

Newsletter

March 2016 | 005

FIELD-TRIP BY COLUMBIA VOLCANOLOGISTS



Scientists, students, and arrieros pose in front of *Desabegado Grande*; picture by Kevin Krajick.

In February, a team of scientists led by **Phillip Ruprecht**, an Assistant Research Professor at Columbia's Lamont-Doherty Earth Observatory, visited the *Quizapu* Volcano in Southern Chile as part of a field trip research project financed by the President's Global Innovation Fund (PGIF).

Besides Ruprecht, three other faculty members participated in the expedition (from the Lamont Center and from the Universities of Hawaii and Michigan). The group also included two postdoctoral researchers and four PhD students from Columbia as well as local students from Universidad de Concepción and Universidad de Chile.

After a seminar series held at the Santiago Center, which was attended by local geologists and volcanologists, the group left for Talca, in Maule Region, for the eight-day field trip

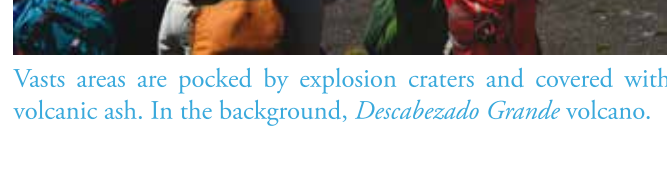
component. They climbed the Chilean *Cordillera* to explore the natural hazards as well as processes that lead to ore formation associated with volcanism.

In particular, the group focused on one of the most historically active places in Chile -the volcanic cluster around *Desabegado Grande*, including *Quizapu*, which erupted in 1846 and 1932. The latter provided a unique "volcano park" to discuss magma generation and transport, eruptive behavior and volcanic processes, among many other earth-sciences related topics. The highlight of the workshop was a day hike to the crater (>3100 m elevation - a very windy place) where participants could grasp the forces and dimension of these historic eruptions by looking into the 800 m wide crater and seeing the many stages of eruptive activity it experienced.

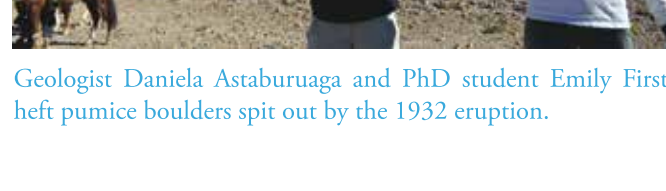
The goals of this joint-project between Chilean earth scientists and Lamont faculty was to identify common future research interest and develop new bonds. More extensive collaborations are on their way.

FIELD-TRIP BY COLUMBIA VOLCANOLOGISTS IN PICTURES

Photographs by Kevin Krajick.



Vasts areas are pocked by explosion craters and covered with volcanic ash. In the background, *Desabegado Grande* volcano.



Geologist Daniela Astaburuaga and PhD student Emily First held pumice boulders spit out by the 1932 eruption.



Horses hauled the participants' food, tents and heavier gear and, on the last day, the participants themselves.



Francisco García, a student from Universidad de Concepción, digs through ash layers.



Megan Newcombe, a Lamont-Doherty postdoctoral researcher, inspects a hunk of 1846 lava that shows distinct flow bands.



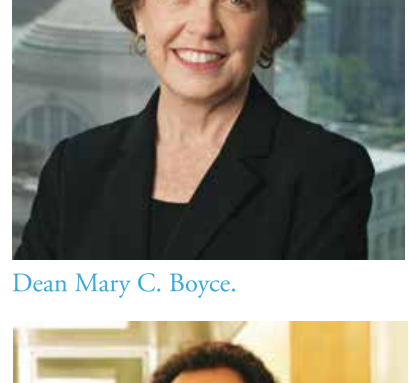
Days on this barren landscape are blistering hot, but when the sun goes down, the temperature plummets, often below freezing. The group enjoys a fire made with scavenged shrub wood.

SUCCESSFUL LAUNCH OF ENGINEERING RESEARCH SEED GRANT PROGRAM

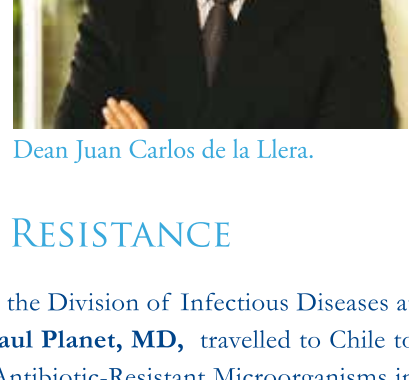
During 2015, **Dean Mary C. Boyce**, from The Fu Foundation School of Engineering and Applied Science at Columbia University (SEAS), and **Dean Juan Carlos de la Llera**, from the School of Engineering at the Universidad Católica (UC) reached an agreement to create an Engineering Research Seed Grant Program.

Its aim is to benefit joint teams of faculty members who use these funds to stimulate initial research conversations and interactions that can lead to deeper collaboration in several engineering disciplines, including Sensing; Imaging and Visualization; Health and Wellness; Resilience and Sustainability; Data Science; Computation-Based Engineering; Advanced Materials and Devices; and Communication, Information and Cybersecurity (including the Internet of Things). Five joint teams of SEAS-UC researchers obtained funding for their projects:

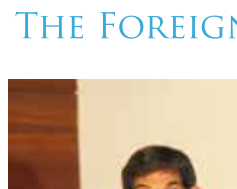
- Tal Danino and Daniel Garrido: **Synthetic Biology and Microbiome Engineering Applications for Health.**
- Jacob Fish and Diego Celentano: **Multiscale Modeling of Nodular Cast Iron.**
- Andrew Laine and Daniel Hurtado: **Image-based Computation for the Quantification of Cardiac and Lung Deformation in Understanding Processes of Disease.**
- Shih-Fu Chang and Álvaro Soto: **Visual Recognition Technologies to Support Shelf Operation in Big Retail Stores.**
- Clark Hung, Helen Lu and Loreto Valenzuela, Hugo Olguín: **Electrotherapeutics for Musculoskeletal Tissue Repair Regeneration.**



Dean Mary C. Boyce.



Dean Juan Carlos de la Llera.



Paul Planet.

TWO-DAY SYMPOSIUM ON ANTIBIOTIC RESISTANCE

In December, a team led by the Assistant Professor of Pediatrics in the Division of Infectious Diseases at the College of Physicians and Surgeons of Columbia University, **Paul Planet, MD**, travelled to Chile to participate in a two-day Symposium entitled "Rise and Spread of Antibiotic-Resistant Microorganisms in the Americas", held in conjunction with the Facultad de Medicina Clínica Alemana-Universidad del Desarrollo. During the event, specialists in infectious diseases, microbiology, and genomics from North and South America presented a state-of-the-art technological approach and discussed strategies for halting the spread of antibiotic-resistant pathogens.

THE FOREIGN CORRUPT PRACTICES ACT (FCPA) & ITS IMPLICATIONS FOR CHILE



Michael Fine.

Michael Fine, Senior Ethics & Compliance Advisor at LRN in Washington DC, participated in a workshop organized by the Center on the challenges that the increasing extraterritorial enforcement of the FCPA poses to Chilean companies that do business with the U.S.

His lecture, which was co-sponsored with the North American Chilean Chamber of Commerce (AmCham) and Universidad Católica's Center for Corporate Governance, raised huge interest from local law firms and corporate legal counsels interested in learning how to build effective compliance programs, develop internal controls and carry-out due diligence procedures.

VISIT OF COLUMBIA TOP EXPERT ON CLIMATE CHANGE



Michael B. Gerrard, Professor of Energy Regulation and Environmental Law at Columbia University's Law School, and Director of the Sabin Center for Climate Change Law, visited Chile in March to participate in a series of events around the topic "Challenges and Opportunities in Lowering Carbon Intensity".



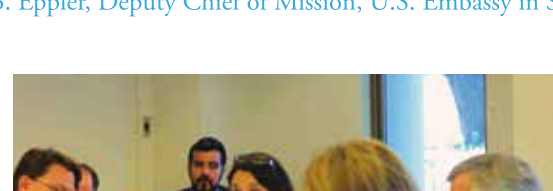
During the roundtable discussion, Dieter Linneberg from CLC and Tatiana Molina from AmCham.



Dale B. Eppler, Deputy Chief of Mission, U.S. Embassy in Santiago.



Christian Patrickson, Dean Manuel Agosin and Maisa Rojas.



The Center's Director Karen Ponichik.

LECTURE ON EUROPEAN ECONOMICS

Stephany Griffith-Jones, Economist and Financial Markets Program Director at Columbia's Initiative for Policy Dialogue, visited Chile during January. Among her many academic activities, she gave a lecture on the Economic and Financial Outlook for Europe in 2016 at the Center, in an event co-sponsored by Cieplan, a local think tank, and Universidad de Talca, which was attended by economists and government officials. During her trip, Professor Griffith-Jones was interviewed on global economic issues by several local media outlets, including *Mirada Económica* at TV Canal 24 Horas.



ALUMNI NEWS

WORKSHOP ON TEACHING SCIENCE TO CHILDREN



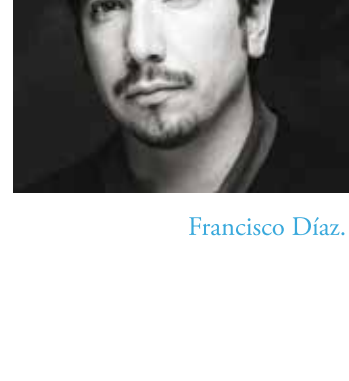
Columbia Global Centers | Santiago.

In January, the Santiago Center invited a team from Teachers College's Hollingworth Center to share their experience of conducting a Science Camp in Huilo-Huilo, a small town in Southern Chile, with teachers and principals from local private and municipal schools as well as with NGOs focusing on education. **María Eugenia Rivera** (TC '15) participated in organizing the program.

The Hollingworth Center's goal is to develop the potential of children in the area of sciences by incorporating knowledge on this field during children's early formative years and by developing the sense of curiosity and wonder among them.

GSAAP ALUMNI SPEAK AT HARVARD

In February, **Francisco Díaz** (GSAAP '13) presented the book "Who Cares for Chilean Cities?" at Harvard's Graduate School of Design. The publication was partly financed by the Santiago Center in the framework a research project on Chilean architecture, public space and urban projects that involved scholars from the Graduate School of Architecture, Planning and Preservation (GSAAP) and local universities. His lecture was preceded by a presentation by **Alejandro de Castro** (GSAAP '09) on the activities and projects of GSAAP's Latin Lab, an academic space designed to explore, study, reflect around and act upon problematics that are relevant to Latin America.



Francisco Díaz.

SUCCESSFUL SOCIAL ENTERPRISE CREATED BY SIPA ALUMNI



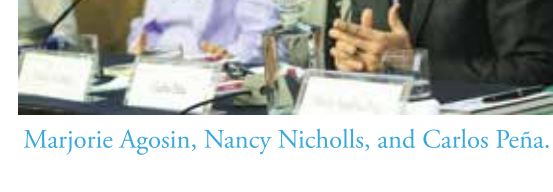
The Santiago Center hosted the graduation of the first generation of nine Chilean female web developers that studied at Laboratoria, a social enterprise that empowers young women from low-income backgrounds by giving them access to education and work in the digital sector.

The Laboratoria Academy started as a tech agency in New York and first moved to Peru to become a tech enterprise that aims at promoting the incorporation of poor women into the workforce. It was founded by Columbia's **Mariana Costa** and **Rodulfo Prieto** (MPA-DP '13). Two other SIPA alumni, **Marisol Alarcón** and **Gabriela Rocha** (MPA-DP '13), are the partners in charge of the Chilean and Mexican operations, respectively. Laboratoria has been such a success that even before graduating, 70% of its students have been offered employment in the web development industry. In Chile, besides private donors and corporate partnerships, the institution receives government funding and support through the Economic Development Agency (CORFO).

BOOK LAUNCH: HONORING A RIGHTEOUS AMONG NATIONS FROM CHILE



María Angélica Puga.



Marjorie Agosin, Nancy Nicholls, and Carlos Peña.

The Santiago Center teamed-up with the local Jewish Community, the Museum of Memory and Human Rights and Universidad Católica's History Institute to present the book "*Buscando a María Edwards*" (Searching for Maria Edwards) by **María Angélica Puga**. The author is the great-granddaughter of María Edwards, a Catholic member of Chile's economic and social elite who lived in France during World War II, where she enrolled in the Resistance and helped to save Jewish children

through her work as volunteer at the Rothschild Hospital. She is the only Chilean honored by Israel's Yad Vashem Holocaust Museum as a Righteous among Nations and also received France's *Chapelier de la Légion d'honneur* medal. The book was commented by **Marjorie Agosin** from Wellesley College, **Nancy Nicholls** from Universidad Católica and **Carlos Peña** from Universidad Diego Portales.



Members of María Edwards's family.



Álvaro Fischer, Carlos Peña and Rabbi Eduardo Waingortin.



Patricia Politzer, Claudio Mandler and Andrea Jettanovic.

AWARD-WINNING CHILEAN NOVELIST SPEAKS IN NEW YORK



In early March, the Santiago Center sponsored a literary function in New York featuring **Carla Guelfenbein**, one of the most respected and admired local writers, who presented her latest book "*Contigo en la Distancia*" ("With you in the Distances"), followed by comments from journalists José Manuel Simián and Manuel Santelices.

The event took place at the Cervantes Institute and was also sponsored by the Embassy of Chile in the U.S. This book was awarded the Alfaguara Fiction Prize 2015.

