



2009 Rachel Carson Legacy Conference

**When
Chemicals
Disrupt:**



Managing Our Risks

RACHEL CARSON LEGACY CONFERENCE 2009

WHEN CHEMICALS DISRUPT: MANAGING OUR RISKS



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INTERNATIONAL UNION OF OPERATING ENGINEERS - LOCAL 95

MEDIA: WDUQ 90.5 FM

RACHEL CARSON

LEGACY CONFERENCE

AT

BIDWELL TRAINING CENTER

FRIDAY, SEPTEMBER 25, 2009

8:30 A.M. TO 4:30 P.M

Hormones are carefully regulated chemicals that control development, growth, and regulation of cells. Typically, these chemicals bind to receptors in/on cells providing specificity of function. Estrogen and the estrogen receptor is one example. Over the last 30 years, researchers have reported estrogen-like effects from a variety of environmental pollutants known as endocrine disrupting chemicals (EDCs). Suspected EDCs include: pesticides like DDT and its metabolites, a family of chemicals that Rachel Carson sounded the alarm about more than 45 years ago; as well as ingredients or degradation products found in pesticides (e.g., atrazine); personal care products (parabens); plastics (phthalates, nonylphenol, bisphenol-A); canned food (bisphenol-A); detergents (alkylphenols); disinfectants (o-phenylphenol); and surfactants (e.g., nonoxynol), to name a few. This conference addresses several important aspects of EDCs in our environment, including: the large body of peer-reviewed scientific evidence for EDC detrimental effects in laboratory, wildlife, and population studies supporting the importance of identifying and prioritizing the chemicals of concern; technology identifying equally effective and less toxic substitutes for commercial use; regulatory options for controlling commercial use; and the labor and environmental justice issues surrounding the production and use of EDCs

“We must remember that we have introduced ... things into dynamic systems that comprise our environment, and it is not enough to monitor the entrance of the contaminant into the environment at that single point. We must be prepared, with the best understanding of all concerned – the physician, the biologist, the ecologist – to follow the contaminants through whatever path they take, through physical and biological systems.... In my opinion we have been too unwilling to concede the possibility of hazard or of the actual existence of hazard. We have been too unwilling to give attention to the preparation of countermeasures to cope with hazardous situations when they do arise.”

Rachel Carson

Quote from *Lost Woods: The Discovered Writing of Rachel Carson*
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AGENDA

| | | |
|--------------------|---|--|
| 7:30 - 8:30 A.M. | REGISTRATION AND CONTINENTAL BREAKFAST | |
| 8:30 - 9:00 A.M. | OPENING REMARKS | PATRICIA M. DEMARCO, PH.D. EXECUTIVE DIRECTOR, RACHEL CARSON HOMESTEAD ASSOCIATION WILLIAM STRICKLAND PRESIDENT AND C.E.O., MANCHESTER BIDWELL CORPORATION CAREN GLOTFELTY DIRECTOR OF ENVIRONMENT PROGRAM, THE HEINZ ENDOWMENTS THE HONORABLE CONGRESSMAN MICHAEL DOYLE |
| 9:00 - 10:30 A.M. | THE SCIENCE OF ENDOCRINE DISRUPTORS | MODERATOR: MARYANN DONOVAN, PH.D., MPH KEYNOTE: LINDA BIRNBAUM, PH.D. DIRECTOR, NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES SPEAKERS: CONRAD DANIEL VOLZ, PH.D., MPH , ASSISTANT PROFESSOR, GRADUATE SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF PITTSBURGH TALAL EL-HEFNAWY, M.D., PH.D. , ASSISTANT PROFESSOR, DEPARTMENT OF MEDICINE, UNIVERSITY OF PITTSBURGH Q & A |
| 10:30 - 10:45 A.M. | BREAK | |
| 11:00 - 12:30 P.M. | TECHNOLOGY AND HAZARD ABATEMENT | MODERATOR: MATTHEW MEHALIK, PH.D. KEYNOTE: TERRY COLLINS, PH.D. THOMAS LORD PROFESSOR OF CHEMISTRY, CARNEGIE MELLON UNIVERSITY SPEAKERS: TIMOTHY HALL, C.E.O. , GREENOX CATALYSTS, INC. PAUL RENNER , ASSOCIATE DIRECTOR, THE LABOR INSTITUTE Q & A |
| 12:30 - 1:30 P.M. | NETWORKING LUNCH | |
| 1:30 - 2:15 P.M. | ENVIRONMENTAL JUSTICE AND OBLIGATIONS TO FUTURE GENERATIONS | INTRODUCTION: WILLIAM STRICKLAND KEYNOTE: JEROME C. RINGO PRESIDENT, APOLLO ALLIANCE Q & A |
| 2:15 - 3:40 P.M. | REGULATORY POLICY APPROACHES | MODERATOR: PENNSYLVANIA STATE SENATOR JIM FERLO KEYNOTE: KEN COOK , PRESIDENT, ENVIRONMENTAL WORKING GROUP SPEAKERS: MICHAEL WILSON, PH.D., MPH , UNIVERSITY OF CALIFORNIA, BERKELEY Q & A |
| 3:40 - 3:50 P.M. | BREAK | |
| 3:50 - 4:30 P.M. | WORKSHOPS: ACTION OPTIONS | ENDOCRINE DISRUPTOR AWARENESS AND SCIENCE (ROOM 213) REGULATORY OPTIONS (ROOM 214) RISK MANAGEMENT OPTIONS (ROOM 222) |
| 4:30 - 6:00 P.M. | RECEPTION | HELD AT MASCARO CONSTRUCTION COMPANY, LP (LOCATED ADJACENT TO BIDWELL TRAINING CENTER) |

PRESENTERS



Linda S. Birnbaum, Ph.D., D.A.B.T., A.T.S., is Director, National Institute of Environmental Health Sciences (NIEHS) and the National Toxicology Program (NTP). The Institute is a component of the National Institutes of Health (NIH). As director, Dr. Birnbaum oversees an \$850 million budget that funds multidisciplinary biomedical research programs to discover the environmental causes of disease. The research program is focused on prevention, and includes intervention efforts that encompass training, education, technology transfer and community outreach. The Institute currently supports more than 1,240 research grants. Prior to her appointment as the NIEHS Director, Dr. Birnbaum was a senior advisor at the Environmental Protection Agency (EPA), where she served for 16 years as director of the Experimental Toxicology Division. She has worked as a federal scientist for nearly 30 years. A native of New Jersey, Dr. Birnbaum earned her M.S. and Ph.D. in microbiology from the University of Illinois, Urbana.



Terrence J. Collins, Ph.D., is the Thomas Lord Professor of Chemistry at Carnegie Mellon University (CMU) where he has taught since 1987. Professor Collins is one of the founders of the field of Green Chemistry. He is the Director of the Institute for Green Science at CMU and also an Honorary Professor at and Distinguished Alumnus of the University of Auckland in New Zealand. Among his many research awards is the 1998 Presidential Green Chemistry Challenge Award. Terry Collins has invented small molecule catalysts that activate natural oxidants such as hydrogen peroxide to clean water of numerous pollutants and pathogens. He developed the first university course in Green Chemistry starting in 1992, a course that is now forming the basis of a free on-line course in green chemistry. Collins writes and lectures widely about the importance and promise of chemists turning their prodigious inventive talents towards eliminating hazards from chemical products and processes.



Jerome Ringo is President of the Apollo Alliance and a dedicated champion of environmental justice and vocal advocate of clean energy. He has first-hand experience of the challenges we face after working for more than 20 years in Louisiana's petrochemical industry. More than half of that time was spent as an active union member working with his fellow members to secure a safe work environment and quality jobs. As he began observing the negative impacts of the industry's pollution on local communities - primarily poor, minority communities - Jerome began organizing community environmental justice groups. His experience organizing environmental and labor communities and his drive to further diversify the environmental movement bridges many of Apollo's partners to create a broad based coalition to provide real solutions for our energy crisis. Elected to serve on the National Wildlife Federation board of directors in 1996, Jerome became the chair of the board in 2005 becoming the first African American to head a major conservation organization. Jerome was the United States' only black delegate at the 1998 Global Warming Treaty Negotiations in Kyoto, Japan, and represented the National Wildlife Federation at the United Nations conference on sustainable development in 1999.





Ken Cook co-founded Environmental Working Group (EWG) with Richard Wiles in 1993. In the 15 years since its founding, EWG has earned renown for its innovative, headline-making computer investigations of environmental problems. Prior to founding EWG, Cook served as the Vice President for Policy at the Center for Resource Economics. He also directed press and governmental relations at the World Wildlife Fund and Conservation Foundation. Both Cook and EWG have been the subject of profiles in numerous publications, including *The New York Times*, *Chronicle of Philanthropy*, *Chicago Tribune*, *Des Moines Register* and the *National Journal*. Ken was recognized as one of Washington's top non-profit lobbyists by The Hill, and also named one of "Agriculture's 100 Most Influential Leaders" by *Progressive Farmer*. He is a board member of Environmental Media Services, Earth Day Network, and the Amazon Conservation Team. Cook earned BA, BS, and MS degrees from the University of Missouri-Columbia.



Conrad (Dan) Volz, Ph.D., MPH, is an Assistant Professor of Environmental and Occupational Health (EOH) at the Graduate School of Public Health (GSPH), University of Pittsburgh; and Director of the Center for Healthy Environments and Communities (CHEC) at the Graduate School of Public Health (GSPH). He is also Director of the Risk Assessment Certificate Program at the GSPH. Dr. Volz's research interests are primarily focused on how industrial and municipal toxins and carcinogens move through the air, water, soil and groundwater to reach people and how to block this movement. Dr. Volz is the Principal Investigator for the Three Rivers Fish Consumption Project, which has found significant proliferation of MCF-7 cancer cells from application of extracts of channel catfish that are correlated with fish catch locations from areas of high combined sewage overflow density. He was Director of the 2004 Amchitka Expedition to determine radionuclide concentrations in marine biota from underground nuclear test shots fired in the Aleutian Islands. Dr. Volz was the recipient of the Dr. James Craig Award for Teaching Excellence at the GSPH 2009 Convocation.



Talal El-Hefnawy, M.D., Ph.D., is an Assistant Professor in the Department of Medicine at the University of Pittsburgh and is a member of the University of Pittsburgh Cancer Institute. Dr. El-Hefnawy graduated in 1990 from Zagazig University School of Medicine, Egypt. He obtained his Ph.D. degree in reproduction endocrine physiology from The University of Turku School of Medicine, Finland. Dr El-Hefnawy received further training at Georgetown University and at the University of Pittsburgh first as a post-doctoral fellow and as a junior faculty. Dr. El-Hefnawy's research interest is in cancer research and in the environmental impact on cancer development and progression, and his laboratory is located at the Hillman Cancer Pavilion at the University of Pittsburgh Cancer Institute.



Timothy Hall is Chief Executive Officer of GreenOx Catalysts, Inc. Mr. Hall recently served as the President & CEO of Cornerstone Healthcare Group based in Austin, Texas, after having been involved in venture capital and private equity investing with The Hillman Company of Pittsburgh, PA, for nearly two decades. As an early stage investment professional at Hillman, Mr. Hall developed a strategic and operational focus which included special engagements as the Chairman, President and CEO of SCCI Health Services (specialty hospitals), Neville Land Company (sports and recreation super center), and Wellstream International (specialty composite piping systems for offshore oil and gas exploration). He has also served as a Director of U.S. Media Holdings, Community of Science, Inc. and Physician Eye-care Network. Mr. Hall's previous civic trustee positions have included the Pittsburgh Ballet Theater's Board of Trustees and the Shedd Aquarium in Chicago. A native of Chicago, Illinois, Mr. Hall received his B.A. degree in Economics from Colgate University in 1979 and his M.B.A. degree from The Graduate School of Business at the University of Chicago in 1983.



Paul Renner is Associate Director of The Labor Institute in New York City (members of United Steelworkers Local 4-149), where he has specialized in policy development and participatory health and safety educational programs for workers in hazardous industries. Paul directs special projects for the Tony Mazzocchi Center for Safety, Health, & Environmental Education (TMC), a project of the USW and the Labor Institute. Paul is currently serving as the Chief Steward for his shop and as Trustee for USW Local 4-149. He has been a member of the USW and its predecessor unions for over 40 years. He has worked for Merck & Company as a Chemical Operator at its facilities in Rahway, New Jersey, and was a member of the Oil, Chemical and Atomic Workers International Union (OCAW), where he held a number of elected positions including Unit Chairperson and Chief Steward. Paul was also a Captain on the Merck Fire Department, Hazmat Response Team and Rescue Squad for over 10 years, and served several terms on the joint health and safety committee.



Michael P. Wilson, Ph.D., MPH, is a research scientist at the Center for Occupational and Environmental Health (COEH), School of Public Health, University of California, Berkeley, where he conducts research and practice in environmental health sciences and chemicals policy. He received his masters (MPH) and doctoral (Ph.D.) degrees in environmental health sciences from the University of California, Berkeley, in 1998 and 2003. He earned a bachelor's degree with thesis honors in biology from the University of California, Santa Cruz, in 1984. Dr. Wilson is the lead author of reports commissioned by the California Legislature and California EPA that identify chemical policy strategies for California and have helped generate renewed interest in green chemistry and in the health and environmental consequences of the chemical enterprise. These reports helped support the launching of California's Green Chemistry Initiative. Dr. Wilson serves on the California Green Ribbon Science Panel (AB 1879) and the state's Biomonitoring Scientific Guidance Panel (SB 1379). He previously served on the California Green Chemistry Science Advisory Panel.



Mike Doyle is currently serving his eighth term in Congress representing the 14th District of Pennsylvania, which includes the City of Pittsburgh as well as communities in the western, southern, and eastern portions of Allegheny County. Representative Doyle serves on the House Energy and Commerce Committee which is one of only four exclusive committees in the House. There he sits on the subcommittees on: 1) Energy and Environment; 2) Communications, Technology, and the Internet; and 3) Oversight and Investigations. Representative Doyle has been working aggressively on the Energy and Commerce Committee to reduce U.S. dependence on foreign oil supplies through the development of new, more energy-efficient technology and alternative and renewable sources of energy. He has also been actively involved in efforts to draft energy policies that will halt global warming without destroying or outsourcing American jobs. Doyle is a founder and co-chair of the Congressional Autism Caucus, the House Distributed Generation Caucus, and the Congressional Robotics Caucus.



Bill Strickland is the President and CEO of Manchester Craftsmen's Guild and Bidwell Training Center, Inc., both founded in 1968. The facility includes a 350-seat performing arts music/lecture hall, library, art studios and labs, lunchroom facilities, an IBM Center and specially designed classrooms for vocational training. Bill has recently completed the development of a 70,000 square-foot medical technology complex. Born in Pittsburgh, Bill earned a bachelor's degree in American history and foreign relations from the University of Pittsburgh. Throughout his distinguished career, Bill has been honored with numerous prestigious awards for his contributions to the arts and the community. In 1999, he was presented with the Commonwealth of Pennsylvania Arts Leadership and Service Award. In 1998, he received the Kilby Award and "Coming Up Taller" Award presented in a White House ceremony by first lady Hillary Rodham Clinton. In 1996, he received the MacArthur "Genius" Award for leadership and ingenuity in the arts. In addition, nationally and in Pittsburgh, Bill has engaged in many leadership roles related to the arts, education, public policy, economic and workforce development.



Patricia M. DeMarco, Ph.D., is Executive Director of the Rachel Carson Homestead Association in Springdale, PA. Throughout her 30-year career in energy and environmental policy development and implementation, Dr. DeMarco has held a variety of positions including Executive Director of the Power Facilities Evaluation Council and staff to the Governor of Connecticut. She worked as the Manager of Resource Development for the Connecticut Municipal Electric Energy Co-operative and started a technology development firm as a loaned executive. She operated and sold her own business, the Energy Roundtable, prior to moving to Alaska in 1998 to become President of the Anchorage Economic Development Corporation. After serving as a Commissioner of the Alaska Regulatory Commission and as Associate Dean for the College of Business and Public Policy at the University of Alaska Anchorage, she returned to her hometown of Pittsburgh in September 2005 and, in addition to her position with the Rachel Carson Homestead, holds Adjunct Faculty positions at the University of Pittsburgh. She received a Bachelor of Science and a Doctorate in Biology from the University of Pittsburgh.

MODERATORS



Dr. Maryann Donovan is the Associate Director for Research Services at University of Pittsburgh Cancer Institute (UPCI) and Scientific Director of the UPCI Center for Environmental Oncology (CEO-UPCI). Established in 2004, under the leadership of Dr. Devra Davis, the Founding Director in collaboration with Dr. Donovan, the CEO-UPCI, the first cancer institute-academic medical center-based interdisciplinary program in the world, is focused on improving the scientific understanding linking environmental exposures to adverse health outcomes, providing outreach and education to help reduce exposures and cancer risk, and informing public policy. Dr. Donovan has spent more than 30 years in academia. In her early research she published the first studies demonstrating that a biological control agent still used commercially today was not toxic to non-target species. Subsequently, as a human geneticist, she studied the molecular basis responsible for hemoglobin switching, coagulation disorders and tumor metastasis. She also co-directed the first cancer molecular diagnostic lab at the University of Pittsburgh/University of Pittsburgh Medical Center, developing and validating assays to improve cancer diagnosis.



Matthew Mehalik, Ph.D., serves as Program Manager at Sustainable Pittsburgh, where he has created a sustainable business network for Western Pennsylvania, called Champions for Sustainability. He also teaches as Adjunct Assistant Professor of Environmental Policy at Heinz College, School of Public Policy and Management, Carnegie Mellon University. He has taught a variety of courses related to complex systems, sustainable communities, public policy and the fundamentals of sustainable product innovation and design in domestic and international settings. He has written multiple journal articles in the areas of engineering sustainability and engineering education, and has co-authored *Ethical and Environmental Challenges to Engineering* with Michael E. Gorman and Patricia Werhane. Matt obtained a Ph.D. in Systems Engineering, with concentrations in innovation, ethics, and policy, from the University of Virginia (2001). His research involved an analysis of new environmental technologies and strategies for transforming manufacturing networks. He possesses an M.S. in Systems Engineering and a B.S. in Aerospace Engineering, also from the University of Virginia. He worked for Lockheed Martin as a test engineer.



Jim Ferlo is Pennsylvania State Senator for the 38th Senatorial District. Jim is currently serving his second consecutive term in office. Formerly, a 14-year Pittsburgh City Councilman and two-term Council President (1994 – 1997), Ferlo has been incorporating his own passionate style of community activism since the late 1960s. It was during those early years as a union activist, political organizer and community advocate that Ferlo affirmed his commitment to the public and his confidence in people. This commitment and investment has translated into an experienced legislator who is accessible and accountable. As Board Treasurer of the City of Pittsburgh's Urban Redevelopment Authority, Senator Ferlo has been a leader in shifting the mindset of local development and investment. His leadership has refocused attention on neighborhood-based and Green Building initiatives. He has been a pioneer in envisioning ways that local communities can take advantage of state programs, including several instances where he has successfully urged local townships and boroughs to collaborate with neighboring municipalities to combine their strengths as a "Multiple-Main Street" or as an "Enterprise Zone."

WORKSHOPS

ENDOCRINE DISRUPTOR AWARENESS AND SCIENCE

Instructor: **Maryann Donovan, Ph.D., MPH**, Associate Director for Research Services at University of Pittsburgh Cancer Institute (UPCI) and Scientific Director of the UPCI Center for Environmental Oncology (CEO-UPCI).

Room: 213

REGULATORY OPTIONS

Instructor: **Stanley J. Kabala, Ph.D.**, Associate Director, Center for Environmental Research and Education, Duquesne University

Room: 214

RISK MANAGEMENT OPTIONS

Instructor: **Patricia M. DeMarco, Ph.D.**, Executive Director, Rachel Carson Homestead Association
Matthew Mehalik, Ph.D., Program Manager, Sustainable Pittsburgh

Room: 222

RACHEL CARSON

HOMESTEAD ASSOCIATION

The Rachel Carson Homestead Association (RCHA), headquartered in Springdale, PA, is located at the birthplace and home of scientist and author Rachel Carson (1907-1964).

The mission of the RCHA is to preserve, restore and interpret Rachel Carson's birthplace and early home and to design and implement education programs and resources in keeping with her environmental ethic:

- *Live in harmony with nature*
- *Preserve and learn from natural places*
- *Minimize the impact of man-made chemicals on natural systems of the world*
- *Consider the implications of human actions on the global web of life.*

Today, more than ever, the issues we face call for the kind of responses Rachel Carson espoused in her writings and her actions.

At the Rachel Carson Homestead and on our Web site, www.rachelcarsonhomestead.org, you will find information about Rachel Carson, our programs, conferences and public-awareness materials, all of which promote Carson's legacy to this and future generations.

CONFERENCE PLANNING COMMITTEE

Maryann Donovan, MPH, Ph.D., Co-Chair
Center for Environmental Oncology
University of Pittsburgh Cancer Institute

Terrance Collins, Ph.D., Co-Chair
Institute of Green Science
Carnegie Mellon University

Mark Collins
Rosemary C. Capo, Ph.D.
Dept. of Geology and Planetary Science Environmental
Studies Program
University of Pittsburgh

Charles Christen
Center for Health Environment and Communities
Graduate School of Public Health
University of Pittsburgh

Stanley J. Kabala, Ph.D.
Center for Environmental Research and Education
Duquesne University

Matthew Mahalik, Ph.D.
Sustainable Pittsburgh

Beth Dutton
Collective Efforts, LLC

Bernie Lynch
Strategic Development Solutions

Eden Fisher, Ph.D.
Engineering & Technology Innovation Management Program
Carnegie Mellon University

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Iris Strickland, Administrative Assistant



RACHEL CARSON HOMESTEAD

2010 EVENTS

Rachel Carson Green Chemistry Roundtables

RCHA partners with Champions for Sustainability

John Ehrenfeld, author of *Sustainability By Design*, on January 13
More in March, May and July

Healthy Choices and Cost Cutting Options

RCHA partners with University of Pittsburgh Center for Environmental Oncology

Consumer awareness and action workshops
December to June in Pittsburgh neighborhoods

Rachel's Sustainable Feast

September, Pittsburgh, PA
Local Foods from Local Farms and Much More!

WWW.RACHELCARSONHOMESTEAD.ORG

Rachel Carson Homestead Association
613 Marion Avenue, Box 46
Springdale, PA 15144-0046
(724) 274-5459 • info@rachelcarsonhomestead.org