Infectious Disease Challenges and Threats Outlined at News Conference

The National Foundation for Infectious Diseases (NFID) held its 16th Annual Richard J. Duma/ NFID News Conference and Symposium on Infectious Diseases on July 26, 2011. The news conference was presented via webinar. This event is named for former NFID president and executive director Richard J. Duma, MD, PhD, currently director of infectious diseases at Halifax Medical Center in Daytona Beach, Florida and director emeritus of NFID.

The panel of esteemed presenters provided updates on whooping cough; infections and travel; and resetting attitudes toward immunization.

The Return of Whooping Cough

Since 2010 pertussis has made a significant comeback with outbreaks in California and in many other states. In 2010 more than 9,000 cases of pertussis were reported in California alone, more than had been seen in the state since 1947. Among these cases were 10 infant deaths resulting from pertussis. All of the affected babies were under three months of age and too young to be fully immunized themselves, stated Mark H. Sawyer, MD, professor of Clinical Pediatrics and an infectious diseases specialist at the University of California San Diego School of Medicine and Rady Children’s Hospital.

Parents are the most common source of pertussis infection in infants. Recently the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) voted to recommend that pregnant women receive Tdap (tetanus, diphtheria, acellular pertussis) vaccine during their pregnancy if they have not already been immunized.

Also, the CDC recently expanded recommendation for the use of Tdap vaccine for older children and adults.

The expanded recommendations now include adults 65 years of age and older. Currently there are two different pertussis vaccines: DTaP (diphtheria, tetanus, acellular pertussis) for children older than seven years of age and Tdap for children 10 years of age and older as well as adults of all ages. The vaccines differ in the amount of various components.

Dr. Sawyer cited the reasons for outbreaks of pertussis: 1) it is very contagious; 2) people who have pertussis can be contagious up to three weeks; 3) pertussis is difficult for doctors to recognize and diagnose; 4) even after someone begins treatment for pertussis they are contagious for up to five days; and immunity from prior vaccination or disease wanes over time so people again become susceptible.

Infection in Returning Travelers; Bringing Home Unwanted Souvenirs

Jay S. Keystone, MD, professor of medicine, University of Toronto and Director of Toronto Medisys Travel Health Clinic at Toronto General Hospital, provided an update on infectious diseases encountered while traveling. Dr. Keystone discussed outbreaks that are prevalent today including malaria, dengue, typhoid and African tick bite fever.

“Travelers have an increased risk of infectious diseases, some of which are vaccine preventable,” said Dr. Keystone. He mentioned that many of the illnesses that are returned are gastrointestinal in nature. The largest percentage of persons returning ill are those who are new travelers who opt out of getting vaccines prior travel. Influenza, hepatitis A, hepatitis B, typhoid fever and cholera are most the most prevalent vaccine preventable illnesses found in travelers.

Dr. Keystone discussed a new strain of gonorrhea which has proven to be drug-resistant. “It is crucial that we have increased surveillance for infectious disease and a strong public health system that can respond to disease outbreaks,” stated Dr. Keystone.

Resetting Attitudes about Vaccines

Gregory A. Poland, MD, is director of The Mayo Clinic Vaccine Research Group, professor of medicine and infectious diseases and the director of the immunization clinic and director at the Mayo Clinic. Dr. Poland discussed challenges in controlling fears and misinformation about vaccine safety to ensure that more children and adults receive needed vaccines to prevent disease.

“Since the widespread use of vaccines began in the 1960’s, cases of vaccine preventable disease have fallen dramatically, often to less than 1% of pre-vaccine era numbers of cases,” stated Dr. Poland. “Those
The National Foundation for Infectious Diseases (NFID) is a non-profit, tax-exempt 501(c)(3) public foundation established in 1973 to educate the public and health care professionals about the causes, treatment and prevention of infectious diseases.

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The conference was developed for officials who have an interest in vaccine research in public health, agriculture, health delivery, policy and regulatory matters. The conference will also include meet the experts breakfast sessions.

The conference will begin accepting submitted abstracts in October. For the second year, a pre-conference workshop “Creating Outstanding Scientific Communications: Talks, Abstracts, and Posters,” will be held on Sunday, May 6, 2012. The International Association for Biologicals will hold its programs, “Potential Use of Biomarkers on Vaccine Research” and “Early Immunological Events to Assess Vaccine Safety” on May 10–11, 2012.

The conference was developed for researchers, scientists, epidemiologists, microbiologists, immunologists, molecular biologists, physicians and veterinarians,

The National Foundation for Infectious Diseases (NFID) will sponsor the Fifteenth Annual Conference on Vaccine Research on May 7–9, 2012, at the Hyatt Regency Inner Harbor Hotel in Baltimore, Maryland.

The conference is designed to bring together the diverse disciplines involved in the research and development of vaccines. Expert faculty from various disciplines will present the latest vaccine-related scientific data, results, and issues via symposia and panel discussions. The conference plenary sessions will focus on the following topics:

- Vaccine Discovery
- Clinical Development in Vaccines/Vaccine Discovery
- Rotavirus Vaccines
- Vaccines for Enteric Disease
- Food Safety Vaccines
- Vaccine Adjuvants
- Scientific Assessment to Recent Adverse Events
- Discovery

The Keynote Lecture, Vaccine Discovery, will be delivered by Stanley A. Plotkin, MD, emeritus professor, Wistar Institute and University of Pennsylvania. F. Marc LaForce, MD, director, Meningitis Vaccine Project Institution, PATH, will deliver the Mary Lou Clements-Mann Memorial Lecture in Vaccine Sciences “New Group A Meningococcal Conjugate Vaccine: Introduction in Africa”

The 15th Annual Conference on Vaccine Research will feature the presentation of the Maurice R. Hilleman Early-stage Career Investigator Award, which memorializes the lifetime achievements of Dr. Maurice R. Hilleman in the field of vaccinology. The award recognizes individuals in the early stages of their careers in any field of vaccinology, from basic research, through pre-clinical and clinical studies, manufacturing and production, to related vaccine manufacturers, and public health officials who have an interest in vaccine research. NFID will offer AMA PRA Category 1 Credits™ and Continuing Education credits. The National Foundation for Infectious Diseases 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.

For more information about registration or abstract submission, call NFID at (301) 656-0003 x19, fax: (301) 907-0878, e-mail: vaccine@nfid.org or you may visit the NFID website at www.nfid.org
Clinical Vaccinology Course Scheduled

The National Foundation for Infectious Diseases (NFID) announces its Clinical Vaccinology Course. The course, co-sponsored by the NFID, Emory Department of Medicine, Division of Infectious Diseases and the Emory Vaccine Center will be held November 4–6, 2011 at the Grand Hyatt Atlanta Hotel in Atlanta, Georgia. The course will also be held in Chicago, March 9–11, 2012 at the Hyatt Regency Chicago in Chicago, Illinois.

Course collaborating organizations include the American Academy of Pediatrics, the American Academy of Physician Assistants, the American College Health Association, American Medical Association, American Nurses Association, 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.

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 19.00 AMA PRA Category 1 Credit(s)™. 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 19.00 contact hours. The course will also offer pharmacy education credits through PharmCon which is accredited by the Accreditation Council for Pharmacy Education as a provider for continuing pharmacy education.

Online registration is now open for the courses. 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.

Keynote presentations include:

- A Overview of Vaccinology
  Walter A. Orenstein, MD
  Emory University
- Global Immunization Disparities:
  Reaching Every Child
  Orin Levine, PhD
  Johns Hopkins University

The Clinical Vaccinology Course will feature sessions addressing:

- How Vaccines Work
- An Update on the Advisory Committee on Immunization Practices
- Childhood and Adolescent Immunization
- Vaccinology I
- Special Vaccine Issues
- Adult and Adolescent Immunization Challenges
- Childhood Immunization Challenges
- Communication Issues
- Vaccinology II
- Special Populations

NFID Focuses on Adolescent Immunization

As children go back to school this fall it’s a great time to make sure our adolescents have all their recommended vaccines. Studies have shown that parents do a great job of vaccinating their babies, but by their teen years, too many parents have forgotten about how important it is to protect them with immunizations. Vaccines are recommended across the entire lifespan to help us live healthier lives free of infectious diseases that caused death or permanently injured scores of Americans just a few generations ago.

One great resource for the most up-to-date information about vaccines for adolescents is the National Foundation for Infectious Diseases’ (NFID) newly updated website, Adolescentvaccination.org.

The website outlines the vaccines that the Centers for Disease Control and Prevention (CDC) recommends for adolescents. It also includes information on the recent outbreaks of pertussis (whooping cough) and measles in the

(ADOLESCENT IMMUNIZATION continued on page 5)
Joint NFID/IDSA Postdoctoral Fellowship and Young Investigator Awards Announced

The National Foundation for Infectious Diseases (NFID) is pleased to announce the recipients of the 2011 Postdoctoral Fellowships and Young Investigator Grant recipients. The awards, presented in partnership by NFID and the Infectious Diseases Society of America (IDSA), assist infectious diseases specialists in furthering their research.

The Association of Subspecialty Professors Young Investigator Award in Geriatrics

Robin Lynn Paige Jump, MD, PhD is the recipient of the 2011 Association of Subspecialty Professors Young Investigator Award in Geriatrics. The award provides support to infectious diseases faculty within the first four years of their appointment who are interested in academic careers focused on geriatric medicine aspects of a subspecialty. Award recipients must develop and implement a basic, clinical, or health services research project encompassing the geriatric aspects of infectious diseases.

Dr. Jump is a team leader of the Geriatric Infectious Disease team at the Community Living Center and staff physician at the Louis Stokes Cleveland Department of Veterans Affairs Medical Center. She is also a clinical instructor in the Division of Infectious Diseases and HIV Medicine at Case Western Reserve University.

Dr. Jump’s research project will focus on colonization resistance and older adults’ vulnerability to Clostridium difficile disease.

Astellas Young Investigator Award

Jeffrey D. Dvorin, MD, PhD and Alexander Ploss, PhD are the recipients of 2011 Astellas Young Investigator Awards. The awards provide funding to young investigators who have demonstrated outstanding research in any one area of current interest in the field of infectious diseases.

Dr. Dvorin is an associate physician in the department of medicine, division of infectious diseases at Children’s Hospital Boston. His research topic is functional characterization of an essential protein kinase in the malaria parasite Plasmodium falciparum.

Dr. Ploss is a research assistant professor in the laboratory of virology and infectious diseases at Rockefeller University. His research focuses on a conditional transposon-based insertion mutagenesis screen for genes involved in hepatitis C virus infection.

Merle A. Sande/Pfizer fellowship in International Infectious Diseases

Katherine Ann Plewes, MD, MSc is the recipient of the 2011 Merle A. Sande/Pfizer Fellowship in International Infectious Diseases. The award is given for important clinical research in infectious diseases and/or HIV/AIDS conducted in a resource-limited setting.

Dr. Plewes is an infectious diseases fellow in the division of infectious diseases at the University of British Columbia. Her research focuses on the effect of acetaminophen on decreasing kidney injury in patients with severe falciparum malaria complicated by Blackwater Fever by inhibiting the hemoglobin-induced lipid peroxidation of free hemoglobin released during massive hemolysis.

Pfizer Young Investigator Award in Vaccine Development

David K. Hong, MD is the recipient of the 2011 Pfizer Young Investigator Award in Vaccine Development. The award provides funding for outstanding research in vaccine development, either through clinical or laboratory investigation, by a candidate who demonstrates commitment to vaccinology as a career.

Dr. Hong is an instructor in the Pediatrics, Immunology and Allergy and Infectious Diseases department at Stanford University Medical Center. His research will investigate mechanisms of cross-presentation after vaccination with cationic lipid/DNA complexes (CLDC) adjuvant.

The first recipient of the Astellas Postdoctoral Fellowship in Transplant Infectious Diseases is Margaret L. Pollack, MD, senior fellow in the Vaccines and Infectious Diseases Division of the Fred Hutchinson Cancer Research Center. Dr. Pollack’s research CMV infection via marrow stems cells seeks to define abortive infection and to identify donor immune characteristics that are associated with these self-limited infections.

Astellas Postdoctoral Fellowship in Transplant Infectious Diseases

New this year is the Astellas Postdoctoral Fellowship in Transplant Infectious Diseases. The award provides advanced training in the pathogenesis of infection. The recipient will benefit from the opportunity to be associated with a senior mentor who will assist the trainee in career planning and research program development. The grant covers two years and will allow the recipient to find a research focus, and an opportunity to develop preliminary data to support applications for independent funding for their future careers.

NFID Awards Dinner Announcement

The National Foundation for Infectious Diseases is pleased to announce its 2012 Awards Dinner honoring Dr. George L. Drusano 2012 Maxwell Finland Award Recipient

Dr. Helene D. Gayle 2012 Jimmy and Rosalynn Carter Humanitarian Award Recipient

Tuesday, March 27, 2012

Ritz Carlton Pentagon City
Arlington, Virginia

For additional information please write to: info@nfid.org
The National Foundation for Infectious Diseases (NFID) has launched new resources to support pneumococcal prevention efforts in US adults. A professional practice toolkit and educational Web pages for consumers are now available on NFID’s Adultvaccination.org website.

Adults in the US bear a significant burden of invasive pneumococcal disease, with 85 percent of cases in people age 18 or older and death rates of 20–30 percent. Pneumococcal vaccination is recommended for all adults age 65 and older, as well as younger adults with chronic health conditions. Despite longstanding recommendations, vaccination rates are suboptimal in part due to low awareness among both healthcare professionals and consumers about who should receive the vaccine.

The professional toolkit will help healthcare professionals educate adult patients about pneumococcal disease and support their efforts to vaccinate at-risk patients. It includes ready-to-use and customizable resources in English and Spanish such as patient education materials for in-office display, immunization assessment forms, and template practice communications about the importance of adult immunization.

The new Web pages for consumers include a patient education page and an online Q&A that features NFID Advisory Board members answering commonly asked questions about pneumococcal disease.

The professional toolkit can be accessed at www.Adultvaccination.org/pneumococcaltoolkit and the consumer information can be found at www.Adultvaccination.org/pneumococcal. This effort was led by NFID’s multidisciplinary Pneumococcal Disease Advisory Board, co-chaired by William Schaffner, MD, NFID president and Susan J. Rehm, MD, NFID medical director.

US. Both resulted in many children being hospitalized; the whooping cough outbreak also resulted in the death of 10 infants in California. Unimmunized adolescents are a common source of whooping cough infection for infants. Unfortunate outbreaks like these highlight the need for continued high vaccination rates across our entire lifespan for personal protection and the protection of those around us.

To help prevent outbreaks and protect individuals, CDC recommends a Tdap (pertussis) booster vaccine for all adolescents and one or two MMR (measles, mumps and rubella or “German measles”) vaccines for unimmunized adolescents. Adolescents should also get the meningococcal vaccine and girls should receive the HPV vaccine.

(NEWS CONFERENCE, from page 1) Tremendous health gains are now significantly threatened by falling vaccine coverage rates among children, adolescents, and adults—not only in the US but across Europe. This is occurring not because we don’t have safe and effective vaccines, but because we have a shortage of vaccines, and not for lack of monetary resources. In fact, the primary cause for falling coverage rates are fear, mistrust, ignorance, and the direct effects of the anti-vaccine movement,” he said.

Dr. Poland stated that in order to reduce fears and needless disease outbreaks we must communicate that: 1) vaccines licensed in the US are safe and effective, and recommendations are evidence-based; 2) low vaccine coverage rates, based on fear about vaccine safety and ignorance regarding vaccine benefits, are leading to outbreaks of previously controlled communicable diseases; 3) illness, hospitalizations, deaths, and large costs to control these diseases have resulted to treat unvaccinated patients; 4) anti-vaccine groups have done great harm to the public health; and 5) newer transformative and innovative vaccine education efforts are needed, and will correct these issues.

### Calendar of NFID Events and Meetings

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