



Regional Research Partnership Program

A Letter from the Director, Office of Science Policy

As the summer comes to a close and we gear up for a busy fall, I want to thank each and every OSP staff member for their contributions in making our office a great place to work!

In addition, I want to take this opportunity to announce two changes in OSP management. First, Jeff Morris was selected to permanently fill the position of Associate Director for Science.

Looking forward to a great year,

[Handwritten signature]

Director Office of Science Policy

We are pleased to announce that the implementation of the Regional Research Partnership (RRP) Program is officially underway!

In welcoming the individuals who have joined the Program, we would like to take this opportunity to highlight the efforts in which they are engaged:

Region 1-Dick Siscanaw is working in NERL's Environmental Sciences Division in Las Vegas, NV, with Brian Schumacher, on the development of an EPA method to measure trace VOCs in soil and sediment, which is a Region 1 FY 2003 RARE Project.

Region 3 - Khin-Cho Thuang is working in NERL's Environmental Sciences Division in Las Vegas, NV, with Ed Heithman, on the development and application of analytical speciation techniques for risk assessments on arsenic contamination issues.

Region 4 - Daniel Ahern is working with Tom Fontaine of NHEERL's Western Ecology Division in Corvallis, OR, on the relationship of terrestrial ecosystems to manganese emission from wood burning. Jim Harrison is working in NERL's Ecosystems Research Division in Athens,

GA, with Sandra Bird, on the impervious area estimation and forecasting in EPA Region 4. Bonita Johnson also is working in Athens, with Marirosa Molina, on the development of a DNA library of enterococci species.

Region 5-Michael Davis is working in Athens, with Walter Frick, on modeling discharge flows to rivers and lakes to track thermal and pathogen plume movement.

Region 7-Jay Hua is working in NRMRL's Cincinnati, OH location, in the Water Supply and Water Resources Division, with Jorge Santo Domingo, on the use of bacteriodes 16S rDNA sequences to discriminate between sources of fecal contamination.

Region 8 - Toney Ott is working in Washington, DC, with NCEA's Dan Kluza, on the investigation and evaluation of current methods for applicability to predict and map riparian aquatic nonindigenous/invasive plant species.

Region 9 - Matthew Small is working with Jim Weaver in NERL's Ecosystems Research Division in Athens, GA, on the evaluation of risks of exposure to total petroleum hydrocarbons.

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Embassy Science Fellows Program

Implementation Update

The second year of EPA's participation in the Embassy Science Fellows (ESF) Program is officially underway! Scientists from across the Agency have applied to the program and six selections have been made thus far. This Program is a partnership between U.S. technical agencies and the Department of State, through which applications are invited for short-term technical assignments in U.S. posts abroad. The goal of the program is to provide expertise in science, mathematics, and engineering, to support the work of the embassies, consulates, and missions of the State Department, in the formulation of sound foreign policy, while providing international experience to EPA staff.

In welcoming the individuals who have joined this year's Program to date, we would like to highlight the areas of the world in which they will work, and the efforts they will fulfill while on assignment through the ESF Program.

Partnership Program

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Region 10 – Stephanie Harris is working with Frank Schaefer in Cincinnati, OH, in the National Homeland Security Research Center, on the Development of enhanced isolation methods for *Bacillus anthracis*.

On behalf of ORD, we welcome you and look forward to your input and assessment of this new ORD Regional outreach effort! For more information about the program, please contact David Klauder at 202-564-6496 or visit our Web site at <http://intranet.epa.gov/ospintra/regres.pdf>. ■

Eric Adidas, Region 6 in Addis Ababa, Ethiopia – The Embassy requests a science fellow specializing in watershed management or hydrology who could work with local and regional authorities in the design of water strategies and the direction of needed research. The fellow also could provide scientific assessments of projects under consideration by the local offices of the Nile Basin Initiative.

Pamela Kay Swingle, Region 4 in Athens, Greece – The Embassy requests technical advice on how to create an economically viable recycling program that would reduce pressures on landfills and contribute to the Greek government's efforts to beautify Athens and the surrounding areas before the 2004 Olympics.

Scott Hedges, ORD in Conakry, Guinea – The Embassy requests the assistance of an air quality expert to design and conduct a small-scale air quality survey and to write a report on his/her findings. The scientist will be asked to choose a limited number of key sites and monitor them. The scientist also will prepare a needs assessment and provide recommendations for the design of a larger-scale air quality monitoring program for the city.

John Furlow, ORD in Niamey, Niger – The Embassy requests a visiting science fellow from the EPA for a period of 3 to 6 months to study the environmental impact of pollution in Niger, particularly in and around Niamey, the capital, and develop options for reducing pollution. Specifically, the Embassy seeks scientific and economic policy expertise on ways in which plastic and other materials can be recycled in a creative, sustainable, and economically feasible manner.

Barbara Brown, ORD in San Jose, Costa Rica – The Government of Costa Rica, through the Costa Rican Center for High Technology (CENAT), is requesting scientific/tech-

nical collaboration to define the main guidelines for water rehabilitation and management and land use planning for the Grande de Tarcoles River. CENAT is looking for a natural scientist or geoscientist with broad experience in research and development in the area of water rehabilitation and management and experience in working with interdisciplinary teams.

Jentai Yang, OIA in Shenyang, China – Consulate Shenyang, whose district in northeast China includes Heilongjiang, Jilin, and Liaoning Provinces, will be hosting a fellow from EPA. The fellow could productively engage with provincial officials and academics on any of a wide range of possible topics, including: solid waste management, river basin management, air and water monitoring projects, hazardous waste management, medical waste management, reduction and mitigation of coal usage, and legal mechanisms for public participation in environmental processes.

We welcome you to the ESF Program, wish you luck in your assignments, and look forward to hearing about your international experiences! For more information about the ESF Program, please contact Doug Steele at 202-564-6759 or visit our Web site at <http://intranet.epa.gov/ospintra/features/embassy.htm>. ■

OSP Update Contributing Writers

- Sarah Bauer
- Megan Grogard
- David Klauder
- Dick Garnas
- Ruth Partridge
- Connie Bosma
- Terry Simpson
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- Paul Zielinski
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For more information on the OSP Update, contact Susan Peterson at 202-564-1077 or peterson.susan@epa.gov



Program Support

OSP's Program Support Staff was busy again this quarter. With help from Laboratory/Center staff, OSP reviewed and commented on various Agency documents; attended meetings in support of the Program Offices with the Office of Management and Budget, the Science Advisory Board, and the National Academy of Sciences; and participated in briefings of the Administrator, Deputy Administrator, Assistant Administrators, and congressional committees.

EPA's second annual Science Forum 2003: Partnering to Protect Human Health and the Environment, was held on May 5-7. The Forum was co-led by EPA organizations working together to develop a program that demonstrates the importance of promoting science collaboration and moving the results of our scientific efforts into action. Program Support Staff, along with fellow OSP staff members, were on hand to provide information and to answer questions.

With ORD Laboratory/Center help, OSP reviewed and commented on 16 analyt-

ic blueprints, 10 of which were actions within the Office of Air and Radiation's Residual Risk Program. OSP also reviewed and commented on the Office of Pollution Prevention and Toxic Substance's risk assessments for perfluorooctanoic acid (PFOA) and pentachlorophenol. In addition, OSP's Program Support Staff provided scientific and technical support to the other Program Offices in the development of a brochure on residential vermiculite insulation, guidance on scientific and ethical review of third party human studies, a screening risk assessment on arsenic in Ironite® fertilizer, and revisions to the effluent limitation guideline program.

ORD concurred without comments on the National Sediment Quality Survey Report to Congress, concurred without comment on the Tribal New Source Review Rule, and concurred without comment on the Promulgation of NESHAP (MACT) for Site Remediation.

As a core office in EPA's Action Development Process, ORD is required to participate in the development of most

Tier 1 and 2 activities. This quarter, these new Tier 1 and 2 activities were identified for ORD's participation: Prevention of Significant Deterioration and Nonattainment New Source Review; Interstate Transport Rule; Industry Petitions to Delist 3-Can Subcategory and Ethylene Glycol Monobutyl Ether from the Clean Air Act List of Hazardous Air Pollutants; and Ferroalloys Production Residual Risk Standards. ORD also is participating in the development of four new EPA Tier 3 activities.

Finally, OSP presented its training course, "ORD's Role in the Agency's Action Development Process" on April 2, in Ada, OK. OSP plans to hold another live session of this training course in Duluth, MN. OSP also is developing a virtual interactive course that will be housed on the OSP Web site.

Keep checking the Web site at <http://intranet.epa.gov/ospintra/features/osptrain.htm> for Duluth dates and registration information and the latest on the virtual training. ■

ORD/OPPTS Seminar Series

April 8, 2003 – Predicting Contaminant Effects-Endangered Species

Author: Foster Mayer, Ph.D., Gulf Ecology Division, NHEERL

Endangered and imperiled species continue to increase in the United States; endangered aquatic species far outnumber U.S. birds and mammals (fishes-20%, mussels-55%, crayfishes-36% vs. birds & mammals-7%).

Since 1995, a team of researchers has worked closely with scientists at the U.S. Geological Survey, U.S. Fish & Wildlife

Service, University of Missouri, OPPTS, and OW to address questions regarding endangered species and risk assessments for minimal data sets. This research has shown that: (1) endangered species do not appear to be more sensitive to chemicals than common surrogate test species when tested under acute, chronic, and effluent conditions; (2) surrogate test species are toxicologically representative of endangered species; and (3) toxicity can be estimated for endangered species by incorporating known toxicological relationships within a species and among taxonomic groups. This research and model and software development should

provide both OPPTS and OW with sound concepts and methodology to further support probability-based risk assessments on endangered and other species with chemicals having minimal data sets.

The presentation is available at <http://intranet.ord.epa.gov:9876/devement/RCT/PestToxRCT.nsf/1d97341def1e57d185256a5c006ee712/8b2869fdc158dfb485256cfb0071290f?OpenDocument>. For further information, contact Greg Susanke at 202-564-9945 or susanke.greg@epa.gov.

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Regional Science Topic Workshops

OSP is the sponsor of two Regional Science Topic Workshops. The first, the Region/ORD Emerging Pollutants Workshop, occurred in the Region 5 Office in Chicago from August 11-14, 2003. The second, the Regions/OSRTI/ORD Workshop on Inhalation Risk Assessment: A Superfund Focus, is being co-sponsored by the Office of Superfund Remediation and Technology Innovation and will be held in the Hilton Washington Embassy Row in Washington, DC, from September 9-11, 2003. All interested EPA staff are encouraged to attend. Outside participation is by invitation only.

The topics and issues in these workshops were selected by the Regional Offices. The general objectives of both are to: (1) provide participants with a better understanding of the science and scientific applications relevant to the Region-

selected topic; and (2) establish a network of EPA scientists who will continue to exchange information and work together after the workshop on the featured topic.

The Region/ORD Emerging Pollutants Workshop aimed to bring participants up to date on: (1) the less-discussed emerging issues (e.g., disposal of electronic components, platinum group metals in sediments, bisphenol A); (2) more visible emerging issues (e.g., brominated flame retardants, hormones, pharmaceuticals, alkyl phenols, radium in oil piping, PFOA/PFOS, phthalate esters); (3) re-emergent issues (e.g., asbestos returning in new forms—taconite, vermiculite); and (4) a look into the future (genomics and nanotechnology).

The objectives of the **Regions/OSRTI/ORD Workshop on Inhalation Risk Assessment:**

A Superfund Focus are to: (1) establish a better understanding of the science used to conduct inhalation risk assessments, (2) apply this science to Superfund inhalation risk assessment paradigms, (3) assess these methods relative to those historically used by the Regions to evaluate inhalation risks at Superfund sites, (4) identify key gaps in the science, and (5) discuss Superfund policy issues associated with implementation of the science.

To review the agendas and/or register for these workshops, visit the following Web sites: <http://www.namsinc.org/epaChicago> and <http://www.namsinc.org/epaWashington>.

For more information on the Regional Science Topic workshops, contact David Klauder at 202-564-6496 or klauder.david@epa.gov. ■

Training Workshop for the Regional Science Liaisons to ORD

From June 3-6, 2003, the Regional Science Liaisons (RSLs) to ORD participated in a training workshop in Duluth, MN, to learn about the research programs ongoing in the Mid-Continent Division relevant to Regional interests and to further develop the ORD Regional Science Program agenda. Some of the topics presented and discussed at the workshop included research on the Great Lakes and Gulf of Mexico, the ECOTOX database, perfluorooctane sulfonate (PFOS), endocrine disrupting compound (EDC) testing, and computational toxicology. Much of the discussion focused on how the RSLs could assist the Mid-Continent Division in its efforts to communicate its research data and products to the Regions in ways that will be useful in Regional risk assessments and decision-making.

Discussions with Mid-Continent Division managers and scientists resulted in the

identification of several follow-up actions. Based upon feedback from the laboratory on its experience with the RARE program, the RSLs made recommendations for improving the process for selecting and funding RARE and Regional Methods projects. As a result, the announcement and schedule for the FY 2004 RARE/RM Programs will be sent out much earlier this year. This should give all parties more time to accomplish their respective steps in the process.

The Duluth laboratory is very interested in expanding the use of and obtaining additional support to maintain and further develop ECOTOX, an ecological database widely used among Region and Program Office ecological risk assessors. The ECOTOX project manager, Chris Russom, has drafted a charter for a cross-Agency ECOTOX Steering Committee. Some of the RSLs recently met with her

and Mid-Continent managers to develop a strategy for staffing the Steering Committee and vetting the recommendations it develops to Agency decision-makers.

Another collaborative laboratory/RSL outcome from the meeting was a commitment to convene meetings between Regional and ORD Laboratory participants in the MAIA program and those involved in W-EMAP to be sure that the latter learn from the former's experiences on issues such as working with states and other partners.

A highlight of our visit to Duluth was the warm reception we received by the management and scientific staff.

For more information on the Training Workshop, contact David Klauder at 202-564-6496 or klauder.david@epa.gov. ■



Seminar Series

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June 4, 2003– Potential Impacts of Air Fresheners on Indoor Air Quality

Author: Mark Mason, Indoor Environments Management Branch, Air Pollution Control Division, NRMRL

The use of air fresheners designed to mask unpleasant odors has the potential to increase exposure to a broad range of volatile organic compounds (VOCs). Also, many of the compounds employed to

create the complex blend of scents readily react with ozone to produce a mixture of gases and ultra-fine particles that consist of aldehydes, ketones, and organic acids. To gain insight into the potential impact of these widely used consumer products on indoor air quality and to develop and improve our ability to model indoor environmental processes, we have determined constituent compounds of selected products, determined the gas-phase emission rates of specific compounds, and investigated ozone source emissions interactions in environmental test chambers. Results demonstrate that these products may have a significant impact on concentrations of VOCs and

particles in the indoor air and have the potential to increase concentrations of known toxic compounds such as formaldehyde.

The presentation is available at <http://intranet.ord.epa.gov:9876/development/RCT/PestToxRCT.nsf/1d97341def1e57d185256a5c006ee712/4f38b3536aaa836a85256d3500645a43?OpenDocument>. For further information, please contact Greg Susanke at 202-564-9945 or susanke.greg@epa.gov.

June 18, 2003–Drift of Pesticides: Developing an Integrated Exposure Tool

Author: Sandra L. Bird, Ecosystems Research Division, NERL

Off-site drift of pesticides from agricultural sites is a major source of inadvertent pesticide exposure and many limitations exist in meeting the Office of Pesticide Programs' (OPP) total exposure assessment needs for pesticide drift. A new ORD research initiative is designed to develop and test modeling capabilities that will provide OPP, Regions, states, and other entities with the capability of addressing exposure from off-site drift in a comprehensive manner with quantifiable uncertainty. This seminar describes the current state of regulatory spray drift modeling technology and the current and proposed research efforts to develop a comprehensive tool.

The presentation is available at <http://intranet.ord.epa.gov:9876/development/RCT/PestToxRCT.nsf/1d97341def1e57d185256a5c006ee712/b18f59b9adca70e385256d43006835d1?OpenDocument>. For further information, please contact Greg Susanke at 202-564-9945 or susanke.greg@epa.gov.

July 16, 2003– Pharmaceuticals and Personal Care Products as Ubiquitous Pollutants from Health and Cosmetic Care: Significance, Concern, Solutions, Stewardship

Author: Christian G. Daughton, Ph.D., NERL

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RARE/RM Highlights

Through the Regional Applied Research Effort (RARE) and Regional Methods (RM) programs, ORD responds to the high priority, near-term research needs of EPA's Regional Offices; and fosters improved communication and collaboration between Region and ORD staff. ORD recently announced initiation of the FY 2004 nomination process for the RARE/RM programs.

Proof of Concept Demonstration for Near Real-Time *In Situ* Detection of Fecal Contamination in Fresh and Marine Waters.

Region 1 and ORD's Atlantic Ecology Division collaborated on a "proof-of-concept" demonstration for an autonomous, *in situ* BioAnalyzer, which has been developed by SubChem Systems, Inc., a small Rhode Island company, and the University of Rhode Island. The instrument employs innovative approaches to quantify enteric bacteria in aquatic waters in near real-time. Ultimately, hand-held and remote platform (telemetry) applications of this technology will one day allow public health officials and water resource managers to make more timely decisions regarding the opening and closing of recreation and resource areas.

Modeling Loadings of PCBs to the Delaware River Estuary.

Region 3 and ORD's Ecosys

tems Research Division collaborated on a study that contributed to a larger effort to establish TMDLs for total PCBs in the Delaware Estuary, as required by court orders and agreements between EPA and states bordering the Estuary. This RARE study built upon the hydrodynamic and water quality modeling efforts completed under the Estuary Toxics Management Program by developing a hydrodynamic, sediment, and water quality model for PCBs that can be used to apportion the TMDLs.

Identifying and Predicting Diving Plume Behavior at Groundwater Sites Contaminated with MTBE.

Region 5 and ORD's Subsurface Protection and Remediation Division collaborated in the collection of field data and development of several models for predicting the movement of methyl tertiary butyl ethylene (MTBE) from leaking underground gasoline storage tanks into the groundwater. The models were demonstrated to state representatives and EPA Regional staff concerned with the problem of Leaking Underground Storage Tanks, and were later used by program and enforcement staff in developing appropriate monitoring plans with responsible parties to avoid overlooking groundwater contamination by MTBE. ■



OSP Profiles

Michael Gill is ORD's Hazardous Substances Technical Liaison (HSTL) for the Region 9 OSWER Program, located in the San Francisco Regional Office. His duties, which often involve scientific technical support and information brokering, help make the connection between Regional science needs and ORD expertise. His customers are, for the most part, Regional Remedial Project Managers (RPMs), but may include RCRA and other Regional staff, state environmental staff, industry, and the public. Questions concerning waste sites (e.g., cleanup, characterization, etc.) are resolved directly by Mike or via ORD Laboratories' Technical Support Centers. Mike also participates in ORD research planning, environmental technology demonstrations, and scientific workshops. He maintains a comprehensive environmental technology "links" Web site at <http://www.epa.gov/region09/waste/techlinks/index.html>.

Mike has been a HSTL since 1998 and has been with EPA since 1992, when he was hired as an RPM for Region 9's Superfund Program. Before coming to EPA, Mike was an electrical engineer and worked as a project manager for the U.S. Navy, overseeing shipboard electronic system installations. He also worked at a Navy R&D lab in

New London, CT, and as a contractor in Belmont, CA, writing software and designing analog and digital computer interface circuits.

Mike graduated from Northeastern University (Boston) in 1979 with a Bachelor's Degree in electrical engineering and from Rensselaer Polytechnic Institute in 1984 with an MSEE. He currently resides in Berkeley, CA, with his wife and young son, where they enjoy cycling and running. Mike's recent work activities include:

Technical Support—Mike handled multiple technical support requests during this past month. Some requests were forwarded to the Laboratories' ORD Technical Support Centers in Cincinnati, Ada, and Las Vegas, while others were completed directly by Mike. The requests covered the spectrum of waste issues, from technical information requests and engineering questions on treatment systems to a request for assistance for biological sampling at an old Native American burial site.

Energy Savings—Mike's abstract on "Energy Conservation and Production at Waste Cleanup Sites," an overview of a draft Engineering Forum issue paper, was accepted for presentation at the RCRA National Meeting

in Washington, DC (August 12-15). Mike also will participate on an Energy Savings Advisory Group (ESAG) being formed by the Northwest Pollution Prevention Center, which is funded by ORD to support Region 10 energy efforts. The ESAG will provide guidance during the preparation of a software-based energy savings tool, as a followup to recommendations of the Engineering Forum issue paper.

NIEHS Conference—Mike is on the planning committee for general and workshop sessions of the National Institute of Environmental Health Sciences (NIEHS) conference, "Emerging Scientific Issues for Superfund," planned for October 9-10 at University of California—Berkeley. He has engaged a number of ORD scientists as session co-chairs and speakers, and assisted conference planners with inviting an ORD plenary speaker.

Roseanne Lorenzana is ORD's RSL for Region 10 and is located in Seattle, WA. She has been a toxicologist and human health risk assessor in the Region 10 Office of Environmental Assessment for the past 12 years. Prior to that she was a

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OSP Welcomes Program Support Coordinators

Program Support Coordinators have been selected for all of the Laboratories/Centers. These Coordinators will help manage ORD's efforts to deliver scientific advice to Program Offices.

The Coordinators are:

Michele Alston, NERL

Bob Hetes, NHEERL

Darrell Winner, NCER

Lynn Papa, NCEA

Pat Watson, NRMRL

The Coordinators met with OSP staff on July 9, 2003, and OSP staff briefed them on the program support function and current issues in the Program Offices. The afternoon focused on discussing in greater detail their responsibilities for

coordinating Laboratory/Center involvement in the program support function. OSP looks forward to working closely with the Coordinators to promote sound science in Agency decision-making.



Seminar Series

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The existence of pharmaceuticals and personal care products (PPCPs) as environmental pollutants is a multifaceted issue whose scope continues to become better delineated since the escalation of concerted attention beginning in the 1980s, primarily in European countries. PPCPs typically occur as trace environmental pollutants (primarily at ppb-ppt levels in surface waters, but also in groundwaters) as a result of their widespread, continuous, combined usage in a broad range of human and veterinary therapeutic activities and practices; PPCPs also can be associated with treated sewage sludge ("biosolids"), which often is applied as a soil amendment. The many issues surrounding PPCPs as environmental pollutants are captured on the U.S. EPA's Web site devoted to PPCPs (<http://www.epa.gov/nerlesd1/chemistry/pharma/index.htm/>).

Unlike "conventional," regulated pollutants, the environmental load of PPCPs results from the combined actions of the seemingly minuscule contributions of individuals—effectively providing a continual input of anthropogenic chemicals to the environment via widely dispersed sources. PPCPs also contrast sharply with conventional pollutants in that they often are designed to elicit biological activity at very low doses. The numbers and types introduced to commerce continually escalate, largely as a result of escalating advancements in computational chemistry/toxicology and biotechnology.

The growing, worldwide importance of freshwater resources (and imperative for water reuse/recycling), coupled with the expanding use of biosolids in agriculture, underscores the need for ensuring that any aggregate or cumulative exposure for humans or ecosystems be minimized. This has prompted recent investigations on waste treatment processes for sewage, as well as for drinking water treatment.

Despite a paucity of health effects data for long-term, simultaneous low-dose exposure to multiple xenobiotics (a major toxicological issue embodied by what can be called the "4Ts"—Toxicant Totality Tolerance Trajectory, see <http://www.epa.gov/nerlesd1/chemistry/ppcp/stressors.htm>), particularly for PPCPs and non-target organisms, a wide range of proactive actions could be implemented in the near-term (and research initiated for the longer term) for reducing or minimizing the introduction of PPCPs to the environment. These actions and activities fall in the category of pollution prevention, and many of the possible pollution prevention actions or activities fall under what could be envisioned as a holistic ("cradle-to-cradle") life-cycle stewardship program—overseen by the health-care industry and consumers alike. Such a stewardship program would benefit not just the environment, but also could lessen medication expense for the consumer and improve overall patient health and consumer safety. The many issues associated with environmental stewardship of PPCPs are captured in the documents on EPA's Green Pharmacy Web page at <http://www.epa.gov/nerlesd1/chemistry/ppcp/greepharmacy.htm/>.

The presentation is available at <http://intranet.ord.epa.gov:9876/develment/R>

[CT/PestToxRCT.nsf/1d97341def157d16a5c006ee712/47d4ae57d6767f0a85256d5d004e5054?OpenDocument](http://www.epa.gov/nerlesd1/chemistry/ppcp/stressors.htm). Please contact Greg Susanke at 202-564-9945 or susanke.greg@epa.gov for more information.

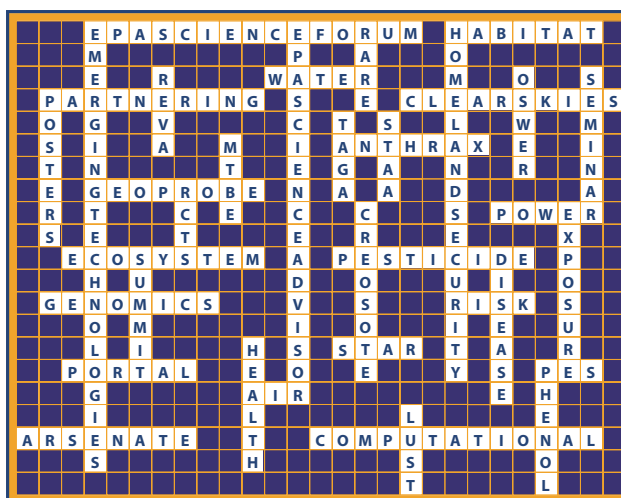
August 13, 2003—Cancer Mortality and Birth Malformations Associated with Wheat Acreage and Herbicide Use

Author: Dina Shrienemachers, Ph.D., Human Studies Division, NHEERL

Environmental exposure to chlorophenoxy herbicides and their potential effect on human health are of concern to the EPA, because of their widespread use for weed control in grain farming and maintenance of home lawns, road sides, parks, golf courses, national forests, and rangeland. These compounds, including the very common herbicide 2,4-D, are the predominant herbicides applied to spring and durum wheat grown in Minnesota, North Dakota, South Dakota, and Montana. The other major field crops in these four states, corn and soybeans, are treated mostly with other herbicides. To identify potential hazards caused by chlorophenoxy herbicides and/or contaminants, population studies (also named ecologic studies) were conducted

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Solution to May 2003 Crossword Puzzle





OSP Profiles

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toxicologist/ manager with the Oregon Health Division and the Washington Department of Health. She has a Doctorate in Veterinary Medicine (with externships in aquatic veterinary medicine, primate medicine, and marine mammal medicine). Roseanne also has a Ph.D. in toxicology from the University of Illinois and postdoctoral experience from the Environmental Health Sciences Center at Oregon State University (biochemical mechanisms).

Roseanne has been a Diplomate of the American Board of Toxicology since 1992. She holds adjunct faculty positions at the University of Washington and Oregon State University, and has guided many students through projects involving priority scientific issues important to regional programs. Roseanne has extensive experience with risk assessment Agency's Superfund and Water programs. She has taught EPA's Risk and Decision-Making class a number of times in Region 10 as well as internationally. She also has

authored several chapters and articles in the scientific, peer-reviewed literature.

In 1994-95, she participated in EPA's Leadership Development Program, culminating in a 3-month detail in Perth to assist the Chair of the Australian Technical Working Party on Carcinogen Risk Assessment by managing peer review, providing consultation to stakeholders, and testing the applicability of a toxicity assessment methodology for soil contaminants, which was adopted nationally in Australia and New Zealand. Some of Roseanne's other recent activities have focused on toxicology and exposure assessment for arsenic; issues related to contaminants in traditionally harvested, subsistence food of Northwest Native Americans and Native Alaskans; and environmental exposure issues for Asian/Pacific Islander Americans.

Recently, Roseanne planned and facilitated a seminar series in Region 10 on the rapidly expanding new field of genomics. This series contained eight 2-hour sessions spread out over a 5-month period. She organized the "training course" in stages, starting with background

science presentations and progressing to more complex applications of genomics to risk assessment issues. Several ORD scientists were featured speakers on topics relating to cross-species extrapolation, defining susceptible populations, and utilizing genomics in risk assessment and decision-making. Roseanne made the seminar series available to other interested Regions via teleconference and posted presentation materials on QuickPlace. In addition, she arranged for the entire seminar series to be professionally videotaped. CDs of the series will be prepared for distribution to each Region. These videotapes also will be utilized by ORD to prepare audio-video training modules for the Regions and other audiences on molecular biological applications to health and environmental risk assessment.

Roseanne developed the QuickPlace site for Region 10, which she successfully utilized for her genomics training seminars. The site is designed to be a "one-stop shop" for Regional staff looking for science information. EPA staff may request to be added to a list serve that notifies them of all new additions to the site, which is continuously updated. ■

Multi-Year Plans on the Internet

The Multi-Year Plans (MYPs) have expanded their territory. They now are posted on OSP's Internet site, available to the public. Visit <http://www.epa.gov/osp/myp.htm> to take a look at the final MYPs that have been posted and to view summary information of all 16 Plans.

Eight MYPs have been approved by their Executive Guidance Group (EGG) members for posting on the Internet. These are: Particulate Matter, Air Toxics, Contaminated Sites, Safe Food, Safe Pesticides/Safe Products, Global Change, Ecological Research, and Mercury. The remaining MYPs are undergoing revision or are being reviewed by the EGGs.

The MYPs are updated every 2 years, with the next revision beginning in fall 2003. The Plans are developed by writing teams, under the direction of the lead author. The writing teams include representatives from ORD, Program Offices, and the Regions. After incorporating Executive Council and Science Council comments, the writing teams submit the MYPs for final review by the EGGs. Once an MYP has received approval from its EGG, it is posted on the new MYP Internet site.

For more information, contact Kevin Teichman at 202-564-6705 or teichman.kevin@epa.gov. ■

Seminar Series

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in rural, agricultural counties of these four states. Associations of cancer mortality and birth malformation rates with wheat acreage as a surrogate for chlorophenoxy herbicide exposure, were investigated.

The presentation is available at <http://intranet.ord.epa.gov:9876/development/Region10/PestToxRCT.nsf/1d97341def1e57d85256a5c006ee712/ee6f63aa03f0f8c1856d7900641e26?OpenDocument>. Please contact Greg Susanke at 202-564-9945 or susanke.greg@epa.gov for more information. ■

(June thru August '03)

Space: The Final Frontier?

One thing we know, change is constant. And if anyone needed proof of that, the current musical chairs in OSP would clearly be a prime example. Once again, the space issue has surfaced and is providing another challenge for the EPA locater. Because of good fortune and expansion, OSP is surrendering back to the IOAA the 5 cubicles and one office loaned to us. The newly homeless staff, combined with our new hires, caused us to squeeze out of our sardine can and right into temporary space on F Street, NW, known in the OSP circle as either the "West Wing" or the "North-west Territory"!

As of mid-July, the Cross Program Staff has been relocated to F Street. In true OSP fashion, a send off luncheon was held along with the promise that Metro cards would be available to assist staff with transportation between the buildings for meetings.

Who is affected?

- The Cross Program Staff will relocate to F Street with the exception of Brenda Washington. Susan Peterson of the A-Team will take Brenda's spot in the move.
- Sarah Bauer, Megan Grogard, and Brenda Washington will move to the third floor.
- The SPC Team will move up to the fourth floor.
- Tanya Tharps will remain on the third floor, however she will occupy new space.

All phone numbers will remain the same. This move should be completed by the last week in July. For more infor-

mation on staff relocations, contact Anthony Grimm at 202-564-0153.

Welcome to Our New Folks

Neil Stiber joined the Cross-Cutting Initiatives Team of the Cross Program Staff on July 20th. He is serving in a post-doctoral position and is supporting activities related to the Council for Regulatory Environmental Modeling (CREM), a cross-Agency institution established to promote consistency and consensus among environmental model developers and users. Neil has a Ph.D. in Engineering and Public Policy from Carnegie Mellon University.

The following OSP employees were hired to serve on the Science Policy Council (SPC) Team of the Cross Program Staff; however, the entire Science Policy Council Team has been reassigned to the new Office of the Science Advisor in the Immediate Office of the Assistant Administrator:

William Sette joined the SPC Team of the Cross Program Staff on June 1st. He comes to us from EPA's Office of Pesticide Programs in the Office of Prevention, Pesticides and Toxic Substances. William has a Ph.D. in Experimental Psychology from the University of Rochester.

Joyce Jatko joined the SPC Team of the Cross Program Staff on June 29th. She comes to us from the National Science Foundation. Joyce has a Doctor of Public Administration from the University of Southern California.

Details/Training Assignments/ Students/Internships/Fellowships

Veronica O'Leary joined the Cross-Cutting Initiatives Team of the Cross Program Staff on June 2nd. She is an Intern through a cooperative agreement with EPA and the Washington Internship for Native Students adminis-

tered through American University. Veronica is serving a summer (10 weeks) training internship for environmental program capacity building in environmental management, technology and policy.

Evan Charles joined the Cross Program Staff on June 15th. He is serving under the Student Temporary Employment Program for the summer assisting with Cross Program Staff office operations.

Allison Robinson joined the Cross-Cutting Initiatives Team of the Cross Program Staff on August 4th. She is a Fellow with the Association of Schools of Public Health that is supported by a grant with ORD and will work on modeling issues in support of EPA's Council for Regulatory Environmental Modeling at OSP.

Congratulations to Award Recipients!

Congratulations to the OSP staff who will be receiving awards at the 22nd Annual ORD Awards Ceremony on September 17th in Research Triangle Park, NC. These OSP staff include:

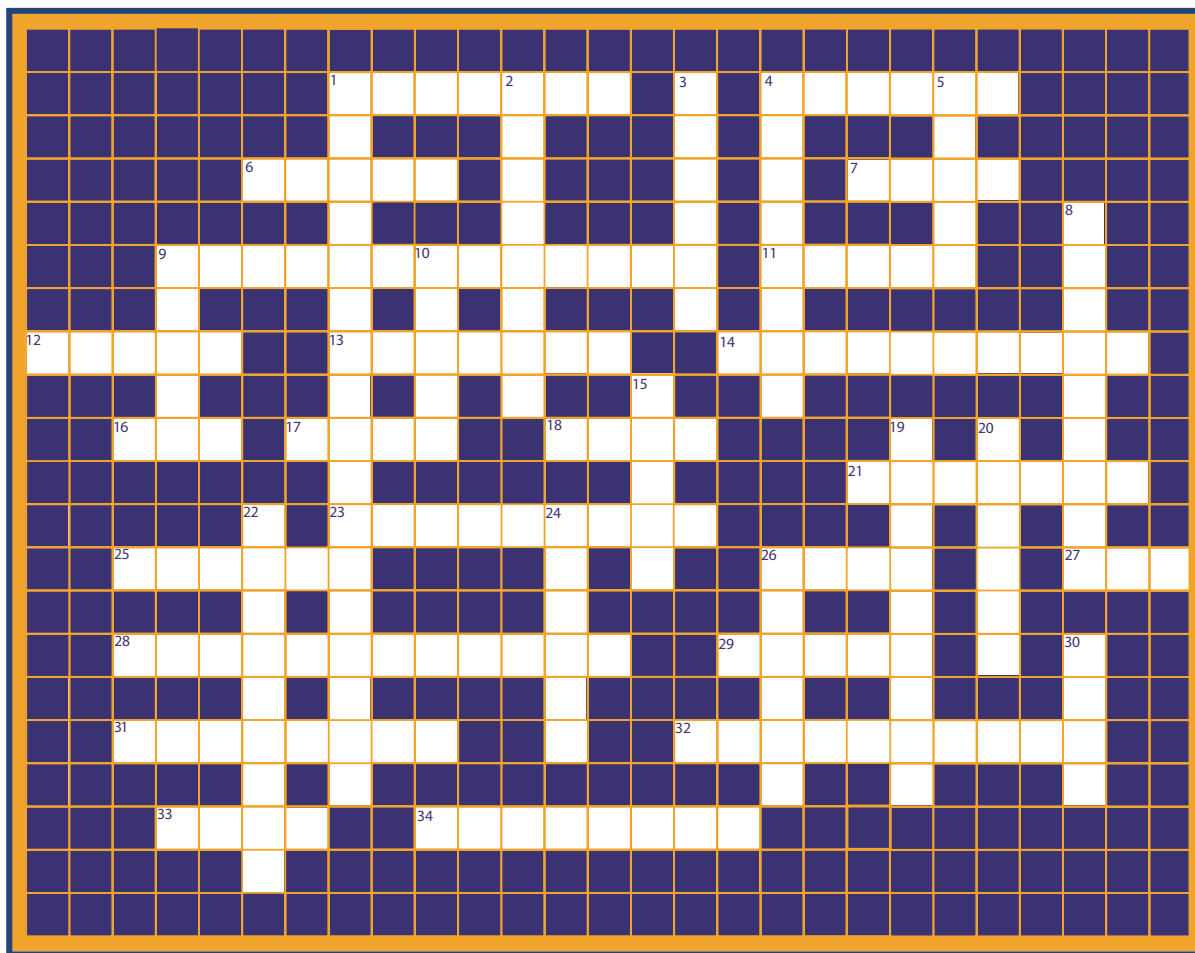
Norman Kulujián and **John Barich** are receiving Bronze Medals for their efforts on the Hazardous Substance Research Centers I Science and Technology Transfer Advisors and Liaison Team.

Randy Wentsel is receiving a Bronze Medal for his efforts on the Orimulsion Technology Assessment Team.

Kerry Dearfield is receiving a Bronze Medal for his efforts on the Assessment Factors Workgroup.

Larry Fradkin is receiving a Bronze Medal for his efforts on the Federal Technology Transfer Act Team. ■

Crossword Puzzle



Across

1. _____ Science Fellows Program
4. Ecological database used by Region _____ and Program Office risk assessors
6. ____ Ababa, Ethiopia
7. Perfluorooctane sulfonate
9. "Proof-of-concept" _____
11. Manual
12. River _____
13. _____ Toxics Management Program
14. _____ Risk Assessment Workshop
16. Region 8 Regional Research Partnership Program representative
17. Near _____-time
18. Maximum Achievable Control Technology
21. Region 3 Regional Research Partnership Program issue

23. Common _____ test species
25. National Emissions Standards for Hazardous Air Pollutants
26. Geological Survey
27. Conducts final review of MYPs
28. Organic compounds in petroleum
29. Contaminated groundwater _____
31. Waste material discharged into the environment
32. One of the less-discussed emerging issues at the Regional/ORD Emerging Pollutants Workshop
33. 16S _____ sequences
34. One of the MYPs now available on the Web

Down

1. Topic of April 8 Seminar
2. Region 1 Regional Research Partnership Program representative
3. Swingle's new ESF assignment
4. _____ Pollutants Workshop
5. A triatomic form of oxygen
8. The E in EDC
9. Problem with pesticides
10. _____ Maximum Daily Load
15. Opposite of chronic
19. Use indoors to treat the air can increase VOC exposure
20. ESF Yang
22. Along the beach
24. ESF Hedges' new focus
26. www.epa.gov/osp
30. One of Mike Gill's energy savings responsibilities