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Global Health Matters

News from the John E. Fogarty International Center

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FIC Announces Awardees of International Clinical Research Training Fellowships

On August 4, FIC announced the year 2005 awardees of the FIC/Ellison Overseas Fellowships in Global Health and Clinical Research Program, a training program for U.S. and low- and middle-income country students in the health sciences. FIC selects top-notch medical, dental, and public health graduate students from the United States and from the foreign sites. These paired student awardees receive one year of mentored clinical research training at an NIH-funded institution in a developing country. The students will obtain a significant experience with clinical research and will work together.

FIC, the Ellison Medical Foundation, and the NIH's National Center on Minority Health and Health Disparities, National Institute on Drug Abuse, and National Institute of Allergy and Infectious Diseases

jointly support the fellowship program. The Association of American Medical Colleges and the Association of Schools of Public Health provide program support for recruitment, review, and matching.

"Increasing the numbers of clinical researchers with practical experience in research-poor settings will enhance our ability to tackle global health challenges," said Sharon H. Hrynkow, Ph.D., FIC Acting Director, on behalf of FIC and its partners. "Projects on AIDS and related opportunistic infections, malaria, sexually transmitted infections, and non-infectious disease issues such as reproductive health provide new insights for tomorrow's clinical leaders, both in the United States and in low- and middle-income nations."

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The FIC/Ellison fellows for 2005



Sharon H. Hrynkow, Ph.D.,
Acting Director, FIC

Message from the Director

In this issue of *Global Health Matters*, we report on a sampling of activities supported by FIC over the past several months. These range from the announcement of the second class of more than 50 FIC-Ellison Fellows, who will spend the next year training in clinical research in a developing country, to the scientific presentations of the 45 FIC/NIH GRIP Fellows and the reception honoring them, attended by Congressman Fogarty's daughter and the NIH Director, to FIC's many scientific and diplomatic outreach activities, including those involving India, China, Malaysia, and Chile.

As we work to develop and support the most effective research and training programs in global health and to advance the NIH mission through international partnerships, it is the FIC staff, working as a team, that allows advances to be made. In this Message, I would like to pay tribute to the hardworking, dedicated, and talented FIC staff.

FIC's senior scientific staff includes experts in epidemiology, occupational health, infectious diseases, oncology, public health, neuroscience, foreign relations, and other fields. Each member of our senior team brings to FIC both technical expertise and hands-on experience in the international arena. Many have lived and worked in developing countries and add their practical wisdom as FIC considers potential new programs or initiatives reaching poorer countries. The efforts of several members of our senior team are highlighted in the current issue, but there are many more not highlighted simply for lack of space.

Equally important are the many support staff who keep the FIC engine humming and in good working order. Their efforts are often not seen by outside groups. But because of the energy, dedication, and skill of FIC's administrative, grants, secretarial, and other support systems, the whole of the operation moves forward. Without them, the visible effort highlighted in the present report would simply not happen.

Vince Lombardi, a highly acclaimed coach in the NFL, once said, "Individual commitment to a group effort—that is what makes a team work, a company work, a society work, a civilization work." I applaud the individual commitment of each FIC staff member working to address global health challenges and to improve international cooperation in biomedical and behavioral research—for the benefit of all.

A handwritten signature in blue ink that reads "Sharon Hrynkow". The signature is fluid and cursive, with the first name being the most prominent.

India and the U.S. Sign Statement on Vision Research

On August 24, FIC and the National Eye Institute (NEI) announced the signing of an Indo-U.S. Statement of Intent for collaboration on expansion of vision research. The agreement, signed by Dr. Maharaj Kisan Bhan, Secretary of the Indian Department of Biotechnology (DBT), and Elias A. Zerhouni, M.D., Director of the U.S. National Institutes of Health, symbolizes an increased commitment to collaboration on eye disorders.

“Our scientific collaborations with colleagues in India are strong. Through this agreement, they will become even stronger,” said Dr. Zerhouni. “With the rising global burden of disability and suffering posed by eye disorders, partnerships such as the one we forged today are increasingly critical.”

Dr. Bhan said, “The leaders of India, the world’s largest democracy, are striving to improve the eye health of our people. We are very concerned about the toll of many vision disorders on our well-being. Through this collaboration, we are confident that India will gain important new knowledge for the protection of sight and for the prevention of vision loss.”

Eye disorders are responsible for 3.1 percent of the global burden of disease, according to *The World Health Report 2003* produced by the World Health Organization. These disorders rank ninth in Global Disease Burden, behind such diseases as HIV/AIDS, malaria, and perinatal conditions. Worldwide, more than 37 million people are blind. In India, the number is more than 12 million; in the United States, over 1 million. The societal cost of visual disorders and disabilities in the United States exceeds \$67 billion. For India, the World Bank committed nearly \$100 million to cataract blindness control programs from 1994 to 2001.

NEI has a historic relationship with India dating back to the 1980’s. Dr. Paul A. Sieving, NEI Director, is building on earlier efforts through enhanced

vision research collaborations. The agreement follows two Indo-U.S. workshops on expansion of collaborative research held this year in India and the United States. With funding through a cooperative agreement with the NEI, the Association for Research in Vision and Ophthalmology arranged the workshops held in February and April.

The workshops explored and identified complementary scientific intellectual and fiscal resources in the United States and India to enhance and accelerate clinical and basic vision research through active collaborations between research intuitions and scientists in the two countries. Thirty delegates from 20 U.S. institutions and 25 delegates from five vision research centers in India held discussions in five different topical areas: molecular genetics of eye diseases; clinical aspects of genetic eye diseases; harmonization of clinical measurement techniques and terminology; translational physiology; and identification, development, and exchange of research resources.

“I am very enthusiastic about the potential for this agreement between India and the United States,” said Dr. Sieving. “India has a well-trained and dedicated technical workforce and the will to tackle seemingly intractable problems through research. This is very much on par with our own approach and determination.”

The agreement was signed on August 24 at the Lawton Chiles International House on the NIH campus in Bethesda, Maryland and witnessed by members of the diplomatic corps as well as by NIH senior scientists. ♦



Maharaj K. Bhan, and NIH Director Elias A. Zerhouni, M.D., are shown signing the Statement of Intent. Looking on are Tina Chung, M.P.H., FIC Program Officer, and Dr. Kamal Kant Dwivedi, Counselor for Science and Technology at the Indian Embassy in Washington, D.C.

New Members Join FIC Advisory Board

The two newest members of the FIC Advisory Board are (first row, from left) Dr. Arthur Kleinman of Harvard University and Dr. William A. Vega of the Robert Wood Johnson Medical School, Piscataway, New Jersey. Dr. Kleinman is the Esther and Sidney Rabb Professor and Chairman of the Department of Anthropology, while Dr. Vega is a Professor of Psychiatry. Also shown (in first row) are Drs. Sharon H. Hrynkow and Lee W. Riley. In the second row (from left) are Drs. Sharon L. Ramey, Ilona Kickbusch, Patricia M. Danzon, and Douglas C. Heimburger. In the third row (from left) are Drs. Robert R. Redfield, Vinton Cerf, and Jeff Reading.



The FIC Advisory Board

Dr. Kickbusch of Switzerland, Senior Advisor on Health Policy in the Federal Office of Public Health, was a guest speaker at the May meeting where she spoke on the Interface of Gender, Globalization, and Global Health. Dr. Cerf, co-creator of the Internet and now Vice President for Technology Strategy at MCI spoke on Internet and Healthcare: New Opportunities for the Twenty-first Century. Dr. Reading, the scientific director of the Institute of Aboriginal Peoples' Health, Canadian Institutes of Health Research, spoke on a Global Perspective of Indigenous People. ♦

Mollie Fletcher Takes New Job in NIH OD

FIC Acting Director Sharon H. Hrynkow, Ph.D., honored Mollie Fletcher for her more than six years of outstanding service as the lead secretary within the Office of the FIC Director. Mrs. Fletcher left FIC for a new position within the Executive Secretariat in the Office of the NIH Director. At a farewell reception, Dr. Hrynkow discussed highlights of the important roles Ms. Fletcher had played in FIC's management and diplomacy.



Mollie Fletcher (left) with FIC Acting Director Sharon H. Hrynkow, Ph.D.

Farewell, Rob Eiss

Robert Eiss, Senior Advisor for Strategic Initiatives and Acting Director of the Division of International Relations, is leaving Fogarty for a new position as CEO of the Center for Management of Intellectual Property in Health Research (MIHR), an organization based in Oxford, UK. Mr. Eiss has served at FIC in a variety of capacities over 12 years, starting as a Program Officer in the Division of International Relations, then serving as Director of the Office of International Science Policy and Analysis. His contributions to the Center are many, including leadership in developing the FIC Strategic Plan 2000-2003, which set the basis for much of FIC's new efforts in the chronic disease arena, and providing the analytic framework for NIH investments in Africa that ultimately led to the Multilateral Initiative on Malaria. ♦

Dr. Herrington Is Named Division Director; Dr. Davis, Ms. Chung Are Program Officers

FIC Acting Director Sharon H. Hrynkow, Ph.D., has announced the appointment of three officials to the FIC Division of International Relations (DIR). James Herrington, Ph.D., is the new DIR Director; Elizabeth Ann Davis, Ph.D., D.V.M., is the new DIR Program Officer for Europe; and Tina Chung, M.P.H., is the new DIR Program Officer for Asia and the Pacific.

Since 2000, Dr. Herrington has been on assignment with the United Nations Foundation, where he provided scientific expertise to senior staff in the program areas of women's and children's health, population studies, HIV/AIDS, and the environment. Also, he has been a CDC Health Scientist with 24 years of experience in international public health program design and evaluation.

During his career, he has focused on Africa and the Caribbean with long-term assignments in Senegal (Peace Corps), Cote d'Ivoire, Nigeria, and Haiti.

Dr. Herrington holds a Ph.D. in environmental health and epidemiology from Colorado State University, Fort Collins; an M.P.H. from the University of North Carolina at Chapel Hill; and a B.S. from Texas A&M University, College Station.

Dr. Davis is a veterinarian and epidemiologist who has served as a Foreign Service Officer for the U.S. Agency for International Development and the U.S. Department of Agriculture in Central America, a U.S. Army field virologist at NAMRU-2 in Indonesia, and a former research and clinical microbiologist in both industry and academia.

During her recent assignment in Central America, Dr. Davis collaborated with CDC-MERTU Laboratories based in Guatemala to expand the diagnostic

capabilities for vector-borne viruses, most notably West Nile virus, and to develop in-country training courses in geographic information systems and epidemiology.

Dr. Davis holds a D.V.M. degree from the Virginia-Maryland Regional College of Veterinary Medicine at Virginia Tech, an M.P.H. from the University of North Carolina at Chapel Hill, and a B.S. in molecular biology/microbiology from Oklahoma State University.

Ms. Chung comes to FIC from the Office of Global Health Affairs (OGHA), Office of the Secretary, HHS. At OGHA, she served as an International Health Officer covering multilateral affairs. In this capacity, she coordinated and monitored HHS' interest with multilateral organizations (e.g., WHO, UNICEF, OECD) and the U.S. government's policies and decisions in health and health-related areas for implementation by international organizations.

Ms. Chung has served on numerous U.S. delegations, including the World Health Assembly, the WHO/Western Pacific Regional Meeting, and UNICEF. Prior to her duties in multilateral affairs, she was the Public Health Advisor overseeing the Asia and Pacific region for OGHA. During her time in the Asia bilateral program, Ms. Chung was detailed to Beijing for three months to assist the CDC in laying the groundwork for an assessment on HIV/AIDS in China. The assessment eventually led CDC to include China as one of its priority countries and to the subsequent placement of two permanent CDC staff members to coordinate its in-country HIV/AIDS program. Ms. Chung holds an M.P.H. from Yale University and a BA from Middlebury College. ♦



James Herrington, Ph.D.



Elizabeth Ann Davis, Ph.D., D.V.M.



Tina Chung, M.P.H.

FIC's Biodiversity Program: Recent Accomplishments

The FIC/NIH/NSF/USDA International Cooperative Biodiversity Groups (ICBG) Program supports screening of flora, fauna, and microorganisms to discover new drug candidates in the context of promoting biodiversity conservation and scientific development in partner countries. Many view it as a model program since it brings together university scientists, conservationists, indigenous peoples and groups, and pharmaceutical companies in a formal

relationship. A range of early stage drug candidates have been identified through the program, which operates in 14 countries in Latin America, Africa, Southeast and Central Asia, and the Middle East. As with any scientific venture, oftentimes new discoveries or outcomes are made that were unanticipated. The following two stories are exciting spin-offs from the ICBG. ♦

Scientists Help Fijians Conserve Coral Reef

In the South Pacific islands of Fiji, coastal villagers are beginning to reap much-needed financial benefits from conserving the beautiful tropical environment they treasure as a family heirloom. In a unique project that combines environmental conservation, economic development, and drug discovery research, scientists and policy experts led by the Georgia Institute of Technology are collaborating with the villagers of Tagaqe and the University of the South Pacific to explore, protect, and generate income for islanders from their coral reef. The project was part of an ICBG planning grant funded primarily by FIC.

Instead of breaking off pieces of live coral reef substrate-called "live rock" for sale to the saltwater aquarium industry, villagers planted a crop of synthetic rock that becomes naturally covered by desirable species. Villagers recently harvested it.

The project, devised and negotiated by the researchers, is intended to reward villagers now for conserving the reef they need to make a living in the future—including potential income from the discovery of drug compounds in reef organisms. Other Fijian villages are interested in starting similar efforts, researchers said.

The project calls for villagers to keep half of the profits and reinvest half to start another crop. A Fijian aquarium company, Walt Smith International, has agreed to buy the synthetic rock and market it as a "green" product to individual and public aquariums around the world. Studies at the University of the South Pacific have shown that the organisms that live on cultivated rock are as effective as those on live rock in purifying aquarium water.

The Georgia Aquarium, scheduled to open in Atlanta on Nov. 23, has confirmed that it plans to use the cultivated rock in its exhibits. Founder Bernie Marcus said, "This is a great way to promote conservation of coral reefs, help generate the economy for local villagers of Fiji and provide the aquarium with valuable 'green' live rock." An added benefit is the possible discovery of new drugs in Georgia Tech studies of Fijian coral reef organisms, Mr. Marcus noted.

Georgia Tech Professor of Biology Terry Snell, Ph.D. who helped lead the conservation effort in Fiji, said, "The villagers have been enthusiastic about the project. They want to conserve the reef so they can pass it on to their children so they can make a living in the village."

Conservation of coral reef ecosystems is also important because the study of organisms inhabiting them holds significant potential for the discovery of new drugs, including antibiotics and anti-cancer agents, researchers believe.

In particular, reefs in tropical, less developed countries, such as Fiji, hold the greatest promise because of high species diversity and the tendency of organisms in these habitats to fight back against predators, competitors, and pathogens by evolving chemical defenses, explained Georgia Tech Professor of Biology Mark Hay, Ph.D., the project's principal investigator. But species are being lost at dramatic rates as live rock is harvested and reefs are damaged by environmental stress and the effects of overfishing. Researchers are evaluating the effects on the Fiji reef as part of this project. ♦

Coiba National Park in Panama Is Named a World Heritage Site

The United Nations has designated seven new “World Heritage Sites,” which are places the UN considers to be of outstanding value to all humanity. One of the newly named sites—Panama’s Coiba National Park—is the location of an ICBG-funded research project involving exotic animals and plants.



Coiba National Park

Scientists from the Smithsonian Tropical Research Institute (STRI) work with counterparts at partner Panamanian institutions and Oregon State University to inventory and screen plants and marine organisms for potential drug candidates.

“Coiba is a continental island that has been isolated long enough to offer researchers exciting, unspoiled data about biological science,” said Dr. Ira Rubinoff, the Director of the Smithsonian Tropical Research Institute (STRI).

Since Coiba was used as a penitentiary for nearly 100 years, the park has been largely insulated from commercial and residential development.

“Some species—including the scarlet macaw—which are extinct in the adjacent mainland are still thriving in Coiba,” said Dr. Rubinoff. “Also preserved are rare trees and plants, which have possible value in drug discovery. Also potentially important to biomedical science are the reefs that surround the adjacent islands. Research and conservation efforts are working together in Coiba for global health benefits.”

Dr. Todd Capson, STRI Associate Scientist, working with the Panama National Authority of the Environment, played a major role in coordinating the effort to nominate and support Coiba for world heritage status. ♦

Upcoming Events

October

- 7 Lawton Chiles International Lecture on Maternal and Child Health in the Americas, NIH campus, Bethesda, Maryland
- 12–14 International Cooperation on Alcohol Abuse and Alcoholism, Shanghai, China
- 26 FIC meets with universities on global health

November

- 3–4 NIH NLM Global Health Histories Symposium, Bethesda, Maryland
- 13–16 Multilateral Initiative on Malaria Conference, Yaounde, Cameroon
- 13–16 International Society for Neuroscience Conference, Washington, DC

December

- 1 World AIDS Day
- 12 Board of the Global Fund, Morocco

Congressman Fogarty's Daughter, Mary McAndrew, Greets GRIP Awardees

Mrs. Mary McAndrew, daughter of the late Congressman John E. Fogarty, joined NIH Director Elias A. Zerhouni, M.D., and FIC Acting Director Sharon H. Hrynkow, Ph.D., in honoring the 45 awardees of the FIC Global Health Research Initiative Program for New Foreign Investigators (GRIP).



NIH Director Elias A. Zerhouni, M.D., with Mary McAndrew

The GRIP (R01) provides \$50,000 per year for up to five years when the scientist returns home. The GRIP is open to scientists from low- and middle-income countries who trained either in the NIH Intramural Research Program (IRP) or through one of the FIC extramural training programs.

The GRIP awardees gathered at NIH for two days to make and hear presentations from each other and to share their views with FIC and its NIH partners on what they would need to remain independent scientists after returning home.

An evening reception was held at the Lawton Chiles International House to allow ambassadors and other diplomats the opportunity to meet the emerging scientific leaders. In the opening remarks, Dr. Zerhouni applauded the awardees for navigating successfully the NIH grants system. He added that they each had important roles and responsibilities on returning home, not only as young scientists but as international scientists. Dr. Hrynkow

shared with the group some of the history and vision of Congressman Fogarty, and she encouraged the GRIP awardees to view themselves as "Fogarty ambassadors," representing the living legacy of Congressman Fogarty's vision of international scientific cooperation.

Dr. Jose Vazquez-Prado, a GRIP recipient and former postdoctoral fellow in the NIH intramural program, shared perspectives on the input of the GRIP in his career. Speaking for all of the GRIP awardees, he discussed how the GRIP allowed him to return to Mexico following his training experience and to develop a team of scientists to work with him. Dr. Vazquez-Prado will study polarized cell migration, including by G protein coupled receptors, which is relevant in physiologic and pathologic processes such as inflammation, neuronal function, and metastasis of cancer cells. ♦



Dr. Jose Vazquez-Prado spoke to the new GRIP awardees about the design of the program, his experience in GRIP, and his recent work as a postdoctoral fellow in the NIH intramural research program.

GRIP Awardees

Kawango E. Agot, Kenya
Alicia Aleman, United States
Marcus V. Andrade, Brazil
Maria L. Araujo, Brazil
Anna Bebenek, Poland
Ximena L. Burbano, Colombia
Mario Caba, Mexico
Sau Man S. Chan, China
Meera K. Chhagan, South Africa
Rosina Cianelli, Chile
Laura Diaz-Cueto, Mexico
Plamen S. Dimitrov, Bulgaria

Shufa Du, United States
Maulidi R. Fataki, Tanzania
Pedro E. Ferrand, Chile
Esteban A. Fridman, Argentina
Saurabh Ghosh, India
Na He, China
Denver T. Hendricks, South Africa
Dong-Yan Jin, China
Chitra Kannabiran, India
James N. Kiarie, Kenya
Edith C. Kordon, Argentina
Mihaly Kovacs, Hungary

Santiago M. Calvillo, Mexico
Victor Mwapasa, Malawi
Edith Nakku-Joloba, Uganda
Joice N. Pedreira, Brazil
Thanyawee Puthanakit, Thailand
Gayatri Ramakrishna, India
Maosheng Ran, China
Ram Rangsin, Thailand
Leopoldo Ribeiro-Filho, Brazil
Sergio Rosenzweig, United States
Gideon Rutaremwa, Uganda
Suneeta Saghayam, India

Rossana Sapiro, Uruguay
Ranjan Sen, India
Jose A. Terron, Mexico
Alice Thienprasert, Thailand
Anneli Uuskula, Estonia
Leos Valasek, Czech Republic
Jose Vazquez-Prado, Mexico
Jinzhong Wang, China
Rosa M. Wong-Chew, Mexico

Chinese Science Leader Meets Top NIH, FIC, NIAAA Officials

The Vice President of the Chinese Academy of Sciences, Dr. Zhu Chen, made an official visit to NIH to meet with NIH Director Elias A. Zerhouni, M.D., FIC Acting Director Sharon H. Hrynkow, Ph.D., and NIAAA Director Ting-Kai Li, M.D. Discussions included strengthening ties in the field of neuroscience and in the control of alcohol abuse. In coming months, FIC will be involved in several special programs in China. Other Chinese visitors were Drs. Yan Wang, Jie Cao, and Sun Hui. Other NIAAA participants were Drs. Zhaoxia Ren and David Lovinger.



Dr. Yan Wang, FIC Acting Director Sharon H. Hrynkow, Ph.D., NIH Director Elias A. Zerhouni, M.D., Dr. Zhu Chen, Dr. Jie Cao, and Dr. Sun Hui

FIC Strengthens Its Ties With Chile

Representatives of the Chile Ministry of Health visited NIH to discuss global health issues involving FIC, the National Heart, Lung, and Blood Institute (NHLBI), and the National Institute of Child Health and Human Development (NICHD). Dr. Roberto Tapia, Director of Chile's Ministry of Health's International Affairs Office, and Dr. Jorge Jimenez, Professor of Public Health at Chile's Catholic University, met with Sharon H. Hrynkow, Ph.D., FIC Acting Director; Dr. Ana Chepelinsky,



Dr. Ana Chepelinsky, Dr. Roberto Tapia, Sharon H. Hrynkow, Ph.D., FIC Acting Director, Ms. Virginia Gidy, and Dr. Jorge Jimenez

FIC Program Director for the Americas; and Virginia Gidy, of the HHS Office of Global Health Affairs. A detailed briefing was also held, in which Drs. Tapia and Jimenez met with Matilde Alvarado, Coordinator of NHLBI's Office of Minority Health Education and Outreach Activities, and Dr. Gregg Morosco, Director of NHLBI's Office of Prevention, Education, and Control. During their visit, the Chilean Health Ministry representatives also met with NICHD's Drs. James Hanson, Danuta Krotoski, and Nancy Moss to discuss disease prevention and global networking in women's and children's health research.



Dr. Roberto Tapia and Dr. Jorge Jimenez with Ms. Matilde Alvarado and Dr. Gregg Morosco

FIC/Ellison Fellows

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In the program, U.S. students are paired with host country students, creating partnerships and contributing to an international community of research scholars. Twenty-seven fellows were selected from 22 U.S. medical schools and five U.S. schools of public health from a pool of 120 highly-qualified U.S. applicants in the second annual competition. Eleven fellows are pursuing dual degree programs (M.D., M.P.H. or M.D., Ph.D.). The foreign sites identified 27 fellows at similar points in their careers. If you have questions about the program, contact Program Director Aron Primack at 301-496-1653. ♦



FIC/Ellison fellows head to Africa.

2005 FIC/Ellison Awardees

U.S./Foreign Fogarty-Ellison Fellows	Foreign Site	U.S./Foreign Site Mentors
Alon Unger , M.D. candidate, University of California, San Francisco Luiz Henrique Santos Guimarães	Bahia, Brazil	Dr. Warren Johnson , Cornell Medical School Dr. Mitermayer Galvão dos Reis , Federal University of Bahia Research: tropical diseases
Joseph Donroe , M.D., M.P.H. candidate, Tufts University School of Medicine Jonathan Sherman , M.D. candidate, Mayo Medical School Anne Griffin , M.D., M.P.H. candidate, Mount Sinai School of Medicine Giselle Soto Martin Tapia	Lima, Peru	Dr. Robert Gilman , Johns Hopkins University Dr. Alberto Ramírez-Ramos , Universidad Peruana Cayetano Heredia Research: emerging infections in Peru
Felicia Chow , M.D. candidate, Johns Hopkins University School of Medicine Carolina Mejia , M.D., M.P.H. candidate, University of Washington Dr. Marizabel Rozas Latorre Dr. Mirtha Nuñez	Peru	Dr. Joseph Zunt , University of Washington Silvia Montano , VAMNRD, Universidad Peruana Cayetano Heredia Research: reduction of HIV transmission by control of sexually transmitted diseases
Louis Didié Herold	Haiti	Drs. Warren Johnson and Dan Fitzgerald , Cornell University Dr. Jean William Pape , Haitian Group for the Study of Kaposi's Sarcoma and Opportunistic Infections (GHESKIO) Research: Kaposi's sarcoma and opportunistic infections
Craig Conard , M.D. candidate, Tulane Medical School Dr. Mahamadoun H. Assadou , University of Bamako	Bamako, Mali	Dr. Chris Plowe , University of Maryland Prof. Ogobara Doumbo , University of Bamako Research: Malaria Research Training Center

2005 FIC/Ellison Awardees (continued)

U.S./Foreign Fogarty-Ellison Fellows	Foreign Site	U.S./Foreign Site Mentors
Kwei Akuete , M.D. candidate, Case Western Reserve University School of Medicine Kyle Luman , M.D., M.P.H. candidate, University of California, San Francisco Simon Sekiganda Luzige , Makerere University in Kampala Elizabeth Namukwaya , Makerere University, Mulago School of Medicine	Kampala, Uganda	Dr. Christopher Whalen , Case Western Reserve University Dr. Moses Kamya , Makerere University Research: HIV and tuberculosis, focusing on punctuated antiretroviral therapy
Cameron Page , M.D. candidate, Yale University School of Medicine Ashok Reddy , M.D. candidate, University of Washington School of Medicine Dr. Anne Mungai Dr. John Kinuthia	Nairobi, Kenya	Dr. King Holmes , University of Washington Dr. James Kiarie , University of Nairobi AIDS Research and Training Program Research: children with HIV, HIV and adherence to antiretroviral therapy
Jeffrey M. Blander , Sc.D. candidate, Harvard School of Public Health Paul Drain , M.D. candidate, University of Washington School of Medicine Abel Makubi Dr. August Furuha	Tanzania	Drs. Wafaie Fawzi and Ferdinand Mugusi , Harvard University Research: assessment of The President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund implementation, the impact of psychosocial interventions on medication adherence, issues related to nutrition and micronutrient supplementation for HIV seropositive individuals
Erin McDonald , M.D. candidate, Stanford School of Medicine Melissa Ketunuti , M.D. candidate, Stanford School of Medicine Raabya Rossenkhan Lemme Kebaabetswe	Gaborone, Botswana	Dr. Max Essex , Harvard School of Public Health Dr. Ibou Thior , Princess Marina Hospital Research: identification of HLA-restricted CTL epitopes of HIV-1C in Botswana
Sylvia Aparicio , M.D. candidate, Harvard Medical School Edford Sinkala	Lusaka, Zambia	Dr. Sten Vermund , Vanderbilt University Drs. Isaac Zulu and Paul Kelly , University Teaching Hospital Zambia Research: PMTCT and abdominal TB in Zambia
Vanessa Wolfman , M.D., M.P.H. candidate, University of Maryland Joan Matji , M.Sc.Nutrition, Ph.D. candidate, University of Pretoria	Pretoria, South Africa	Dr. Brian Forsythe , Yale University Prof. Bridget Jeffery , University of Pretoria Kalafong Hospital Research: psychosocial development and growth of children born to mothers with HIV
Lisa Bebell , M.D. candidate, Columbia University College of Physicians and Surgeons Richard "Cully" Wiseman , M.D. candidate, University of Texas Medical Branch School of Medicine Dr. Kogie Naidoo , University of KwaZulu Natal Sibusiso Ntsele	Durban, South Africa	Dr. Alan Berkman , Mailman School of Public Health at Columbia University Dr. Salim Abdool Karim , Columbia University Research: acute HIV infection and the characterization of the host immune response

2005 FIC/Ellison Awardees (continued)

U.S./Foreign Fogarty-Ellison Fellows	Foreign Site	U.S./Foreign Site Mentors
Andrea Finkelman , M.D., M.P.H. candidate, Tufts University Ramnath Subbaraman , M.D. candidate, Yale University School of Medicine Sonia Singh , M.D., M.P.H. candidate, Johns Hopkins University School of Public Health Kirithi Satyakumar , Christian Medical College Dr. Narashmhan Padmanesan Kirti Kabeer	Vellore and Chennai, India	Dr. Kenneth Mayer , Brown University Dr. Gagandeep Kang , Christian Medical College Research: molecular epidemiology of cryptosporidial infections in HIV-infected individuals in South India
Eric Nelson , M.D., Ph.D. candidate, Tufts University Ashraf Islam Khan	Dhaka, Bangladesh	Dr. Stephan Calderwood , Harvard School of Medicine Research: hyperinfectivity of human cholera at the ICDDR
Aaron Samuels , M.H.S., M.D. candidate, University of Maryland School of Medicine Jo Nord , M.D. candidate, Oregon Health & Sciences University Phunlerd Phiyaraj Jeerang Wongtrakul	Chiang Mai University, Thailand	Dr. Chris Beyrer , Johns Hopkins University Dr. Thira Sirisanthana , Chiang Mai University Research: HIV/AIDS
Charles Lin , M.D. candidate, University of California, San Francisco School of Medicine Dr. Xing Gao	Wanjing, China	Dr. Myron Cohen , University of North Carolina Dr. Xiang-Sheng Chen , Chinese National Center for STD and Leprosy Control Research: HIV/AIDS and syphilis surveillance
Gina Kruse , M.D. candidate, Baylor College of Medicine Alexey Gorlinsky	St. Petersburg, Russia	Dr. Robert Heimer , Yale University Dr. Andrei Kozlav , the Biomedical Center Research: HIV/AIDS in Russia

McDermott Wins Director's Award

Jeanne M. McDermott, Ph.D., an FIC Program Officer, is a winner of the 2005 NIH Director's Award, which recognizes superior performance directly related to fulfilling the NIH mission. In the award ceremony, NIH Director Elias A. Zerhouni, M.D., praised Dr. McDermott for her "outstanding leadership and commitment in managing the FIC AIDS Training and Research Programs." An epidemiologist and midwife by training, Dr. McDermott has been at FIC for five years. Congratulations, Jeanne! ❖



NIH Director Elias A. Zerhouni, M.D., Jeanne M. McDermott, Ph.D., and FIC Acting Director Sharon H. Hrynkow, Ph.D.

News From the Division of International Epidemiology and Population Studies

Agricultural Antibiotic Use Contributes to ‘Super-bugs’

Doctors have become increasingly concerned by the problem of “super-bugs”—bacteria that have become resistant to standard antibiotics. It is well known that a high rate of antibiotic prescribing in hospitals contributes to the emergence of drug-resistant bacteria. But for some antibiotics, an even more important factor contributing to such emergence, argues a team of researchers in the open access international medical journal *PLoS Medicine*, is the use of antibiotics in agriculture.

“Evidence suggests that antibiotic use in agriculture has contributed to antibiotic resistance in the pathogenic bacteria of humans,” said Drs. David L. Smith of FIC, Jonathan Dushoff of Princeton University and FIC, and J. Glenn Morris Jr. of the University of Maryland.

Antibiotics and antibiotic-resistant bacteria are found in the air and soil around farms, in surface and ground water, in wild animal populations, and on retail meat and poultry. These resistant bacteria are carried into the kitchen on contaminated meat and poultry; other foods are contaminated because of common, unsafe handling practices. Following ingestion, bacteria occasionally survive the formidable but imperfect gastric barrier to colonize the gut, which in turn may transmit the resistant bacteria to humans.

Dr. Smith and colleagues say that the transmission of antibiotic-resistant bacteria from animal to human populations is difficult to measure, as it is “the product of a very high exposure rate to potentially contaminated food, and a very low probability of transmission at a given meal.” Nevertheless, based on the analysis presented in *PLoS Medicine*,

the authors suggest that “transmission from agriculture can have a greater impact on human populations than hospital transmission.”

After first Denmark and then the European Union banned the use of antibiotics for growth promotion, say the authors, the prevalence of resistant bacteria declined in farm animals, retail meat and poultry, and within the general human population. This provides evidence that antibiotic-resistant bacteria has moved between animals and humans.

The exact effects of agricultural antibiotic use on human health remain uncertain, the authors say, despite extensive investigation. “But the effects may be unknowable, unprovable, or immeasurable by the empirical standards of experimental biology.” Given all of this uncertainty, Dr. Smith and colleagues suggest that adopting a “precautionary approach,” such as the European Union ban, would be suitable. ♦



Dr. David Smith

Malaysian Ambassador Visits FIC

Two Malaysian scientists explained their NIH laboratory work to Malaysian Ambassador Ghazzali during his official visit to FIC, the National Institute of Dental and Craniofacial Research (NIDCR), and the NIH Clinical Research Center (CRC). The Ambassador and two other high-ranking embassy officials were impressed by the achievements and enthusiasm of Drs. Hwei Ling Ong and Amy Saw-Tin Hong.

Joining the Ambassador were Zahratul Mahmud, Ph.D., and Esah Sieh-Yip, D.Sc., whose interests include educating promising Malaysian students and promoting the uses of natural rubber in medical products. The Ambassador to the United States had previously served his country at the United Nations.



Malaysian Ambassador Ghazzali (center), Zahratul Kamar Mahmud, Ph.D., Director of the Malaysian Students Department at the Embassy (left), and Esah Sieh-Yip, D.Sc., of the Malaysian Rubber Export Council, met with FIC Acting Director Sharon H. Hrynkow, Ph.D., and other NIH leaders during an official visit.



Two Malaysian scientists, now working in NIH laboratories, provided personal briefings about their research. They are Drs. Hwei Ling Ong (left) of NIDCR and Amy Saw-Tin Hong of NHLBI.

FIC Acting Director Sharon H. Hrynkow, Ph.D., welcomed the diplomats and expressed her hope that even more Malaysians will apply to become NIH visiting scientists.

“Once on campus, foreign scientists are a ‘captive audience’ insofar as FIC has ample opportunity to discuss research and training opportunities with them for their post-NIH life,” said Dr. Hrynkow. She noted that NIH has several research grants involving Malaysian scientists, and that NIHers attend important medical and dental meetings in Kuala Lumpur and other Malaysian cities.

“FIC is always honored when ambassadors and foreign ministers visit NIH officials and research laboratories,” Dr. Hrynkow said. “Whenever appropriate, FIC invites visiting scientists to join in the NIH presentation. This is not only a touch of home for the diplomats and for the NIHers, but this gives FIC a chance to demonstrate the existence and value of NIH’s international exchange programs.”

In recent months, NIH visiting scientists have enhanced the visits made by diplomats from Korea, Turkey, Hungary, Taiwan, India, Sweden, Belgium, the Netherlands, Canada, and other nations.

FIC thanks Dr. Zakir Bengal (NIH Center for Scientific Review), Dr. Lois Cohen (NIDCR), and Dr. David Henderson (CRC) for providing briefings to the Malaysian delegation. ♦



Dr. David Henderson of the CRC provided detailed information about NIH programs and facilities.

“Demystifying the State Department”

Health, science, and foreign policy interests are merging in new and increasing ways. Whether it is AIDS, bioterrorism, obesity, alcohol and drug or any number of other health issues that impact individuals, families, and populations, there is interest increasingly by the State Department in working with NIH and other DHHS agencies in tackling them.

To shed light on the State Department’s recent reorganization of its health and science offices, and to learn about foreign affairs issues on the horizon, Fogarty convened a one-day “in-service” for staff and for a small group of representatives from other NIH Institute and Center international offices.

Sharon Hrynkow, Ph.D., FIC Acting Director, opened the meeting and challenged the audience to consider the bi-directionality of health/science and foreign affairs. “As we look to the Department of State to assist us in advancing through diplomatic channels our research programs and priorities, at the same time, State looks to us to provide information and guidance as its officers build relationships around the world,” she noted. With a number of new staff in the Division of International Relations, the moment was right to bring FIC and State together.



Andrew Reynolds (right), Deputy Science and Technology Advisor, and William Peters (left), Director, Office of Global Issues and Communications Information Programs, visited NIH as part of an “in-service” for FIC staff.

The program included a range of State Department experts, including Andrew Reynolds, Deputy Science Advisor to the Secretary of State, and William Peters, Director for Global Issues in the Public Affairs Bureau. They provided the “view from 30,000 feet” on State Department operations and priorities under Secretary Condoleezza Rice.

Dr. Mark Dybul, an NIAID employee now working as Deputy Global AIDS Coordinator at the State Department, shared his views on State’s role in the President’s Emergency Plan for AIDS Relief and how the science and foreign policy issues mesh. Dr. Marc Ostfield provided perspectives from the Office of Non-Proliferation on bioterrorism as a foreign policy concern. He provided additional perspectives on the culture of the State Department, which employs 7,500 foreign service officers and 11,000 civil servants as well as a number of political appointees.

At the embassies, foreign service nationals play a key role in the day-to-day work of the embassies. Virginia Palmer added views from the regional bureau (Asia) and Ann Blackwood from the International Organizations bureau (responsible for WHO, UNICEF, and other UN technical agencies). Judging from the enthusiasm of the participants (as well as the speakers) for this program, FIC expects to plan a second effort, recognizing that it may take more than one day to completely demystify the State Department! ♦



Participants and attendees discussed the important work of the U.S. Department of State.

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Planning Ahead... International Career Fair Draws 500 Young Scientists

More than 500 international scientists participated in this year's NIH Career Fair for Visiting Fellows. They chose from 30 exhibit booths as they gathered materials and asked questions that are important in their individual career planning. The exhibitors were primarily from embassies and international organizations. Cosponsors were FIC, the

National Institute of Environmental Health Sciences, and the NIH Fellow Committee, while a co-organizer was the NIH Visiting Fellows Committee. Sharon H. Hrynkow, Ph.D., FIC Acting Director, and Joan P. Schwartz, Ph.D., Acting Deputy Director, NIH OD Office of Intramural Training and Education, addressed the attendees.



An exhibit featuring career opportunities in New Zealand



There are many interesting medical research jobs in Asia.

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