCE 2011 Global Environmental Sustainability in China," DOW Chemical (China), Corporations. Total requested: \$10,000.00. Total awarded: \$10,000.00. (submitted: January 2011, funded: April: 2011).
- McLaughlin, J. S., Donation. "Penn State CHANCE Program," ATAS International, Inc., Corporations. Total requested: \$15,000.00. Total awarded: \$15,000.00. (submitted November 2010, funded: January 2011).
- McLaughlin, J. S., Donation. "CHANCE Program," ATAS International, Inc., Corporations. Total requested: \$10,000.00. Total awarded: \$10,000.00. (Submitted: November 2009, funded: January 2010).
- McLaughlin, J. S., Grant. "CHANCE Program," Sanofi Pasteur, Corporations. Total requested: \$20,000.00. Total awarded: \$15,000.00. (submitted: September 2009, funded: January 2010).
- McLaughlin, J. S., & Liu, H., Funding Request. "CHANCE China 2011," Jiangnan University, Universities and Colleges. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted:September 2009, funded: January 2010).
- McLaughlin, J. S., Grant. "Global Stewardship: Establishing a 2010 Short-term Study Abroad Course inChina," The Pennsylvania State University/Global Programs Faculty Travel Grant, Penn State. Total requested: \$5,000.00. Total awarded: \$4,000.00. (submitted: February 2009, funded: April 2009).
- McLaughlin, J. S., Donation. "CHANCE Program," ATAS International, Inc., Corporations. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted: September 2008, funded: January 2009).
- McLaughlin, J. S., Grant. "CHANCE Program," Sanofi Pasteur, Corporations. Total requested: \$15,000.00. Total awarded: \$15,000.00. (submitted: August 2008, funded: December 2008).
- McLaughlin, J. S., Donation. "CHANCE Program," ATAS International, Inc., Corporations. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted: November 2007, funded: January 2008)

- McLaughlin, J. S., Grant. "Penn States Partners with Nanjing University: Short-term Study Abroad," The Pennsylvania State University/Global Programs Faculty Travel Grant, Penn State. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted: February 2008, funded: April 2008).
- McLaughlin, J. S., Grant. "SDB Faculty Development Grant," Society for Developmental Biology, Associations, Institutes, Societies and Voluntary Health Agencies. Total requested: \$500.00. Total awarded: \$500.00. (submitted: May 2008, funded: June 2008).
- McLaughlin, J. S., Grant. "Project CHANCE," Department of Education, Commonwealth of Pennsylvania. Total requested: \$3,000. Total awarded: \$3,000.00. (submitted: October 2006, funded: March 1, 2007).
- McLaughlin, J. S., Grant. "Global Environmental Stewardship: China," Penn State University, Penn State. Total requested: \$8,000.00. Total awarded: \$8,000.00. (submitted: January 2007, funded: May 2007).
- McLaughlin, J. S., Donation. "CHANCE," ATAS International, Inc., Corporations. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted: November 2006, funded: January 2007).
- McLaughlin, J. S., Grant. "CHANCE," The Pennsylvania Department of Education, Commonwealth of Pennsylvania. Total requested: \$5,000.00. Total awarded: \$3,000.00. (submitted: October 2005, funded: January 2006).
- **McLaughlin, J. S.**, Funding Request. "Tanzania a Video Adventure," Penn State Berks-Lehigh Valley College Undesignated Gift Fund, Universities and Colleges. Total requested: \$1,000.00. Total awarded: \$1,000.00. (submitted: January 2005, funded: February 2005).
- McLaughlin, J. S., Grant. "Building a Partnership between the United States and Costa Rica with Penn State CHANCE," The Pennsylvania Department of Education, Commonwealth of Pennsylvania. Total requested: \$17,000.00. Total awarded: \$15,000.00. (submitted: November 2004, funded: January 2005).
- McLaughlin, J. S., Funding Request. "Penn State Undergraduate Field Course in Tanzania," The Pennsylvania State University International Programs Travel Grant, Penn State. (submitted: February2005, funded: April 2005).
- McLaughlin, J. S., Funding Request. "Peru a Video Adventure," Penn State Berks-Lehigh Valley College Undesignated Gift Fund, Universities and Colleges. Total requested: \$1,000.00. Total awarded: \$1,000.00. (submitted: January 2004, funded: February 2004).
- McLaughlin, J. S., Grant. "Project CHANCE in Costa Rica," The Pennsylvania Department of Education, Commonwealth of Pennsylvania. Total requested: \$10,000.00. Total awarded: \$10,000.00. (submitted: January 2004, funded: June 1, 2004).
- McLaughlin, J. S., Funding Request. "Costa Rica a Video Adventure," Penn State Berks-Lehigh Valley College Undesignated Gift Funds, Universities and Colleges. Total requested: \$1,000.00. Total awarded: \$1,000.00. (submitted: January 2002, funded: February 2002).

- McLaughlin, J. S., Funding Request. "Australia a Video Adventure," Penn State Berks-Lehigh Valley College Undesignated Gift Fund, Universities and Colleges. Total requested: \$1,000.00. Total awarded: \$1,000.00. (submitted: January 2001, funded: February 2001 - December 2001).
- McLaughlin, J. S., & Zervanos, S., Funding Request. "Biodiversity of Australia," Penn State Berks- Lehigh Valley Student Travel Funds, Universities and Colleges. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted: January 2001, funded: June 2001).
- McLaughlin, J. S., Funding Request. "Alaska: A Video Adventure," Penn State Lehigh Valley Faculty Research Fund, Universities and Colleges. Total requested: \$1,000.00. Total awarded: \$1,000.00. (submitted: January 2000, funded: January 2000).
- McLaughlin, J. S., Grant. "From Hands-On to Online: Weaving a Biodiverse Web for the World," Penn State Fund for Excellence in Learning and Teaching (FELT), Universities and Colleges. Total requested: \$5,000.00. Total awarded: \$5,000.00. (submitted: January 1999, funded: May 1999).
- McLaughlin, J. S., Grant. "Physiology Measurements and Experimentation Using the BioPac StudentLab," Penn State Center for Academic Computing, Universities and Colleges. Total requested: \$20,000.00. Total awarded: \$20,000.00. (submitted: January 1997, funded: June 1997).
- McLaughlin, J. S., Funding Request. "DNA in Practice," Penn State Lehigh Valley Faculty Research Fund, Universities and Colleges. Total requested: \$1,000.00. Total awarded: \$1,000.00. (submitted: January 1996, funded: January 1996 - December 1996).

Peer Review of Grant Proposals

- National Science Foundation (NSF) Grant Reviewer. The International Research Experiences for Students (IRES) program (December 20, 2019 - January 7, 2020). https://www.nsf.gov/pubs/2019/nsf19585/nsf19585.htm.
- Biotechnology and Biological Sciences Research Council (BBSRC) Grant Reviewer.
 (December 15, 2017 December 20, 2017). Roslin Institute/University of Edinburgh, Maximizing the potential of the chickembryo as a model of vertebrate development.
 BBSRC is a UNITED KINGDOM (UK) Research Council and non-departmental public body (NDPB); the largest UK public funder of non-medical bioscience.

OUTREACH – OTHER USE OF EXPERTISE

Government Agencies

- Technical Expert, Foreign Affairs Consultant, U.S. Department of State, Bureau of Oceans and International and Scientific Affairs OES), Office of Science and Technology Cooperation (STC), Washington, D.C. (February 28, 2020 – February 28, 2021).
- Leveraged technical expertise in support of the detailed evaluation and analysis as part of an ongoing, comprehensive study of the U.S. Embassy Science Fellows program. Provided strategic recommendations for the future of the program.

Embassy Science Fellow (ESF), Science Advisor/Expert, U.S. Department of State, Bucharest, ROMANIA (January 5, 2020 - January 18, 2020).

- The ESF Program provides U.S. embassies worldwide access to the expertise of U.S. governmentofficers in science and technology fields.
- Selected to serve as a ESF to the U.S. Embassy Bucharest, Romania whose mission included two priorities: supporting Romania as it modifies its primary and secondary school curricula in STEM; and developing a STEM education abroad program (CHANCE) between Penn State University and a Romanian higher education institution.
- National Science Foundation (NSF) Education Workshop Participant, Next Generation Careers – Innovation in Environmental Biology Education Workshop (NSF RCN-UBE # DBI-1539911), Conference Center of the Maritime Institute of Technology (CCMIT), Linthicum, Maryland. (October 17, 2016 - October 19, 2016).

Colleges & Universities

- Special Counselor to the Vice-Rector of Research, Administrative Advisor/Expert ROMANIA, University of Bucharest, Bucharest, Romania. (March 19, 2021 - Present).
- Assists with the development of international opportunities and exchanges between Penn State and the UB, and other universities and partners throughout the European Union. The goal is to uniquely blend collaborative STEM education, undergraduate research, science diplomacy, and civic engagement opportunities to augment education in environmental sustainability while increasing access to quality training for all our students through the framework of the Penn State CHANCE program.
- Visiting Professor, Environmental Science, Jiangnan University, Departmental of Environmental Engineering, Wuxi, Jiangsu Province, CHINA. (December 2010 -December 2017).

Consulting

- Institutional Biosafety Committee (IBC) Member, ADVARRA, Dr. Daniel Eisenman, 10 Laboratory Drive, Building 2, Suite 200, Research Triangle Park, North Carolina, 27709. Contract Period: May 15, 2020 – June 3, 2020.
 Review of an exploratory phase 2a study evaluating the efficacy and safety of URO-902 in subjectswith overactive bladder and urge urinary incontinence. URO-902 is a GMP manufactured double-stranded deoxyribonucleic acid (DNA) plasmid (pVAX vector) containing a cDNA insert encoding the pore-forming α subunit of the human smooth muscle Maxi-K channel, hSlo.
- On-line Curriculum Developer for Science Education, W. H. Freeman, Jerry Correa, Acquisitions Editor, 41 Madison Avenue, 37th Floor, New York, NY, 10010. Contract Period: January 1, 2010 - June 30, 2011.
 Developed three "Research Quests" for biology online undergraduate education.
- Media Reviewer for Web-based Curriculum in the Undergraduate Classroom, Brooks/Cole Cengage Learning, Shelley Ryan, 20 Davis Dr., Belmont, Belmont, CA. Contract Period: March 30, 2009 June 30, 2009.
- Pennsylvania Alternative System of Assessment (PASA) Panelist and Consultant, University of Pittsburgh/Pennsylvania Department of Education, Dr. Peter Heh, University of Pittsburgh, School of Education, 230 South Bouquet Street, Pittsburgh, 15260. Contract Period: April 15, 2009 - May 15, 2009.

Examined alignment between the Pennsylvania Alternate Science Anchors and the Pennsylvania Regular Education Assessment Anchors. Invited participants for the study included 6 university-levelfaculty specializing in either science education or special education.

Other

Mentoring Undergraduate Research in Global Contexts (MURGC) – Research Working Group Member, American Association of Colleges and Universities (AAC&U)/Elon University/Forum for Study Abroad. Goals and projects set toward united research efforts and publications in mentoring undergraduate research in a global context. Invited. January 2021 – Present.

UNDERGRADUATE RESEARCH

Supervision of Undergraduate Research

- Jenkins, A. (Biology), "Coating Polyurethane with Fatty Acids to Inhibit the Host Response *In Vitro*." BIOL 230W (H). (September 2018 December 2018).
- Hussain, S. (Biology), Babar, Z. (Biology), Hadid, J. (Biology), "The Potential of Coating Polyurethane with 'Self-like' Molecules to Reduce the Host Response to Implanted Medical Devices." BIOL 494, 2credits. (January 2018 - April 2018).
- Roque, A. (Biology), Albright, H. (Environmental Resource Management -Soils),
 "Implementing Urban Green Agriculture in Cuba to Increase Food Production and Reduce Fossil Fuel Dependency." SUST 495, 4 credits. (March 2017 - July 2017).
- Lewis, A. (Physical and Environmental Geography), Baker, J. (In-Service/CEU's, Brashear High School Mathematics Teacher), "An Agritourism Network for the Sustainability of Cuban Agriculture." SUST 495, 4 credits. (March 2017 - July 2017).
- Draklellis, E. (Earth Science and Policy), Fredericks, T. (Microbiology), "Developing Effective Policies for Conserving Mangrove Forests in Cuba." BIOL 496, 4 credits. (March 2017 - July 2017).
- Liu, E. (Microbiology), Staley, L. (Landscape Architecture), "Exploring the Economic Utilization of Invasive Species to Improve the Health of Select Ecosystems in Cuba." SUST 495, 4 credits. (March2017 - July 2017).
- Glickman, O. (Biology), Carr, C. (Biology), "Coral Reef Preservation in the United States and Cuba:Solidarity versus Alliance." BIOL 496, 4 credits. (March 2017 July 2017).
- Geis, A. (Biology), Geis, W. (Geology), "The Effects of LED Lighting on the Growth of *Chlorellavulgaris.*" BIOL 296. (January 2016 April 2016).
- Arguello, Y. (Biology), Haddad, J. (Biochemistry), "Denopamine's Actions on the Developing Vertebrate Four-Chambered Heart." BIOL 240W. (January 2016 April 2016).
- Moyer, B. (Biology), Emily, O. (Biology), Sultzbaugh, A. (Biology), Vega, J. (Agriculture), "Bromeliad Communities and their Ecology at La Selva Biological Station in Costa Rica." BIOL 496, 1 credit. (June 15, 2015 - July 1, 2015).

- Patel, M. (Biology), Colon, M. (Biology), Ramin, M. (Biology), "Chronotropic Effects of Elevated Doses of Ractopamine on the Developing Chicken Heart." BIOL 240W, 4 credits. (January 10, 2015 – April 9, 2015).
- Afzal, F. (Biology), Gonzalez, S. (Biology), "Effects of Pseudoephedrine on the Intrinsic Conduction System of the Embryonic Chick Heart." BIOL 240W (H), 4 credits. (January 10, 2014 - April 1, 2014).
- Adams, T. (Biology), Anwar, R. (Biology), Mfarej, M. (Biology), Rundatz, T. (Biology), "Nutritional Stress of Cultured Vero Cells." BIOL 240W, 4 credits. (January 10, 2014 -April 1, 2014).
- Flauta, P. (Biology), Mekolichick, M. (Biology), "Hemoglobin Expression in Ara-C Induced Leukemic K562 Cells." BIOL 494, 3 credits. (August 31, 2013 March 11, 2014).
- Flauta, P. (Biology), Mekolichick, M. (Biology), "The Role of Glutamine in the Growth and Viability of Vero Cells in Cell Culture." BIOL 230W, 4 credits. (August 31, 2013 -December 15, 2013).
- Badre, K. (Business), "Chronic Myelogenous Leukemia Costs in the Era of ObamaCare." BIOL 141H, 3 credits. (January 31, 2013 - April 4, 2013).
- Hullihen, P. (Biology), Patel, D. (Biology), Raad, J. (Biology), Toczek, A. (Biology),"Hemoglobin Expression in Human K562 Leukemia Cell Line." BIOL 494. (January 2012 April 2012).
- Jeyaretnam, V. (Biology), "Chronotropic Effects of Select Cardiovascular Drugs on the Developing Vertebrate Heart." BIOL 240W. (January 2012 April 2012).
- Bonner, L. (Biology), Karam, M. (Biology), Rodriguez, A. (Biology), Ross, S. (Biology),
 "Stimulation of Murine Erythroid Leukemia Cell Differentiation *In Vitro*: Replication of a Classic Experiment." BIOL 494, 4 credits. (January 10, 2011 October 30, 2011).
- Bak, D. D. (engineering), "Energy Supplements and their Effect(s) on Metabolism." BIOL 141(H), 3 credits. (January 10, 2011 May 10, 2011).
- O'Malley, M. (Biology), Haupt, A. (Business), "Pollution and Eutrophication of Lake Taihu in Wuxi, China: An Analysis of Water Quality at Three Field Sites." BIOL 497, 4 credits. (May 15, 2010 April 13, 2011).
- Fatzinger, R. (Engineering), "The Human Eye and Vision: Normal and Pathophysiology." BI SC 004 (H), 3 credits. (August 31, 2010 December 20, 2010).

Supervision of Presented Undergraduate Research

- Naqvi, Aliabbas, (Biology), Rohrbach. R. (Biology), "Investigating Heparin's Ability to Reduce Stress Fiber Formation in Endothelial Cells Exposed to TNF-α" (April 23, 2022) 9th Annual Penn State Eastern Regional Symposium, Penn State Schuylkill.
- Naqvi, Aliabbas, (Biology), Rohrbach. R. (Biology), "Investigating Heparin's Ability to Reduce Stress Fiber Formation in Endothelial Cells Exposed to TNF-α" (April 23, 2022) 12th Annual Penn State Lehigh Valley Undergraduate Research Symposium, Penn State Lehigh Valley.

- El-Ali, A. (Ecology, University of Bucharest, Romania), Girea, C. (Biochemistry. University of Bucharest, Romania), Griffin, J. (Biology, Penn State University), Syed, T. (Biology, Penn State Lehigh Valley), "Nitrogen Levels within Select Aquatic Ecosystems of the Danube River, Romania" (September 28, 2021) International Council for Undergraduate Research (ICUR), University of Warwick, UNITED KINGDOM.
- Potochny, T. (Geography), "Citizen Science, Service Learning and Virtual Experiences in Conservationand Sustainability." (April 2, 2019). American Association of Geographers (AAG) Annual Conference, Washington D.C.
- Hussain, S. (Biochemistry), Babar, Z. (Biology), Hadid, J. (Biology), "The Potential of Coating Polyurethane with 'Self-like' Molecules to Reduce the Host Response to Implanted Medical Devices."(April 21, 2018). 8th Annual Penn State Eastern Regional Symposium, Penn State Abington (2nd Place Award in Biological Sciences and Health Category)
- Roque, A. (Biology), Albright, H. (Environmental Resource Management), "Implementing Urban Green Agriculture in Cuba to Increase Food Production and Reduce Fossil Fuel Dependency." (April 18, 2018). Penn State Undergraduate Research Exhibition, Penn State University Park.
- Draklellis, E. (Earth Science and Policy), Fredericks, T. (Microbiology), "Developing Effective Policies for Conserving Mangrove Forests in Cuba." (April 18, 2018). Penn State Undergraduate Research Exhibition, Penn State University Park.
- Liu, E. (Microbiology), Staley, L. (Landscape Architecture), "Exploring the Economic Utilization of Invasive Species to Improve the Health of Select Ecosystems in Cuba." (April 18, 2018). Penn State Undergraduate Research Exhibition, Penn State University Park [Gerard A. Hauser Award for BestOverall Exhibit Presentation (GRAND PRIZE)]
- Glickman, O. (Biology), Carr, C. (Biology), "Coral Reef Preservation in the United States and Cuba: Solidarity versus Alliance." (April 18, 2018). Penn State Undergraduate Research Exhibition, Penn State University Park.
- Hussain, S. (Biology), Babar, Z. (Biology), Hadid, J. (Biology), "The Potential of Coating Polyurethanewith 'Self-like Molecules' to Reduce the Host Response to Implanted Medical Devices." (April 18, 2018). Penn State Undergraduate Research Exhibition, Penn State University Park.
- Hussain, S. (Biology), Babar, Z. (Biology), Haddad, J. (Biology), "The Potential of Coating Polyurethanewith 'Self-like' Molecules to Reduce the Host Response to Implanted Medical Devices." (April 5, 2018). 8th Annual Penn State Lehigh Valley Undergraduate Research Symposium, Penn State Lehigh Valley (1st Place Award tin STEM Category; 1st Place Award in Information Science Literacy)
- Geis, A. (Biology), Sampson, W. (Geology), "The Effects of LED Lighting on the Growth of *Chlorellavulgaris*." (April 21, 2016). 6th Annual Penn State Regional Undergraduate Research Symposium, Penn State Lehigh Valley (Honorable Mention in STEM Category)

- Arguello, Y. (Biology), Haddad, J. (Biochemistry), "Denopomine's Actions on the Developing Vertebrate Four-Chambered Heart." (April 21, 2016).6th Annual Penn State Regional Undergraduate Research Symposium, Penn State Lehigh Valley (1st Place Award in STEM Category)
- Geis, A. (Biology), Sampson, W. (Geology), "The Effects of LED Lighting on the Growth of *Chlorella vulgaris.*" (April 5, 2016). 6th Annual Penn State Lehigh Valley Undergraduate Research Symposium, Penn State Lehigh Valley (**3rd Place Award in STEM Category**)
- Arguello, Y. (Biology), Haddad, J. (Biochemistry), "Denopamines Actions on the Developing Vertebrate Four-Chambered Heart." (April 5, 2016). 6th Annual Penn State Lehigh Valley Undergraduate Research Symposium, Penn State Lehigh Valley (1st Place Award in STEM Category)
- Spagnoli, A. (Biology), "Crossing the Borders of Costa Rica and Panama in the Name of Conservation." (November 7, 2015). 3rd Annual Western Pennsylvania Conservation Conference (WPACC), ClarionUniversity of Pennsylvania.
- Tapia, D. (Biology), Chiang, A. (Engineering), Rundatz, T. (Biology), Spagnoli, A. (Biology) (September 30, 2015). "Penn State CHANCE: A World-Wide Collaboration," Engaged Scholarship Consortium Conference - Advancing Rigor, Elevating Impact, Penn State University, State College, PA.
- Patel, M. (Biochemistry), Ramin, M. (Biology), "Phenotypic Switching and Loss of Viability of SmoothMuscle Cells in Culture." (April 9, 2015). 5th Annual Penn State Lehigh Valley Undergraduate Research Symposium. Penn State Lehigh Valley.
- Patel, M. (Biochemistry), Ramin, M. (Biology), Colon, M. (Biology), "Chronotropic Effects of Elevated Doses of Ractopamine on the Developing Chicken Heart." (April 9, 2015). 5th Annual Penn State Lehigh Valley Undergraduate Research Symposium, Penn State Lehigh Valley. (2nd Place Recognition in STEM category)
- Moyer, B. (Biology), Ort, E. (Biology), Sultzbaugh, A. (Biology), Vega, J. (Biology), "Observational Pilot Study of Bromeliad Communities and their Ecology at La Selva Biological Station in Costa Rica." (April 8, 2015). Undergraduate Research Exhibition, Penn State University (**2nd Place Recognition in Course-Related Research category**)
- Gonzalez, S. (Biology), Afzal, F. (Biology), "Direct and Indirect Effects of Pseudoephedrine on the Intrinsic Conduction System of the Vertebrate Heart." (March 3, 2015).
 Undergraduate Research at the Capitol Pennsylvania Event, Harrisburg. (1 out of 8 posters selected to represent Penn State University at the state level)
- Afzal, F. (Biology), Gonzalez, S. (Biology), "Direct and Indirect Effects of Pseudoephedrine on the Intrinsic Conduction System of the Embryonic Chick Heart." (April 17, 2014). 4th Annual Penn State Regional Undergraduate Research Symposium, Penn State Worthington Scranton. (1st Place Recognition in STEM category)
- Adams, T. (Biology), Anwar, R. (Biology), Michael, M. (Biology), Taylor, R. (Biology),
 "Nutritional Stress of Cultured Vero Cells Causes Altered Morphology and Growth."
 (April 17, 2014). 4th Annual Penn State Regional Undergraduate Research Symposium,
 Penn State Worthington Scranton.

- Flauta, P. (Biology), Mekolichick, M. (Biology), "Hemoglobin Expression in Ara-C Induced Leukemic K562 Cells." (April 1, 2014). 4th Annual Penn State Lehigh Valley Undergraduate Research Symposium, Penn State Lehigh Valley. (1 out of 8 posters selected to represent Penn State University at the state level)
- Evans, J. (Biology), Fowler, B., "Give Life a CHANCE, Narratives from a Penn State Field Course." (March 21, 2014). PERC 2014 Student Sustainability Symposium, Dickinson College, Carlisle.
- Badre, K. (Business), "Chronic Myelogenous Leukemia Costs -- Post Obamacare." (April 18, 2013). 3rd Annual Penn State Regional Undergraduate Research Symposium, Penn State Lehigh Valley. (1st Place Recognition in ARTS & HUMANITIES category)
- Hullihen, P. (Biology), Patel, D. (Biology), Raad, J. (Biology), Toczek, A. (Biology),
 "Gamma Globin Expression in Human K562 Leukemic Cell Line." (April 18, 2013). 3rd
 Annual Penn State Regional Undergraduate Research Symposium, Penn State Lehigh
 Valley. (1st Place Recognition in STEM category)
- Hullihen, P. (Biology), Patel, D. (Biology), Raad, J. (Biology), Toczek, A. (Biology), "Gamma Globin Expression in Human K562 Leukemic Cell Line." (April 10, 2013). Undergraduate Research Exhibition, Penn State University, University Park.
- Hullihen, P. (Biology), Patel, D. (Biology), Raad, J. (Biology), Toczek, A. (Biology),
 "Gamma Globin Expression in Human K562 Leukemic Cell Line.". (April 4, 2013).
 Participation in the 3rd Annual Penn State Lehigh Valley Undergraduate Research
 Symposium, Penn State Lehigh Valley. (1st PlaceRecognition in STEM category)
- Jayaretnam, V. (Biology), "Chronotropic Effects of Select Cardiovascular Drugs on the Developing Vertebrate Heart." (November 12, 2012). John T. and Paige S, Smith Undergraduate Research Symposium, Penn State York.
- Elshamsy, A. (Biology), Kim, D. (Biology), Raad, J. (Biology), Salmi, N. (Education),
 Zaghtiti, N. (Biology), "Leaf Stomata Density in Psychotria marginata in Relation to
 Varying CO2 concentrations Barro Colorado Island, Panama.". (July 21, 2012).
 CHANCE Research Symposium at the Smithsonian Tropical Research Institute, Panama.
- Jeyaretnam, V. (Biology), "Chronotropic Effects of Select Cardiovascular Drugs on the Developing Vertebrate Heart." (April 19, 2012). 2nd Penn State Regional Undergraduate Research Symposium, Penn State Brandywine. (**1st Place Award in STEM Category**)
- Bonner, L. (Biology), "Stimulation of Red Blood Cell Differentiation *In Vitro*: Replication of a ClassicExperiment Enhances Inquiry in the Undergraduate Laboratory." (March 27, 2012). Undergraduate Research at the Capitol Pennsylvania, Harrisburg, Pennsylvania (1 out of 4 posters selected to represent Penn State)
- Bonner, L. (Biology) "Stimulation of Red Blood Cell Differentiation *In Vitro*: Replication of a Classic Experiment Enhances Inquiry in the Undergraduate Laboratory." (October 13, 2011). National Association of Biology Teachers (NABT) Undergraduate Poster Symposium, NABT Annual Conference, Anaheim, CA.
- Bonner, L. (Biology), Karam, M. (Biology), Rodriguez, A. (Biology), Ross, S. (Biology), "MaximizingGrowth and Differentiation of Murine Erythroid Leukemia (MEL) Cells *In Vitro*." (April 20, 2011).1st Penn State Regional Undergraduate Research Symposium, Penn State Lehigh Valley (1st Place Award in STEM Category)
O'Malley, M. (Biology), Haupt, A. (Business), "Pollution and Eutrophication of Lake Tai in Wuxi, China: Analysis of Water Quality at Three Field Sites." (April 13, 2011). Penn State Undergraduate Research Exhibition, Penn State University Park (1st Place Award in Course-Related Research Category)

Supervision of Peer-Reviewed Published Undergraduate Research

- Hussain, S. (Student Author Undergraduate Student), Babar, Z. (Student Author Undergraduate Student), Hadid, J. (Student Author – Undergraduate Student) & McLaughlin, J. S. (2020). Coating Polyurethane with Palmitoleic Acid and Bovine Serum <u>Albumin to Prevent the Host Response to Foreign Materials.</u> *American Journal of Undergraduate Research*, 16 (4): 5-14. DOI: 10.33697/ajur.2020.002
- Gonzalez, S. M. (Student Author Undergraduate Student), Afzal, F. I. (Student Author -Undergraduate Student), & McLaughlin, J. S. (Co-Author) (2015). <u>Direct and indirect</u> <u>effects of pseudoephedrine on the intrinsic conduction system of the embryonic chicken</u> <u>heart.</u> American Journal of Undergraduate Research, 12 (3), 53-62. DOI: 10.33697/ajur.2015.015
- Adams, T. M. (Student Author Undergraduate Student), Anwar, R. (Student Author -Undergraduate Student), Mfarej, M. G. (Student Author - Undergraduate Student), Rundatz, T. (Student Author - Undergraduate Student), & McLaughlin, J. S. (Co-Author) (2015). <u>Nutritional stress of cultured Vero cells causes altered growth and morphology as</u> <u>seen in neoplastic transformation. *American Journal of Undergraduate Research*, 12 (3), 6-76. ISSN: 1536-4585; web ISSN: 2375-8732
 </u>
- Journal of Introductory Biology Investigations published by Oklahoma State University and supported by the Howard Hughes Medical Institute, Special Penn State Lehigh Valley Issue, 3 (5), 2016.

This journal issue displays select undergraduate research articles from Penn State Lehigh Valley students as part of a collaboration between Oklahoma State University and Penn State University Lehigh Valley. These papers focus on algal or mammalian cell growth dynamics in different conditions and were peer-reviewed by Oklahoma State University graduate students.

Table of Contents:

The Effects of LED Lights on the Growth of Chlorella vulgaris

- Amanda Geis (Student Author Undergraduate Student), William Sampson (Student Author Undergraduate Student), Tai-Yin Huang, Jacqueline S. McLaughlin
- The Effects Bovine Serum on the Growth Dynamics of A10 Cells in Culture
- Habib Yazgi (Student Author Undergraduate Student), Justin W. Cogan (Student Author Undergraduate Student), Saeid Atashpanieh (Student Author – Undergraduate Student), Jacqueline McLaughlin
- The Use of Red Light-Emitting Diodes (LEDs) at 660 nm to the Cultivate Microalgae, *Chlorellavulgaris*
- Lara Makhoul (Student Author Undergraduate Student), Elizabeth S. Mills (Student Author Undergraduate Student), Tai-Yin Huang, Jacqueline McLaughlin

Induced Cell Culture Stress on A10 Cells Due to Changes in Media Conditions and Calcium Influx Yennifer Arguello (Student Author – Undergraduate Student), Jacqueline McLaughlin

PUBLICITY

- "<u>CHANCE Program Offers Students Research Experience in Romania</u>," Web, Penn State Lehigh Valley Newswire. (December 7, 2021)
- "<u>Penn State Lehigh Valley professor appointed to advisory position in Romania</u>," Web, Penn State Lehigh Valley Newswire. (June 8, 2021)
- "<u>Penn State Lehigh Valley faculty engage in scholarly activities off-campus,</u>" Web, Penn State Lehigh Valley Newswire. (December 22, 2020).
- "<u>Penn State Lehigh Valley faculty engage in scholarly activities off-campus,</u>" Web, Penn State Lehigh Valley Newswire. (June 23, 2020).
- "<u>Penn State Lehigh Valley Brand Video: One Community Impacting Many,</u>" Web, YouTube, (April 3, 2020).
- "<u>Penn State Lehigh Valley faculty engage in scholarly activities off-campus,</u>" Web, Penn State Lehigh Valley Newswire. (January 21, 2020).
- "<u>Penn State Lehigh Valley faculty engage in scholarly activities off-campus</u>," Web, Penn State Lehigh Valley Newswire. (October 29, 2019).
- "Penn State Lehigh Valley faculty engage in scholarly activities off-campus," Web, Penn State Lehigh Valley Newswire. (July 30, 2019).
- "Penn State Lehigh Valley faculty engage in scholarly activities off-campus," Web, Penn State Lehigh Valley Newswire. (March 26, 2019).
- "<u>Penn State Lehigh Valley faculty engage in scholarly activities off-campus</u>," Web, Penn State LehighValley Newswire. (December 18, 2018).
- "<u>Penn State Lehigh Valley faculty engage in scholarly activities off-campus,</u>" Web, Penn State Lehigh Valley Newswire. (November 20, 2018).
- "Programa CHANCE de Pennsylvania en Tarija," *Red Uno Television*, Tarija, Bolivia, November 16, 2018.
- "A CHANCE of a lifetime," Penn State News. July 31, 2018.
- "<u>Research about CHANCE Cuba wins top prize at Undergraduate Research Exhibition</u>," *Penn State News*. June 1, 2018.
- "Lehigh Valley's Jacqueline McLaughlin wins environmental education award," Penn State News. October 24, 2017.
- "Penn State students study fragile ecosystems in Cuba," Penn State News. September 15, 2017.
- "Biology professor named fellow," Parkland Press. July 27, 2017.

- "Schuylkill campus trio conduct environmental research in Costa Rica," Penn State News. June 19, 2017.
- "Eleven Penn State students to present research to PA legislators on April 25," Penn State News. April 21, 2017.
- "<u>Announcement of the 2017-2018 Jefferson Science Fellow</u>," National Academies of Sciences, Engineering and Medicine Website. February 2017.
- "Lehigh Valley professor receives esteemed Jefferson Science Fellowship," Penn State News. January 24, 2017.

"Thinking beyond the classroom," Penn State News. July 12, 2016.

- "Video: CHANCE in China," Penn State Public Media. June 22, 2016.
- "<u>VIDEO: New Student Orientation Campuses with MIX</u>," *Penn State Public Media*. May 10, 2016.
- "Penn State Lehigh Valley student research successes," Penn State News. May 3, 2016.
- "Society for Conservation Biology appoints local biology professor," Penn State Lehigh Valley News & Events. July 21, 2015.
- "2015 awards convocation award recipients announced," Penn State Lehigh Valley News & Events. May 5, 2015.
- "McLaughlin receives W. LaMarr Kopp International Achievement Award," *Penn State Lehigh Tradition*. May 2015.
- "McLaughlin receives W. LaMarr Kopp International Achievement Award," *Penn State Lehigh Valley News & Events*. April 14, 2015.
- "Penn State Lehigh Valley undergraduate research symposium winners announced," Penn State Lehigh Valley News & Events. April 14, 2015.

"<u>VIDEO: From Cookbook to Critical Thinking</u>," *Citrus College, Pasadena, CA*. January 2015.

"Penn State Students Protect Endangered Sea Turtles in Panama," *Penn State News*. December 9, 2014.

"<u>VIDEO: CHANCE - Protecting Endangered Species</u>," *Penn State Public Media*. November 9, 2014.

"Lehigh Valley biology students accepted into prestigious research course," *Penn State Newswire*. May 15, 2014.

"Lehigh Valley students place first, second at regional research event," *Penn State Newswire*. April 24, 2014.

"Lehigh Valley campus research symposium winners announced," *Penn State Newswire*. April 8, 2014. "Penn State students to present at Undergraduate at Capitol Event," Penn State Newswire. March 5, 2014.

- "Six at Seven invites community to Mini Medical School: campus biology professor to lead lectures, "Penn State Lehigh Valley News & Events. March 4, 2014.
- "Natural Legacy," e-Bella Magazine, Southwest Florida. February 2014.
- "Lehigh Valley campus biology students accepted into prestigious research course," *Penn State Newswire*. December 4, 2013.
- "Students or biologists? BOTH!" Penn State Newswire. September 30, 2013.
- "CHANCE Conservation researchers take on global climate change in Panama," *Penn State Lehigh Valley Newswire*. July 2, 2013.
- "Five Lehigh Valley students chosen for 'Faces of Penn State' Campaign," Penn State Lehigh Valley News & Events. April 25, 2013.
- "Lehigh Valley student selected for three-year NSF research program," *Penn State Lehigh Valley Newswire*. April 25, 2013.
- "Lehigh Valley students take top honors at regional research event," Penn State Lehigh Valley News & Events. April 25, 2013.
- "<u>Giving the World a CHANCE</u>," Penn State Lehigh Valley Tradition, Penn State Lehigh Valley. March 2013.
- "Give learning a CHANCE," State of the Valley, Penn State Lehigh Valley. February 2013.
- "Biology professor invited to instruct in China," *Penn State Lehigh Valley Newswire*. November 15, 2012.
- "2012 NABT faculty professional development summit focuses on vision and change," NABT News & Views, National Association of Biology Teachers. September 14, 2012.
- "Biology professor awarded National Science Foundation grant," *Penn State Lehigh Valley Newswire*. September 1, 2012.
- "Professor from Penn State University teaching in Jiangnan," Jiangnan University News, Jiangnan University, Wuxi, CHINA. June 1, 2012.
- "McLaughlin's CHANCE program receives award," *NABT News & Views, National Association of Biology Teachers.* May 30, 2012.
- "Campus students take top honors at research symposium," Penn State Lehigh Valley Newswire, Penn State Lehigh Valley. April 24, 2012.
- "CHANCE program wins 2012 Community Engagement and Scholarship Award," Penn State News, The Pennsylvania State University. April 12, 2012.
- "Leukemia research brings biology students and local medical lab together," *Penn State Lehigh Valley Newswire*. March 14, 2012.

- "<u>Award winning student searching for cancer cure, mushrooms</u>," UpperSauconPatch, Upper Saucon, PA and Lower Milford Township, PA. February 7, 2012.
- "CHANCE program to receive award," Penn State Lehigh Valley Newswire. January 25, 2012.
- "Lehigh Valley student chosen to showcase research at State Capitol," *Penn State Lehigh Valley Newswire*. January 25, 2012.
- "<u>Hydroponic rafts may be a solution to Chinese water pollution</u>," *Research Penn State*. December 14, 2011.
- "Biology professor to co-chair national summit," Penn State Lehigh Valley News & Views. September 9, 2011.
- "Chinese and American students Join forces to foster sustainable development and water quality at Lake Taihu," *PaCIE News, Pennsylvania Council for International Education, Arcadia University.* August 2011.
- "Chinese and American students join forces for Sustainable Development," *Penn State Live*. June 28, 2011.
- "Olympus partnership provides cutting-edge tech to bio students," *Penn State Lehigh Valley News & Views*. April 25, 2011.
- "Students of campus professor take 1st place at event," Penn State Lehigh Valley News & Events. April 20, 2011.
- "Biology professor selected for interview panel," *Penn State Lehigh Valley News & Events*. March 9, 2011.
- "2010 CHANCE idol winners announced," Penn State Lehigh Valley News and Events. December 6, 2010.
- "McLaughlin named outstanding international educator in Pennsylvania," NABT News & Views, National Association of Biology Teachers. November 2010.
- "Penn State undergraduates take on a big environmental problem in China," *PaCIE News, Pennsylvania Council for International Education*. October 2010.
- "Biology Professor Receives International Education Award," Penn State Live. September 13, 2010.
- "Professor passionate about environment," *Penn State Office of Global Programs*. September 2010.
- "Local community goes green," 28 News At 5: WBRE-TV CH 28 (NBC) Wilkes-Barre/Scranton, CHANCE Idol Awards Ceremony, East Pocono Mountain High School, Swiftwater, PA. September 17, 2009.
- "Biology professor makes the world her classroom," State of the Valley, Penn State Lehigh Valley. September 2009.

"Taking a CHANCE," Penn State Lehigh Valley Tradition, Fall, 2009 Issue. September 2009.

- "A second CHANCE," American Institute for Biological Sciences, BioScience 58: 189; doi:10.1641/B580305. 2008.
- "Penn State Lehigh Valley is shaking up the science room and taking it abroad," *PaCIE News*. December 2007.
- "CHANCE makes passion for biology contagious," The Morning Call. July 28, 2005.
- "McLaughlin wants Pennsylvania teachers to take a CHANCE," *NABT News & Views*. October 2004.
- "Nurturing Pennsylvania's biology teachers," Penn State Outreach. October 2004.
- "Women's 5K Classic attracts 100-plus," *Penn State Berks-Lehigh Valley Collegian*. October 2004.
- "Biodiversity in Costa Rica," International Mosaic, Pennsylvania State University, Office of Global Programs. May 2004.
- "Class explores Costa Rica: Land of beauty and biodiversity," *Blue and White, Penn State Berks Lehigh Valley.* October 2003.
- "Four faculty receive Atherton Award for Teaching Excellence," *Penn State Intercom*. March 20, 2003.
- "College students explore the land of beauty and biodiversity," *The Parkland Press*. December 5, 2002.
- "Students go down under for biology studies," *Penn State Berks-Lehigh Valley College*. October 2002.
- "Students go 'Down Under' for Biology Studies," *The Morning Call, Careers and Education Supplement.* July 25, 2002.
- "Faculty member's field lesson, web brings biology to life," *Penn State Intercom*. April 25, 2002.
- "PSU biology teachers gets national award," The Morning Call. August 30, 2001.
- "An Alaskan adventure: students from the Berks-Lehigh Valley College explore the Alaskan ecosystem," *Nittany News, Penn State Berks-Lehigh Valley College*. November 2000.
- "The big chill: students experience the biodiversity of Alaska," *Blue and White, Penn State Berks Lehigh Valley College*. October 2000.
- "Exploring ecosystems," Reading Eagle/Reading Times. June 3, 2000.
- "In search of biodiversity and evolution," *International Mosaic, Penn State Office of Global Programs*. December 1999.
- "In search of biodiversity and evolution: two professors lead Penn State students to the Amazon and to the Galapagos," *Nittany News, Penn State Berks-Lehigh Valley College*. October 1999.

- "Students search the Amazon, Galapagos looking for evolution in nature," *The Parkland Press*. September 13, 1999.
- "PSU professor writes teaching modules on web," The Morning Call. August 28, 1999.
- "Lehigh Valley 5K walk/run," Nittany News, Penn State Berks-Lehigh Valley College. November 1998.
- "Lehigh Valley class uses the web as a tool in biology experiments," *Penn State Intercom*. October 15, 1998.
- "Teacher's ability praised at Penn State Lehigh Valley event," *The Morning Call.* June 15, 1998.
- "Welcome to the laptop lab," 50 Years of Modern Computing, Faircount International; Tampa, FL. January 1996.

SERVICE (SINCE 2010)

Service to the University Record of Committee Work

- International Research Strategy Committee, Invited Member. Penn State University. (August 2021 Present).
- Penn State Lehigh Valley Undergraduate Research Symposium Committee, Co-Chair, (September 2021 Present).
- Annual Penn State Regional Undergraduate Research Symposium, Penn State Regional Undergraduate Steering Committee, University College, Member. (September 2019 – Present).
- Faculty Affairs Committee, Penn State Lehigh Valley, Committee Member. (August 2010 Present).
- Undergraduate Research Strategic Planning Committee, Office of the Vice President for Undergraduate Education, Invited Member. Penn State University. (June 2018 Present).
- Governmental Policy Committee, Penn State Lehigh Valley, Committee Member. (August 2018 2020).
- Search Committee, Biology Laboratory Technician, Penn State Lehigh Valley, Member. (January 2018 - February 2018).
- Annual Penn State Regional Undergraduate Research Symposium, Penn State Regional Undergraduate Steering Committee, University College, Co-Chairperson. (September 2011 - 2018).
- Whiting Indigenous Knowledge Research Award, The Whiting Endowment for the Advancementof Indigenous Knowledge. Penn State University. (August 2016 April 2017).
- LaMarr Kopp International Achievement Award, Penn State University, Chairperson. (August 2015 April 2016).

- Faculty Invitational Lecture Committee, Penn State Lehigh Valley, Committee Member. (August 2013 April 2016).
- Undergraduate Research Symposium Committee, Penn State Lehigh Valley Research and Scholarship Committee, Committee Member. (August 2012 September 2015).
- Search Committee, Biology Faculty Search Committee, Penn State York, Invited Committee Member. (September 2014 - April 2015). Search for Assistant Professor of Biology.
- Faculty Invitational Lecture Committee, Penn State Lehigh Valley, Chairperson. (August 2014 April 2015).
- Global Expo, Student Services and Programs Committee, Penn State Lehigh Valley, Committee Member. (October 2014 - November 2014).
- Outreach and Engaged Scholarship Awards Committee, Office of the Vice President of Outreach, Penn State University, Chairperson. (August 2013 April 2014).
- Faculty Research and Scholarship Committee, Penn State Lehigh Valley Faculty Senate, Chairperson. (August 2011 – April 2013).
- Biology Program Curriculum Evaluation and Program Assessment, Penn State Biology Department Curriculum Evaluation and Program Assessment Committee, Member. (January 2011 - December 2012).
- Biology Department Curriculum Evaluation and Program Assessment Committee, Penn State University, Committee Member. (August 2011 April 2012).
- Faculty Invitational Lecture Series Committee, Penn State Lehigh Valley, Committee Member. (August 2011 April 2012).
- 4-Year Life Science/Biology Degree Committee, Penn State Lehigh Valley, Co-Chairperson, (August 2011 December 2011).
- Campus Safety Advisory Committee, Penn State Lehigh Valley, Committee Member. (January 2011 - December 2011).

Record of Administrative Support Work

AC-14 Committee, Penn State Lehigh Valley, Member. (August - November 2021)

- CHANCE, Penn State Lehigh Valley, Founding Director. (January 2004 Present). The development, implementation, oversight, and assessment of international field courses; creation and sustainability of all partners (over 50 governmental, nongovernmental, academicand corporate partners and/or collaborators around the world); delivery of content for professional website, social media outlets, and Penn State PR offices; development of online curriculum; guide all fund-raising and networking activities; delivery of professional presentations and workshops; service/outreach activities; and, supervise committed volunteer and/or Penn State supported staff/faculty.
- P & T Discipline Representative, University College, Representative. (August 2010 Present).
- Admissions Applicant Review Committee, Penn State Schreyer College, Reviewer. (November 2013 - December 2016; November 2020 – Present).

P & T Committee, Penn State Lehigh Valley, Committee Member. (September 2018 – April 2021).

Record of Contributions to the University's Programs to Enhance Equal Opportunity and Cultural Diversity

- Equity Action Resource Team Certified Member (EART), Penn State Affirmative Action Office, Educational Equity, and Human Resources. (November 2017 – November 2019).
- Office of the Vice Provost for Educational Equity, Penn State Commission for Women, Presidents Commissions for Equity, Appointed Committee Member. (August 2015 August 2017).
- Office of the Vice Provost for Educational Equity, Penn State Commission for Women Awards Committee, Presidents Commissions for Equity, Committee Member. (August 2015 - April 2016).

Assistance to Student Organizations and Activities

- Penn State Undergraduate Research Exhibition, Penn State Office of Undergraduate Education, Judge. (April 2013 Present).
- Biology Club, Penn State Lehigh Valley, Faculty Advisor. (August 2013 May 2015).

Participation in Recruitment and Retention Activities

- Teen Entrepreneurship Summer Challenge Workshop Algae as Biofuels, PSLV/Perkiomen School, Instructor. (July 2016 July 2018).
- Open House Speaker/Panelist, Penn State Lehigh Valley Admissions Office, Presenter. (April 2010 2018; July 2021).

Curriculum Alignment and Development

- University Shield Curriculum Review & Consultation System, Penn State University Faculty Senate, Peer Reviewer. (January 2017 Present).
- Office for Undergraduate Research & Fellowships Mentoring, Undergraduate Community of Practice–CUREs, Penn State University, Invited Facilitator (June 2020).

Service to Society

Participation in Community Affairs

- Career Café, Strayer Middle School, Quakertown, Pennsylvania. Invited Presenter. (November 27, 2018).
- Annual Hawk Mountain Field Day, Hawk Mountain Sanctuary, Kempton, Pennsylvania, Coordinator. (Fall 2010 2019).
- Stem Outreach Workshop: Laboratory Exercise in Cell Counting and Staining, Penn Ridge High School, Doylestown, Pennsylvania. Invited Instructor. (October 30, 2018).

East Penn School District School District Science Curriculum and Instruction Review Board, Emmaus, Pennsylvania, Science Curriculum & Instruction Advisor, (January 2012 -December 2012).

Service to Governmental Agencies at the International, Federal, State, or Local Levels

- Undergraduate Research at the Capitol PA (URC-PA), Pennsylvania House Republican Caucus, State Representatives and Senators/ PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania. Chairperson. (August 2016 - present).
- National Academy of Sciences, Jefferson Science Fellowship Program, Selection Committee, Peer-reviewer of Applicants, December 2021.
- Undergraduate Research at the Capitol PA (URC-PA), Pennsylvania House Republican Caucus, State Representatives and Senators/ PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania, Co-Chairperson. (August 2013 – 2016).
- National Science and Technology Council (NSTC) Research Rigor and Integrity Subcommittee, White House Office of Science and Technology Policy (OSTP), Appointed Member by U.S. Department of State, Office of Science and Technology (STC) Cooperation, Washington D.C. (February 2019 - January 2020).

Provided strategic guidance and support on STEM best practices in American higher education and promoting and protecting the integrity of the U.S. science enterprise which were the key priorities of the White House Office OSTP Director, Dr. Kelvin Droegemeier.

Jefferson Science Fellow, National Academy of Sciences, Appointed Science Advisor to Office of Science and Technology Cooperation (STC), U.S. Department of State, Washington D.C. (February 17, 2019 – February 16, 2020).

Service to Public and Private Organizations

WISE (Women in Science and Engineering) Advisory Council, DaVinci Science Center. Allentown, Pennsylvania. Invited Member. (August 2015 - April 2016).

Organizing Conferences and Service on Conference Committees

- 14th Annual Mentoring Conference Committee, University of New Mexico Mentoring Institute, Peer-reviewer of Conference Proposals. (July 2021).
- 2024 World Congress on Undergraduate Research (WorldCUR) Organizing Committee, Council for Undergraduate Research (CUR), Invited Member. (April 2019 Present).

Participation in or Service to Professional and Learned Societies

- Special PJAS Region III Awards Committee, Pennsylvania Junior Academy of Science, Lehigh Valley, Pennsylvania, Invited Chairperson. (January 2017 Present).
- PJAS Annual Region III Science Fair, Pennsylvania Junior Academy of Science, Judge. (January 2010 2018; 2021).
- Intel International Science and Engineering Fair, The Society for Science & the Public, Judge. Pittsburg, Pennsylvania. Invited Judge. (May 13-20, 2018).

Service to the Disciplines and to the Profession Organizing Conferences and Service on Conference Committees

- 1st CHANCE Romania Undergraduate Research Symposium, Water Issues Confronting the Danube Delta. University of Bucharest, Faculty (College) of Biology, Bucharest, Romania. (July 24, 2021).
- Embassy Science Fellow (ESF) Reception, U.S. Department of State, Bureau of Oceans and International Environmental and Scientific Affairs, Office of Science and Technology Cooperation, and 26 U.S. Federal Agencies, Washington D.C. Organizing Committee Chairperson. (September 19, 2019).
- Undergraduate Research at the Capital Pennsylvania (URC-PA) Poster Conference, Pennsylvania House Republican Caucus, PA State Representatives and Senators/PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania. Organizing Committee Chairperson. (April 17, 2018).
- Undergraduate Research at the Capital Pennsylvania (URC-PA) Poster Conference, Pennsylvania House Republican Caucus, PA State Representatives and Senators/PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania. Organizing Committee Chairperson. (April 25, 2017).
- Undergraduate Research at the Capital Pennsylvania (URC-PA) Poster Conference, Pennsylvania House Republican Caucus, PA State Representatives and Senators/PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania. Organizing Committee Chairperson. (April 5, 2016).
- 4th Annual Poster Session and Workshop: Local to Global Citizen Science Across Borders, NABT-Global Perspectives Committee, National Association of Biology Teachers, Denver, Colorado. Committee Chairperson. (November 5, 2016).
- NABT National Professional Development Summit: SENCER Connecting Biology Teaching to Community and Global Issues, NABT Global Perspectives Committee, National Association of Biology Teachers (NABT), 2 and 4-Year College and University Sections, Providence, Rhode Island.Co-Chairperson. (November 13, 2015).
- Undergraduate Research at the Capital Pennsylvania (URC-PA) Poster Conference, Pennsylvania House Republican Caucus, PA State Representatives and Senators/PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania. Organizing Committee Co-Chairperson. (March 3, 2015).
- 3rd Annual Poster Session and Workshop: Citizen Science Teaching Conservation, NABT Global Perspectives Committee, National Association of Biology Teachers (NABT), Providence, Rhode Island. Committee Chairperson. (November 13, 2015).
- NABT National Professional Development Summit: Bridging the Gap: Implementing Vision and Change,2 and 4-Year College and University Sections, Faculty Development Committee, Co-Chairperson. Cleveland, Ohio. Co-Chairperson. (November 14, 2014). (NSF TUES GRANT #1249774).

- Undergraduate Research at the Capital Pennsylvania (URC-PA) Poster Conference, Pennsylvania House Republican Caucus, PA State Representatives and Senators/PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania. Organizing Committee Co-Chairperson. (March 11, 2014).
- 2nd Annual Poster Session and Workshop: Promoting Global Sustainability in the Teaching and Learning of Biology, NABT Global Perspectives Committee, National Association of Biology Teachers (NABT), Cleveland, Ohio. Committee Chairperson. (November 14, 2014).
- NABT National Professional Development Summit: Implementing Vision and Change in the Undergraduate Biology Classroom, NABT Faculty Development Committee, 2 and 4-Year College and University Sections, Atlanta, Georgia. Committee Co-Chairperson. (November 22, 2013). (NSF TUES GRANT #1249774).
- Undergraduate Research at the Capital Pennsylvania (URC-PA) Poster Conference, Pennsylvania House Republican Caucus, PA State Representatives and Senators/PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania. Organizing Committee Co-Chairperson. (March 19, 2013).
- 1st Annual Poster Session and Workshop: Connecting Students to Planet Earth through the Study of Global Biological Knowledge, NABT Global Perspectives Committee, National Association of Biology Teachers, Atlanta, Georgia. Chairperson. (November 21, 2013).
- Undergraduate Research at the Capital Pennsylvania (URC-PA) Poster Conference, Pennsylvania House Republican Caucus, PA State Representatives and Senators/PA Independent and Public Colleges and Universities, Harrisburg, Pennsylvania. Organizing Committee Co-Chairperson. (March 19, 2013).
- NABT National Professional Development Summit: Moving from Vision to Change 21st Century Transformation of the 21st Century Classroom, NABT Faculty Development Committee, 2 and 4-Year College and University Sections, Dallas, Texas. Committee Co-Chairperson. (November 2, 2012).
- 1st Penn State Regional Undergraduate Research Symposium, Penn State Lehigh Valley Campus, Center Valley, Pennsylvania, Organizing Committee Chairperson. (April 29, 2011).
- NABT National Professional Development Summit: International Programs Teaching Biology Aroundthe World, NABT Faculty Development Committee, 2 and 4-Year College and University Sections, Anaheim, California. Committee Co-Chairperson. (October 2011).
- National Association for Research in Science Teaching (NARST), Annual Conference, Reviewer. (January 1, 2011 - December 31, 2011).

Active Participation in or Service to Professional and Learned Societies

Society for Developmental Biology, Life Science Teaching Resource Community (LifeSciTRC), Professional Development and Curriculum Committee, Resource Reviewer. Bethesda, (January 1, 2011- present).

Council for Undergraduate Research (CUR), National Conference for Undergraduate Research (NCUR), Undergraduate Abstract Review. (November 1, 2020 – January 4, 2021).

- Society for Conservation Biology (SCB), Conservation Asia 2016 Organizing Committee, Asian Section, Singapore. Member (January 2015 - December 2015).
- Knowles Science Teacher Foundation (KSTF), Teaching Fellowships, Interviewer. Philadelphia, PA. (February 11, 2011 - February 13, 2011).
- National Association for Research in Science Teaching (NARST), Annual Conference, Proposal Reviewer. (January 2011 - December 2011).

Voluntary Consultation and/or Advising

Dr. Joshua B. Slee, DeSales University, Mentorship. Allentown, Pennsylvania. (January 2015 - Present).

CURE development, implementation, and assessment; student learning outcomes; publications; national presentations; grants.

Dr. Marie Gehman, Mentorship, International University of Grand-Bassam, Cote d'Ivoire, AFRICA, Faculty Mentor. (January 2017 - 2021).

CURE development, implementation, and assessment; student learning outcomes

Drs. Meghan Schall & Lee Eshani, Mentorship, Penn State Hazelton, Faculty Mentor. Hazelton, Pennsylvania. (May 2018 - December 2019).

CURE development, implementation, and assessment; student learning outcomes; pedagogical research and publications.

Dr. Lara Goudsouzian, Mentorship, DeSales University, Faculty Mentor. Center Valley, Pennsylvania. (January 2015 - December 2016).

CURE development, implementation, and assessment; student learning outcomes; pedagogical research and publications.

Dr. Christine Goedhart, Mentorship, Citrus College, Faculty Mentor. Pasadena, California United States. (November 2014 - December 2016).

Mentee: Christine Goedhart

CURE development, implementation, and assessment; student learning outcomes; pedagogical research and publications.

Professional Development Activities Related to Service Responsibilities

- Seminar, Security Overseas Seminar, U.S. Department of State, Arlington, Virginia, United States. (October 7, 2019 October 8, 2019).
- Web-Based Seminar, Introduction to Working in an Embassy, U.S. Department of State, Arlington, Virginia, United States. (September 1, 2019 - September 30, 2019).

Seminar, Washington Tradecraft, U.S. Department of State, Arlington, Virginia. (June 18, 2019 - June 21, 2019).

Institute, ACE Regional Level Leadership Forum, American Council on Education, Scottsdale, Arizona. (April 28, 2015 - May 2, 2015).