



Photo: Eileen Barosso

**T**he university is an institution that not only transmits acquired knowledge; it is also an interactive environment where knowledge is constantly evolving as new horizons are explored to solve pressing problems. As a preeminent research institution, Columbia University, and its talented pool of interdisciplinary scientists, researchers and students, is engaged in translating knowledge into instruments for improving life, in its broadest sense, around the globe.

Our planet is at a critical crossroads, with its ecosystems under assault. Many of Earth's challenges are closely interwoven: climate change, its impact on human populations, contamination of our depleted water sources, deforestation, growing levels of poverty and urbanization, and the social and ecological effects of natural disasters; all demand innovative approaches to reverse their negative impacts.

Efforts by our scientific community to address these issues would not be possible without the support and commitment of those who share a sense of responsibility for these dire global crises. During the past year, through the remarkable generosity of individuals and foundations, the Earth Institute has made strides on a number of fronts. The Lenfest Center for Sustainable Energy continues to research and develop advanced technologies to reduce carbon emissions from coal-burning power plants and to capture and store carbon dioxide. In partnership with the PepsiCo Foundation, the Earth Institute is bringing cleaner, safer water to populations in need.

With the support of the Denning family, we created the endowed professorship held by Professor Ruth DeFries, the Denning Family Professor of Sustainable Development, who has championed the formation of an undergraduate major in sustainable development.

The evolution of this degree field, currently offered as a special concentration, will facilitate the study of this critically relevant area at the undergraduate level.

Columbia has been a leader in climate work for more than 50 years and is one of the few universities conducting advanced and comprehensive research on climate issues. The Columbia Climate Center was publicly launched in March 2009 to bring together and build upon the many climate-related activities and research efforts conducted throughout Columbia, linking expertise from climate science, earth engineering, public health, political science, economics and decision science.

For the well-being of our planet, continued efforts must be made in the area of sustainable development, and your support of the Earth Institute, Columbia University, has a direct and meaningful impact. Under the consummate leadership of Jeffrey Sachs, the Earth Institute will, with your help, remain at the forefront of addressing this challenge.

Lee C. Bollinger

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**T**he greatest challenge of our time is sustainable development: to live peacefully and sustainably on a crowded planet, with everybody able to meet their economic needs while protecting the vital ecosystems for future generations. The Earth Institute is proud to be a world-leading center in this great challenge, helping to push forward solutions to sustainable development through education, research, problem solving and educating the public.

Some of the great challenges taken on this year by the Earth Institute include growing water stress in many parts of the world, the risks and complexities of climate change, scaling up health systems in low-income settings, and the challenges of the Millennium Development Goals in rural Africa, Papua New Guinea, Haiti and elsewhere.

Securing safe and plentiful water for all regions of the world will prove to be one of our most daunting tasks for global society. Water stress is already a grim reality in many regions, and climate change will further alter the water cycle on local and global scales, putting many regions in profound peril. The PepsiCo Foundation generously supports our crucial work on water sustainability in four countries. The HSBC Foundation saw the need for tackling the challenges of climate change in our own backyards and funded several of our educational workshops, internships and research assistantships on climate in New York City.

The challenges of sustainable development require a new kind of training that is intrinsically cross-disciplinary—addressing holistically the interconnected challenges of poverty, disease, climate change, biodiversity loss and more. Our students in the undergraduate special concentration in sustainable development are given a comprehensive understanding of complex global issues through study in a wide range of disciplines including political science, anthropology, environmental science, economics and urban studies. We are moving forward to launch a major in sustainable development as soon as possible.

In a joint effort with the John D. and Catherine T. MacArthur Foundation, we have also begun a two-year global Master's in Development Practice (MDP) program that will encourage the development of revolutionary graduate degrees around the world. The first of these, the Master of Public Administration in Development Practice, began at Columbia in the fall of 2009 and will train a new host of practitioners in a wide array of disciplines so that they are equipped to tackle complex sustainable development challenges.

As we advance the thrilling and groundbreaking work of the Earth Institute, we keep our eyes on global problem solving; a rigorous focus on scientific evidence; the mobilization of breakthrough technologies, including for the world's poor; and, most crucially, thinking globally and toward the future. Our donors and partners are assisting us in our mission to help bring about beneficial changes in people's lives through critical advances in sustainable development. Please accept my profound gratitude to all of the Earth Institute's generous supporters, partners and friends, who make this transformative work possible.

Jeffrey D. Sachs



Photo: Alan Orling

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