



Save the Date



The 2010 Albert B. Sabin Gold Medal Ceremony will take place on **Tuesday, April 27, 2010** at the George Washington University's City View Room. Please check the [event listing](#) for more information.

WHO report says vaccines play key role in poverty and mortality reduction



Allusions of the mission and programmatic work of the Sabin Vaccine Institute can be found throughout the World

November 2009

The Sabin Report | Volume 11 Issue 3

World Pneumonia Day Commemorated Across the Globe

November 2, 2009 marked the first annual [World Pneumonia Day](#) created to mobilize efforts to fight a neglected disease that kills more than two million children



under the age of five every year. Pneumococcal Awareness Council of Experts (PACE) members around the world organized World Pneumonia Day events and outreach to help make it a truly global day. Several members published commentaries and articles in journals, some co-authored op-eds for newspapers, and others organized press events, symposia and other activities.

To promote awareness and prevention of pneumonia in Bangladesh, Dr. Samir Saha, Professor and Head of the Department of Microbiology at the Bangladesh Institute of Child Health, hosted a number of events in Dhaka, including a scientific symposium on the disease for the country's pediatricians and infectious disease experts. The symposium also marked the official launch of PACE in Bangladesh.

In New York, a half-day Global Pneumonia Summit was convened at the Asia Society. Sabin President Dr. Peter Hotez, and numerous PACE Council Members, spoke at the event.

Watch *Global Health TV's* World Pneumonia Day interview with Sabin Vice-President Dr. [Ciro de Quadros](#) [here](#).

Rwanda deworms an estimated 4 Million Children in less than one week

In October, the Rwandan Ministry of Health, in partnership with the Rwanda NTD Control Program, held a mass drug administration (MDA) campaign that



Health Organization, UNICEF, and World Bank's State of the World's Immunizations and Vaccines report released on October 21, 2009.

Vaccines are a leading cost-effective health intervention that can reduce global poverty, improve overall welfare, and reduce mortality says the report. Vaccines also play a key role in achievement of the Millennium Development Goals (MDGs).

An essential element of Sabin's mission to reduce human suffering involves the development of vaccines-for hookworm and Schistosomiasis-that treat or prevent infectious and neglected tropical diseases. The report hails the 21st century as "the most productive in the history of vaccine development." The global vaccine market has tripled, reaching over US \$17 billion in global revenue by mid-2008, and Sabin is working to add new vaccines to the growing list of over 30 vaccine-preventable diseases.

Read the report and learn more [here](#).

**Heloisa Sabin
named Honorary
Trustee to the
Institute**

successfully dewormed an estimated 3.2 million school-age children and 1.1 million pre-school age children in less than one week. In addition, 105,000 school-age children from six schistosomiasis-endemic districts received praziquantel. In Rwanda the entire population of nearly 9 million people is at risk of infection from one or more soil transmitted helminths.



At the launch of the campaign, the First Lady of the Republic of Rwanda, Mrs. Jeannette Kagame, stressed the importance of interventions aimed at boosting maternal and child health. The week-long campaign provided inoculations against measles as well as standard interventions delivered during "Mother and Child Health Week," including polio immunizations, vitamin A capsules, bednets, and family planning services.

The Ministry of Health organized the campaign in partnership with Columbia University's Access Project, the Global Fund, the Global Network for Neglected Tropical Diseases, the Red Cross, USAID, the World Food Program, and the World Health Organization.

Read blog post [here](#).

Manufacture of Hookworm Vaccine Commences at AERAS

Sabin Vaccine Development is partnering with AERAS Global TB Vaccine Foundation to manufacture the *Na*-GST-1 hookworm vaccine at their Rockville, MD production facility. AERAS, a non-profit product development partnership (PDP), funded by the Bill and Melinda Gates Foundation, is primarily concerned with the development of a new tuberculosis vaccine, but also committed to supporting the manufacturing needs of other Gates-funded PDPs like Sabin Vaccine Development. The state-of-the-art GMP-compliant facility has the capacity to produce up to 200 million doses of recombinant tuberculosis vaccine per year, and is geared toward vaccine production and distribution at the lowest possible cost. Both of these factors make AERAS an ideal partner in the production of neglected tropical disease vaccines, and two lots of *Na*-GST-1 vaccine will be produced for toxicological and clinical use.

The successful manufacture of the *Na*-GST-1 hookworm vaccine will be an important step towards the eventual creation of a bivalent vaccine candidate for hookworm. Immunization with *Na*-GST-1 may interfere with the ability of adult hookworms to digest hemoglobin, therefore inhibiting their ability to feed. Investigators at Sabin's partnering organization, the George Washington University, have shown that vaccination with *Na*-GST-1 reduces worm and egg burdens in dogs. In humans, this may translate into a less severe infection and to a greater extent, the breaking of the hookworm transmission cycle. Clinical trials for this promising candidate are scheduled to begin in Brazil in mid-2010.

Sabin Vaccine Development to Manufacture Schistosomiasis Vaccine Candidate at Instituto



Mrs. Heloisa Sabin, who helped establish the Sabin Vaccine Institute in 1993, was unanimously elected Honorary Trustee on August 26, 2009. She has continuously championed the work and legacy of her late husband, Dr. Albert Sabin, by promoting the role of vaccines in eliminating needless deaths from preventable and treatable diseases.

Originally from Brazil, but currently residing in Washington, DC, Mrs. Sabin is a notable advocate for the vaccine and global health fields and the Sabin Vaccine Institute looks forward to learning from, and sharing, her unique insight.

Recent Scientific Articles

Dr. Peter Hotez published two analyses detailing the devastating impact of neglected tropical diseases in Sub-Saharan Africa (SSA) and member nations of the Organization of the Islamic Conference. ["The Neglected Tropical](#)

Butantan

In September, the Sabin Vaccine Development team met with collaborator Instituto Butantan (IB) in São Paulo, Brazil for a meeting pertaining to the schistosomiasis vaccine candidate *Sm-TSP-2*. The major outcome was the decision to use their new cGMP facility for the manufacture of *Sm-TSP-2*, and both Sabin and IB agreed upon the terms of a general manufacturing agreement and production timeline. IB's commitment to the production of a schistosomiasis vaccine was evident in their impressive quality system improvements. A meeting with the newly expanded quality assurance department revealed visionary leadership and compliance with Agência Nacional de Vigilância Sanitária (ANVISA) and U.S. FDA, which will be crucial in the timely review and approval for clinical testing.

Brazil has the world's second largest number of endemic schistosomiasis cases. A successful transfer and production of a schistosomiasis vaccine could have a huge positive impact on the population. Brazil also currently manufactures more than 80% of its own vaccines. The necessary requirements have been put in place to ensure an expedient technology transfer and execution of the manufacturing process in 2010.

PACE asks European Commission for stronger commitment to prevent pneumococcal disease

The Pneumococcal Awareness Council of Experts (PACE) and Michael Cashman, Member of the European Parliament, hosted a parliamentary discussion on the role of the European Union in combating pneumococcal disease on October 5. Drs. Ciro de Quadros and Fred Were of PACE led the discussion calling attention to the World Health Organization's recently released data on the global burden of pneumococcal disease and highlighting strategies for prevention. The event was part of a two-day meeting during which PACE met with members of the European Commission to discuss the need for pneumococcal prevention and to encourage further support for research, funding and policy decisions that will change the profile of the disease from unknown global killer to top public health priority.



Sabin Sponsored Briefings Prompt Action in DR Congo

Sabin's Sustainable Immunization Financing (SIF) program hosted a parliamentarian briefing in Kinshasa, Democratic Republic of Congo on September 11th to call attention to the urgent need to secure sufficient funding for DR Congo's health sector, and in particular for its Expanded Programme of Immunization (EPI).

DR Congo allocates only 3% of its national budget to health, and its EPI remains entirely dependent on external donors to provide routine immunizations to its children. While the program is currently receiving

[Diseases and Their Devastating Health and Economic Impact on Member Nations of the Organization of the Islamic Conference,](#) and "[Neglected Tropical Diseases in Sub-Saharan Africa: Review of their Prevalence, Distribution, and Disease Burden,](#)" were published in online open access journal *PLoS Neglected Tropical Diseases*.

"A constitutional amendment for deworming" by Dr. Hotez was also published in *PLoS*. Additional articles co-written by Dr. Hotez and published in *PLoS* include: "Unfinished Public Health Agenda of Chagas Disease in the Era of Globalization," "Two Years of Providing Access to Innovation for the World's Poor...and Counting," and "Schistosomiasis in Africa: an emerging tragedy in our new global health decade."

Dr. Hotez wrote "Neglected diseases amid wealth in the United States and Europe" and co-wrote "From neglected tropical diseases to forgotten maladies" which were published in *Health Affairs*.

In September, Dr. Ciro de Quadros published two pieces in *Vaccine*. "Antibiotic resistance in Latin America: A cause for alarm" and "From

support from the GAVI Alliance, it has been in danger of losing that support.

As a direct result of the meeting, the Minister of Budget issued an order for the release of funds to the GAVI Alliance, thereby fulfilling part of DR Congo's international obligations. The meeting has also sensitized parliamentarians--who play a large role in the budget process--to the cost-effectiveness of EPI in promoting the health of children. While significant challenges lay ahead, Sabin remains confident that DR Congo can, and will, assume greater responsibility for financing important health programs like EPI. With continued collaboration and perseverance, remarked one participant, "financial sustainability of EPI is just around the corner."

Beauty Queens and Soccer Players help the Global Network Highlight NTD Control Efforts in the Americas

At the 2009 Clinton Global Initiative Annual Meeting, former President Bill Clinton announced a commitment by the Global Network; Inter-American Development Bank; Pan American Health Organization; the Miss Universe Organization; the Brazilian National Soccer team and other public and private partners to mobilize \$30 million in support of neglected tropical disease control and elimination efforts in the Americas.



Over 230 million people suffer from one or more disabling and disfiguring neglected tropical diseases in the Americas; however, with a firm commitment from the public and private sectors, experts say it is possible to eliminate onchocerciasis (river blindness), lymphatic filariasis and trachoma throughout the region, as well as achieve a 75% reduction in the prevalence of schistosomiasis and soil-transmitted helminths.

Read press release [here](#).

Continuing progress in two-year study of Hookworm Infection in Brazilian children

In August, Sabin Vaccine Development passed the one-year mark of the start of a two-year pediatric study to determine the rates and intensity of re-infection, following drug treatment, among children between the



global to regional: The importance of pneumococcal disease in Latin America" were in a supplement edited by PACE member Ron Dagan and focus on the various issues surrounding pneumococcal disease. PACE members Keith Klugman and Shabir Madhi also had an article in the same issue of *Vaccine*.

Drs. Hotez and de Quadros, et al. published "New Vaccines for developing countries" in the *American Journal of Law & Medicine*.

PACE has created a pair of summaries of their findings on long-term sequelae and mortality due to bacterial meningitis and pneumococcal infections in persons with sickle cell disease in Africa. The "Africa Review Papers," and links to the published articles, will be added to the Sabin website in the coming weeks. The study on bacterial meningitis has been published by *BioMed Central*, in the flagship journal *BMC Medicine*. The study on sickle cell disease is currently under review for publication by a prestigious journal.

Upcoming Meetings

The Sabin Vaccine Institute will co-host,

ages of 1 and 10 in a hookworm endemic area of Brazil. The program has successfully enrolled over 400 children in five communities. To prepare the new enrollees, a team of "community preparedness" experts conducts educational sessions with children to de-mystify the process of collecting blood and stool samples. The study will provide information on the effectiveness of current deworming drugs and will obtain data to help design future hookworm vaccine trials. In addition, nutritional assessments are being performed to estimate the impact of treating helminth infections on this parameter.



Sabin Vaccine Development Assesses the Need of a Drug "Orphanage"

An "orphan" drug is a medicine that is not manufactured or marketed because demand is insufficient to cover the costs of supply. Orphan drugs follow the same regulatory development path as any other drug, but with the help of orphan status, some requirements are lessened to keep up development momentum. For example, orphan status allows that it may not be possible to test 1,000 patients in a phase III clinical trial, as fewer than that number may be afflicted with the disease. Since the market for any such drug may be unprofitable, orphan status also works to motivate the drug manufacturer through government incentives. These incentives may include eligibility for grants, tax credits, enhanced patent protection, and marketing rights. A few examples of the many drugs that have been successfully developed through orphan status are drugs to treat cystic fibrosis, phenylketonuria, and snake venom.

There is a new proposal to establish a functional "orphanage" for drugs targeting neglected tropical diseases (NTDs) to improve the likelihood that these drugs will complete the development process. At the request of the Bill and Melinda Gates Foundation, Sabin Vaccine Development is currently planning to convene a meeting with experts from the FDA, the Gates Foundation, Sabin, and other leaders of the field to address the effectiveness of the orphanage in promoting drug development for NTDs and its appropriateness as a mechanism to do so. There are hopes that creating an NTD drug orphanage will advance the development of drugs for NTDs.

Global Network Launches *End the Neglect* Blog

The Global Network recently launched *End the Neglect*, a blog which serves as a broad, transparent platform through which the neglected tropical disease (NTD) community can continue to raise the profile of NTDs and disseminate stories from the field. The blog will be a vital resource to educate and inform readers of the devastating impact that NTDs have on the developing world and the simple and cost-effective interventions that can help put an end to these debilitating and deadly diseases.

The Global Network encourages colleagues and collaborators around the world to serve as guest bloggers, and share personal stories, experiences, successes, and challenges.

with the Pan American Health Organization (PAHO), a Regional Symposium on New Vaccines in Lima, Peru this winter. From December 1-2, 2009 government leaders, physicians, researchers and other concerned stakeholders will gather to share the latest research on diseases and vaccine developments.

For more information, click [here](#).

The year 2010 will mark the 30th anniversary since the Global Commission for the Certification of Smallpox Eradication officially reported the elimination of smallpox disease. Sabin is proud to co-sponsor, with FIOCRUZ, a symposium to commemorate the 30th anniversary of smallpox eradication. The symposium will be held in Rio de Janeiro, Brazil from August 24-27, 2010.

For more information click [here](#).

To date, *End the Neglect* has featured a variety of posts, including:

[Pictures](#) and [local perspectives](#) from the latest round of mass drug administration in Rwanda;

An [analysis](#) of a new Resolution issued and passed by the Pan American Health Organization on NTDs;

A [piece](#) tying a New York Times article on Haiti with the importance of NTD control for poverty alleviation and the University of Notre Dame's advocacy work;

A [guest blog post](#) by Josh Ruxin, Founder and Director of the Access Project, on the prevalence of intestinal worm infections in children.

If you are interested in submitting a guest post, email the Global Network directly at globalnetwork@sabin.org.

Three new members join PACE Council

Three new council members have recently joined PACE: Dr. Najwa Khuri-Bulos, Head of the Division of Infectious Disease at Jordan University Hospital; Dr. Shabir Madhi, Chair of the Department of Science and Technology at the National Research Foundation of South Africa; and Dr. Yong-Hong Yang, Professor of Pediatrics, Beijing Children's Hospital. With the addition of these distinguished members, PACE is represented by 21 members in 17 countries.

For a full list of PACE members, click [here](#).

New Faces at the Sabin Vaccine Institute

Nine new staff have joined the Sabin Vaccine Institute since the last issue of the *Sabin Report* was released:



Stephanie Hedeau,
Director of Strategic
Partnerships and

Communications, Global Network

Ashly Smolyn, Program Officer, Sabin Vaccine Development

Eteena Tadjogueu, Communications Associate

Anjana Padmanabhan, Communications Associate, Global Network

Janet Daniels, Controller

Kristina Bell, Receptionist

Mark Levy, Program Coordinator, Global Network

Patrick Sell, Operations Officer, Global Network

Maria Bianchi, Office Manager