A decade has now passed since our research group initially reported several adverse effects of fluoxetine to aquatic organisms commonly employed for developing environmental quality criteria, evaluating whole effluent toxicity, and monitoring ambient toxicity of surface waters and sediments. Our subsequent observation of fluoxetine, sertraline and their active metabolites accumulating in muscle, liver and brain tissues of three different fish species from an effluent-dominated stream was termed “Fish on Prozac.” Here I briefly review some scientific lessons learned from our study of antidepressants and the environment, including opportunities for research, management, environmental education and public outreach. Intrinsic chemical properties of antidepressants and other pharmaceuticals have afforded research in areas ranging from analytical chemistry and comparative pharmacology, to influences of ionization, chirality and adverse outcome pathways on hazard and risk assessment, and further promises to support sustainable molecular design of less hazardous chemicals. Using probabilistic hazard assessment and fish plasma modeling approaches, selective serotonin reuptake inhibitors and tricyclic antidepressants are predicted to result in therapeutic hazard to fish (internal fish plasma level equaling mammalian therapeutic dose) when exposed to water (inhalational) at or below 1 µg/L, a common trigger value for environmental assessments.

**Biography:**
In 2014, Bryan W. Brooks is the Fulbright Canada Visiting Research Chair in Water and the Environment at the University of Lethbridge. He is a Professor of Environmental Science and Biomedical Studies and Director of the Environmental Health Science Program at Baylor University, Texas, USA.