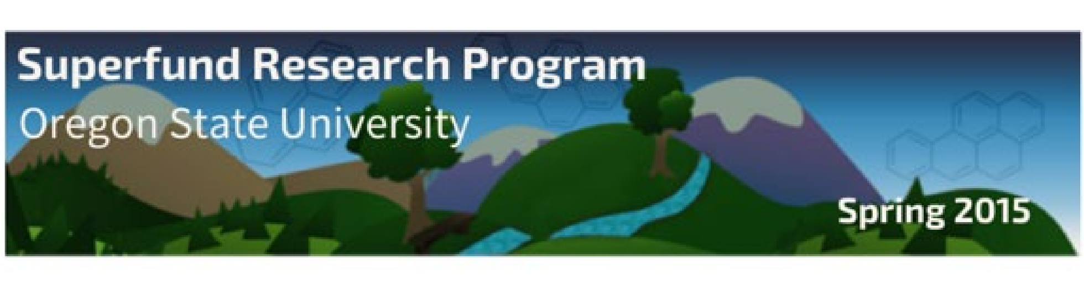


Center Transitions

Our Center announces a key leadership change.

Dr. David E Williams, our founding Center Director has stepped down effective December 2014 to focus his efforts on his research program. Dr. Williams will importantly also serve as our Executive Research Coordinator. With full support of our Center Members, our Executive Review Committees, and the NIEHS, Robyn L.Tanguay was appointed as Center Director.

Dr. Tanguay is a Distinguished Professor of Environmental and Molecular Toxicology and has extensive leadership experience. His brings a dynamic style with a strong commitment to the success of the OSU/PNNL SRP Center and it members.

We also announce a leadership change for our Research Translation Core (RTC). Dr. Dan Sudakin, our founding RTC Director, left OSU in 2014 to pursue a private medical practice. With enthusiastic support from Center Members and approval from NIEHS, Dr. Justin Teeguarden (PNNL) was appointed to lead the RTC.

Dr. Teeguarden has extensive leadership experience and brings his energy, creativity and expertise in risk assessment and modeling. His talents have already substantially advanced and promoted the research of the OSU/PNNL SRP Center.

Media Highlights

SRP Scientists from OSU and PNNL Develop Improved Way to Assess Cancer Risk

An OSU press release went out on May 8th and received lots of media attention and interest. This is a collaborative research publication from Project 1 and **the Biostatistics and Modeling Core.** View Press Release

Susan Tilton at OSU (above) and Katrina Waters at PNNL lead the Biostatistics and Modeling Core.

Researchers from Project 4 Receiving Media Attention from Ohio Fracking PAH study

- **Fracking Activities Pollute Nearby Air With Carcinogenic Hydrocarbons** (CE&N)
- **Fracking may affect air quality and human health, OSU study finds** (OSU Press Release)

Staci Simonich on Public Radio About the Chemicals Found in Snow During the East Coast Storm

Snow is Delicious, But is it Dangerous to Eat? (North Country Public Radio)

Dave William's Research on Effects of Phytonutrients in Utero Highlighted in Magazine

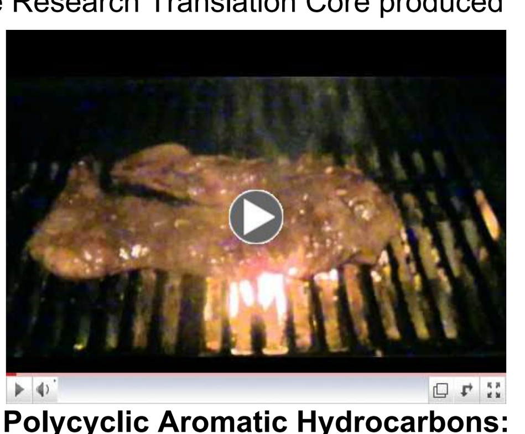
See "Full-Spectrum Eating"

New Video on PAHs

An important role of our Center is to educate diverse audiences on the importance of studying polycyclic aromatic hydrocarbons (PAHs) and the connection to environmental public health. For that reason the Research Translation Core produced a new video designed for the general public. In this video, we addressed five questions about PAHs.

1) What are PAHs?
2) Where do they come from?
3) How am I exposed to PAHs?
4) What are the health effects of PAHs?
5) What can I do to reduce my exposure to PAHs?

The video is available on YouTube.



Polycyclic Aromatic Hydrocarbons: *What Are They and Why Do They Matter?*

Latest Publications

1. Cardenas A, Koestler DC, Houseman EA, Jackson BP, Kile ML, Karagas MR, Marsit CJ. **Differential DNA Methylation in Umbilical Cord Blood of Infants Exposed to Mercury and Arsenic in utero.** Epigenetics. 2015 Apr 29:0. [Epub ahead of print]

2. Coker ES, Smit E, Harding AK, Molitor J, Kile ML. **A cross sectional analysis of behaviors related to operating gas stoves and pneumonia in U.S. children under the age of 5.** BMC Public Health. 15(138 Suppl)

3. Harper TA, Morré J, Lauer FT, McQuistan TJ, Hummel JM, Burchiel SW, Williams DE. **Analysis of dibenzo[def,p]chrysene-deoxyadenosine adducts in wild-type and cytochrome P450 1b1 knockout mice using stable-isotope dilution UHPLC-MS/MS.** Mutation Research. Volume 782, April 2015, Pages 51-56

4. Motorykin O, Santiago-Delgado L, Rohlman D, Schrlau JE, Harper B, Harris S, Harding AK, Kile ML, Massey Simonich SL. 2015 **Metabolism and excretion rates of parent and hydroxy-PAHs in urine collected after consumption of traditionally smoked salmon for Native American volunteers.** The Science of the total environment. 514C:170-177.

5. Paulik LB, Donald CE, Smith BW, Tidwell LG, Hobbie KA, Kincl L, Haynes EN, Anderson KA. **Impact of natural gas extraction on PAH levels in ambient air.** Environ Sci Technol. 2015 Mar 26. PMID: 25810398 [Epub ahead of print]

6. Tidwell LG, Allan SA, O'Connell SG, Hobbie KA, Smith BW, Anderson KA. **Polycyclic Aromatic Hydrocarbon (PAH) and Oxygenated PAH (OPAH) Air-Water Exchange during the Deepwater Horizon Oil Spill.** Environ. Sci. Technol., 2015, 49 (1), pp 141-149 DOI: 10.1021/es503827y

7. Tilton SC, Siddens LK, Krueger SK, Larkin AJ, Löhr CV, Williams DE, Baird WM, Waters KM. **Mechanism-based classification of PAH mixtures to predict carcinogenic potential.** Toxicol. Sci. first published online April 22, 2015 doi:10.1093/toxsci/kfv080

New Trainee Introductions

Cleo Davie-Martin, Project 5

Hi! My name is Cleo Davie-Martin and I am a recent arrival from Dunedin, New Zealand. I am a new Post-doctoral Scholar in the Department of Environmental and Molecular Toxicology at Oregon State University working with Dr. Staci Simonich under Project 5 of the SRP.

Cleo Davie-Martin, Project 5 Postdoc Trainee

I obtained my B.Sc.(Hons) in chemistry and more recently, my Ph.D. in environmental and analytical chemistry from the University of Otago under the supervision of Dr. Kimberly Hageman and Dr. Yu-Ping Chin. My research investigated the local- and global-scale atmospheric distribution of organic contaminants, including pesticides and brominated flame retardants.

On my weekends, you are likely to find me backpacking through the mountains, camping under the stars, and/or exploring the coast (when this beautiful weather ends... perhaps indoors on the climbing wall or playing badminton and squash).

Holly Dixon, Project 4

My name is Holly Dixon, and I am a new PhD student in the Dept. of Environmental and Molecular Toxicology (EMT) at Oregon State University (OSU). I grew up in Lake Oswego, Oregon and completed my undergraduate degree in Biology at the University of Puget Sound in Tacoma, Washington in 2014.

Holly Dixon, Project 4 Trainee

During my undergraduate career, I had the opportunity to complete a nuclear forensics internship at the Los Alamos National Laboratory (LANL) and a chemical mixtures internship at the Pacific Northwest National Laboratory (PNNL) through the U.S. Department of Homeland Security. By completing summer internships, I not only discovered that the field of toxicology is the perfect blend of my biology, chemistry, and research interests, but also that one of my career goals is to better understand people's environmental exposure to toxicants.

>>Read More

OSU SRP to Host Family Science Event in Partnership with the Johns Hopkins Center for Talented Youth (CTY)

Our Center is very pleased to be organizing an educational day of toxicology and environmental health activities for 7-12th graders who are a part of the Talented Youth Program at Johns Hopkins University. Everyone can attend this event. *Unraveling the Mysteries of Living with Chemicals*, is part of the Science and Technology Series at the CTY. The all-day event is scheduled for Oct. 3, 2015.

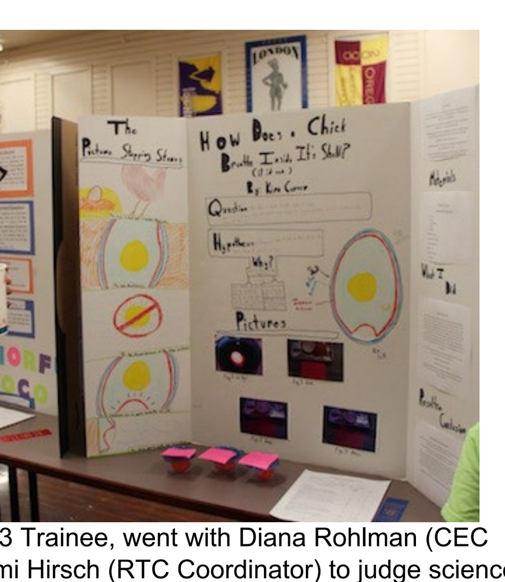
Students will work with our SRP investigators and trainees to learn how to solve real-life mysteries and create healthier environments. We will also focus on the wide range of career options in this important and growing field of science, and organize campus tours that highlight the cutting-edge science facilities at Oregon State University.

JOHNS HOPKINS CENTER *for* TALENTED YOUTH

Trainee Updates

- **Leah Chibwe** (Project 5 Trainee) and **Greta Frey** (CEC Trainee) were awarded an Oregon Lottery Graduate Scholarship for the 2015-16 academic year. These scholarships are awarded based upon the academic merit and scholarly achievement of the nominees.

- **Ivan Titaley** (Project 5 Trainee) was selected by Dr. Daylie Smith as a sponsored fellow at the Pacific Northwest National Laboratory (PNNL) to get hands-on training in modeling of polycyclic aromatic hydrocarbons. To financially support Ivan on this unique training opportunity, he has been awarded an SRP Trainee Externship Award through the SRP Training Core. This activity provides important synergy between Project 5 and Core C - Biostatistics and Modeling. **Read more**



Mitzi Geier, Project 3 Trainee, went with Diana Rohlman (CEC Coordinator) and Naomi Hirsch (RTC Coordinator) to judge science posters at London School (our PTAP project school located near the Black Butte Mine Site in Cottage Grove, Oregon.

- **Mitzi Geier** (Project 3 Postdoc Trainee) was awarded Best Presentation in the "Assessing the Toxicity of Environmental Contaminants" symposium at the 249th ACS meeting in Denver. The title of his presentation was *Assessing the uptake and effects of polycyclic aromatic hydrocarbons and their oxygenated derivatives on zebrafish using a metabolomics approach*".

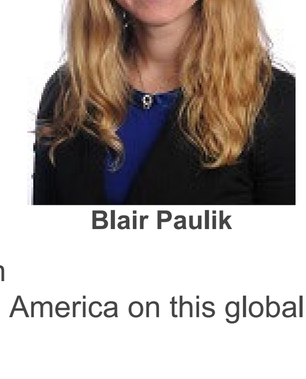
- **Holly Dixon** (Project 4 Trainee) has been recognized as an Oregon State University ARCS Scholar. This award is for an incoming or new PhD student in the College of Agricultural Sciences. As an ARCS Scholar she will receive a generous stipend for 3 years to support her graduate studies. Learn more about Holly.

- **Leah Chibwe** (Project 5 Trainee) has been selected as a winner of one of the 2015 Graduate Student Paper Awards. Leah will present her paper **("Aerobic Bioremediation of PAH Contaminated Soil Results in Increased Toxicity and No Change in Excess Lifetime Cancer Risk")** this fall in Boston at the special C. Ellen Gonter Environmental Chemistry Awards Symposium. Leah also received one of the 2015 Graduate Student Awards in Environmental Chemistry from the Division of Environmental Chemistry of the American Chemical Society.

Blair Paulik Receives SRP Trainee Award for SETAC Europe Meeting

The SRP Training Core is pleased to support externship opportunities for SRP trainees to provide added experiential training specifically benefiting the trainee's career goals.

This new funding opportunity began in 2014. Blair Paulik, a Trainee with Project 4, is the first to receive an Externship Award. Blair is receiving travel and lodging support to attend SETAC Europe 25th Annual Meeting, which was held in Barcelona, Catalonia, Spain, from May 3-7, 2015.



Blair Paulik

Blair was elected to be the Vice Chair of the Society of Environmental Toxicology and Chemistry (SETAC) North America Student Advisory Council (NASAC) for a 3-year term beginning fall 2014. She will be one of only a few students from North America to formally represent NASAC and SETAC North America on this global stage.

>>Read More

Trainees Teach High School Students About Environmental Pollution

Blair Paulik and Jamie Minick, both SRP Trainees working on their PhDs in Dr. Kim Anderson's lab (Project 4), traveled to McNary High School in the Salem, Oregon area on April 10th to teach students about environmental pollution.

Blair and Jamie's interactive presentation highlighted where environmental pollution comes from, why environmental pollution is of concern, how humans are exposed to pollutants, and how scientists at Oregon State University are studying pollutants in the environment.

Jamie Minick presenting on environmental pollutants.

Throughout the day, Blair and Jamie taught 129 high school students from six different classes including chemistry, biology, and environmental science. The students showed genuine interest in the subject matter, asking questions about specific environmental pollutants and about science and college in general.

>> Read More

Events

2015 Environmental Health Science Trainee Colloquium Webinars

Our monthly webinar series shares the research of the OSU SRP Trainees to the OSU and PNNL communities. Some presentations are recorded and shared on the web site.

>>Learn more

NARPM Presents...EPA and the NIEHS Superfund Research Program: Collaborating to Meet Community Technical Assistance Needs at Superfund Sites

Sponsored by: EPA Office of Superfund Remediation and Technology Innovation

Diana Rohlman (CEC Coordinator) and **Naomi Hirsch** (RTC Coordinator) shared an overview of the Black Butte Mine Superfund Site educational project in collaboration with the EPA Partners in Technical Assistance Program (PTAP) on May 6, 2015. View recording and resources.

OSU SRP Researchers Present at the Oregon State Air Toxics Science Advisory Meeting

On May 20, 2015, **Dr. Staci Simonich** and **Dr. Kim Anderson** presented to the Oregon State Air Toxics Science Advisory Committee (ATSAC). This committee is part of the State of Oregon Department of Environmental Quality (DEQ) Air Quality Division Environmental/Technical Services.

Dr. Dave Stone (RTC Co-Leader), who is a member of ATSAC, reiterated the value of both presentations, as well as the overall contribution of the Superfund Research Program at OSU in assisting the State on important public health and environmental issues. >> Read More

Upcoming National and International Meetings

Statistical Approaches for Assessing Health Effects of Environmental Chemical Mixtures in Epidemiology Studies
NIEHS Main Campus | July 13 & 14, 2015

16th International Conference of the Pacific Basin Consortium for Environment and Health
Depok, Indonesia | August 10 - 13, 2015

American Chemical Society National Meeting & Exposition
Boston, MA | August 16 - 20, 2015

27th Conference of the International Society for Environmental Epidemiology
Sao Paulo, Brazil | August 30 - Sept. 3, 2015

International Society for Exposure Science (ISES)
Henderson, Nevada | October 18 - 22, 2015

American Public Health Association's Annual Meeting & Exposition
Chicago, Ill | Oct. 31 - Nov. 4, 2015

2015 Annual Meeting of the Superfund Research Program
San Juan, Puerto Rico | November 18 - 20, 2015

The International Chemical Congress of Pacific Basin Societies
Honolulu, Hawaii | December 15 - 20, 2015

The OSU Superfund Research Center was established in 2009 and brings together a multidisciplinary team with years of experience in polycyclic aromatic hydrocarbons (PAHs) and environmental health issues.

The Superfund Research Program is federally funded and administered by the National Institute of Environmental Health Sciences (NIEHS grant #P42 ES016465), an institute of the National Institutes of Health.

STAY CONNECTED

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