



### Pioneering Scientist Who Connected Environmental Toxins to Childhood Disorders that May Linger through Adulthood Receives \$250,000 Heinz Award

Dr. Frederica Perera found common pollutants can cause significant health and developmental problems in children that carry a measurable economic cost and may manifest as adult disease

**PITTSBURGH, April 23, 2015**—A tireless champion of children's health whose research has revealed how prenatal and childhood exposures to common environmental toxicants can cause neurodevelopmental problems, cancer and other diseases was today named as a recipient of a prestigious Heinz Award for the Environment. The accolade was announced by the Heinz Family Foundation and includes an unrestricted cash award of \$250,000.

Dr. Frederica Perera, DrPH, Ph.D., founder and director of the Columbia (University) Center for Children's Environmental Health (CCCEH) at the Mailman School of Public Health, is being recognized for pioneering the field of molecular epidemiology and for her decades-long research to illuminate the health consequences children suffer from prenatal and childhood exposures to hazardous chemicals, for the benefit of parents, health professionals and policymakers.

She is one of six winners of the 20<sup>th</sup> Heinz Awards. The accolades honor the memory of the late U.S. Senator John Heinz by recognizing those who have made outstanding contributions in one of five critically important categories: Arts and Humanities; Environment; Human Condition; Public Policy; and Technology, the Economy and Employment.

Dr. Perera's team at CCCEH is renowned for its Mothers and Newborns Study, which tracks a large group of children in the United States, specifically in New York City, from womb through adolescence, and for its parallel studies in Poland and China. The research examines how environmental toxicants invade young bodies, causing changes at the molecular level that have been linked to cancer, asthma and neurobehavioral problems such as Attention Deficit Hyperactivity Disorder (ADHD).

The research has shown, among other things, that children with a high prenatal exposure to pollutants common in vehicle exhaust and power plant emissions exhibited more signs of developmental delay at age 3 and more anxiety, depression and attention problems, including ADHD, by age 9. The New York City study has also been instrumental in exposing the potential dangers of insecticides, the chemical bisphenol A (BPA) and cockroach and mouse proteins and how these affect young bodies. Most recently, Dr. Perera led a study that found reducing air pollution in New York City would generate substantial economic benefits by improving IQ scores for low-income children. It was the first study to establish connections between IQ development and exposure to air pollution, and the resulting economic impact.

"Frederica Perera has extended the frontiers of knowledge about children's health and its relationship with the environment. But she is not a scientist who stops where her curiosity leads her. An impeccable researcher, she dares also to speak the truth about what she sees, to raise alarm bells about what is happening to our children, and to spark changes in policy and behavior," said Teresa Heinz, chairman of the Heinz Family Foundation. "She is not only a pioneer in her field, she is also a courageous role model for women in the sciences and for all scientists whose findings inspire them to speak difficult but important truths about how we are affecting the world around us and through that our own health."

Backed by her research findings, Dr. Perera has become an influential advocate for a fuller recognition of the health and economic benefits of preventing prenatal and childhood exposures to environmental contaminants. These include the benefits of reducing harm from fossil fuel burning, the major source of toxic air pollutants and driver of climate change through emissions of CO<sub>2</sub>. She has worked to translate science to policy beginning in 1979 with a book detailing the environmental and health risks of airborne fine particulate matter. More recently, in 2010, Dr. Perera provided testimony before a Committee of the United States Senate in support of the Safe Chemicals Act, and in 2014 she testified before the New York City Council Committee on Environmental Protection. Her Center's research has prompted changes at the local level to reduce emissions from traffic and residential heating and to eliminate toxic pesticides in city housing.

"It's critically important to recognize that environmental exposures play a significant role in most of the health problems that burden us today—including disorders that tragically damage the well-being of our children—and that are contributing to the major health disparities in the United States," said Dr. Perera. "The good news is that we can protect all our children and give them a far greater chance of maturing into healthy, productive adults by understanding the risks posed by various pollutants and acting now to reduce their presence in our air, water and food."

In addition to directing the CCCEH, Dr. Perera currently serves as a professor of environmental health sciences at the Columbia University Mailman School of Public Health.

In addition to Dr. Perera, the 20<sup>th</sup> Heinz Awards honored the following individuals:

### • Arts and Humanities: Roz Chast, Ridgefield, Conn.

Roz Chast, best-selling illustrator and cartoonist, is being recognized for her body of work using humor to soften the anxieties, insecurities and neurosis of modern-day living.

# • Human Condition: (co-recipients) William McNulty and Jacob Wood, Team Rubicon, Los Angeles, Calif.

Messrs. McNulty and Wood, founders of Team Rubicon, are being recognized for their leadership in creating a purposeful way for returning veterans to continue their service by engaging them in lifesaving global disaster relief efforts.

#### • Public Policy: Aaron Wolf, Ph.D., Corvallis, Ore.

Dr. Aaron Wolf, geoscientist and professor at Oregon State University, is being recognized for spearheading a transformative approach to water disputes emphasizing cooperation over conflict.

# • Technology, the Economy and Employment: Sangeeta Bhatia, M.D., Ph.D., Cambridge, Mass.

Dr. Bhatia, bioengineer at the Massachusetts Institute of Technology (MIT), is being recognized for her seminal work in tissue engineering, including the first cultivation of liver cells outside the human body.

Winners will receive their awards at a ceremony in Pittsburgh on May 13<sup>th</sup>, 2015.

Now in its 20<sup>th</sup> year, the Heinz Awards has recognized 123 individuals and awarded more than \$21 million to the honorees. For more information about awardees past and present visit <a href="http://heinzawards.net/2015">http://heinzawards.net/2015</a>.

EDITORS/REPORTERS: To obtain photos of Dr. Bhatia or any of the other recipients, please contact Abby Manishor at <a href="maintenant-shore-burness.com">amanishor@burness.com</a> or 917-539-3308.

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#### **About the Heinz Awards**

Established by Teresa Heinz in 1993 to honor the memory of her late husband, U.S. Senator John Heinz, the Heinz Awards celebrates the accomplishments and spirit of the Senator by recognizing the extraordinary achievements of individuals in the areas of greatest importance to him. The awards, administered by the Heinz Family Foundation, recognize individuals for their contributions in the areas of Arts and Humanities; Environment; Human Condition; Public Policy; and Technology, the Economy and Employment. Nominations are submitted by invited experts, who serve anonymously, and are reviewed by an independent panel of jurors appointed by the Heinz Family Foundation. The jury makes recommendations to the Board of Directors, which subsequently selects the Award recipients. For more information on the Heinz Awards, visit heinzawards.net.

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