2009 Fall Symposium Review

by Ryan Weidling

The Genetic and Environmental Toxicology Association's fall 2009 afternoon symposium was held at the CSU East Bay Oakland Professional Development and Conference Center on November 18, 2009. The topic was "Assault to our Environment, or How to Prevent Them in the First Place", and a number of speakers presented on a range of pressing environmental and ecological topics with urgent calls to action.

As a part of our continuing celebration of GETA's 30th anniversary, Dr. John C. Mirsalis, GETA president in 1993, gave a short presentation on the state of the world, science, and technology during the year he was president. His talk provided a brief snapshot of world events, science, and culture of that year, as well as a look back at GETA. Dr. Mirsalis finished off his talk with some predictions for 2010 and beyond.

Dr. Andrea Neal, Science Advisor to Jean-Michel Cousteau's Ocean Futures Society, presented on the environmental implications of marine debris through research performed as part of Project Kaisei expedition in the Subtropical Convergence Zone of the North Pacific Gyre. Her compelling discussion outlined the topic of marine debris as a marine contaminant, the details of the oceanographic research expedition, and some of the preliminary findings of the scientific work that was performed. The images of plastic waste on uninhabited beaches, trash found in trawls taken thousands of miles off shore, and giant abandoned drift nets gave a sense of weight and urgency to her discussion. Dr. Neal's presentation outlined an important and emerging area of environmental research, and culminated in a critical call to action for us all to reduce plastic waste.

Dr. Bill Bennett, Associate Research Ecologist for the Center for Watershed Sciences and the John Muir Institute of the Environment, presented his research on the status of Delta Smelt in the San Francisco Estuary. His talk outlined the ecological shifts that have combined to create a sudden and alarming decline in the population of this endangered California native fish species, including the roles of climate change, dwindling water resources, and pesticides. Dr. Bennett's presentation outlined some of the science behind an often politically distorted and sensationalized regional topic, and served as a cautionary tale of how our decisions as a society are having large consequences for the survival of other species.

Dr. Susan Klosterhaus, Environmental Scientist for the San Francisco Estuary Institute, presented on flame retardant chemicals in San Francisco Bay. She discussed the usage of flame-retardant chemicals by industry and the pervasive data on PBDEs and alternative flame retardants obtained through environmental and biological monitoring in the Bay Area. Dr. Klosterhaus's talk illustrated the widespread presence of these chemicals in environments and species close to home, and the disconcerting information gaps that exist on their long-term low-level toxicity.

Dr. Jeff Wong, Deputy Director, Science, Pollution Prevention, and Technology Development Department of Toxic Substances Control, presented on California's Green Chemistry Initiative. His discussion included an introduction to DTC's mission and goals, followed by a discussion of the discomforting data gaps on the toxicity of nanotechnology, and the vision of the California Green Chemistry Initiative. Dr. Wong's introduction to the Green Chemistry Initiative showed the urgent work that needs to be done and the exciting steps that are being taken to protect future generations and the environment.

The GETA fall 2009 afternoon symposium provided a sobering look at some of the stresses facing our environment today, where they may lead us, and most importantly, at urgent ways to prevent these frightening glimpses of our potential collective future.