

NEWSLETTER 2010

EMT in the News

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[What you eat effects you, your kids and grandkids](#) (Live Science)

"People think there is nothing you can do (about your disease risk)," said researcher Rod Dashwood of Oregon State University, who gave a lecture this afternoon on epigenetics at the Experimental Biology 2010 conference in Anaheim, Calif. "But you are not just what your genes are." (See also [MSNBC](#))

[Q&A: How Pristine Are Our National Parks?](#)

They say national parks in the West are affected by pesticides, the burning of fossil fuels, and industrial operations. Researchers studied eight national parks and preserves between 2003 and 2005. Staci Simonich was interviewed on OPB.

[Environment's rebound from oil spill clouded by unknowns](#) (USA Today)

"'Out of sight, out of mind' — I worry about that," says environmental toxicologist Kim Anderson of Oregon State University in Corvallis. "I worry people will stop caring."

[Toxicologists warn that waters that look clear of oil can be deceiving](#)

Chemist Kim Anderson of Oregon State University in Corvallis heads a team tracking how much of the worst toxins in the oil — organic chemicals called polycyclic aromatic hydrocarbons — have been dumped in the water by the spill.

[Gulf oil spill released toxic, tough-to-track chemicals](#)

"A chemical spill in the ocean is what this (Gulf of Mexico) leak is, really," says chemist Kim Anderson of OSU.

[Onion growers learn about 'sweet' test kit](#)

Kim Anderson, an Oregon State University scientist has developed a test kit that can dramatically shrink the cost and turn-around time for onion producers to learn if onions qualify as "sweet."

[Applying Superfund expertise to the Gulf oil spill](#)

Kim Anderson, Ph.D., of the NIEHS-funded Superfund Research Program (SRP) at Oregon State University (OSU) is tracking the long-term chemical impact of the Deepwater Horizon oil spill in the Gulf of Mexico.

Check out EMT
in the News on
our [website](#)

(Updated by
notification)



Sonny Ramaswamy's Observations

Impacts of Our Work: Responding to and Solving Problems

As I travel around the state, I occasionally run into someone who does not understand the purpose and meaning of a Land Grant college, such as the College of Agricultural Sciences at Oregon State University.

I point out that our College, as a Land Grant, has a reason for being: offering an enabling education to the children of the masses; discovering new knowledge with a purpose; and delivering that knowledge to impact the everyday lives of the residents of our state and, for that matter, the nation, and the world at large.

In our renewed mission as a Land Grant college as we transform ourselves in light of the budget challenges, we have a new vision:

*The College of Agricultural Sciences will be nationally **preeminent**, as a result of undertaking discovery with **purpose**, delivery of enabling educational programs, and positive **impact** on people, communities, and the economy.*

Our research and Extension efforts are about solving problems. Just during the past few weeks, we have learned of a variety of efforts our faculty, staff, and students are engaged in to solve problems. They include: alternative crops grass seed farmers can grow, sequencing the genome of a wild grass, enhancing levels of anti-oxidants in tomatoes, hive loss in honey bees, alternatives to field burning, invasive species on land and in the ocean, state of salmon raised in hatcheries, and test of the use of sound to repel whales from wave energy devices – to name just a few.

As a Land Grant college, we have a statewide footprint from the Pacific ocean to the Blue Mountains and from the Washington border to the California state line, our mandate is to solve problems.

This issue of *The Source* brings to you some of the stories about our College's efforts in responding to and solving problems. The problems are as diverse as:

- the efforts of several faculty, in collaboration and partnership with colleagues from other states and industry, to address the challenge of dealing with a new, invasive pest insect, the Spotted Wing Drosophila;
- the need for insect identification, which is increasingly a critical skill for wheat growers;
- the potential for technology that could keep genetically modified and non-genetically modified crops separated;
- work on the sage grouse which the federal government has left off of the endangered and threatened species lists for now;
- and the efforts of a team to free a sea lion.

Toxicology Outreach Program

On May 27th, AP Chemistry students from Dallas High School visited three programs at Oregon State University; Chemical Engineering, Food Science, and Environmental and Molecular Toxicology. At EMT, the students were given a tour of the Field Lab, where they were given an introduction to mass spectrometry. Following the tour, the students participated in a simulation of a chemical spill, quantifying levels of a pesticide (metam sodium) in various river water samples. Kate Saili, Steven O'Connell, Norman Forsberg, Lisa Truong and Diana Rohlman led the event. A special thanks to both Jennifer Field and Nancy Kerkvliet for their help in organizing this event!



AquaTox Lab News

Wendy Hillwalker has accepted a part-time Research Associate position with Dr. Stubblefield. Her research focus within the Aquatic Research Laboratory includes information gathering and evaluation, hazard identification, classification and labeling and derivation of environmental threshold levels of metals and other substances for use by safety assessments and national and international regulatory documents. Wendy will continue to work with Kim Anderson in the Food Safety Environmental Stewardship Program where her research interests include the use of in vitro tools such as artificial biofluids and passive sampling devices to assess bio-availability and/or bio-accessibility of environmental contaminants or commodities for human and environmental risk assessment."

Craig Lab News

New Publications

Sena Filho JG, **JM Duringer**, HS Xavier, JM Barbosa-Filho. (2010) [A chemical marker proposal for the Lantana genus: Composition of the essential oils from the leaves of *Lantana radula* and *L. canescens*](#). *Natural Products Communications* 5(4): 635-640.

Field Lab News

Jennifer Field received a major new grant from the Environmental Security Technology Certification Program. ESTCP is a Department of Defense (DoD) program that promotes innovative, cost-effective environmental technologies through demonstration and validation studies at DoD sites. Although final negotiations may slightly modify the scope and magnitude of the award, it will most likely result in 3-4 years of funding, totaling in excess of \$1M. This includes a subcontract with UC-Davis to conduct some of the studies. The project will commence in early 2011.

CONGRAULATIONS JENNIFER!

Hays Lab News

Colin Tominey, who is a post-bacc. student in the Hays lab left at the end of July to enter the MD-PhD program at Yale. He was also accepted into MD-PhD programs at the University of Washington and the Mayo Clinic.

CONGRATULATIONS COLIN!

Jepson News

"As part of IPPC's continuing program of partnership and engagement with the National Plant Diagnostics Network (NPDN), the Western IPM Center, the University of California IPM program, USDA APHIS, the IPM Institute and a number of commodity groups, we have been awarded a million dollar contract to develop a 'Pest Information Platform for Extension and Education' for specialty crops in the Western USA. This will join a cluster of other PIPE programs (<http://www.ipmpipe.org>), and act as a vehicle for other programatic developments in the future.

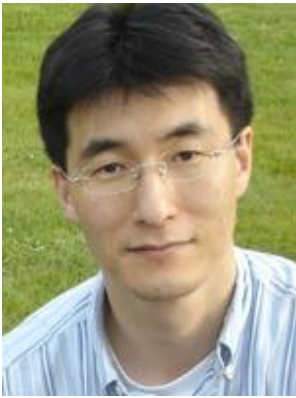
This program will focus on invasive pest threats and provide rapid diagnostic support, pest risk mapping tools to guide monitoring campaigns, dynamic IPM guidelines that include decision support tools, and education and outreach efforts that focus on sustainable crop management. It will draw upon existing programs at OSU and in the region, including pest and crop modeling capacities (<http://uspest.org/wea/>), and the Pesticide Risk Mitigation Engine (PRIME: <http://www.ipminstitute.org/prime/index.htm>), that we have helped to develop.

We thank the College of Agricultural Sciences and USDA NIFA for enabling us to pursue this funding opportunity and further expanding OSU's capacity to provide innovation and leadership in IPM at a time when many funding mechanisms for crop protection research and extension are lapsing at USDA."

Kolluri Lab News

Join us in extending congratulations to **Ed O'Donnell**, who was recently awarded the University Club Foundation (UCF) Graduate Fellowship Award and Scholarship for 2010! Ed's record of academic accomplishment and leadership qualities, as well as his current and potential contributions to the community and society made him excel amongst all the other nominees for this award from four different Oregon universities. His academic record, letters of recommendation, and exemplary personal interview with the UCF Committee earned him this highly competitive and highly prestigious award. Ed's award consists of a substantial scholarship and recognition at the annual University Club Foundation Banquet hosted in October.

CONGRATULATIONS ED!



Hyo Sang Jang has been working as a post-doctoral scholar in the Kolluri lab since July 1, 2010. He received his Ph.D. in Biochemistry and Biophysics here at OSU from 2004-2009. Before joining Siva's lab, he worked with Arup Indra in the College of Pharmacy at OSU. His bachelor's and master's degree in agricultural chemistry was obtained from Seoul National University in South Korea.

WELCOME HYO SANG JANG!



Guofeng Ren is a visiting scholar in the Kolluri lab and has been here since April 28, 2010. He received his Ph.D. in Nutritional Epidemiology from Central South University in China.

WELCOME GUOFENG REN!

Tanguay Lab News



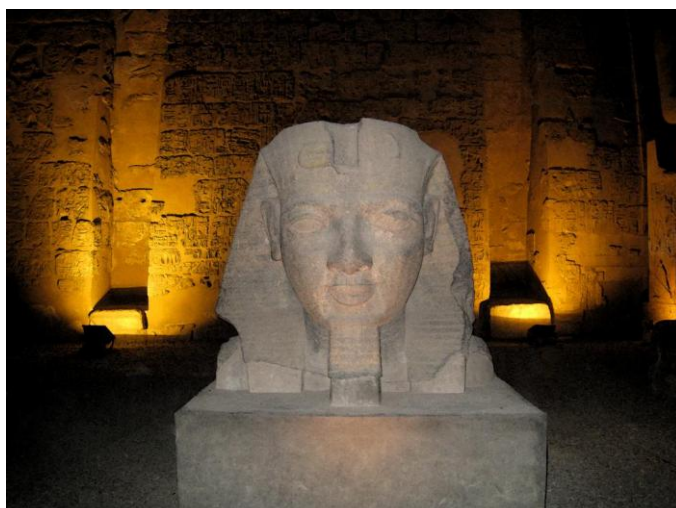
Tamara Tal won **First Place** in the Post Doctoral Poster Competition at the 2010 International Neurotoxicology Conference in Portland, OR.

CONGRATULATIONS TAMARA!

Jenkins Africa Travels in April

In April I participated in BioVision Alexandria 2010 held at the Bibliotheca Alexandrina in Alexandria, Egypt. This annual conference, which alternates between Lyon, France and Alexandria, Egypt, explores future prospects of the new life sciences in the areas of global health, food security, and the environment. I participated as Rapporteur for the environment sessions. Following the conference I traveled to Cairo to present a seminar on pesticide toxicology and risk assessment at the Faculty of Medicine, Cairo University, and meet with those interested in pesticide risk assessment at the Ministry of Agriculture and Land Reclamation.

Before leaving Egypt I received a small dose of Egyptology, much of which was arranged by my traveling companion, Phillip Wexler of the National Library of Medicine; in Cairo – the Egyptian Museum, the Step Pyramid at Saqqara, and the pyramids and sphinx at Giza – as well as a trip to Luxor (Valley of the Kings, Hatshepsut Temple, Karnak Temple, Luxor Temple, Luxor Museum). I then traveled (via Royal Air Maroc – AKA the Marrakech Express – with a stopover in Casablanca) to Dakar, Senegal where I met up with Kathy Blaustein of the OSU Integrated Plant Protection Center to conduct a workshop on pesticide dietary risk assessment (*Atelier sur l'évaluation des risques des pesticides sur la santé humaine*). This bilingual workshop was sponsored by the United Nations *Environment Programme (UNEP)*, the *Global Environment Facility (GEF)*, the Food and Agriculture Organization of the United Nations (FAO), and OSU. The workshop supports the project “Reducing Dependence on POPs and other Agro-Chemicals in the Senegal and Niger River Basins through Integrated Production, Pest and Pollution Management,” a collaborative effort between OSU (Participating faculty: Jepson – lead PI, Jenkins, and Anderson) and FAO, funded, in part, by GEF, a global partnership among 178 countries, international institutions, non-governmental organizations (NGOs), and the private sector to address global environmental issues while supporting national sustainable development initiatives. Workshop participants were a diverse group from across West Africa, with expertise in medicine, toxicology, public health, pesticide regulation, and analytical chemistry. In addition, as a part of the GEF project in West Africa, in partnership with FAO and *Environnement et Développement du Tiers Monde (ENDA)*, we are working with one of ENDA’s teams in Senegal, PRONAT, to develop a survey and focus group protocols designed to obtain information on pesticide use and human exposure in 30 rural communities along the Senegal and Niger rivers, spanning 7 West African countries. Following the workshop we met with representatives of FAO and ENDA-PRONAT to finalize the survey and focus group designs. We also visited the *Centre de Recherches en Ecotoxicologie pour le Sahel (CERES)*. CERES, located in Dakar, is a former FAO facility – now a foundation that conducts ecological research, including pesticide analysis. The analytical laboratory at CERES has the focus of capacity building by the Anderson Lab, providing training and guidance in all aspects of the deployment the passive sampling device and analysis of pesticides in lipid free tubing. In 2005 and 2009 I conducted needs assessments for capacity building necessary for the laboratory to meet ISO certification and capacity for pesticide trace residue analysis of environmental samples following EPA GLPs. This visit allowed an informal evaluation of progress towards those goals. Stay tuned for more updates as the project unfolds.



Tutankhamun at the Luxor Temple



Welcome Baby Durringer!



Date: April 14, 2010

Weight: 7 pounds, 9 ounces

Length: 20 inches

Madeline Rose



Congratulations
Jessica Thorpe

June 19, 2010
At Avery Park



Jessica (Perry) married Alex Thorpe this summer here in Corvallis. She works as a Faculty Research Assistant in the EMT department for NPIC. She can be reached at perryj@ace.orst.edu.

VIEW JESSICA AND ALEX THORPE'S WEDDING PHOTOS AT:

[HTTP://YSKAPHOTOGRAPHY.COM/JESSICA-ALEX/](http://yskaphotography.com/jessica-alex/)



November 10–12, 2010

Superfund Research Program Annual Meeting

- Hosted by EMT in Portland, OR
- For more information, go to:
- <http://oregonstate.edu/conferences/event/superfund2010/>

October 21– 22, 2010

Multistate Research Project, W2122 –

- Casa Munras, Monterey, CA
- Contact Dave Williams
- http://www.lgu.umd.edu/lgu_v2/homepages/meet.cfm?trackID=8836

***Make sure to check out our EMT
Website for updated events and
seminars***

<http://emt.oregonstate.edu>

TEAM Tox and EMT PARTners Pet Day

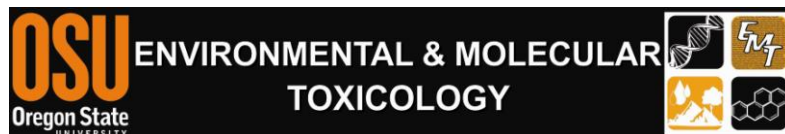
The EMT booth at Pet Day (<http://oregonstate.edu/vetmed/pet-day>) was a huge success! Hundreds of children, parents and canine companions visited the booth and learned about pesticide hazards in the home. Kids swatted toy bugs with flyswatters, and their parents played a guessing game about which pesticides are most toxic to pets.

TEAM Tox & EMT PARTners planned the event with help from the EHSC Outreach Core & NPIC. Booth visitors were greeted with home-made vegan dog treats! They picked up brochures and fact sheets about common pesticides, pet poisoning resources and toxic plants.

It was the perfect event to debut our new EMT sign,

because the booth was such a collaborative effort within EMT. Special thanks to all of the volunteers!

Jenny Przybla, Diana Rohlman, Kate Saili, Jennifer Gervais, Ann Ketter, Kate Cleveland, Kaci Buhl, Sean Ross



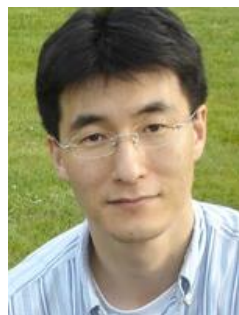
Please Join Us In Welcoming to the Department...



George Tuttle
Harper Lab
Graduate Research Asst.



Guofeng Ren
Kolluri Lab
Visiting Scholar



Hyo Sang Jang
Kolluri Lab
Visiting Scholar



Susie Dunham
NPIC
Faculty Research Asst.



Virginia Leykam
Williams Lab
Faculty Research Asst.



Ted Bunch
NPIC
Faculty Research Asst.



Jessica Phillips
Kolluri Lab
Graduate Research Asst.



Susan Atkisson
Office Manager



Sarah Haluzak

EMT Office Manager
2005-2010

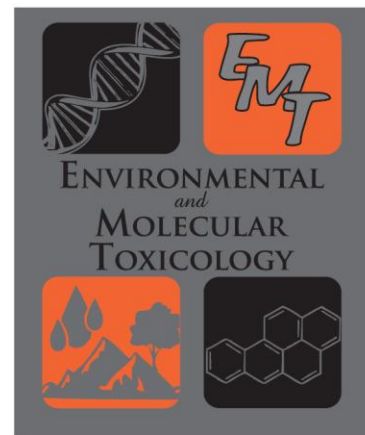
Effective July 2010, after five years of outstanding service to the faculty, trainees and staff of EMT, Sarah Haluzak was recruited away from EMT for a promotional position to now serve as Human Resources Coordinator for the College of Oceanic and Atmospheric Sciences. Sarah effected major improvements in EMT office procedures, hired many talented office support staff, and provided outstanding support to two Department heads and two Interim Department Heads. She supervised many promotion and tenure cycles, managed many staff, faculty and trainee recruitments, and provided outstanding organizational leadership for the entire department. EMT is extremely sorry to lose her, but we all wish her continued happiness and success in her new position! Sarah can now be reached at shaluzak@coas.oregonstate.edu.

We also welcome...

Susan Atkisson to EMT as our new office manager! Susan comes to EMT with six years of experience as office manager of the Department of Biological and Ecological Engineering (BEE). We are very fortunate to have recruited Susan. If you haven't done so already - stop by the office to introduce yourself!



If you haven't done so already...



Be sure to pick up your TeamTox T-Shirts & Mugs!!