Mailman School of Public Health Works With the Community to Battle Asthma in Northern Manhattan

By Stephanie Berger

C

oupling community ini-

tiatives with ground-

breaking research,

Columbia's Mailman School of Public Health seeks to decrease the number of children suffering from asthma in Northern Manhat-

tan as well as to raise greater awareness of the problem through community programs.

Asthma, a chronic disease that blocks the airway of the lungs through muscle squeezing, swelling and excess mucus, has dramatically increased in children of Northern Manhattan. In 2001, the prevalence of childhood asthma in Northern Manhattan was estimated to effect up to almost a third of the population; hospitalization rates for children up to four years old were over 7.5 per thousand. Over the next five years the coalition will be imple-

menting a series of coordinated initiatives to cut the rates sevenfold, to reach the national standard of one per thousand for the year 2010.

"Since 2001, our strategy has been to forge relationships between the community residents and organizations to take asthma management into the community with the help of health-based screening, asthma education integrated into parenting classes, early childhood education, and boosting programs, and outreach and education for community "asthma care providers," explains Sally Findley, director of the Asthma Basics for Children's ABC initiative and professor of clinical population and family health at the Mailman School.

"School by school, we aim to reduce the asthma risk." The ABC project has been awarded additional funding of $4.5 million over five years as part of the CDC's Controlling Asthma in America Cities project. The grant recognizes Columbia's past progress in fighting asthma as well as the magnitude of the current challenge. One of only seven pro-

jects nationwide to receive cing support, the Mailman School's community asthma action plan for managing children's asthma and decreasing the use of emergency services was first launched in 2001 to stem the higher than average rates of childhood asthma in Northern Manhattan.

The community asthma action plan, now in phase II, was developed in partnership with several community organizations such as the Harlem Health Children's Zone, medical provider networks and the New York City Depart-

ment of Health and Mental Hygiene's Child Asthma Initia-

tive.

A cornerstone of the program is the ABC handbook program, originally designed for work with Head Start centers and home-based childcare providers. It has been expanded and redesigned for use with schools, parenting programs and churches. The handbook now has a bilingual format, providing information in both English and Spanish. It is designed to teach childhood educators the basics of asthma, how to manage asthma episodes, how to make their sites "asthma friendly" and even how to intro-

duce children to asthma precautions through the use of simple games and activities. The ABC team works with each center or school to identify children with asthma, including children who have symptoms but who may not yet be diagnosed. This information enables teachers to respond to asthma attacks when they happen at school or day care.

This work through educational institutions is complemented by special programs to train parents in removing objects from their home that trigger asthma attacks and empower them to work with others in community groups to address neighborhood-wide triggers such as diesel exhaust or pesticide exposure. In addition, ABC incorporates state-of-the-art training for community primary care physicians on the latest tech-

niques for asthma management. In all these initiatives, ABC works closely with the New York City Department of Health and Mental Hygiene's Childhood Asthma Initiative, so that ABC's innovative strategies are shared with others in the community. In the first year of implementing its community asthma action plan, ABC will enroll 2,970 chil-

dren and their parents. Each year, additional organizations will be trained by those trained the previous year, and they will enroll parents from their own centers. Enrollment is expected to rise by about 700 per year through 2007, and totaling over 15,000 children by the end of 2008.

Findley continues to draw on the state-of-the-art research at Columbia to strengthen her pro-

gram. Associate Professor of Health Science Patrick Kinney's research on the effect of the home environment on asthma as well as Assistant Professor of Clinical Medicine Rachel Miller's work with prenatal sensitivities to asthma are among the studies now yielding impor-

tant findings in appliance to the ABC initiatives.

Ronald Breslow Receives Welch Award in Chemistry for Lifetime Achievements

By Caroline Ladish

A

lthough chemistry

professor has won the Welch Award in Chem-

istry, which many chemists call the "American Nobel," for important scientific research he has never been a chemistry professor at Columbia.

Ronald Breslow, the Samuel Latham Mitchell Professor of Chemistry and University Professor, was presented with a gold medallion and $300,000 recently by the Welch Foundation at a black-tie celebration in Houston, Texas, where the foundation is headquartered. The award recognizes lifetime achievements in basic chemical research that make a significant contribution to humanity.

In Breslow's case, the award recognizes and applauds his important breakthroughs in can-

cer research and other work.
Columbia Mourns the Death of Social Work Professor Howard Polsky

BY KRISTIN STELINO

Howard W. Polsky, professor of social work, died on Sunday, Oct. 19, in New York. A distinguished educator, researcher and prolific author, Polsky had been teaching at Columbia’s School of Social Work since 1961. His research interests focused on juvenile delinquency and treatment; organizational development; staff training; corrections institutions; family life education; children’s services and more. In 1968 he created a popular new research course, “Social Work and Ethnography.”

In the 1950s and 1960s he was one of the pioneers who used social science knowledge, particularly sociology, to improve social service programs. Throughout his career, Polsky played an important role in defining social advocacy for segments of the population who are confronted with inequalities in everyday life.

Polsky’s seminal work Cottage Six, The Social System of Delinquent Boys in Residential Treatment is regarded as a social work classic. The book has been translated into four languages and more than 40 years after its initial publication in 1962 it influences research and practice throughout the field of children’s institutions. His formulation of youth and adult peer structures in the book, known as the “Polsky Diamond,” is still used as a diagnostic tool.

Everyday Miracles: The Healing Wisdom of Hasidic Stories was a best-seller. Its popularity prompted Polsky to conduct seminars about the book in libraries throughout New York City and in Jewish centers and homes for the elderly.

For Polsky, the capstone of his career came with Mainstreaming Institutions: From Custodialism to Community in Residential Care, written with his wife Roni Berger. The thesis of the book, according to Polsky, is that it is as important for social services to change their normative and social structures as it is to “head” or “cure” clients.

Among his other contributions, Polsky was the principle investigator of the Child Welfare League of America’s Odyssey Project at Edwin Gould Academy in Westchester from 1994 to 1998. The project was a national study of children and teenagers living away from home in residential treatment centers, group homes and foster care.

From 1987-1989 Polsky was a member of the New York City Fire Department Project planning and management team. The team’s goal was to establish a workplace climate conducive to gender integration. He analyzed and diagnosed PDNY culture, and designed, trained and implemented the action programs. The project allowed him to fulfill a childhood dream of riding on a fire engine.

Polsky received a B.A. from University of Chicago, 1949, and an M.S.W. in Group Work (1954) and Ph.D. in Social Psychology from the University of Wisconsin (1957).

He is survived by his wife Roni Berger. The cause of death was complications from emergencpy heart surgery.

LEGISLATIVE UPDATE

University’s Horst Stormer Briefs Congressional Staff

BY ELLEN S. SMITH

On Oct. 20, 2003, Congressional and key Federal Agency staff received an introductory overview of the key concepts in nanoscience and nanotechnology by leading scientists, among them Professor of Physics Horst Stormer and Evelyn Hu, BC ’99, GSAS ’75, scientific director, NanoSystems Institute, UC Santa Barbara.

The briefing was attended by close to 100 staff and was coordinated by The Science Coalition, as part of its Science 101 series to assist lawmakers in making informed policy decisions in this area.

The professors led the attendees through the groundbreaking scientific concepts behind nanotechnology, or the art of manipulating materials on an atomic or molecular scale and building microscopic devices. The researchers explained that many core scientific disciplines such as chemistry and physics interact to form the basis of nanoscience. They also described the potential applications of the new scientific frontiers, noting that like all scientific discoveries—even such common ones as the knife—this new technology can yield both positive and negative uses.

The Science Coalition was formed in the mid-1990’s to expand and strengthen the federal government’s investment in university-based scientific, medical, engineering and agricultural research, its mission statement noted. Sustained support for research across the entire range of scientific disciplines is the most important step the nation can take to maintain America’s position at the forefront of the scientific discovery, technologi cal innovation, and economic growth in the 21st century. Columbia University was a founding member of the group which includes 400 organizations, with member universities (over 80) serving as the steering committee.

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November 12, 2003

A Glimpse of Columbia History . . .
Columbia's Italian Academy Welcomes Diverse Group With 2003-04 Fellows

BY KRISTINE STERLING

M arina Warner, fiction and cultural history writer and visiting professor at the University of St. Andrews, Scotland, and Birkbeck College, University of London, and director of the Italian Academy from writer Edmund White. He told her that the Academy started with Lorenzo da Ponte, Mozart's librettist for several major operas and who attended a party in the early 19th century in New York she may have found herself talking with him. Shortly thereafter, her dear friend Edward Said told her about the cultural identity, transmission and memory. Its goal is to help conserve many aspects of culture that are being lost, while also forging new links between the arts, sciences and humanities.

"In the three years of the existence of our new Fellowship program the number of applicants, both from the U.S. and Europe has exploded greatly to its appeal. When I first devised the program, I imagined that we would have scholars engaged in the humanities, but in fact it has stimulated wide interest both among social scientists and scientists. This year for example we have two distinguished mathematicians working alongside our distinguished Fellows in the arts, humanities and the social sciences.

Through the Fellowship Program, each year up to 10 fellows scholars from the post-doctoral to the full professorial levels. Fellows are in residence for a semester or full academic year, working at our home in Manhattan and work with scholars in the relevant departments at Columbia.

Each year two of the fellowship positions are reserved for the Arts and Neuroscience Project, in which fellows concentrate on the fields of neuroscience and neurophilosophy, as they relate to the arts and the humanities. Freedberg explained that while everyone acknowledged that the new neural sciences had much to contribute to the study of culture, the humanities had been slow to take up the challenge, and he wanted the Academy to be a place where pioneering work was being done at the junction of these fields.

We visited visiting fellows are few and pursue different fields of research including fine art. But the general theme of Memory, the Arts and Neurosciences gathers our various strands together," Warner says. "At the weekly Wednesday fellows' meeting we are bouncing off one another and learning, even though one of us is a mathematician, another a social scientist and two others are practicing artists. This continuing conversation will develop further (throughout the year).

Warner's topic is "Magic and Metaphor," and she is currently writing a book with the working title, "Castles in the Air: Imagining the Soul," about how the search for spirit was continued actively and richly after the enlightenment and led to many experiments to capture spirits or define ectoplasm.

Among the other topics being explored this year are: The City of Knowledge: History and Culture in Contemporary China; "Mneme" Collective Memory and Imaginative World; and Homemade and Global: The Late Modern History of Italian Food.

In addition to the Fellowship Program, the Italian Academy, in conjunction with the Italian Ministry of Foreign Affairs, established Premio New York, or the New York Prize, a scholarship for promising Italian artists wishing to work in New York. Each year two young artists, chosen by jury, spend one or two semesters at the Italian Academy and make contact with New York artists.

While best-known for its Fellowship Program, the Italian Academy also offers an array of cultural and academic events to the public throughout the year.

This fall, the Italian Academy is presenting a three-part concert series, "Contemporary Classic Italian Music of the Last 50 Years." The final concert, Luciano Berio Sequences, will be held on Dec. 3 at 8:30 p.m. The Italian Academy also is hosting a film series this fall, "Visions of the South, Geography as Character in Italian Cinema." The screenings are followed by panel discussions. A complete schedule of events is available on the Italian Academy's Web site at www.ital academy.columbia.edu

COLUMBIA UNIVERSITY RECORD  November 12, 2001 3

Columbia, University Senate Discusses Campus Expansion Plan

BY THOMAS MATHEWSON

A t the Senate on Oct. 24 President Lee Bollinger described a free-wheeling, candid discussion of Columbia's current and pressing need for more space, including new buildings, and some uneasiness about the current pace of development. The board of trustees, he said, was prepared to respond to the Senate's concerns.

Bollinger said Columbia's intensive effort to develop the area in Manhattanville between 125th and 133rd streets and Broadway and 12th Avenue—invoking much more space than the grounds of St. John the Divine—was progressing well at the moment, though he stressed the complexity of the long-term community relations campaigns that Columbia is now waging on several fronts in the surrounding neighborhood, an effort that he said will likely involve more of the same tactics.

He said the University has made the case to the city to the point that in Manhattanville will bring enormous benefits to the community. Columbia, the largest private employer in New York City, has a deep stake in the right kind of job training: "We are working with an assumption that job training in the area needs to do more than teach new skills. It can do well, or data suggest, that can be done well. The only thing that really works—but it can work—

of gentrification and "cultural dilution" that might accompany Columbia expansion efforts.

Without prompting, Bollinger mentioned Columbia's recent mistake involving admissions to its new elementary school at 101st Street. He said the depart-

training people for specific jobs." He said that Columbia can pro-

vide cultural opportunities that will complement and enhance the programs of Harlem arts organizations. He addressed concerns expressed by senators about the dangers to the Harlem community

UNIVERSITY RECORD November 12, 2001 3

The Graduate School of Journalism recently presented the second annual Kurt Schork Awards in international journalism to Elizabeth Rubin, freelance reporter for The New York Times Magazine, The Atlantic Monthly and The New Republic, and Asha Khurshudian (Cherniau, India) reporter for Frontline, a bi-weekly magazine published in India. The awards honor the freelance reporter Kurt Schork, who was killed in a military ambush while on assignment for Reuters in May 2000. They recognize exceptional reporting that sheds new light on controversial issues, including conflicts, human-rights concerns or cross-border issues in a particular country or region. An international panel of judges each year selects a freelance journalist of any nationality covering international news, and a local reporter in a developing country or region in transition. Following the ceremony, Christiane Amanpour, chief international correspondent. CNN, moderated a panel discussion on "Conflict, Controversy and Courage: The Challenges of Reporting in a Climate of News Management" featuring Paul Holmes, editor, political and general news, Reuters, and the 2003 Kurt Schork Award winners. (Pictured from left are Amanpour, Steve Jukes, Reuters; Khurshudian; Rubin; and Sabina Cone, chair of the Kurt Schork Memorial Fund.)

PHOTO BY PHOTOGRAPH BY ELIZABETH DAVIS-KELLY

and Imaginative World; and Homemade and Global: The Late Modern History of Italian Food.

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Columbia Celebrates Lou Gehrig's 100th Birthday in the Low Library Rotunda

On Nov. 3, Columbia and the Eleanor and Lou Gehrig MDA/ALS Research Center sponsored a gala celebration and exhibition in honor of Lou Gehrig's centennial birthday. Gehrig, a Columbia College alumnus before becoming a baseball legend, died of amyotrophic lateral sclerosis (often called Lou Gehrig's disease or ALS), a degenerative disease of the nervous system that usually is fatal within three to five years of diagnosis.

The unique event featured rare Gehrig memorabilia on loan from the National Baseball Hall of Fame in Cooperstown, N.Y. The birthday gala is one of several events planned to celebrate the 250th anniversary of Columbia University and marks one of the rare times the Hall of Fame has lent part of its collection to another institution.

The Lou Gehrig Centennial Birthday Celebration will benefit the Eleanor and Lou Gehrig MDA/ALS Research Center at Columbia University, established by the Gehrig estate in 1987. The center's mission is to further ALS treatment and research with an eye toward its eradication over the next decade. The Eleanor and Lou Gehrig MDA/ALS Center sees approximately 300 new patients annually from the United States and abroad, each of whom presents a special set of needs. The center's ALS experts are able to offer patients state-of-the-art neurological evaluation diagnostics, multidisciplinary care and clinical tests.

Ronald Breslow Receives Welch Award in Chemistry for Lifetime Achievements

(Continued from Page 1.)

SIPA's Merit Janow appointed to World Trade Organization's Seven-Member Appellate Body

By KATHERINE MOORE

Members of the World Trade Organization (WTO) appointed Columbia University's Merit E. Janow to its Appellate Body, Friday, Nov. 7. Janow, professor in the practice of international economic law at the School of International and Public Affairs (SIPA), is the only North American representative on the prestigious seven-member body.

Replacing James Bacchus, former U.S. Congressman, she will serve a four-year term. The Appellate Body is tasked with hearing appeals relating to issues of law and legal interpretations developed by dispute settlement panels.

"I am very pleased with today's decision to appoint Merit Janow," said U.S. Trade Representative Robert Zoellick in a USTR press release issued on Friday, Nov. 7. "Professor Janow embodies the qualities we seek in the Appellate Body itself: integrity, public and professional experience on a broad spectrum of issues and judicial temperament to ensure the highest level of objectivity." USTR nominated Janow and one other American for the post in late October.

Janow joined Columbia in 1994 and currently teaches courses in international economic law and trade policy at SIPA and international trade law and antitrust at Columbia Law School. Before joining the Columbia faculty, she was Deputy Assistant Trade Representative for Japan and China (1990-1993), and practiced as a corporate attorney for Skadden, Arps, Slate, Meagher & Flom in New York, where she worked on domestic and cross-border mergers and acquisitions.

Janow is the author of numerous publications on U.S.-Japan and U.S.-Asian economic and trade relations as well as on international economic law and policy. She served as Executive Director of an international antitrust advisory committee to the Attorney General, Assistant Attorney General for Antitrust and as a WTO panelist in a 2001-2002 trade dispute European Communities—Trade Description of Sardines (WT/DS231). She received a law degree from Columbia.

"It is a great honor to serve on the Appellate Body. I welcome the opportunity to work with its members," said Janow. "The dispute settlement system is an important initiative that came out of the Uruguay Round." (The Uruguay Round was a series of trade negotiations from 1986-1994 that lead to the establishment of the WTO.)

The Janow nomination was confirmed by the full WTO membership in a Nov. 7 Dispute Settlement Understanding (DSU) meeting and a statement announcing her selection was issued the same day. According to USTR, it "...was the result of a recommendation from a WTO selection committee composed of diplomats from all over the world serving as the secretaries of the key WTO committees."

The WTO also reappointed three other members to the Appellate Body last week including Georges Michel Ah-Saab of Lebanon, James A. Flannery, and Koji Ikeda.

Mary Robinson Speaks at SIPA


The late Leo Silver, a New Jersey industrialist, left a generous estate to Columbia after the Gabriel Silver Lectures in 1949 in memory of his father. Previous lecturers have included Dwight D. Eisenhower and Boutros Boutros-Ghali.
Wallach Art Gallery Exhibition Reflects on the Neiman Center's Seven Years in Print

BY KRISTIN STERLING

In an age of digital reproduction and the purported obsolescence of limited edition prints, the LeRoy Neiman Center for Print Studies offers a timely counterpoint. It suggests that the medium of printmaking continues to offer itself up to reinvention. The exhibition is a survey of the innovative artists whose work has been used at the University's LeRoy Neiman Center for Print Studies since the Center's inception in 1995. Reflection presents work by 11 contemporary artists of major caliber—Eric Fischl, Lee Friedlander, Carl Fudge, Ellen Galagher, Tim Gardner, Elliott Green, Lee LeRoy Neiman, Alexis Rockman, Kiki Smith, and 2003 MacArthur Fellow Kermit Wallach. Nearly 100 prints representing a wide range of techniques—including offset lithography, etchings, gravures, letterpress, intaglio, silkscreen, and chine-collé—will be on view through Saturday, Dec. 13.

Among the prints is a series of ten etchings of antique typewriters by William Kentridge that exploits the gummy quality of the sugar-lift line to conjure up the somewhat blurry, irregular quality of the type produced by such machines, which in the modern age of laser printing has all but disappeared. Kentridge created these etchings while serving as artist-in-residence at the School of the Arts. Similarly, Kiki Smith in her triptych 'Moon Three' looks to the special qualities of landscape with its inkys blackness to elicit the flickering of the full moons set within a grid. Eric Fischl takes advantage of the Center's large Dufa VII offset press (a rarity in fine-art printmaking shops) in his trial of offset lithography, "Move", "Tumble" and "Watch", to create the effects of translucent watercolors and splotches. In an innovative and ambitious combination of offset lithography, silkscreen, and chine collé, Sze's two-print project 'Day' and 'Night' achieves a print equivalent, in both scale and imagery, to the artist's sculptural installations in which a myriad small components are magically brought together in room-size assemblages balanced or suspended in seeming defiance of gravity. Founded with a generous gift from the artist LeRoy Neiman and his wife Janet, The LeRoy Neiman Center for Print Studies at Columbia University is dedicated to the advancement of printmaking through education and the production and exhibition of prints. As a central part of its mission, the Neiman Center invites printmakers—both emerging and established—to produce edition prints, and provides them with an abundance of time, materials, and skilled technical assistance. The exhibition includes editions produced while the artist was in residence at the Neiman Center, working closely with master printers and printmakers in training and receiving active assistance from both undergraduate and graduate students in the Visual Arts Division of Columbia University's School of the Arts. The projects produced at the Center embrace a complexity and ambition that are made possible from the ample time and generous resources provided by the Neiman Center and its unique access to the resources of a leading university. The Wallach Art Gallery is located in Schermerhorn Hall, 8th Floor; Gallery hours: Wednesday through Saturday, from 1:00 to 5:00 p.m.

International Space Station Incorporates Columbia's Kermit Software Program

BY MICHAEL LARKIN

Created almost 25 years ago by Columbia's academic computing center to help manage the high demand on the University's mainframes, a software program known as Kermit has left the only way to the International Space Station where it is being used in a scientific experiment.

The software, which is installed on two different computer systems to interact, Kermit was used to solve a compatibility problem on the space station. Using two versions of the program, one of which was modified specifically for NASA, an experimental device referred to as a CLSM-2 can now share information with another computer on board the space station that transmits data back to earth.

"Kermit and Kermit 95 have been invaluable tools to improve our computing efficiency, both in development and in the final operational system," wrote Dave Hall, senior engineer, ZIN Technologies on Kermit's Columbia website. The significance of Kermit is not entirely its invention or its inclusion in the state-of-the-art experiment, but its ability to evolve and to retain its viability in the always-expanding computer industry.

And as one of its creators admits, it was never imagined that Kermit would develop the way it did. "Nobody expected the protocol and software to become a worldwide fact of standard, but even if we had, there are not many things we would have done differently, except in choosing a name," said Frank da Cruz, a manager who has worked on the project since its inception. He recalled amusingly how a picture of the friendly green amphibian swayed his judgment when it came time to name the project.

According to da Cruz, Kermit meets the strain on the University's academic mainframe computers in the late 1970's, which could only provide 35KB of storage per student. Columbia employees developed a protocol to transfer information from the mainframes to floppy disks through microcomputers that were installed around the university. The first Kermit file transfer occurred in April 1981.

The introduction and ensuing popularity of IBM's personal computer (PC) prompted the French and German Kermits. The University adapted the Kermit protocol to address the PC's incompatibility with Columbia's other computers and released it in January 1983. The PC version proved widely popular and was the subject of books published in English, French, German and Japanese.

At the same time, Kermit programs were developed for mini-computers being used in several Columbia departments. Its popularity continued to grow through the mid-1980s, and by 1986, Kermit was well established in Columbia and a fixture at many other universities, government agencies and companies worldwide.

Through the years, hundreds of Kermit programs have been written for universities and research centers distributed through the project. In the early 1990s, Kermit software was translated into Russian, Hebrew, Japanese, Polish and many other languages, some even by students in their senior project classes and the new Universal Kermit Character Set.

At conferences in Europe, the Soviet Union, and Japan, we quickly came to appreciate the enormous demand for computer communication in diverse languages and writing systems, and worked to make it a reality," said da Cruz.

Kermit 95, which was created for Windows 95 and its successors, was licensed to universities such as Harvard, Dartmouth, Princeton, Stanford and the University of Tokyo college system; and was bulk licensed to over 800 companies and government agencies worldwide. Kermit was initially shared with other organizations at no cost, despite the fact that it used a great amount of resources to coordinate the writing of new programs to archive results and to distribute the software. But in 1986, the Kermit Project was formed and distribution fees were established. Today, the project is entirely self-sufficient.

Despite the requirement to fund itself through the commercial licensing of its products, the Kermit Project has remained dedicated to making sure the program is available for humanitarian causes. Kermit was used in the relief mission in Bosnia and by HIV/AIDS researchers in England, and it provided the communications backbone for the 1994 Brazilian national elections, the largest and most complex in history up to that time. "We enjoy the work, the technical challenges, the contact with people around the world, and the chance to lend a hand when we can," said da Cruz.

In recent years, the Internet and the World Wide Web have surpassed Kermit as a popular desktop communications tool for "ordinary users," but Kermit continues to be an invaluable asset in more specialized areas, such as the Space Station experiment.

"By keeping pace with evolving technology and the increasing demand for security and automation, Kermit has grown into a powerful tool for the creation of secure communications application and continues to thrive in the medical, scientific, engineering, manufacturing, and business sectors," said da Cruz.

Visit the Kermit Project website at www.columbia.edu/kermit.
Profile of a Dean: Anderson At the Reins of the School of International and Public Affairs

By Katherine Moore

From serving as an Iraq expert for Rolling Stone magazine, to traveling throughout the world, to teaching and staying in touch with SIPA alumni, Lisa Anderson is at the top of her game. She is one of the most influential and respected deans at Columbia, chair of the Social Sciences Committee and the Board of Trustees' president of the Middle East Studies Association. Anderson oversees 1,200 full-time students, currently with 75 core faculty members, and helps direct SIPA's world-class research programs and regional institutes.

Taking over the reins of Columbia's global public affairs school in 1997, Anderson focused on improving SIPA's world-class research capacity and international standing, as well as developing a vigorous fundraising campaign and strengthening the University's network. Under her watch, SIPA has become an recognizable to would-be graduate students and potential employers as Harvard's Kennedy School, Sciences Po or the London School of Economics.

"During her tenure as dean, Lisa Anderson has reinvigorated the profile and enhanced the capabilities of SIPA," said Ira Katzangelog, Columbia's Acting Vice President and Dean of the Faculty of Arts and Sciences. "As a vibrantly intellectual who reflects deeply on ties linking policy schools to academic departments and wider publics, she has led Columbia's efforts to deepen its global character and educate tomorrow's public servants by equippeing them with the tools necessary to confront our most vexing challenges."

Mexicans Are New York City's Fastest Growing Ethnic Group

Mexicans are New York City's fastest growing ethnic group according to a new Census 2000 report released by the New York Public Library. The report shows that Mexicans now make up the largest minority group in the city, with a population of 1,058,000, or 7.1% of the city's total population. The report also shows that the number of Mexicans in New York City has increased by 40% since 1990.

Jeffrey Sachs Elected to the Institute of Medicine

Columbia's Earth Institute Director Jeffrey Sachs has been elected to the Institute of Medicine of the National Academy of Sciences. Members are elected each year on the basis of professional achievement and demonstrated interest, concern and involvement with critical issues that affect public health. Only one-quarter of new members are selected from outside the field of medicine.

"In this extraordinary leadership and global vision regarding the bridging of development economics and health, I am leadership to the state and global, to an even greater extent, to those who will address global health issues," said the Institute of Medicine.

Jeffrey Sachs

2000-2001, he was Chairman of the Institute of Medicine on Macroeco- nomic and Health: The World Health Organization. As Director of the Earth Institute, he was instrumental in creating the Center for Global Health and Economic Development (CGHED), a unique collaboration between the Mailman School of Public Health and the Earth Institute. Through his work with the United Nations, the World Health Organization, and private sectors, Sachs has been instrumental in addressing critical global health issues.

Sachs, who is Professor of Health Policy and Management at the Columbia School of Public Health as well as being director of the Earth Institute and Quelch Institute for Sustainable Development, has been involved in providing health care to the world's poor. During
TALKS


14TH, FRID. 12:00 P.M., "Recent Developments on the Human Rights Front," Jesse G. Steinmeier, director, H.D. Foundation. WEAI. 854-2592. 1191 AAB.


20TH, THU. 5:30 P.M., "Italy," Corey S. Ohr, Yale. APAM. 854-4457. 214 Mudd.

26TH, WED. 6:00 P.M., "Community Hearing with the Advisory Committee on Socially Responsible Investing," For more info, visit www.columbia.edu/secretary/SRI. 101 Greene Hall.


EXHIBITS


12TH, WED. 12:00 P.M., "Climate and Extravagance: Practicing Environmental Consciousness in Human's Xiansti Village," Yu-Ting Chao, National Taiwan U. WEAI. 854-2592. 1191 AAB.


20TH, THUR. 11:45 A.M., ICGT Colloquium: "What do you get when you mix 100 billion bacteria?" David Liberator, University of California, Berkeley. 1100 III.


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Researchers Improve Remote Mapping Techniques for Assessment of Disaster Zones

By Mary Tobin

Rapidly assessing land damage and responding to natural disasters such as floods and fires is key to saving lives. Until now, however, rescue efforts have been hampered by the limitations of the technology commonly used to identify the disaster areas.

Research by scientists at the Lamont-Doherty Earth Observatory at Columbia University shows that Synthetic Aperture Radar (SAR) polarimetry is a more superior technology for rapidly identifying disaster zones than the currently used optical remote sensing technologies, such as Landsat and SPOT. Their findings are published in the Journal of Geophysical Research, and coincide with an opportunity to outfit satellites scheduled for deployment in 2004 with SAR polarimetry instruments.

SAR mapping has a clear advantage over optical mapping—the results are not hindered by darkness, clouds, or the smoke and dust frequently associated with disaster zones. This new SAR research marks the initial step in developing radar-based maps of damaged landscapes that can be rapidly provided to rescue workers.

Kristina Czuchlewski and Jef- frey Weissel, Lamont-Doherty Earth Observatory at Columbia and Tunjin Kim, Jet Propulsion Laboratory at California Institute of Technology, have developed a classification system for turning the data acquired by SAR into detailed maps depicting landscape elements such as water, vegetation, landslides, and buildings on a per-pixel basis (for areas as small as 5 x 5 m).

Czuchlewski and her team evaluated the effectiveness of using SAR polarimetry by mapping the massive Tsaoiling landslide that resulted from the 1999 earthquake (magnitude 7.6) in Taiwan, damaging highway transportation systems and isolating communities in the area. The Tsaoiling landslide slid into the Chingshaichi Valley killing 34 people and requiring rapid construction of a new road to facilitate rescue efforts. Debris covered about 1.3 square miles of the Valley floor, damming the river and forming an artificial lake that had to be drained to avoid the possibility of dam failure during the monsoon rains.

“Our SAR polarimetry data was taken one year after the Tsaoiling landslide occurred. When you compare this map to the one generated from the Landsat optical data just 3 months after ours, we find SAR polarimetry to be equally proficient, with the critical added advantage of not needing clear skies to get an image,” said Czuchlewski, who is a doctoral candidate, in the Department of Earth and Environmental Sciences, Columbia.

The researchers currently utilize NASA’s AIRSAR DC-8 aircraft to collect SAR polarimetry data. Electromagnetic energy is transmitted from the aircraft to the disaster zone and measures the electric field backscatter. This backscatter is then further processed to determine scattering mechanisms, or the "fingerprint," of the surface material. The different types of scattering mechanisms are applied to the various elements of the terrain. For example, backscatter from bare, rough surfaces generally consists of a single "bounce" back toward the receiving antenna. In contrast, backscatter from leafy trees is diffuse, becoming more random as the radar wave interacts with the trunks, branches, and leaves of the canopy. These fundamental properties of the surface can be easily extracted from fully-polarimetric SAR because this type of data records the amplitude and phase of the backscattered electric field, allowing us to measure the normalized and random bounce occurring within each pixel. Optical imagery, on the other hand, detects those different surface cover types based on their electromagnetic signature at very short wavelengths. Instead of scattering, optical techniques measure reflectance, a property that is strongly disturbed by the atmosphere and dependent on the sun’s energy.

Lamont-Doherty Earth Observatory researchers are also conducting studies to apply SAR polarimetry mapping to other natural disaster sites, including those devastated by wildfires and lava flows. “If carried aboard a fleet of robotic, unmanned aerial vehicles (UAVs) instead of on satellites, SAR polarimeters could be rapidly deployed in a cost-effective way to disaster sites anywhere on the globe,” said Jeffrey Weissel, Doherty Senior Scholar and leader of the research team at Lamont-Doherty Earth Observatory. “We could take advantage of the long endurance of UAVs to monitor the development of emerging disasters such as floods, wildfires and volcanic eruptions. In this way, SAR-based disaster response technology could play a vital role in evacuating populations placed at risk by many different kinds of natural disasters.”

The Tsaoiling landslide research was supported by the NASA Solid Earth & Natural Hazards program and an Earth System Science Fellowship award.

SAR technology may assist with disasters such as the recent California wildfires. “SAR is a great tool for characterizing the damage to forests because the different elements of trees create a different backscatter signature,” Czuchlewski explains. “Needles are different from branches which are different from trunks. SAR should become instrumental in the forest and landscape fire-recovery phases because it can help determine where to focus rehabilitation efforts.”

For more information at Czuchlewski’s research Website, go to: http://www.ldeo.columbia.edu/~kczuch

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Anthropologist, curator, teacher, activist—Margaret Mead changed the world and how we see it. Read about her and other remarkable Columbians on the Columbia 250 website.