

# KIMBERLY PAUSE TUCKER, P.H.D.

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## Education

### **Doctor of Philosophy, University of Florida, Gainesville, FL,**

Interdisciplinary Program in Biomedical Sciences – Genetics Focus, December 2007

*Dissertation:* Conservation genetics of the Florida manatee, *Trichechus manatus latirostris* [\[link\]](#)

### **Bachelor of Science, Florida State University, Tallahassee, FL**

Biological Sciences, May 2003

*Independent Study Research* (May 2002-May 2003): Phylogenetics of crustaceans in Florida ephemeral ponds

## Work Experience

**Director, Whitaker Center for STEM Education and Professor of Biological Sciences,** Florida Gulf Coast University, College of Arts and Sciences, Fort Myers, FL, August 2021 – present. [\[link\]](#)

**Professor, Biological Sciences,** Stevenson University (SU), School of the Sciences, Stevenson, MD, July 2012 – June 2021. (Promoted to Associate Professor, April 2016; Promoted to Professor, April 2019)

**Founding Director,** SU Center for Environmental Stewardship, July 2013-June 2021. [\[link\]](#)

**Director,** STEM Initiatives, SU School of the Sciences, July 2012-November 2019 [\[link\]](#)

*I coordinated various externally-focused STEM/STEAM events including Expanding Your Horizons, Science Camp, STEMinars, etc. I also represented SU on the inaugural Maryland STEM Festival Steering Committee (statewide) and hosted annual STEM Festival events. I still serve on the committees for these initiatives.*

**Interim Faculty Director,** SU Service Scholars Program, March 2020-May 2021. (Stepped into this program leadership role in response to COVID-19 pandemic) [\[link\]](#)

**Faculty in the Residence Halls Mentor,** SU Office of Student Affairs - Residence Life, September 2015-May 2020

**Assistant Professor,** College of Coastal Georgia, School of Mathematics and Natural Sciences, Brunswick, GA, August 2010 – May 2012

**Director,** Coastal Georgia Regional Science and Engineering Fair, College of Coastal Georgia, Brunswick, GA, August 2010 – May 2012.

Coordinated the science fair for the six counties in the Coastal Georgia region held each February. The fair served approximately 200 elementary, middle, and high school students (grades 4 - 12) annually.

**Adjunct Professor,** University of Tampa, Department of Biology, Tampa, FL, January 2010 - May 2010

**Postdoctoral Fellow,** Laboratory of Dr. Mya Breitbart, University of South Florida College of Marine Science; October 2007 - July 2010.

**Graduate Research Assistant,** Laboratory of Dr. Peter McGuire, University of Florida Department of Biochemistry and Molecular Biology; August 2003-August 2007.

**Naturalist/Interpreter,** Island Beach State Park, Seaside Park, NJ; May 2003 – August 2003.

**Teaching Assistant,** Florida State University, Department of Biological Science, Tallahassee, FL, August 2002 - May 2003.

**Instructor,** Florida State University, Saturday at the Sea Program; Tallahassee, FL; January 2003 - May 2003.

**Laboratory Technician,** Laboratory of Dr. Michael Blaber, Florida State University Institute of Molecular Biophysics; Tallahassee, FL; February 2001 – December 2002.

## Research/Internship Student Mentoring [\[link\]](#)

### **Stevenson University**

#### *Research Assistant Mentor (paid student position)*

Carly Brukiewa (Spring 2021)

Stephen Knerler (Summer 2019-Spring 2020)

Ana Castillo (Fall 2019-Spring 2020)

Elizabeth Crampton (Fall 2019- Spring 2020)

Xena Sorto (Fall 2018- Spring 2020)

Allison Bishop (Spring 2019)

Kate Krasnodemski (Fall 2016)

#### *Biology Honors Thesis Mentor*

Karleigh Baldwin, Ecology and Evolution of CRISPR (Spring 2018)

Hadassa Guttman, Evaluation of Environmental Microbial Community Analysis Methods for Bioremediation – Her work resulted in a publication in a peer-reviewed undergraduate research journal [\[link\]](#) (Spring 2014)

*Internship Mentor*, INDSC 320 – Junior Internship (Spring 2019) Marissa Hoffman, National Aquarium/Marine Animal Rescue and Rehabilitation Internship

*Research Mentor*, BIO 365 – Independent Research in Biology (Spring 2013 – Spring 2018, Spring 2020, Spring 2021)  
*I mentored 16 total students through this course over the years.*

*Capstone Research Mentor*, BIO 460 – Senior Research Capstone (Summer 2014 – Fall 2014)  
Emily Hicks, Evolutionary Changes Induced by Exposure to Used Motor Oil in Chesapeake Bay Watershed Bacterial Isolates (Summer-Fall 2015)  
Ava Schein, Isolation and characterization of bacteria from the Baltimore Inner Harbor; Microcosm studies examining the effect of used motor oil, a component of runoff, on bacteria (Summer-Fall 2014)

*Research Mentor*, Summer Science Scholars Research Program (S3RP) (Summer 2013, Summer 2019)

**College of Coastal Georgia**  
*Research/Internship Mentor*, BIOL4900 – Field Experience/Internship (Summer 2011, Fall 2011)

## Courses Taught

### **Stevenson University**

BIO 113L – General Biology I: Cell Biology and Genetics Laboratory (Fall 2012)

BIO 115L – General Biology III: Ecology and Evolution Laboratory (Fall 2013, Fall 2014, Fall 2016)

BIO 218 – Careers Connections in the Life Sciences (Spring 2020, Spring 2021)  
*Course Coordinator (2021-present)*

BIO 235L – Diversity of Life, *Service-Learning* (Spring 2017, Fall 2017, Spring 2019, Fall 2019, Fall 2020 online, Spring 2021 hybrid- simultaneous online and in-person instruction)  
*Course Coordinator (2017-present)*

BIO 275 – Environmental Science (Fall 2012)

BIO 307 – Marine Biology and Laboratory, *Service-Learning* (Spring 2013)

BIO 330 – Molecular Genetics Laboratory (Spring 2016)

BIO 440 – Topics in Biology- Human Health and the Environment (Spring 2016)

BIO 440 – Topics in Biology- Vector-borne Diseases in Maryland (Spring 2019)

ENV/BIO 315 – Evolution (Spring 2015, Spring 2018, Spring 2020)

ENV 330 – Conservation Biology, *Service-Learning* (Fall 2015, Fall 2018, Fall 2020 hybrid)

ENV/BIO 365 – Independent Research in the Environmental/Biological Sciences (Spring 2013-Fall 2017, Spring 2018, Spring 2020, Spring 2021)  
*Course Coordinator (2021-present)*

SCI 100 – School of the Sciences New Student Seminar (Fall 2012, Fall 2013, Fall 2015)

SL 101 – Community as Your Classroom, *Service-Learning* (Fall 2018)

SVC 101 – Foundations of Service-Learning, *Service-Learning* (Fall 2019, Fall 2020 online)  
*Course Coordinator (2020-present)*

### **College of Coastal Georgia**

BIOL1107 – Introductory Biology I and lab (Fall 2010, Spring 2011, Fall 2011, Spring 2012)

BIOL3250 – Marine Biology and lab/field experiences, *Service-Learning* (Spring 2011)

BIOL4110 – Genetics and lab (Spring 2011, Spring 2012)

BIOL4000 – Special Topics in Biology: Conservation Biology, *Service-Learning* (Fall 2011)

### **University of Tampa**

BIO300 – Genetics (Spring 2010)

### **Florida State University**

BSC1005L – Non-majors Biology Lab (Fall 2002, Spring 2003)

## Grant and Gift Funding

### Completed

- Monitoring Maryland Ticks for Abundant and Emerging Diseases*, Lyme Foundation of Maryland, \$47,750 (May 2019-May 2021).
- SU Environmental Science Program Support*, The Keith Campbell Foundation for the Environment, \$20,000 (July 2020-June 2021, renewable for program after I left)
- SU Student-Driven Service Project Mini-Grants*, T. Rowe Price Foundation, \$30,000 (September 2018-present, renewable)
- Stevenson University ECO (Environmental and Community Outreach) Reps Program: Developing Future Leaders*, BGE Green Grant, \$4,000 (July 2019-July 2020)
- Expanding Your Horizons Sponsorship*, Toyota Financial Services Foundation, \$8,400 (July 2018-present, renewable)
- Conservation Biology Service-Learning Project- Wetland Monitoring and Field Guide*, Stevenson University Alan Penczek Service-Learning Fund, \$1,000 (October 2018-December 2019)
- Monitoring Maryland Ticks for Abundant and Emerging Diseases*, Stevenson University Summer Research Scholars Program (S<sup>3</sup>RP), \$8,500 (May 2019-August 2019)
- Stevenson University ECO (Environmental and Community Outreach) Reps Program*, BGE Green Grant, \$5,000 (July 2018-July 2019)
- Microbial diversity in the Jones Falls following an oil spill*, Stevenson University Faculty Research Grant \$2,500 (July 2018-July 2019)
- Chesapeake Conservation Corps Host Site*, Chesapeake Bay Trust, \$17,000 equivalent which funds a full-time Corps member for one year of work with the SU CES (August 2017-August 2018)  
Through this opportunity, an additional \$1,250 was awarded to the CES through the Corps member for an event entitled “Through the Green Ceiling” about diversity and inclusion in the outdoors.
- Stevenson University Native Plant Habitat Demonstration Garden*, BGE Green Grant, \$5,000 (August 2017-July 2018)  
This project leveraged approximately an additional \$3,000 from donations, fundraisers, and other grants for a total project cost of over \$8,000
- Integrating Climate Change into the Curriculum: A Collaboration Among Three Schools (Stevenson University, Goucher College, and Loyola University Maryland) to create the Baltimore Higher Education Climate Consortium*, MADE CLEAR Climate Change Education Summit, \$5,000 per school for total of \$15,000 (July 2016-July 2017)
- Conservation Biology Service-Learning Project- Invasive Species Removal and Community Outreach*, Stevenson University Alan Penczek Service-Learning Fund, \$740 (September 2015-December 2015)
- Incorporating Electronic Laboratory Notebooks into an Introductory Ecology Course*, Stevenson University Faculty Scholarship Grant, \$2,500 (April 2014-January 2015)
- What goes in must come out... Making connections in the community by tracking the path of trash in the Jones Falls Watershed*, Chesapeake Bay Trust, \$10,000 (February 2013-February 2014)
- Identification of Microbial Biodiversity and Community Structure in Baltimore Harbor*, Stevenson University Seed Grant, \$5,800 (December 2012-June 2013) and SU Summer Research Scholars Program (S<sup>3</sup>RP), \$13,500 (May 2013-August 2013)

## Publications

### Invited Publications (peer-reviewed)

- A. Hansen, J. Ward, D. Donnelly-Hermosillo, E. Zavaleta, L. Whitenack, H. Lanier, A. Hove, J. Nation, **K. P. Tucker**, D. Lent, and U. Muller (2021) Biology Beyond the Classroom: Experiential Learning through Authentic Research, Design & Community Engagement. *Integrative and Comparative Biology*. 61(3): 926–933. [\[link\]](#)
- R. Glaser, M. Marx, A. Kniss, C.E. Moran, **K. P. Tucker** (2021) A creative model for interdisciplinary service-learning. *Integrative and Comparative Biology*. 61(3): 1028–1038. [\[link\]](#)

### Peer-Reviewed Publications (\* indicates undergraduate author)

- K. M. Krasnodemski\*, E. Cochran\*, A. Ellett\*, D. Mayfield-Jackson\*, **K. P. Tucker** (2019) Response of freshwater bacterial isolates exposed to used motor oil. *BIOS*. 90(2): 105-111. [\[link\]](#)
- K. P. Tucker** and C. E. Moran (2018) More than just pulling weeds: A case study of engaging upper-division Conservation Biology students in Service-Learning. *Experiential Learning and Teaching in Higher Education: A Journal for Engaged Educators*. 2(1): 47–56. [\[link\]](#)

- H. S. Guttman\*, S. Youngren, and **K. P. Tucker** (2016) Evaluation of Environmental Microbial Community Analysis Methods for Bioremediation. *BIOS* 87(3):85-95. [[link](#)]
- M. Hopkins, S. Kailasan, A. Cohen, **K. P. Tucker**, A. Shevenell, M. Agbandje-McKenna, M. Breitbart (2014) Diversity of single-stranded DNA phages (Family *Microviridae*) in the environment revealed through PCR amplification of the partial major capsid protein. *ISME Journal*. **8**, 2093–2103. [[link](#)]
- K. P. Tucker**, M. K. Hunter, R. K. Bonde, J. D. Austin, A. M. Clark, C. A. Beck, P. M. McGuire, M. K. Oli (2012) Genetic diversity and population substructure in the Endangered Florida manatee: Implications for conservation. *Journal of Mammalogy*, **93**, 1504-1511. [[link](#)] \*featured cover article
- M. E. Hunter, **K. P. Tucker**, T. L. King, R. K. Bonde, A. A. Mignucci-Giannoni, P. M. McGuire (2012) Comprehensive genetic investigation recognizes evolutionary divergence between the Florida (*Trichechus manatus latirostris*) and Puerto Rico (*T. m. manatus*) manatee populations and identifies unique subpopulations in Puerto Rico. *Conservation Genetics*, **13**, 1623-1635. [[link](#)]
- C. Nourisson, B. Morales-Vela, J. Padilla-Saldivar, **K. P. Tucker**, A. Clark, L. D. Olivera-Gómez, R. Bonde, P. McGuire (2011) Evidence of two genetic clusters of manatees with low genetic diversity in Mexico and implications for their conservation. *Genetica*. **139**, 833-842. [[link](#)]
- K. P. Tucker**, R. Parsons, E. M. Symonds, M. Breitbart (2011) Diversity and distribution of single-stranded DNA phages in the North Atlantic Ocean. *The ISME Journal*. **5**, 822-830. [[link](#)]
- T. Sime-Ngando, S. Lucas, A. Robin, **K. P. Tucker**, J. Colombet, Y. Bettarel, E. Desmond, S. Gribaldo, P. Forterre, M. Breitbart, D. Prangishvili. (2011) Diversity of virus-host systems in hypersaline Lake Retba, Senegal. *Environmental Microbiology*. **13**, 1956-1972. [[link](#)]
- M. K. Hunter, N. Auil-Gomez, **K. P. Tucker**, R. K. Bonde, J. Powell, P. McGuire (2010) Low genetic variation and evidence of limited dispersal in the regionally important Belize manatee. *Animal Conservation*. **13**, 592-602. [[link](#)]
- M. Hunter, D. Broderick, J. Ovenden, **K. Tucker**, R. Bonde, P. McGuire, J. Lanyon (2009) Characterization of highly informative cross-species microsatellite panels for the Australian dugong (*Dugong dugon*) and Florida manatee (*Trichechus manatus latirostris*) including five novel primers. *Molecular Ecology Resources*. **10**, 368-377. [[link](#)]
- K. C. Pause**, C. Nourisson, A. M. Clark, M. E. Kellogg, R. K. Bonde, P. M. McGuire. (2007). Polymorphic microsatellite DNA markers for the Florida manatee (*Trichechus manatus latirostris*). *Molecular Ecology Notes*. **7**, 1073-1076. [[link](#)]
- K. C. Pause**, R. K. Bonde, P. M. McGuire, R. T. Zori, B. A. Gray (2006) G-banded karyotype and ideogram for the North Atlantic right whale (*Eubalaena glacialis*). *Journal of Heredity*. **97**, 303-306. [[link](#)]

#### *Invited Publications (not peer-reviewed)*

- K. P. Tucker** (2014) Review of the book, *Sirenian Conservation: Issues and Strategies in Developing Countries*, edited by Ellen M. Hines, John E. Reynolds, Lemuel V. Aragones, Antonio A. Mignucci-Giannoni, Miriam Marmontel, and Helene Marsh. *The Quarterly Review of Biology*, **89**, 261-262. [[link](#)]

#### *Book Chapter*

- R. Burgess, R. Glaser, **K. P. Tucker** (*in press*) DNA sequencing and genotyping in the classroom in D. Dluzen and M. Schmidt. *Rigor and Reproducibility in Genetics and genomics*. Academic Press: Cambridge, MA, USA [[link](#)]

#### *General Audience Publications (not peer-reviewed)*

- Stevenson University** (2018) "Environmental Service-Learning: Beyond Working in the Dirt." Mid-Atlantic Campus Compact: Model Programs Environmental Engagement Building Just Communities. [Frederick, MD], p. 39 [[link](#)]
- K. P. Tucker** (2017) "Op-Ed: You're doing it wrong/Think you know how to recycle? Think again." Baltimore Sun. [Baltimore, MD] 20 April 2017, [[link](#)]
- Stevenson University** (2016) "Career Discovery Day at Stevenson University." Maryland-DC Campus Compact Magazine: Model Programs Impacting Communities STEM Issue. [Frederick, MD], p. 34 [[link](#)]
- K. P. Tucker** (2015) "Op-Ed: The last (plastic) straw." Baltimore Sun. [Baltimore, MD] 14 September 2015, [[link](#)]
- K. P. Tucker** (2015) "Op-Ed: Be an eco-friendly consumer." Baltimore Sun. [Baltimore, MD] 21 April 2015, [[link](#)]
- K. P. Tucker** (2012) "A professor's view of service-learning." Mariner's Log. [Brunswick, GA] April 2012, p.1

## Presentations

### *Invited Lectures*

#### *Invited Plenary Speaker*

**K. P. Tucker** (September 2017) Innovators' Panel. *National Society for Experiential Education Annual Conference*, St. Petersburg, FL

Title of my presentation: Think Local, Act Local: Connect Students to Complex Global Issues and Empower Them to Act.

#### *Invited Symposium Speaker*

**K. P. Tucker**, R. L. Glaser, M. Marx, A. Kniss, C. E. Moran (January 2021) Symposium: Biology Beyond the Classroom: Experiential Learning Through Authentic Research, Design, and Community Engagement, *Society for Integrative and Comparative Biology Annual Meeting*

Title of our presentation: Interdisciplinary Collaboration in Undergraduate Service-Learning

#### *Invited Panelist*

**K. P. Tucker** and several others (October 2016) Stevenson University. *Start Something That Matters*, Owings Mills, MD

C. Carollo, G. Cantarero, A. Yarnell, **K. P. Tucker** (July 2015) Women in Science Panel. *ParityFest*, Baltimore, MD

C. Ceary, R. Schurtz, **K. P. Tucker**. (April 2014) Why Do We Harm the Environment When We Know How to Help It? The Psychology of Environmental Sustainability. *Bee Green Day*, Stevenson University, Stevenson, MD

S. B. Buchbinder, R. Pelton; **K. P. Tucker** (January 2014) Tips for writing and publishing. *Grant Workshop*, Stevenson University, Stevenson, MD

#### *Invited Speaker*

It's All About the Journey, *Beta Beta Beta Biological Honor Society Induction Ceremony at Stevenson University*, November 2019 (keynote address)

The Pursuit of Success, *National Society of Leadership and Success Induction Ceremony at Stevenson University*, December 2018 (keynote address)

Teaching Conservation Using Service-Learning, *Network of Conservation Educators and Practitioners Teaching and Learning Studio (American Museum of Natural History)*, June 2018

Recycling- Doing it Right! *Glen Arm Garden Club*, November 2017

Biology and health assessment of Florida manatees (*Trichechus manatus latirostris*) and careers in marine mammal science, *Junior Zoo Crew*, Maryland Zoo, July 2014

Florida manatee health assessment and population genetics, American Association for Laboratory Animal Science, 38<sup>th</sup> *National Capital Area Branch of the American Association of Laboratory Animal Science Seminar*, August 2012

Diversity and distribution of single-stranded DNA phages in the Atlantic Ocean, *University of Florida*, November 2011

Conservation genetics of manatees (*Trichechus manatus*), *Rollins College*, November 2009

### **Oral Presentations with Published Abstracts (\* indicates undergraduate author)**

**K. P. Tucker** (September 2019) Introducing Future Scientists to the Power of Citizen Science. *National Society for Experiential Education Annual Conference*, St. Petersburg, FL, USA.

M. A. Snead\* and **K. P. Tucker** (December 2018) Simulated oil spill shows potential impact for microbial community in Jones Falls. 24<sup>th</sup> *Maryland Water Monitoring Council Conference*, Linthicum, MD

C. E. Moran and **K. P. Tucker** (September 2018) Mustangs Make a Difference Day: Implementing a campus-wide day of service. *National Society for Experiential Education Annual Conference*, Savannah, GA, USA.

**K. P. Tucker** and C. E. Moran (September 2017) Making Service-Learning reflection relevant in STEM courses- It's not just "warm and fuzzy" stuff. *National Society for Experiential Education Annual Conference*, St. Petersburg, FL, USA.

**K. P. Tucker**, J. Matanoski, and B. B. McGahee (April 2017) Integrating climate neutrality and sustainability into the Stevenson University Residential Curriculum. *2017 Capital PKAL Regional Network Meeting*. Baltimore, MD, USA.

E. Huckfeldt, **K. P. Tucker**, and C. E. Moran (November 2016) Meeting students where they are: A collaboration between Residence Life and faculty. *Mid-Atlantic Association of College and University Housing Officers*. Hershey, PA, USA

**K. P. Tucker** and C. E. Moran (July 2016) Reciprocal Partnerships: How to make the most of Service-Learning for conservation practitioners and educators. *North American Congress for Conservation Biology*. Madison, WI, USA

A. LaPeruta\*, H. Guttman\*, K. Mistretta\*, and **K. P. Tucker** (May 2014) Seasonal fluctuations in the biodiversity and abundance of the microbial community within the Baltimore Harbor. *American Society for Microbiology, Maryland*

*Branch Annual Student Poster & Oral Presentations.* Baltimore, MD (*J. Howard Brown Award winner for outstanding undergraduate student abstract. Poster and oral presentation completed by student author.*)

- K. P. Tucker** (February 2014) Imagining a swimmable, fishable Baltimore Harbor by 2020. *Stevenson University Scholars Showcase*, Stevenson, MD
- K. P. Tucker**, T. Sime-Ngando, S. Lucas, A. Robin, J. Colombet, Y. Bettarel, E. Desmond, S. Gribaldo, P. Forterre, M. Breitbart, D. Prangishvili. (June 2010) Diversity of virus-host systems in hypersaline Lake Retba. *USF College of Marine Science Postdoctoral Fellow and Researcher Summer Colloquium*, St. Petersburg, FL
- K. Pause Tucker**, R. Parsons, M. Breitbart (August 2009) Diversity and distribution of a novel group of marine ssDNA phage. *Eighteenth Evergreen International Phage Biology Meeting*. Olympia, WA
- K. C. Pause** (April 2008) Conservation genetics of Florida manatees. *Sirenian Population Genetics Workshop*, Orlando, FL
- K. C. Pause**, A. M. Clark, R. K. Bonde, P. M. McGuire (November 2006) A preliminary analysis of gene flow and population structure of the Florida manatee. *Florida Genetics*, University of Florida Genetics Institute, Gainesville, FL
- K. C. Pause**, A. M. Clark, R. K. Bonde, P. M. McGuire (April 2006) A preliminary analysis of gene flow and population structure of the Florida manatee. *Wildlife Society of Florida Spring Meeting*, Melbourne, FL
- K. C. Pause**, A. M. Clark, R. K. Bonde, P. M. McGuire (December 2005) Genetic studies of the Florida manatee. *Sirenian International Symposium*. San Diego, CA
- K. C. Pause**, R. K. Bonde, P. M. McGuire, R. T. Zori, B. A. Gray (April 2005) G-Banded karyotype and ideogram for the North Atlantic Right Whale (*E. glacialis*). *Florida Marine Mammal Health Conference II*, Gainesville, FL

**Poster Presentations with Published Abstracts (\* indicates undergraduate author)**

- A. Castillo\*, S. Knerler\*, A. Bishop\*, H. Bowie\*, X. Sorto\*, S. Ferrara\*, J. Strickland\*, A. Babyak\*, C. Webster\*, A. Singh\*, M. Soloski, M. Tucker, **K. P. Tucker** (March 2020) Pathogen Monitoring in Maryland Ticks. *Mid-Atlantic Tick Summit VIII*, Laurel, MD
- A. Bishop\*, C. Webster\*, A. Babyak\*, A. Singh\*, S. Herd\*, M. Hoffman\*, J. Parker\*, **K. P. Tucker**, M. S. Tucker (March 2019) Vector-borne bacteria and parasites in Maryland white tailed deer. *Mid-Atlantic Tick Summit VIII*, Laurel, MD
- K. Baldwin\*, M. Hoffman\*, N. Johnson\*, T. Long\*, G. Nutter\*, J. Parker\*, C. Stein\*, C. Sagal, R. Mardiney, B. Paternotte, and **K. P. Tucker** (December 2018) Volunteers Welcome! Monitoring Irvine Nature Center's Restored Wetland. *24<sup>th</sup> Maryland Water Monitoring Council Conference*, Linthicum, MD
- C. Webster\*, A. Babyak\*, A. Singh\*, A. Bishop\*, S. Herd\*, **K. Tucker**, and M. Tucker (June 2018) Surveillance of blood parasites and ticks in the Maryland white tailed deer population. *93<sup>rd</sup> Annual Meeting of the American Society for Parasitology*, Cancun, Mexico.
- A. Babyak\*, C. Webster\*, A. Singh\*, A. Bishop\*, S. Herd\*, **K. P. Tucker**, and M. S. Tucker (April 2018) Prevalence of blood parasites in the white tailed deer population in Maryland. *2018 Spotlight on National Parks Resources in the National Capital Region Meeting*, Shephardstown, WV
- C. Wasilnak\*, **K. P. Tucker**, M. Tucker (December 2017) Analysis of human intestinal parasites in bivalves and water of the Jones Falls Watershed, Chesapeake Bay, and Inner Harbor of Baltimore, Maryland. *23<sup>rd</sup> Maryland Water Monitoring Council Conference*, Linthicum, MD
- M. Snead\*, S. Admasu\*, M. Socks\*, and **K. P. Tucker** (December 2017) Bacterial species isolated from the Jones Falls with enhanced growth in response to used motor oil. *23<sup>rd</sup> Maryland Water Monitoring Council Conference*, Linthicum, MD (*M. Snead was awarded first place in the MWMC Student Poster Competition.*)
- A. Babyak\*, **K. P. Tucker**, and M. S. Tucker (May 2017) Prevalence of blood parasites in the white tailed deer population in Maryland. *American Society for Microbiology, Maryland Branch Annual Student Poster & Oral Presentations*. Baltimore, MD (*A. Babyak was awarded second place for the J. Howard Brown Award for the outstanding undergraduate student abstract.*)
- M. Snead\*, S. Admasu\*, M. Socks\*, and **K. P. Tucker** (May 2017) Microbial community growth, metabolic activity, and diversity in response to used motor oil. *American Society for Microbiology, Maryland Branch Annual Student Poster & Oral Presentations*. Baltimore, MD
- K. P. Tucker**, B. Roche, E. E. Dahl, and G. Mora (April 2017) Baltimore Environmental Exchange: Professional development and network for capacity building in climate science education. *2017 Capital PKAL Regional Network Meeting*. Baltimore, MD
- A. Bosiacki\*, S. Admasu\*, K. M. Krasnodemski\*, E. Hicks\*, **K. P. Tucker** (November 2015) Microbial community response to used motor oil, a component of runoff. *21<sup>st</sup> Maryland Water Monitoring Council Conference*, Linthicum, MD

- E. Hicks\*, K. M. Krasnodemski\*, A. N. Schein\*, **K. P. Tucker** (November 2015) Evolutionary changes induced by exposure to used motor oil in Chesapeake Bay watershed bacterial isolates. *21<sup>st</sup> Maryland Water Monitoring Council Conference*, Linthicum, MD (*E. Hicks and K. M. Krasnodemski presented their work together and won second place in the MWMC Student Poster Competition.*)
- K. P. Tucker** (February 2015) Electronic Laboratory Notebooks for an introductory ecology course. *Stevenson University Scholars' Showcase*. Stevenson, MD
- A. N. Schein\*, S. Admasu\*, **K. P. Tucker** (November 2014) Microcosm studies of Chesapeake Bay microbial community and population dynamics after exposure to used motor oil, a component of runoff. *20<sup>th</sup> Maryland Water Monitoring Council Conference*, Linthicum, MD
- L. A. Grammer\*, H. Guttman\*, K. Mistretta\*, **K. P. Tucker** (July 2013) Identification of Microbial Biodiversity and Community Structure in the Baltimore Harbor. *26<sup>th</sup> International Congress for Conservation Biology*. Baltimore, MD
- K. P. Tucker**, C. Hurd, A. J. LaPeruta\*, S. Arbitman\*, K. D. Johnson, J. Mackinnon (July 2013) Connecting Students and Communities to Conservation through Service-Learning. *26<sup>th</sup> International Congress for Conservation Biology*. Baltimore, MD
- K. P. Tucker**, M. E. Hunter, R. K. Bonde, A. M. Clark, C. A. Beck, M. K. Oli, P. M. McGuire (November 2011) Low nuclear diversity in the Endangered Florida manatee: Analysis of genetic management units (gMUs) and implications for their conservation. *Sirenian International Symposium*. Tampa, FL
- K. P. Tucker**, C. L. Sun, B. D. Dill, P. Wilmes, R. Hettich, B. C. Thomas, V. Denef, N. VerBerkmoes, L. Comolli, B. Luef, J. F. Banfield, M. Breitbart (February 2010) Metagenomic and metaproteomic analysis of viruses from an acid mine drainage system. *Genomic Science Awardee Workshop VIII*, Crystal City, VA
- K. C. Pause**, C. Sun, P. Wilmes, R. Hettich, N. VerBerkmoes, L. Comolli, J. F. Banfield, M. Breitbart (February 2009) Characterization of viruses from an acid mine drainage system. *Genomics: Genomes to life (GTL) Contractor-Grantee Workshop VII*, Department of Energy, Bethesda, MD
- K. C. Pause**, C. Sun, P. Wilmes, J. F. Banfield, M. Breitbart (June 2008) Characterization of viruses from an acid mine drainage system using microscopy and metagenomic sequencing. *108<sup>th</sup> General Meeting*, American Society for Microbiology, Boston, MA
- K. Pause**, C. Sun, P. Wilmes, B. Baker, L. R. Comolli, C. Pan, R. Hettich, N. VerBerkmoes, J. F. Banfield, M. Breitbart (February 2008) Purification and characterization of viruses from an acid mine drainage system. *Genomics: GTL Contractor-Grantee Workshop VI*, Department of Energy, Bethesda, MD
- K. C. Pause**, R. K. Bonde, P. M. McGuire, R. T. Zori, B. A. Gray (December 2005) G-Banded karyotype and ideogram for the North Atlantic Right Whale (*E. Glacialis*), *Sixteenth Biennial Conference for the Society for Marine Mammalogy*. San Diego, CA
- Plus over twenty additional abstracts as contributing author for presentation at meetings.*

### **Regional and Local Meetings (Oral Presentations and Professional Development Workshops Led)**

- Victory Gardening Through 2020: Self-sufficiency, Sustainability & Self-care*. Stevenson University Center for Environmental Stewardship Earth Day Lightning Talks (**K.P. Tucker**), April 2021
- The CES organized a series of seven brief lectures by faculty from multiple disciplines to celebrate Earth Day.*
- Making the most of Service-Learning for community partners and educators (Irvine Nature Center hosted training for Chesapeake Bay Trust Conservation Corps members)* (C.E. Moran, **K. P. Tucker**, and M. Somerville), May 2017
- Baltimore Environmental Exchange Curriculum Development Workshop*. Loyola University, Baltimore, MD. October 2016. *Together with colleagues from Loyola University Maryland and Goucher College, we wrote a grant to fund this professional workshop and create a local network of faculty and staff interested in infusing climate neutrality and sustainability into curricula and programming. I also served as emcee and a break-out session facilitator.*
- Maryland DC Campus Compact Service-Learning and Civic Engagement Conference*. Universities at Shady Grove, Rockville, MD. *Workshop: Translating Your Service Experiences into a Winning Resume* (C. Moran and **K.P. Tucker**), April 2016

### **Professional Development Attended**

- 2021 SENCER Summer Institute – Science Education for New Civic Engagements and Responsibilities (SENCER)*, Online, August 2021



*Active Learning Strategies for Synchronous Online Instruction* - Network of Conservation Educators and Practitioners (NCEP) Studio Alumni Webinar, Online, January 2021

*2020 SENCER Summer Institute* – Science Education for New Civic Engagements and Responsibilities (SENCER), Online, July August 2020

*Experiential Education Academy* – Graduated National Society for Experiential Education (NSEE), St. Petersburg, FL, September 2019

Earned certificates in:

“*Legal Issues for Experiential Education*” and “*Strategic Planning*”, NSEE, St. Petersburg, FL, September 2019

“*Principles of Ethical Practice*” and “*Assessment*”, NSEE, Savannah, GA, September 2018

“*Fundamentals of Experiential Education*” and “*Reflection*”, NSEE, St. Petersburg, FL, September 2017

*2018 Conservation Teaching and Learning Studio (Walking the Walk: Implementing Active Teaching and Learning in the Classroom)* NCEP, American Museum of Natural History Center for Biodiversity and Conservation, New York, NY, June 2018

*Summer Writing Institute*, Stevenson University, Stevenson, MD, May 2014, June 2015, May 2017

*Learning the Language of Executive Leadership to Increase Sustainability’s Value*, Association for the Advancement of Sustainability in Higher Education Conference and Expo pre-meeting workshop, Baltimore, MD, October 2016

*Infusing Principles of Sustainability and Climate Neutrality into Existing Curriculum to Enhance Conservation Education for All Students*, North American Congress for Conservation Biology/Society for Conservation Biology workshop, Madison, WI, July 2016

*Interdisciplinary Conservation Education: Engaging Students for Action*, North American Congress for Conservation Biology/Society for Conservation Biology workshop, Madison, WI, July 2016

*Environmental Leadership Program Chesapeake Regional Network Orientation Retreats*, Environmental Leadership Program, Knoxville, MD, June 2016, September 2016, and December 2016

*Sustainability, Innovation, & Organizational Design Seminar*, Swarthmore College, Swarthmore, PA, June 2016

*Maryland-DC Campus Compact Service-Learning Course Design Workshop*, University of Maryland, College Park, MD, January 2016

*AAC&U Transforming STEM Higher Education*, Atlanta, GA, November 2014

*Project Kaleidoscope (PKAL) Summer Leadership Institute for STEM Faculty*, Baca, CO, July 2013 - August 2013 (Competitive selection process.)

*Service-Learning Scholars*, College of Coastal Georgia, Brunswick, GA, February 2011-March 2011

*Service-Learning: Bridging the Classroom and the Community*, College of Coastal Georgia, Brunswick, GA, January 2011

*Learner-Centered Teaching*, University of Tampa, Tampa, FL; January 2010

*Workshop on Molecular Evolution*, Woods Hole Oceanographic Institution, Woods Hole, MA; July 2009

*Applied Conservation Genetics*, National Conservation Training Center, Shepherdstown, WV; December 2006

*Forensic Science for Marine Biologists*, Shoals Marine Laboratory, Appledore Island, NH; August 2006

*SEAVET I*, University of Florida College of Veterinary Medicine; June 2005

*Biology Teaching Workshop*, Florida State University; Tallahassee, FL; August 2002

## Honors and Awards

2019	Chesapeake Bay Trust Educator of the Year (\$2,500 grant award)
2018	Honorary Membership, National Society for Leadership and Success
2017	Spotlight of the Month (October) Regional Winner <a href="#">[link]</a> National Association of College and University Residence Halls
	Organization of the Month (March): Center for Environmental Stewardship, National Residence Hall Honorary, Stevenson University chapter
2016	National Society for Experiential Education Rising Leader
	Environmental Leadership Program: Chesapeake Regional Fellow (2016 Cohort)
	Stevenson University Student Employee Supervisor of the Year
	Building Community Award, Stevenson University Human Resources
2015	Program of the Month: Mustangs Make a Difference Day, National Residence Hall Honorary, Stevenson University chapter
2013	Outstanding Advisor of the Year: Environmental Club, Stevenson University



	Best Collaborative Program: Environmental Club/GreenFest, Stevenson University
2005-2006	AAAS/Science Program for Excellence in Science one-year sponsored membership
2005	University of Florida Interdisciplinary Program in Biomedical Sciences Travel Grant recipient
2001-2002	Phi Sigma Pi National Honor Fraternity National Society of Collegiate Scholars
1999-2003	Florida State University Liberal Studies Honors Program, completed Aid Association for Lutherans Scholarship recipient Florida State University Presidential Scholarship
1999-2001, & 2002-2003	Kiefer Memorial Scholarship recipient (Girl Scouts)
1999-2000	FSU Seminole Leadership Experience, Genesis Program, completed

## Professional Memberships

2016-present	National Society for Experiential Education
2008-2010, 2015-present	American Society for Microbiology (National and Maryland Branch)
2012-present	Beta Beta Beta National Biological Honor Society, Nu Sigma Chapter
2015-2019	American Association of University Women
2014-2018	Sigma Xi, Scientific Research Society
2013-2018	Association for the Sciences of Limnology and Oceanography
2005-2006, 2011-2018	Society for Conservation Biology

## Service and Activities

### *Service to the Institution*

Member, PULSE Biology Undergraduate Research Working Group, April 2019-June 2021  
 Chair, Brusini Excellence in Science Award Selection Committee, January 2019- June 2021  
 Coordinator, SU Community Garden, January 2018- June 2021  
 Faculty Advisor, SU Food Recovery Network Chapter, August 2017-present (worked with students to found chapter at SU)  
*Through the efforts of my students, we have recovered nearly 5,000 lbs of fresh food 2017-2019.*  
 Member, three Faculty Mentoring and Evaluation Committees, August 2013- June 2021  
 Member, Mustangs Make a Difference Day/Acts of Kindness Planning Committee, June 2015- June 2021  
 Member, SU Service-Learning Advisory Board, October 2014- June 2021 (founding member)  
 Member, SU Environmental Sustainability Committee, December 2013- June 2021 (Co-chair, September 2014-April 2016)  
 Member, SU School of the Sciences Leadership Team, July 2012- June 2021  
 Member, First Year Experience Revision Committee, Summer 2016-Summer 2017  
 Faculty Advisor, SU Environmental Club, September 2012-May 2017  
 Member, Experiential Expo Planning Committee (undergraduate research representative), September 2015-March 2017  
 Member, Faculty and Administrator Search Committees, Summer 2014, Spring 2015, Summer 2015  
 Coordinator, SU Future Scholars' Day (recruitment event), November 2012-February 2015  
 Member, SU Build Community Day Planning Committee, April 2012-October 2013  
 Secretary, CCGA Committee on Faculty Welfare and Development, April 2011-May 2012  
 Co-founder and member, USF College of Marine Science Postdoctoral Association, September 2009-July 2010  
 Organizer, Summer Colloquium, June 2010 [\[link\]](#)

### *Professional Service*

Planning Committee Member, 2019 National Society for Experiential Education Annual Conference  
 Member, App and Welcome Subcommittees  
 Planning Committee Member, 2018 Capital PKAL (Project Kaleidoscope) Regional Network Conference. Theme: Cultural Responsiveness in Fulfilling the Mission of Preparing a Global STEM Workforce [\[link\]](#)  
*Ad hoc reviewer: BIOS, Tropical Conservation Science, Journal of Aquatic Plant Management, Molecular Ecology Resources*  
*Ad hoc abstract reviewer: Society for Conservation Biology's 26th International Congress for Conservation Biology*  
 Abstracts 2013, Council for Undergraduate Research Posters on the Hill 2016  
 Member, Jones Falls Small Watershed Action Plan Advisory Board, June 2014-2015  
 Member, Georgia Department of Natural Resources Coastal Advisory Council, May 2011- May 2012

### ***Service to the Community***

Board of Trustees Member, Irvine Nature Center, July 2019- June 2021 [[link](#)]

Member, Strategic Planning Committee and Member, Education Task Force

Co-coordinator and volunteer/chaperone, Spring Serve, March 2018

Invited Attendee, Strategic Planning Retreat, Irvine Nature Center, February 2018

Co-coordinator and volunteer/chaperone, Fall Serve, October 2017, October 2018

Member, Maryland STEM Festival Steering Committee, June 2014-November 2015

Chair, Marketing and Communications Committee [[link](#)]

*Event host:* Expanding Your Horizons (October 2018)

*Event host:* BioBlitz at Baxter Farm (November 2017)

*Event co-host:* Towards Greater Equity and Inclusivity in Environmental Sciences (November 2016)

*Event co-host:* Students Can Save the World, or at Least Baltimore. (November 2015)

Volunteer (grant searching and writing), All About Animals Rescue, October 2011 – November 2011

Volunteer, Tallahassee-Leon County Animal Shelter, May 2002-December 2002

Girl Scouting: Alumni Association, October 2008-present; Scout, September 1985-October 2003, Silver Award, June 1998

### ***Other Relevant Skills and Activities***

Experienced hiker, snorkeler, and kayaker, competent backpacker

Participated in numerous marine mammal necropsies, mostly cetaceans and sirenians, but also some pinnipeds (most recently November 2015)

Translated marine mammal necropsy and field experience to white tailed deer for sample collection from managed hunts (January-February 2017-2020)

Experience in field collection of questing ticks and associated ecological site data (2018-present)

Participated in numerous captures of West Indian manatees for biological sampling and health assessment throughout Florida and Puerto Rico (most recently January 2015)

Experience on an oceanographic research vessel, microbial sample collection/processing at sea

Familiar with basic HTML coding and web design/maintenance through online platforms (Weebly, SquareSpace, Google)

Experience creating and maintaining social media accounts for @stevensonCES and @stevensonservice

Trained in First Aid, re-certified 2012