



Environmental Health Initiative

University of California, San Francisco

Preventing Disease Millions at a Time

Our goal is a world where children grow up free of chronic disease so they can realize their full potential.

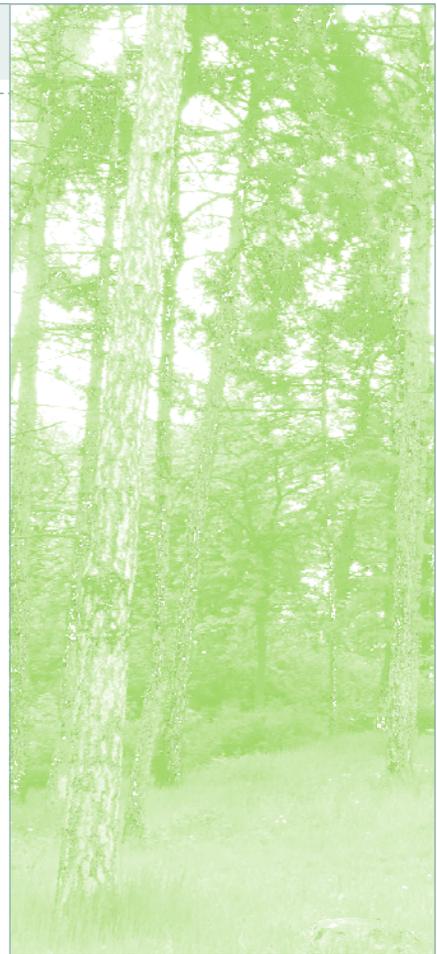
The Environmental Health Initiative (EHI) links the groundbreaking science of researchers across UCSF, from the biological, population and translation sciences, to solve, and prevent, the environmental burden of disease starting at the beginning with healthy pregnancies.

Why EHI?

- Rapid rise in chemical and pesticide manufacturing and use since the mid-20th century has brought unprecedented exposures into our daily lives through contaminated air, water, food, and consumer products.
- Growing incidence of multiple childhood diseases, including asthma, neurodevelopmental disorders, childhood cancer, diabetes and obesity raise concern about environmental risk factors.
- Cellular, tissue, animal and human studies demonstrates the environment is an influence during the most sensitive periods of development with lifelong consequences.
- We have only begun to understand the full extent of how industrial chemicals and pesticides in our bodies affect our health.
- We know actions work. Banning lead and flame retardants have resulted in lower levels of these pollutants in families throughout the United States.
- While there is so much we do not know, we do know that an investment in science and research translation can have a huge pay off in identifying and reducing environmental contributors to disease and improve health.

Why UCSF?

- UCSF is a world-renowned health sciences campus dedicated to advancing health worldwide.
- As the leading public university for NIH funding, UCSF is a source of innovative ideas that generate scientific and health breakthroughs.
- By embedding environmental health within the fabric of UCSF, we will harness the power of the health sciences to tackle a growing problem of our time, and to build lasting changes that address the impacts of harmful chemical exposures on health at a local, national and global level.



Our Partners

Program on Reproductive Health and the Environment (PRHE)
Center for Reproductive Sciences
Department of Obstetrics, Gynecology and Reproductive Sciences
Department of Pediatrics
Department of Neurology
Department of Medicine
Global Health Sciences
Sabre-Sandler Asthma Basic Research Center
UCSF Diabetes Center
Center for Tobacco Control Research and Education
Philip R. Lee Institute for Health Policy Studies
Sugar Stress Environment and Weight Initiative
Office of the Executive Vice Chancellor & Provost
Office for Sustainability
Research and Development Office



Our Leadership

Tracey Woodruff, Ph.D., MPH

Dr. Woodruff is Professor in the Department of Obstetrics, Gynecology, and Reproductive Sciences and Philip R Lee Institute for Health Policy Studies at UCSF and the Director of the Program on Reproductive Health and the Environment. She has done extensive research and policy development on environmental health issues, with a particular emphasis on early-life development. Her research includes evaluating prenatal exposures to environmental chemicals and related adverse pregnancy and child outcomes. She was previously at the US EPA, where she was a senior scientist and policy advisor in the Office of Policy. She is an Associate Editor of Environmental Health Perspectives. She was appointed by the governor of California in 2012 to the Science Advisory Board of the Developmental and Reproductive Toxicant (DART) Identification Committee.

Diana J. Laird, PhD

Dr. Laird is Associate Professor in the Department of Obstetrics, Gynecology, and Reproductive Sciences and Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research at UCSF, where she runs a basic science laboratory. She is a geneticist and developmental biologist whose research focuses on the formation of the reproductive system, the earliest precursors of egg and sperm, and their interaction with the environment. In 2010 she was a recipient of the NIH New Innovator Award.

Transdisciplinary Collaboration to Advance Science and Improve Health

The EHI nucleates, supports, and coordinates a robust program of transdisciplinary research and research translation to identify the leading environmental contributors to disease, how and where they occur, how genetics and social factors can co-influence disease trajectory, and what are the most effective intervention and prevention strategies. We are starting with seed funding, and will grow and sustain the EHI through the following objectives:

- Develop the next generation of scientists and clinicians
- Establish a Science Innovation Fund to support innovative transdisciplinary pilot projects on key environmental health topics
- Support a team of experts to organize and guide the Initiative
- Support larger research projects that will be strategically selected to answer key scientific questions to fill gaps in knowledge in the following theme areas:
 - Identify what and how people are exposed to environmental chemicals and pesticides
 - Uncover the biological pathways of disease and advance rapid screening techniques to identify toxicants
 - Apply epidemiology and population science to investigate developmental chemical exposures and harmful effects on health
 - Identify the environmental causes of the health disparities
 - Translate, communicate, and promote evidence-based real-world solutions
 - Document the chemical and pesticide industry influence on science and policy

With this strategic set of initiatives, we can produce measurable reductions in the exposures that harm the population's health. We have a great opportunity to act now to reduce the environmental burden on chronic disease across the lifespan.



To learn more about the EHI and join our mailing list, please contact Annemarie Charlesworth at Annemarie.Charlesworth@ucsf.edu.