



## Experts Provide Updates in Vaccine Research at 13th Annual Conference

The Thirteenth Annual Conference on Vaccine Research, sponsored by the National Foundation for Infectious Diseases (NFID) was held on April 26 - 29, 2010 at the North Bethesda Marriott Hotel and Conference Center in Bethesda, Maryland.

The three-day conference has become the world's largest scientific meeting devoted exclusively to research on vaccines and related technologies for disease prevention and treatment. NFID Medical Director, **Susan J. Rehm, MD** stated "in addition to the reality that a large number of common infections have come under control in the vaccine era, we can now envision the possibility of preventing or treating many chronic, non-infectious and neoplastic conditions with vaccines. The Annual Conference on Vaccine Research is a premier venue for cutting-edge learning, data-sharing, and networking for scientific collaboration to help us move toward this reality."

The conference keynote presentation, "Success and Failure: The Thrills of Vaccine Development and Application," was given by **Donald P. Francis, MD, DSc**. Dr. Francis serves as Executive Director of Global Solutions for Infectious Diseases in San Diego, California. The presentation included a review of significant vaccine successes around the world, among them the global eradication of smallpox, the widespread containment of polio, and development and use of measles, rotavirus and influenza vaccines worldwide. Dr. Francis also discussed the



Dr. Susan J. Rehm presents the 2010 Charles Merieux Award to Dr. Theodore Eickhoff at the 13th Annual Conference on Vaccine Research

encouraging results in Phase III clinical trials with RTS, S malaria vaccine and an HIV vaccine (RV 144) tested in a Thai study that was shown to be safe and modestly effective in preventing HIV infection.

Dr. Francis discussed delays in vaccine development which impacted the eventual control of some diseases. He shared his frustrations about the lack of public resources dedicated to vaccine development. "The private sector can develop products only if society values them and they, therefore, can expect a profit," said Dr. Francis. "But there are great failures in this system where the public values therapeutics over vaccines and government leaders want safe and effective vaccines that cost only pennies. This is especially challenging for less developed countries where resources are increasingly scarce."

**Anthony S. Fauci, MD**, director, National Institute of Allergy and Infectious Diseases at the National Institutes of Health and Chief of the National Institute of Allergy and

Infectious Diseases Laboratory of Immunoregulation in Bethesda, MD presented the Mary Lou Clements-Mann Memorial Lecture in Vaccine Sciences, an update on the HIV/AIDS vaccine.

Dr. Fauci noted that HIV vaccine development differs from other vaccine

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# DOUBLE HELIX

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Dr. Anthony S. Fauci, Dr. David S. Fedson, Dr. George C. Hill and Dr. Michael T. Osterholm pose for a photo at the 13th Annual Conference on Vaccine Research.

development because there is no natural model of protection, and that a quarter-century of research has yielded many disappointments. However, he noted that new data in human and animal models provide a measure of optimism and have energized the field. Dr. Fauci discussed the modest protective effect seen in a Phase III HIV vaccine trial in Thailand and discussed fundamental issues in HIV vaccinology that must be addressed if an effective HIV vaccine is to be developed. “The field of HIV vaccinology now has two fundamental challenges: 1) to build on the results of RV144 by working to determine, if possible, the correlate(s) of immune protection in that trial and 2) to address the many fundamental issues in HIV vaccinology relevant to the design of vaccines candidates, such as identifying neutralizing epitopes on the HIV envelope and using structure-based antigen design to develop immunogens based on these epitopes,” stated Dr. Fauci.

NFID’s Charles Mérieux Award was presented to **Theodore C. Eickhoff, MD**, Professor Emeritus in the Division of Infectious Diseases at the University of Colorado, Denver. Dr. Eickhoff has been a champion of adult immunization for more than four decades. He is committed to educating his colleagues about balanced assessments of benefits, costs and risks of routine vaccination to prevent diphtheria, tetanus, measles, rubella, influenza, hepatitis B and pneumococcal disease. “Adult immunization will be seen as important by clinicians only when it is continually emphasized to them in their training programs,” stated Dr. Eickhoff.

Dr. Eickhoff presented a luncheon talk, “*Adult Immunization – 1920 – 2010: Some Issues along the Way.*” Dr. Eickhoff addressed the challenges in adult immunizations he has noted over the years: public ignorance, professional apathy, high costs and the haphazard organization of immunization efforts. He discussed the progress he attributes to greatly improved professional educa-

tion, media support in public education – aided by articulate professional spokespersons – and increasing prominence of preventive medicine. He also noted progress in reimbursement of health care providers along with improvements in record keeping and immunization distribution channels.

The Mérieux Award is named in honor of Dr. Charles Mérieux, a French scientist and visionary who recognized the importance of preventive medicine and understood that in order to maximize vaccine effectiveness, an efficient global strategy of vaccine distribution would be required. Dr. Mérieux devoted his life to the prevention of infectious diseases. The Charles Mérieux Award is supported by an unrestricted educational grant from sanofi pasteur.

The Conference also included the presentation of the Robert Austrian Memorial Lecture by **David S. Fedson, MD**, former professor of medicine at the University of Virginia and former director of Medical Affairs in Europe for Aventis Pasteur MSD (now sanofi pasteur MSD). Fedson presented “*Another Lesson learned from Kings County Hospital 1964.*” The lecture, underwritten by a grant from Merck & Co, is named in honor of the late Dr. Robert Austrian, former chair of medical research at the University of Pennsylvania, who developed the first multivalent vaccine against pneumococcus bacteria.

In his lecture, Dr. Fedson offered a new perspective on the observations made by Dr. Austrian in his classic study of pneumococcal bacteremia. The early mortality

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from this disease had not changed despite the advent of antibiotic treatment. Dr. Austrian's research concluded that it could be prevented by vaccinations. This finding led to the extraordinary development of pneumococcal vaccines which in recent years have brought about major reductions in hospitalization and mortality from pneumococcal infections in developed countries. Dr. Fedson stated that in the absence of vaccination, there is a possibility that this unpreventable mortality might be reduced by treating patients with inexpensive generic medications (for example, statins and glitazones) that modify the host response to the pneumococcal infection.

In its third year, the Maurice R. Hilleman Early-Stage Career Investigator Award, which recognizes promising scientists who are beginning their careers in vaccinology, was awarded to **Helen Keipp Talbot, MD, MPH**, Vanderbilt University Medical Center, Nashville, Tennessee. Dr. Talbot's research topic is "*Immunopotential of Trivalent Influenza Vaccine When Given with a Recombinant Fusion Protein Linking Influenza M2e to the TLR5 Ligand Flagellin*"

The first and second runner ups were **Bernadette Ferraro, PhD, MPH**, University of Pennsylvania, Philadelphia and **Margaret E. McCoy, PhD**, Walter Reed Army Institute of Research in Silver Spring, Maryland. The Maurice R. Hilleman Early-Stage Career Investigator Award is supported by an unrestricted educational grant from Merck & Co, Inc.

Again this year NFID sponsored an international travel grants program. This activity supported the travel and participation of 16 researchers from developing countries with limited resources. The travel grant program provides an annual forum for discussion of pressing global vaccinology issues.

Other invited and submitted presentations and posters highlighted updates on vaccines, poverty and world hunger; pandemic influenza; vaccine safety; vaccine immunology; live vaccines and differentiating infected from vaccinated animals; vaccines for tropical and exotic pathogens;

clinical studies; adjuvants and immunomodulators; vaccines for diverse pathogens; innovations in molecular approaches to vaccine delivery; novel adjuvants; and late breaking topics and issues. The conference included 20 invited presentations, 36 submitted presentations and 53 poster presentations.

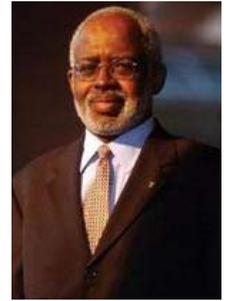
The Annual Conference on Vaccine Research is sponsored by NFID in collaboration with the **Centers for Disease Control and Prevention (CDC); Center for Biologics Evaluation and Research, Food and Drug Administration; Center for Vaccine Development, University of Maryland; Emory Vaccine Center; Fondation Mérieux; International Association for Biologicals; International Society for Vaccines; International Vaccine Institute; Jenner Society; National Institute of Allergy and Infectious Diseases; Sabin Vaccine Institute; and the US Department of Agriculture.**

Financial support for the conference was provided through unrestricted educational grants from **Aeras Global TB Vaccine Foundation; Becton Dickinson; CSL Biotherapies; DynPort Vaccine Company; EpiVax, Inc.; Fondation Mérieux; GeoVax, Inc.; GlobeImmune, Inc.; Inovio Biomedical Corporation; Integrated BioTherapeutics; LigoCyte Pharmaceuticals; MedImmune, Inc.; Merck & Co., Inc.; NanoBio Corporation; Novartis Vaccines and Diagnostics, Inc.; sanofi pasteur; U.S. Food and Drug Administration; VaxInnate Corporation; and Vical, Inc.**

The Fourteenth Annual Conference on Vaccine Research will be held May 16 - 18, 2011, at the Baltimore Marriott Waterfront Hotel in Baltimore, Maryland. And the Fifteenth Annual Conference on Vaccine Research has been scheduled for May 7 - 9, 2012 at the Hyatt Regency Inner Harbor in Baltimore, Maryland. A call for abstracts will be available November, 2010 for the 14<sup>th</sup> Annual Conference. Please visit [www.nfid.org](http://www.nfid.org) for more information in the fall.



Dr. William Schaffner  
NFID Incoming  
President



Dr. George C. Hill  
NFID Outgoing  
President

## Dr. William Schaffner Assumes NFID Presidency

The National Foundation for Infectious Diseases (NFID) elected new members to its Board of Directors and Board of Trustees at its joint board meeting last month.

William Schaffner, MD, Vanderbilt, University School of Medicine was elected President of the NFID Board of Directors. Newly elected Board officers are **Walter A. Orenstein, MD**, Bill and Melinda Gates Foundation, elected to the position of Secretary and **Patrick Joseph, MD**, elected to the position of NFID Vice President. Outgoing Board President, **George C. Hill, PhD**, Vanderbilt University School of Medicine, became NFID's Immediate Past President.

The new directors are **Joseph A. Bocchini, Jr., MD**, Louisiana State University Health Sciences Center; **Kathryn B. Kirkland, MD**, Dartmouth-Hitchcock Medical Center; and **Cynthia G. Whitney, MD, MPH**, Centers for Disease Control and Prevention. The new directors were elected to three-year terms.

Elected for a three-year term to the NFID Board of Trustees are **Carol J. Baker, MD**, Baylor College of Medicine; **Samuel L. Katz, MD**, Duke University; **John H. Johnson**, Lilly Oncology; and **George A. Pankey, MD**, Ochsner Clinic.

## NFID's Pediatric Influenza Coalition Meets, Addresses Post-Pandemic Communications Challenges

At its annual meeting in June, the National Foundation for Infectious Diseases' (NFID)

Childhood Influenza Immunization Coalition (CIIC) began intensive planning to meet the communications challenges left in the wake of the H1N1 pandemic. Ongoing NFID research of parent attitudes, presentations from public health officials and discussion of member experiences shaped the discussions on how to continue increasing pediatric influenza vaccination rates.

According to results of an NFID consumer research survey presented at the meeting, 40 percent of parents say they will vaccinate their children against influenza next season while another 21 percent say they will consider vaccination. **Carol J. Baker, MD**, Coalition chair and past president of NFID emphasized, however, that these statistics "don't necessarily translate into vaccination rates. A major challenge continues to be moving parents from saying what they'd do to actually doing it."

The research also measured how parents' attitudes have shifted since the H1N1 outbreak. While a quarter of parents are more concerned than in the past; the majority (60 percent) say H1N1 did not change their concern about the impact of influenza on their children. And very troubling is that 12 percent state they are even less concerned now than in the past.

As part of its overall strategy, CIIC will continue to explore parents' attitudes and gain a better understanding of what parents are thinking. "This past season, more than ever, it was important to invest in research," said **Susan J. Rehm, MD**, NFID medical director, "to make sure our programming and messaging really kept in line with the very rapidly changing information and also the motivational needs of parents." Upcoming research includes one-on-one phone interviews with pediatricians, focus groups with mothers and a larger, national survey.

### Report from CDC: 2009-2010 Season Very Severe, Misinformation about Flu Persists

Despite ongoing media focus on the H1N1 pandemic being less severe than predicted, last year's flu season was the worst on record for the nation's children. There were an estimated 87,000 hospitalizations and 1,280 deaths among US children 18 years and younger. This contrasts with an estimated 20,000 hospitalizations and about 100 deaths in this population during an "ordinary" flu season.

**Tim Uyeki MD, MPH, MPP**, deputy chief, Epidemiology and Prevention Branch Influenza Division, National Center for Immunization and Respiratory Diseases of the CDC, presented an overview of the 2009-2010 influenza season that included these data. He also pointed out how critical communications will be to convince parents about the dangers of influenza and benefits of vaccination. Dr. Uyeki explained the severe complications from H1N1 include viral pneumonia, multi-organ failure and neurological complications, such as encephalitis.

A second presenter from CDC, communications specialist **Richard Quartarone**, shared CDC's plan to create a 'call to action' for Americans to protect themselves, their families and their communities against flu. He also presented some initial focus group findings which showed that knowledge levels are high among parents but misinformation about influenza and the danger to healthy children persists.

### Ample Vaccine Supply Expected, New Vaccination Venues Discussed

During his brief recap of the National Influenza Vaccine Summit meeting, **Litjen Tan, MS, PhD**, American Medical Association representative to the Coalition, relayed that manufacturers estimate 171 million doses of vaccine will be produced for US use in the 2010-2011 season. He

also underscored the importance of education, particularly in light of the new universal influenza vaccination recommendation, to optimize use of the large number of doses expected.

Another key to delivering more vaccines will be using as many venues for vaccination as possible. **Jaime Murphy Dawson** from National Association of School Nurses reported that one in three children was vaccinated in a school this past year. Schools can help provide access to all children, including underserved populations. She noted that while school clinics are not always feasible due to funding issues, school staff can still play a significant role in educating students and families about influenza.

### CIIC Planning Teams Brainstorm Strategies to Keep Interest High

CIIC has capitalized on its collective member expertise and experiences by designing planning teams to focus on four key areas: communicating with families, motivating health care professionals, addressing influenza vaccination disparities, and communicating through social media. Each team held a working session at the meeting and identified key needs and strategies, including:

- Resolve confusion surrounding H1N1 and the pandemic, and explain the reasons why it is important to vaccinate the entire family.
- Motivate more health care professionals to take a stronger stance in advocating vaccination for their patients, and serve as a role model.
- Increase coverage rates among ethnic minorities and provide culturally sensitive communications messages; identify pockets of need and arm community leaders and providers with educational materials and tools.
- Build the social media network to facilitate sustained interaction, or "buzz," surrounding influenza vaccination; deliver frequent and uniform messages.

## Clinical Vaccinology Course Scheduled

The National Foundation for Infectious Diseases (NFID) announces its Clinical Vaccinology Course. The course, co-sponsored by NFID, Emory Department of Medicine, Division of Infectious Diseases and the Emory Vaccine Center will be held November 5 - 7, 2010 at the Hyatt Regency Hotel in Bethesda, Maryland. The course will also be presented in Chicago, March 4 - 6, 2011 at the Hyatt Regency Chicago.

Course collaborating organizations include the American Academy of Pediatrics, the American Association of Physicians Assistants, the American College Health Association, the American Society of Health-System Pharmacists, Centers for Disease Control and Prevention, the National Association of Pediatric Nurse Practitioners, and the Society of Infectious Diseases Pharmacists.

The course is specifically designed for primary care physicians, nurses, nurse practitioners, pharmacists, physician assistants, public health specialists, infectious disease specialists and other health care professionals involved with clinical aspects of vaccinology.

The Clinical Vaccinology Course will feature multiple presentation sessions addressing:

- How Vaccines Work
- Special Vaccines Issues
- Adult Immunization
- Childhood and Adolescent Immunizations
- Communication Issues
- Special Topics in Vaccination

- Vaccines in Special Populations
- Update on the Advisory Committee on Immunization Practices
- Clinical Cases in Vaccinology

Keynote presentations include:

- *An Overview of Vaccinology* – **Walter A. Orenstein, MD**, Bill and Melinda Gates Foundation
- *Global Immunization Disparities: Reaching Every Child* – **Orin Levine, PhD**, Johns Hopkins University

In addition, the course will feature Meet the Experts breakfast sessions to allow attendees an opportunity to network with seasoned colleagues specializing in vaccinology.

The Clinical Vaccinology Course has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME). NFID designates this educational activity for a maximum of 16.75 AMA

PRA Category 1 Credit(s)<sup>TM</sup>. NFID is an approved provider of continuing nursing education by the Maryland Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation. This educational activity has been approved for 16.75 contact hours. The course will also offer pharmacy continuing education credits.

Online registration is now open for the November course. The cost to attend is \$550 prior to September 20, 2010 and \$650 after this date. Discounted course registration will be offered to medical students, doctoral students, residents, fellows, physician assistants, nurse practitioners and NFID supporting members. Additional information about the course, including full course agenda and faculty listing, is available on the NFID website, [www.nfid.org](http://www.nfid.org).

## NFID Recognized for Communications Programming

The National Foundation for Infectious Diseases (NFID) received a first place Big Apple Award for its annual Influenza/Pneumococcal News Conference and received an honorable mention for the CIIC program from the Public Relations Society of America (NYC Chapter). The award recognizes creativity and resourcefulness in addressing contemporary issues.

The news conference successfully kicked off the 2009-2010 flu season with a strong message, urging Americans to get vaccinated against seasonal influenza as well as H1N1. The Coalition has made significant progress in bringing childhood influenza immunization to the forefront within member's organizations.

## The Double Helix® is Available Online

This is the first electronic edition of *The Double Helix*® newsletter. We hope you enjoy this new format. The Double Helix may also be found at the National Foundation for Infectious Diseases' (NFID) website, [www.nfid.org](http://www.nfid.org). In addition, the newsletter will be published quarterly in conjunction with the online edition of the Journal of Infectious Diseases in Clinical Practice at [www.infecdtis.com](http://www.infecdtis.com).

Please share this information with your colleagues and ask them to forward their e-mail address to [helix@nfid.org](mailto:helix@nfid.org) in order to receive e-mail notifications from NFID regarding the availability of the newest editions. Thank you.

## Calendar of NFID Events and Meetings

### November 5 – 7, 2010 Clinical Vaccinology Course

Sponsored by the National Foundation for Infectious Diseases  
Hyatt Regency Bethesda in Bethesda, Maryland

### March 4 – 6, 2011 Clinical Vaccinology Course

Sponsored by the National Foundation for Infectious Diseases  
Hyatt Regency Chicago

### March 22, 2011 NFID Awards Dinner

Sponsored by the National Foundation for Infectious Diseases  
Ritz Carlton Pentagon City, Arlington, Virginia

### May 16 – 18, 2011 Fourteenth Annual Conference on Vaccine Research

Sponsored by the National Foundation for Infectious Diseases  
Baltimore Marriott Waterfront Hotel in Baltimore, Maryland

### May 7 – 9, 2012 Fifteenth Annual Conference on Vaccine Research

Sponsored by the National Foundation for Infectious Diseases  
Hyatt Regency Inner Harbor in Baltimore, Maryland



For more information about NFID sponsored events and meetings, please contact:

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