

Kathryn (Katie) Tomsho

Education

2017 - current **Doctoral Candidate of Population Health Sciences**
Department of Environmental Health
Harvard T.H. Chan School of Public Health

2014-2017 **Master of Public Health**
Department of Environmental Health
Boston University School of Public Health

2008-2012 **Bachelor of Arts**
Honors in Environmental Studies
Dickinson College

Professional Experience

August 2019 – October 2019

Teaching Assistant

Harvard T.H. Chan School of Public Health – Department of Social & Behavioral Sciences

Teaching assistant for 500-level course *Health Literacy* under Dr. Rima Rudd. Responsibilities include facilitating class discussion, providing support to students for final projects, and providing feedback regarding final papers.

June 2014 – August 2017

Research Assistant

Boston University – School of Public Health – Department of Environmental Health

Works within the department to facilitate smooth operation of several environmental health related projects. Oversees the department's Exposure Biology Research Laboratory. Research assistant and trainee for Superfund Research Program Research Translation Core, and collaborator with Community Engagement Core.

- Communicated and taught sophisticated scientific concepts to relevant stakeholders
- Analyzed and interpreted data for community members
- Assisted with grant-writing and reporting
- Coordinated and facilitated biological sample collection and in-lab processing for McClean Exposure Biology Research Laboratory

August 2015 – December 2017

Teaching Assistant

Boston University – School of Public Health

Teaching assistant for 700-level course *Introduction to Environmental Health* under Dr. Robin Dodson, Dr. Junenette Peters, and Dr. Patricia Janulewicz. Responsibilities include weekly office hours and reviewing and grading student materials.

June 2012-May 2014

Assistant Director of Outreach

Alliance for Aquatic Resource Monitoring (ALLARM)

Managed ALLARM's shale gas volunteer monitoring program across Pennsylvania – a program designed to train community members to monitor streams for early detection of pollution associated with natural gas extraction.

- Communicated and taught complex scientific concepts to varying audiences
- Developed and delivered accessible presentations to both communities and professional audiences
- Organized and managed data for Pennsylvania volunteers

- Coordinated statewide volunteer community of about 1,000 people
 - Fostered a feeling of involvement and purpose
 - Developed motivational & personal interest products for volunteer network
- Mentored and supervised ALLARM student employees
- Developed volunteer training materials
- Designed and developed data management tools for volunteers

August 2009-May 2012

Watershed Coordinator

Alliance for Aquatic Resource Monitoring

Worked collaboratively & independently with ALLARM employees on various projects. Responsibilities ranged from protocol development research to community training and professional conference presentations.

- Developed research and protocol products
- Planned conferences and large-scale events
- Developed content for community trainings
- Presented at professional conferences

August 2011-December 2011

Teaching Assistant

Dickinson College

Teaching assistant for 300-level course *Analysis & Management of the Aquatic Environment* under Dr. Candie Wilderman. Responsibilities included weekly meetings to plan and prep for laboratory sessions, helping with lab presentations and activities, and helping with a weekend field trip to the Chesapeake Bay.

- Planned and prepared lab sessions
- Assisted students with equipment and procedures in lab
- Supervised post-lab clean up
- Assisted with content presentation
- Coordinated field trips

Professional Presentations & Conferences

March 12, 2011: Schuylkill Watershed Congress

Pottstown, Pennsylvania

Examining Marcellus Shale Region Grass Roots Mobilization

May 4, 2012: National Water Quality Monitoring Conference

Portland, Oregon

Co-presenter: Julie Vastine

Coordinated Monitoring Efforts in Shale-Gas Plays: Case Study Pennsylvania Marcellus Monitoring

May 4, 2012: National Water Quality Monitoring Conference

Portland, Oregon

Co-presenter: Julie Vastine

Shale Gas Volunteer Monitoring Workshop

May 7, 2012: River Rally

Portland, Oregon

Examining Marcellus Shale Region Grass Roots Mobilization

May 7, 2012: River Rally

Portland, Oregon

Co-presenter: Julie Vastine
Shale Gas Volunteer Monitoring

March 25-27, 2013: Technology to Empower Citizen Scientists
Highland Heights, Kentucky
Invitational Conference

August 10, 2013: Mid-Atlantic Volunteer Monitoring Conference
Shepherdstown, West Virginia
Co-presenters: Jinnie Monismith, Kelly McIntyre
Shale Gas Monitoring

April, 2014: National Water Quality Monitoring Conference
Cincinnati, Ohio
Volunteer Monitoring for Shale Gas Impacts: Success through Collaboration

October, 2016: AEHS Foundation 32 Annual International Conference on Soils, Sediments, Water and Energy
Amherst, Massachusetts
Poster: Examining PCB Concentrations in New Bedford STUDENT Harbor Quahogs for Human Risk Implications

December, 2018: Partnerships for Environmental Public Health Annual Meeting: Reporting Back Research Results
Research Triangle Park, North Carolina
Poster: Evaluation of Report back of household-level NO₂ and PM_{2.5} concentrations to community participants in exposure assessment study

January, 2019: NIH-EPA Environmental Health Disparities Annual Grantees Meeting
Baltimore, Maryland
Poster: Report back of NO₂ and PM_{2.5} concentrations to community participants: A proposed framework for evaluation

Publications

Heiger-Bernays, W. J.; **Tomsho, K. S.**; Basra, K.; Petropoulos, Z. E.; Crawford, K.; Martinez, A.; Hornbuckle, K. C.; Scammell, M. K. Human Health Risks Due to Airborne Polychlorinated Biphenyls Are Highest in New Bedford Harbor Communities Living Closest to the Harbor. *Sci. Total Environ.*, 2019. <https://doi.org/10.1016/j.ygyno.2016.04.081>.

Tomsho KS; Schollaert C; Aguilar T; Bongiovanni R; Alvarez M; Scammell MK; Adamkiewicz G. A Mixed Methods Evaluation of Sharing Air Pollution Results with Study Participants via Report-Back Communication. *Int. J. Environ. Res. Public Health*, 2019, 16 (21), 4183. <https://doi.org/10.3390/ijerph16214183>.

Tomsho KS, Basra K, Rubin SM, et al. Community reporting of ambient air polychlorinated biphenyl concentrations near a Superfund site. *Environ Sci Pollut Res*. 2018;25(17):16389-16400. doi:10.1007/s11356-017-0286-6.

Martinez A, Hadnott BN, Awad AM, Herkert NJ, **Tomsho KS**, Basra K, Scammell MK, Heiger-Bernays W, Hornbuckle KC. Release of Airborne Polychlorinated Biphenyls from New Bedford Harbor Results in Elevated Concentrations in the Surrounding Air. *Environ. Sci. Technol. Lett.* 2017, Feb.

Awards & Honors

August 2020 – present: Harvard T.H. Chan Pedagogy Fellow
Harvard T.H. Chan School of Public Health

January 2020 – present: Guest editor for special edition of International Journal of Environment & Public Health: Environmental Health Literacy & Equity

August 2018 – present: Board member of T.H. Chan Environmental Justice Student Organization

- Organized conferences
- Organized on-campus speaker events
- Facilitated student events

May 2012: Honors in Environmental Studies
Dickinson College

Computer Skills

- Microsoft Outlook, Word, Publisher, Excel, Powerpoint
- R Software
- ArcGIS
- Canvas Learning Management Platform
- InDesign
- Adobe Premiere Elements 9.0
- Jada Content Management System
- Ektron Content Management System