

Impacts of Endocrine Disruptor Chemicals on Human Health & the Aquatic Environment

Jan 29, Sat, 9a.m.-5p.m.
(7 CEUs) - Room 1062

Open to:
Health care Professionals, Students and the General Public (*college level*)

- Professional: **\$135** • Bastyr/NIAOM Alumni: **\$125**
- Full-time Student: **\$125** • General Public: **\$125**



Fran Solomon, PhD

Organic chemicals are discharged to water, air, and soil from various human activities, and have the ability to biomagnify in food webs and persist in fatty tissues of organisms. Many of these chemicals are found in everyday household products and have toxic effects from the molecular to the organismal to the ecosystem levels, including endocrine disruption. Endocrine disruption effects are fascinating, alarming, and far-reaching.

This seminar will be an overview of persistent organic pollutants that are endocrine disruptor chemicals (EDCs). These chemicals of emerging concern include pesticides, polychlorinated biphenyls, polybrominated diphenyl ethers, bisphenol-A, phthalates, and perfluorinated compounds. The seminar will begin with a description of the sources, properties, and mechanism of action of EDCs, and exposure pathways. We will then focus on the impacts of specific EDCs and mixtures of EDCs, primarily on humans, with some examples drawn from the aquatic environment (e.g., impacts on brain development, the immune defense system, carbohydrate metabolism, body weight, and reproductive health, and links between EDCs and certain types of cancer in humans). We will conclude with a discussion of regulatory reform and individual actions that can be taken to reduce exposure to EDCs. The types of activities to be included in the seminar are lectures, stories, "show and tell" demonstrations, discussions, and a small group in-class exercise.

Upon completion of the workshop you will be able to:

- Identify human activities that contribute to discharge of endocrine disruptor chemicals (EDCs) to water, air, and soil.
- Describe the consequences of exposure to EDCs.
- Educate patients and colleagues about the impacts that EDCs can have on human health.
- Educate patients about actions that

FRAN SOLOMON

Dr. Frances Solomon is an environmental biologist with a bachelor's degree in biology from the University of Rochester (Rochester, New York), and a master's degree in environmental health and Ph.D. in fisheries/aquatic ecology from the University of Washington (Seattle, Washington). She has over 25 years experience in environmental agencies, focusing on the biological impacts of toxic water pollutants, pollution prevention and control, and cleanup of contaminated sites.



Dr. Solomon is passionate about bringing her work experience and knowledge to the classroom, and is especially passionate about educating people on the topic of endocrine disruptor chemicals (EDCs). She teaches short courses and gives lectures for environmental professionals and the general public in Washington State and Canada about EDCs and other toxic chemicals in the environment. In fall 2010, she gave lectures about EDCs to faculty and students at Hokkaido University and Keio University in Japan. She also teaches a class entitled Environmental Pollution at Western Washington University. She has taught environmental biology courses at University of Washington (Tacoma), The Evergreen State College (Tacoma), University of British Columbia, and Northwest University in Xi'an, China.

Dr. Solomon conducts research for the Washington Toxics Coalition (www.watoxics.org) on sources of toxic chemicals to Puget Sound and their impacts on the aquatic environment and human health. She is vice-president of the Pacific Northwest chapter of the Society of Environmental Toxicology and Chemistry (www.setac-pnw.org), and will be chapter president in 2011.

CANCELLATION, TRANSFER & REFUND POLICY

Please submit your request in writing (email or fax). Unless otherwise specified in the individual course descriptions, cancellations or transfers made up to 14 calendar days before the first day of the course will result in a full refund, less a \$35 processing fee or 20% of tuition, whichever is less. No refunds are granted for cancellations made with less than the 14-day notice. Returned checks will be assessed a \$28 fee. Students registered for the full course will not be refunded for any missed sessions and may not receive certificates of completion for partial completion of a seminar. Bastyr University reserves the right to cancel courses with insufficient enrollment, in which case a full refund will be granted to those registered.