

Explorations in Toxicology

"It's like being in Eureka!" Terria McNamar, teacher from Corvallis on touring the various OSU labs.

On July 24th, local teachers from Salem, Albany and Corvallis attended a day long workshop led by Dian Rohlman that included activities centered around concepts in toxicology. TEAM Tox students presented outreach modules in toxicology, immunology and environmental chemistry (see below).

Yanni the Yeast : Toxicity of household chemicals using dose response assays

Using yeast as a model system, student's evaluate the toxicity of household chemicals.

Mass Spectrometry: Concepts of Mass and Weight

To understand how mass can be used to identify individual chemicals, students sort M&Ms by mass, size, shape and color. A model of a mass spectrometer demonstrates how objects are sorted based on their mass.

The Doctor's Corner: An introduction to Flow Cytometry

Students role-play as doctors, using flow cytometry to diagnose a fictional patient.

Following the hands-on activities, the teachers toured the Flow Cytometry core facility, to supplement the information they received during the immunology module. Additionally, teachers visited the FSES core facility to learn about passive samplers, such as the ones deployed following the Deepwater Horizon Oil Spill, and the Anderson Lab, where they were able to view zebrafish in different stages of development, as well as different types of nanoparticles.

This event would not have been possible without the incredible help and support of Dr. Kari van Zee (STEPS), as well as funding from Precollege Programs, and the participation of TEAM Tox students and EMT faculty. In particular, thanks to Norman Forsberg and Dan Koch, who helped lead activities, and to George Tuttle, Drs. Stacey and Brian Harper, Dr. Sumit Punj and Norman Forsberg for leading tours through the laboratories.

For more information about the event, or to access the educational materials used during the workshop, please contact Diana Rohlman at rohlmand@onid.orst.edu



Diana Rohlman, COEC Program Coordinator, presenting the Mass Spectrometry: Concepts of Mass and Weight activity in the context of the recent Deepwater Horizon oil spill