

4/2019

Curriculum Vitae Rebecca J. Van Beneden

Role on Proposed RRF: Co-PI

Business Address:

School of Marine Science, University of Maine
Phone: 207 581-4431(office); E-mail: rebeccav@maine.edu

Education:

1974 - B.S., Biology, Wright State University, Dayton, Ohio

1983 - Ph.D., Biochemistry, Johns Hopkins University, Baltimore, MD

Professional Experience:

2016-2018 Director, School of Marine Sciences
2015-2016 Interim Director, School of Marine Sciences
2014-2015 Associate Director, School of Marine Sciences
2001-2004 Associate Director, School of Marine Sciences
2000-present Professor, Dept. of Biochemistry, Microbiology and Molecular Biology and School of Marine Sciences
1993-present Faculty Supervisor, DNA Sequencing Facility
1993-2000 Associate Professor, Dept. Biochemistry, Microbiology and Molecular Biology and the School of Marine Sciences
1988-1993 Research Assistant Professor, Duke University School of the Environment and Department of Cell Biology, Duke Medical Center, Durham, NC; Duke University Integrated Toxicology Program.
1983-1988 Visiting Scientist, Laboratory of Molecular Oncology, NCI/NIH Frederick, MD, funded as a Visiting Postdoctoral Fellow from McMaster Univ., Ontario, Canada (1983-1984); as Scientist I, Program Resources, Inc., Frederick, MD (1985-1986); as an Assistant Research Scientist, Chesapeake Bay Institute, Johns Hopkins University, Shady Side, MD (1985-1988) and as a Leukemia Society of America Special Fellow (1986-1989) & NIH New Investigator
1982-1983 Postdoctoral Fellow, Johns Hopkins Univ., School of Hygiene, Baltimore, MD
1977-1978 Graduate Teaching Assistant, Johns Hopkins University, Baltimore, MD
1974-1976 Research Assistant, Dept. Human Genetics, Johns Hopkins School of Medicine, Baltimore, MD.

Publications (most relevant, last five years):

Liu Y, Hock JM, Van Beneden RJ, Li X. Aberrant overexpression of FOXM1 transcription factor plays a critical role in lung carcinogenesis induced by low doses of arsenic. *Molecular Carcinogenesis*, 53(5):380-91, 2014.

Carlson, P and Van Beneden, RJ. Arsenic exposure alters expression of cell cycle and lipid metabolism genes in the liver of adult zebrafish (*Danio rerio*). *Aquatic Tox.* 153: 66-72, 2014.

Van Beneden, R, & Elskus, A. Have Mummichog (*Fundulus heteroclitus*) from the lower Penobscot River, Maine, Developed Tolerance to the Toxic Effects of Mercury? Technical Report to Maine Department of Environmental Protection, 2017.

Babich, RS and Van Beneden, RJ. The Effect of Arsenic Exposure on Early Eye Development in Zebrafish (*Danio rerio*). *Journal of Applied Toxicology*, in review.

Bowser, TJ and Van Beneden, RJ. The effect of embryonic arsenic on behavior of mummichog (*Fundulus heteroclitus*) larvae. *In prep. for submission to Aquatic Tox.*

Research Support:

Current

ME08509

Van Beneden (PI)

10/01/09-09/30/19

MAFES (Maine Agriculture & Forestry Experiment Station)

Contaminant Effects on Early Life Stages of Shellfish and Finfish

The goal of this study is to characterize cellular, reproductive, biochemical changes in fish and shellfish exposed to anthropogenic contaminants.

Completed

2016-2017 Have mummichog from the lower Penobscot River developed tolerance to mercury?
ME Dept of Environmental Protection. Co-PI with A. Elskus, \$4995.

2014-2016 The Effect of Arsenic Exposure on the Mummichog (*Fundulus heteroclitus*) and zebrafish (*Danio rerio*). EPA GRO Undergraduate Fellowship to M. Giroux, \$50,000.