

Message from Jeff Sachs**Lamont-Doherty Brings Down the House**

The Lamont-Doherty Earth Observatory attracted 3,200 visitors to the annual open house on October 5th. Congratulations to Michael Purdy and the campus volunteers who mount this monumental undertaking every fall. When I left the Palisades campus after giving a short lecture on El Niño's impact on struggling economies, the shuttle buses were still streaming in. An article the next day in the Rockland County *Journal* quoted visitors as calling the Open House "awesome" and "impressive." In describing the scientists, one parent said, "They do a fantastic job." Allow me to second that.

Thanks also to the scientists who worked in collaboration with the International Research Institute for Climate Prediction (IRI) and the Center for International Earth Sciences Information Network (CIESIN) to present the science behind El Niño. As you read in our September newsletter, one of the special initiatives the Earth Institute is highlighting this year is El Niño. The goal is to remind international funding agencies, such as the World Bank and IMF, that developing countries have to integrate science into their development plans. El Niño modeling, which developed at Lamont through the path-breaking work of Mark Cane and Steve Zebiak, beautifully demonstrates the science of sustainability.

So did the the Gumby suit in Tent #3. Special thanks to the Marine Affairs Office -- Mercy Garland and Ginny Beck -- for inventing such an ingenious child magnet.

Another Earth Institute initiative is attracting more students to the Lamont campus. It's important to note that over 100 students, primarily undergraduates, made their way to Lamont, where they were treated to free lunch and tee-shirts, as well as information about DEES and other undergraduate academic programs.

I would like to remind you about the map resource web initiative -- an interactive map that will allow anyone in the world to access general information about our research projects. We need your participation on this. Take a few minutes and contribute your data to <http://webcenter.ideo.columbia.edu:81/>

In the News**The Wall Street Journal (10/01/02):**

More 'Moderate' El Niño to Return Over the Winter
Information provided by International Research Institute for Climate Prediction (IRI) scientists marking the return of El Niño this winter was reported in the *Wall Street Journal* in October. Jeffrey Sachs was quoted on how this effects the devastating drought in southern Africa.

Science (9/27/02): Climate Effects of Black Carbon Aerosols In China and India

NASA/Goddard Institute for Space Studies researchers discovered that large amounts of soot, as well as other pollutants, have been observed to cause changes in precipitation and temperature over China. ([more](#))

Science (9/27/02): The Ocean's Role in Atlantic Climate Variability

Martin Visbeck from the Lamont-Doherty Earth Observatory wrote in his *Science* article, "Today, a substantial part of the global year-to-year climatic variability is caused by the El Niño-Southern Oscillation in the Pacific Ocean."

Science (9/27/02): Mild Winters Mostly Hot Air, Not Gulf Stream

New research done by Dr. Richard Seager of the Lamont-Doherty Earth Observatory and his colleagues shows that the Gulf Stream has little effect on the contrast in winter temperatures between Europe and eastern North America, dispelling a long-held assumption. ([more](#))

Science (10/03/02): A New Global Effort To Control Malaria

Jeffrey Sachs renews his call for a worldwide effort to control malaria. ([more](#))

Nature (10/03/02): Vapour Undersaturation in Primitive Mid-Ocean-Ridge Basalt and the Volatile Content of Earth's Upper Mantle

Alberto Saal from the Lamont-Doherty Earth Observatory and colleagues report on the undersaturated pre-eruptive volatile content for a suite of mid-ocean-ridge basalts from the Siqueiros intra-transform spreading centre.

The Rockland County Journal News (10/2/02): Four Sites on List for Rivers Center Site

The Lamont-Doherty Earth Observatory is among the dozen locations still being considered for the Rivers and Estuaries Center on the Hudson.

Director General of the International**2002 World Food Prize Laureate Joins Earth Institute as Director of Tropical Agriculture**

Pedro Sanchez, recipient of the 2002 World Food Prize, will join the Earth Institute at Columbia University as Director of Tropical Agriculture in January 2003. He will receive the 2002 World Food Prize in October 2002 at the University of Iowa.

Sanchez is noted for his visionary contributions to reducing hunger and malnutrition in the developing world by transforming depleted tropical soils into productive agricultural fields.

Sanchez will serve several areas within the Earth Institute. Joining him is his wife Cheryl Palm, who will serve as Senior Research Scientist at the Center for Environmental Conservation and Research (CERC). ([more](#))

Rosenzweig, Kinney Testify Before City Council In Favor of Vehicle Emissions Resolution

Goddard Institute for Space Studies scientist Cynthia Rosenzweig and Patrick Kinney of the Mailman School of Public Health testified before the New York City Council recently in favor of a resolution that would have New York adopt the same motor vehicle emissions standards as were adopted in California.

Known as Resolution 439, the measure was passed unanimously by the Environmental Protection committee of the City Council. It now goes before the entire City Council for a vote in November.

CEI_DA.nsf/CEIProject.

You should also have received an email with details about the map resource. If you haven't received the email, and are currently working on an Earth Institute research project, you can contact Jill Stoddard at ceieditor@Ideo.columbia.edu to request information about it.

Best,

Jeff Sachs

IRI Scientists Urge Funders, Aid Agencies to Prepare for El Niño 2002/03

As this year's El Niño gains strength over the tropical Pacific, climatologists from around the world gathered in Washington D.C. on September 30th to call for international funding organizations to prepare for El Niño-related disasters. The event was co-sponsored by the Corporacion Andina de Fomento (CAF).

An El Niño in the coming months that is moderate in strength may spell big trouble in parts of Brazil, Peru, Indonesia, southern Africa, and other vulnerable locations around the world. Climate models now enable scientists to identify an El Niño phenomenon in its early development stages, clarify risks in affected areas, and give regions and international aid agencies time to prepare, as climatologists Steve Zebiak and Tony Barnston of Columbia's International Research Institute on Climate Prediction (IRI) explained.

Those regions already experiencing climate stresses (drought or excess rainfall) are at greatest risk, explained IRI hazards expert Maxx Dilley. Dilley hopes agencies will learn to treat climate threats from a perspective of "risk management, not disaster management."

Said William Whalen of USAID, "This is a very timely and important event, especially in relation to Southern Africa, where 14.4 million people are extremely food insecure."

During the last El Niño, in 1997/98, droughts, floods, crop loss and other impacts are estimated to have cost between US\$32-96 billion worldwide.

Comments and Suggestions

Contact our [editor](#)

Past issues

Research Institute for Climate Prediction Steps Down

Dr. Antonio Divino Moura, Director General of the International Research Institute for Climate Prediction (IRI) since its inception in 1996, has announced that he is stepping down from this position at the end of the month. Dr. Moura's extraordinary leadership during the last several years has taken IRI from a forward-thinking concept and developed it into the world-class institution that it is today. An institute dedicated to improving the lives of societies worldwide that are impacted by climate variations that stem from the El Niño phenomenon. Dr. Moura has built an exceptional team that has diligently worked to advance the IRI's mission through modeling and prediction, forecast operations and development, monitoring and dissemination, and applications. The IRI has also built a worldwide capacity for training, education, and outreach.

We wish Dr. Moura well as he returns to his home in Brazil to take on new challenges, including working with IRI to enhance its presence in Latin America. Dr. Steve Zebiak will serve as Interim Director, and the search process for a new Director General will begin in the coming weeks.

Biodiversity on the Brink: Challenges in Science and Policy

In its second year, this exciting series continues to highlight critical issues in conservation. This event is a special partnership with The Nature Conservancy, The Center for Environmental Research and Conservation at The Earth Institute, and The School of International and Public Affairs

Part 1: Protecting Biodiversity in Latin America: Collaborations at Work

Tuesday, November 19, 6:00 - 7:45 p.m. at Columbia University.

Featured Speakers:

Roberto Troya, Ecuador Country Program Director, The Nature Conservancy, Andes Division

Claudio Padua, Wildlife Trust

Dr. Charles M. Peters, Kate E. Tode Curator of Botany, Institute of Economic Botany, The New York Botanical Garden

Free and open to the public; reservations are strongly recommended -- please contact Kathy Lopez at CERC at 212-854-8179 or cerc@columbia.edu. Or contact Anne Marie Ventola at TNC at 212.997.1880 ext. 22, or aventola@tnc.org. There is an informal reception at 5:30 p.m.



Cynthia Rosenzweig

Rosenzweig, a senior scientist at the Goddard Institute for Space Studies, testified that limiting motor vehicle emissions would be an important strike against a root cause of climate change.

Kinney, a professor at the Division of Environmental Health Sciences at the Mailman School of Public Health, testified that improving fuel economy and emissions controls can prevent human health problems associated with motor vehicle pollution.

Rosenzweig and her colleague William Solecki, who co-authored their testimony, were co-leaders of the Metropolitan East Coast Regional Assessment of Climate Variability and Change, a report on climate change in the New York metropolitan area, which was published by the Earth Institute.

The MEC report showed that New York City is threatened by several interconnected problems associated with global warming—from health problems to infrastructure and power generation—but particularly by sea level rise.

Rosenzweig and Solecki emphasized that limiting emissions in New York not only protects New York City itself, but also sends a powerful message to cities around the world. "New York can play an important national and international leadership role in acting to slow and lessen the impacts of global climate change," they said.



Local science enthusiasts expanded their tree ring knowledge at Lamont-Doherty's Open House on October 5th. An estimated 3,200 people attended.