Brittan A. Wilson

assistant professor

Division of Science, Information Arts and Technologies

Contact Information:

Phone: 410.837.5335

E-mail: bwilson@ubalt.edu

University of Massachusetts Boston

Doctorate, Environmental Sciences/Oceanography

2004 – 2009

University of Kansas

Masters of Arts, Ecology and Evolutionary Biology

2000 – 2002

B.S., Cornell University

Experience

Assistan Professor

University of Baltimore

July 2012 – Present (8 months)

Research Specialist – project design, data analysis, project management and supervising of student workers

Technical writing and publication

Funding acquisition through granting agencies

Primary courses: Environmental Chemistry and Human Ecology

Cactus Communications

Freelance Editor

Cactus Communications

October 2012 – Present (5 months)

Copy editing and formatting for grant proposals and manuscripts

Assistance for individuals with English as their second language for publication in English journals for grammar and stylistic standards

Specialty Fields: Ecology, Environmental Science, Analytical Chemistry, Toxicology, Environmental Modeling

Texas A&M International University

Assistant Professor of Environmental Biology

Texas A&M International University

August 2009 – July 2012 (3 years)Laredo, Texas Area

Research Specialist – project design, data analysis, project management and supervising of student workers

Technical writing and publication

Funding acquisition through granting agencies

Administration of Health Sciences scholarships and academic programs

Primary courses: Environmental Toxicology, Environmental Chemistry and Limnology

Morton's The Steakhouse

Service Captain

Morton's The Steakhouse

August 2004 – July 2009 (5 years)Boston, MA

Personnel Management

Oversight for all private parties

Sales and marketing specialist

Assistance with charity events preparation and donations

Fiscal responsibility for all sales and commissions

Adjunct Professor

Emerson College

August 2008 – June 2009 (11 months)

Environmental and Humankind

Anatomy and Physiology

UMass Boston

Graduate Researcher

UMass Boston

August 2004 – June 2009 (4 years 11 months)Boston, MA

Conception, design and implementation of independent research regarding the fate and effects of Triclosan

Acquired independent funding for research – successfully completed all goals and requirements set forth by funding agency

Manuscript preparation and publication of research resulting in 3 manuscripts

GIS analysis

Statistical analysis and modeling using large environmental data sets

Preparation of presentation materials to communicate research results – Best presentation award

Collaboration with U.S. Environmental Protection Agency

Adjunct Professor

Fisher College

August 2007 – December 2008 (1 year 5 months)

Environmental Science

Watershed Integrated Science Partnership (WISP)

NSF Fellowship

2005 – 2006 (1 year)Boston, MA

Teaching partnership with junior-high faculty in the Boston Public School District

Design and implementation of inquiry based lessons

Co-Author of a laboratory module now produced by FOSS

Originally from Kansas City, Mo., I have lived in a variety of cities both on the East Coast and in the Midwest. Over the years, I have had the privilege of working with fantastic students and colleagues. As an environmental scientist, I am passionate about protecting our natural resources, in particular water resources. I am focused on how pharmaceutical and personal-care products (mainly Triclosan and Ciprofloxacin) are transmitted through the environment via recycled waters impacting both drinking water and irrigated agricultural regions. So far, we have succeeded in modeling how these compounds move through the environment during flood conditions and through estuary food chains and how plants uptake these compounds in agricultural systems.

I enjoy working with a diverse student body at all levels of education, including nonmajors, majors and graduate students. I believe in fostering in my courses an environment of collaborative learning, strong fundamentals and a holistic assessment of the scientific process and how science impacts our communities. I teach a variety of courses ranging from Fundamentals of Biology to environmental courses such as Environmental Chemistry, Environmental Toxicology and Limnology.

Selected Publications

Torres, A., Tobin, K.J. and Wilson, B., 2012. Bacterial Loading During Flooding: A Case Study from July 2010 on the Bi-National Rio Grande River (Texas/Mexico). Water Pollution: 11th International Conference on Modeling, Monitoring and Management of Water Pollution, ed. Brebbia, C.A., WIT Press, Southampton, U.K., 12 pp.

Cantwell, M., Wilson, B., Zhu, J., King, J., Wallace, G., Smith, J., Olsen, C., Burgess, R. 2010. Temporal Trends of Triclosan Contamination in Dated Sediment Cores from Four Urbanized Estuaries: Evidence of Preservation and Accumulation. Chemosphere. 78:347-352.

Wilson, B., Chen, R., Olsen, C., Cantwell, M., Gontz, A., Zhu, J. 2009. The partitioning of Triclosan between aqueous and particulate bound phases in the Hudson River Estuary. Marine Pollution Bulletin. 59:207-212.

Wilson, B., Smith, V., deNoyelles, J., Larive, C. 2003. "The effects of three pharmaceutical and personal care products on natural freshwater algal assemblages." Environmental Science and Technologies. 37(9):1713-1719.

1.Torres, A., Tobin, K.J. and Wilson, B., 2012. Bacterial Loading During Flooding: A Case Study from July 2010 on the Bi-National Rio Grande River (Texas/Mexico). Water Pollution: 11th International Conference on Modeling, Monitoring and Management of Water Pollution, ed. Brebbia, C.A., WIT Press, Southampton, UK., 12 pg.

2.Rock, M., Davis-Berg, E., Wilson, B. 2011. Embryogenesis and Development of the Sea Urchin Arbacia Punctulata in the Presence of the Environmental Toxin Hypochlorite. Journal of Environmental Protection. 2:1127-1133.

3.Cantwell, M., Wilson, B., Zhu, J., King, J., Wallace, G., Smith, J., Olsen, C., Burgess, R. 2010. Temporal Trends of Triclosan Contamination in Dated Sediment Cores from Four Urbanized Estuaries: Evidence of Preservation and Accumulation. Chemosphere. 78:347-352.

4.Wilson, B., Chen, R., Olsen, C., Cantwell, M., Gontz, A., Zhu, J. 2009. The partitioning of Triclosan between aqueous and particulate bound phases in the Hudson River Estuary. Marine Pollution Bulletin. 59:207-212.

5.Wilson, B., Olsen, C., Zhu, J., Cantwell, M. 2008. Short-term dynamics and retention of Triclosan in the Lower Hudson River Estuary. Marine Pollution Bulletin. 56(5):1230-1233.

6.Wilson, B., Smith, V., deNoyelles, J., Larive, C., 2003. The effects of three pharmaceutical and personal care products on natural freshwater algal assemblages. Environmental Science and Technologies. 37(9):1713-1719.

Currently in review/preparation

1.Wilson, B., Bautista, J.A., Villareal, P. 2011. Toxicological impact of Imazapyr on planktonic organisms in alkaline aquatic systems. In Review.

2.Wilson, B.A. and M. O. Mendez. 2012. In situ impacts of a flooding event on contaminant deposition and fate of a riparian ecosystem. In final preparation.

3.Wilson, B.A. and M. O. Mendez. 2012. Accumulation of triclosan and ciprofloxacin in tomato plant tissues due to chronic exposure. In preparation.

4.E. Valdez and B.A. Wilson. 2011 Impact of chronic exposure to Triclosan on onions, plant uptake and toxicological effects. In preparation.

5.Wilson, B.A. and M. O. Mendez. 201\_. Comparison of ciprofloxacin and triclosan effects on the soil microbial community of tomatoes and onions. In preparation.

6.Mendez, M.O., J. J. Jurado, C. B. Lerma, and B. A. Wilson. 201\_. Effects of contaminant deposition from a flooding event on the culturable heterotrophic microbial community of the Rio Grande. In preparation.

7.Arambula, R., B. A. Wilson, and Mendez, M. O. 201\_. Microbial community dynamics of flooded riparian soils. In preparation.