2014 Annual Pediatric Infectious Diseases Society Awards

Corresponding Author: Ilan Youngster, MD, MMSc, Division of Infectious Diseases, 300 Longwood Avenue, Boston, MA 02445. E-mail: ilan.youngster@childrens.harvard.edu.

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The following is a compilation of the 2014 Pediatric Infectious Diseases Society Awards presented on Sunday, May 4, 2014, during the Pediatric Academic Societies meeting in Vancouver, BC. Award summaries were adapted from submissions provided by the nominating physician.

11th Annual Stanley A. Plotkin Lectureship in Vaccinology: Eugene D. Shapiro, MD

The Stanley A. Plotkin Lecture in Vaccinology is presented annually to an individual who has made significant contributions to the field of vaccinology or areas of related science that have impacted the lives of children and the specific area of pediatric infectious diseases. This year’s recipient was Dr. Eugene D. Shapiro (Figure 1), who received the award for his invaluable research efforts related to vaccine effectiveness in childhood. His presentation focused on the inherent limitations of randomized trials in the evaluation of pediatric vaccines and development of feasible alternative research strategies. Most notably, he described the use of “sham exposures” and “sham outcomes” to reduce the risk of bias in case–control studies. A summary of his presentation, “Case-Control Studies to Assess the Effectiveness of Vaccines,” is provided in the current issue of the Journal of the Pediatric Infectious Diseases Society.

Eugene D. Shapiro, MD is professor of pediatrics, epidemiology of microbial diseases, and investigative medicine at Yale University. He is Associate Chair for clinical, epidemiologic, and educational research in the Department of Pediatrics. He is also Co-Director of Education for the Yale Center for Clinical Investigation/CTSA, Director of Yale’s KL-2 Mentored Clinical Scholars Program, and Deputy Director of Yale’s PhD Program in Investigative Medicine.

Dr. Shapiro is a clinical epidemiologist whose research has focused particularly on the effectiveness of vaccines in clinical practice, Lyme disease, and evaluation of the febrile child.

Figure 1. Stanley A. Plotkin Lectureship in Vaccinology recipient Eugene D. Shapiro (center) with PIDS president David Kimberlin (left) and David Greenberg (right).
Dr. Shapiro was born in and attended public school in Syracuse, NY. He received a BA in English literature from Yale University and an MD from the University of California, San Francisco School of Medicine. He did both a residency in pediatrics and a fellowship in pediatric infectious diseases at the Children’s Hospital of Pittsburgh, PA, and a fellowship in clinical epidemiology as a Robert Wood Johnson Clinical Scholar at Yale, after which he joined the faculty at Yale. He is married to Susan Bowers and has 3 children and 1 grandchild.

2014 Distinguished Physician Award: Stanford T. Shulman, MD

Nominated by: Robert R. Tanz, MD

The Distinguished Physician Award of the Pediatric Infectious Diseases Society has been awarded yearly since 1987 to “a pediatrician with an extensive and distinguished career marked by significant accomplishments and contributions in pediatric infectious diseases including those as a clinician, educator and/or investigator . . . in keeping with the Society’s purpose to enhance the health of infants, children and adolescents by promoting excellence in diagnosis, management and prevention of infectious diseases through clinical care, education, research and advocacy.”

Dr. Stanford T. Shulman (Figure 2) is the recipient of the 2014 Pediatric Infectious Diseases Society Distinguished Physician Award, for his unwavering dedication to improving child health throughout his distinguished career as investigator, clinician, teacher, and mentor. He is currently the Virginia H. Rogers Professor of Pediatric Infectious Diseases at Northwestern University Feinberg School of Medicine and Chief, Division of Infectious Diseases at Ann & Robert H. Lurie Children’s Hospital of Chicago.

Dr. Shulman’s career has been marked by his commitment to excellent science, nurturing of trainees and faculty, advocacy for children, and service to his profession. He has been a member of the Pediatric Infectious Diseases Society since it was formed in 1980, and served as President of the Society from 2007 to 2009. He chaired the Section of Infectious Diseases of the American Academy of Pediatrics from 1995 to 2001, in addition to numerous other committees including the American Heart Association Committee on Rheumatic Fever, Endocarditis, and Kawasaki Disease from 1980 to 1988 and the IDSA Guidelines Committee for Diagnosis and Management of Streptococcal Pharyngitis from 2009 to 2012. He was the lead author of the subsequent 2012 IDSA practice guideline.

Stan Shulman was born in Kalamazoo, MI, in 1942. He graduated cum laude from the University of Cincinnati with a BS in Zoology and from the University of Chicago Medical School, where he completed his pediatric internship and residency. He went on to complete a Research Fellowship at the Institute for Child Health in London, England, and then a Fellowship in Pediatric Immunology and Infectious Diseases at the University of Florida in Gainesville.

In Gainesville, with the man who was to become his long-time mentor, Dr. Elia Ayoub, Stan began to study Streptococcus pyogenes, the immunologic response to infection with Group A Streptococcus (GAS), and various aspects of acute rheumatic fever. In 1973 he and Dr. Ayoub characterized the antibody-binding capacity of streptococcal group A carbohydrate hapten. In 1974 he published studies of the human antibody response to group A carbohydrate, and measurement of antibodies to group A carbohydrate for distinguishing nonrheumatic from rheumatic mitral valve disease. The more recent recognition of the high prevalence of mitral valve disease identified by echocardiography in children in developing countries has made his 40-year-old observations relevant once again. Years after discontinuing this

Figure 2. Distinguished Physician Award recipient Stanford T. Shulman (center), with PIDS President David Kimberlin (left) and award nominator Robert Tanz (right).
line of research, he returned to the lab to redevelop the A carbohydrate antibody enzyme-linked immunosorbent assay for use in a new study of mitral valve disease in Ugandan children.

Another example of Dr. Shulman’s creativity is evident in his use of data sent to him by Dr. Gene Stollerman more than 40 years after it was collected. Pairing the Stollerman data from the 1960s with newly available molecular surveillance data, he clearly demonstrated that the dramatic decline in acute rheumatic fever in the United States beginning in the 1960s was associated with changes in the prevalence of “rheumatogenic” M types.

It is striking that going back to his fellowship he has published studies, case reports, and case series on other infectious-related and immune-mediated conditions: congenital syphilis, osteomyelitis, lupus nephritis, chronic hepatitis, congenital heart block, nosocomial infections, and staphylococcal infections. Many of his hundreds of publications were written with trainees; the breadth and depth of his interests and his keen observations continue today. He is recognized internationally as an authority on Kawasaki disease (KD) as well as on GAS; he has been invited to speak about pharyngitis, acute rheumatic fever, and Kawasaki disease in too many countries to name, and he has served on countless grant review committees in the United States and abroad. He continues to engage with faculty and fellows in his division, as well as more distant collaborators, in efforts to better understand the pathogenesis of KD.

Perhaps the most extraordinary aspect of Dr. Shulman’s career has been his willingness and ability as a teacher and mentor. Selflessly helping others and developing future leaders in pediatric infectious diseases is central to his approach to clinical care, education, and research. In recognition of this, he was named the Northwestern University Feinberg School of Medicine Faculty Mentor of the Year in 2010. Always delighted to see a trainee or faculty member experience success, he is willing to help them find their way in academic medicine—and not only in pediatric infectious diseases. He has been a mentor for medical students, residents, and faculty in many other disciplines.

Dr. Ellen Chadwick, Associate Chair for Education in the Northwestern University Department of Pediatrics, a division member, and former fellow of Dr. Shulman, most eloquently summarized his career:

“Stan Shulman is the ultimate distinguished academic physician. An internationally known expert who has contributed to the evolving knowledge base through his research, numerous publications, and clinical experience, he is truly a renaissance man in Pediatric Infectious Diseases.”

2014 Young Investigator Award: Aaron M. Milstone, MD, MHS

Nominated by: Kwang Sik Kim, MD

The Young Investigator Award has been presented annually since 2004 to a physician who has completed fellowship training 7 years or less from the award date and whose independent and productive research during and after fellowship represents outstanding contributions in pediatric infectious diseases.

Dr. Aaron M. Milstone (Figure 3) is the recipient of the 2014 Young Investigator Award. He graduated from Washington University in St. Louis and matriculated at Yale School of Medicine, where he began to demonstrate his interest in and commitment to research, particularly in infectious diseases. He undertook a project in parasitic diseases, and his medical school thesis won the William U. Gardner Prize for “Outstanding medical thesis,” and led to a first-authored publication in the Journal of Biological Chemistry. He continued his training in Pediatrics at the Children’s Hospital of Philadelphia,
where he completed his residency and worked for a year as a postdoctoral fellow studying viral pathogenesis.

Dr. Milstone went on to complete a fellowship program in Pediatric Infectious Diseases at Johns Hopkins University School of Medicine, focusing on patient-oriented research in healthcare epidemiology and infection control. Dr. Milstone integrated himself into the Johns Hopkins Hospital Department of Hospital Epidemiology and Infection Control, and his significant contribution and national recognition on this topic along with his outstanding record in academic Pediatrics in teaching and mentoring activities is the basis for this award.

Aaron Milstone has contributed greatly to our understanding of the epidemiology and outcomes of antimicrobial-resistant organisms in children. He published the first data to demonstrate a substantially higher risk of infection in hospitalized children who acquired methicillin-resistant Staphylococcus aureus (MRSA) colonization in the intensive care unit (ICU) compared with children who are admitted to the ICU already colonized with MRSA. This finding supports aggressive measures to prevent the nosocomial spread of MRSA in hospitalized children. His contribution to the prevention of healthcare associated infections and antimicrobial resistance in children was recognized by receiving the Pediatric Investigator Award from the Society for Healthcare Epidemiology of America in 2010.

Dr. Milstone has continued to investigate interventions to prevent healthcare-associated infections in children. He designed a multicenter randomized controlled trial to determine whether bathing children in the intensive care unit with an antiseptic can reduce nosocomial infections and the transmission of multidrug-resistant organisms. This study, published in The Lancet, was one of the largest clinical trials of critically ill children and demonstrated that bathing children with chlorhexidine reduced bloodstream infection. In recognition of this work, Dr. Milstone received the Inaugural Caroline B. Hall Clinical Innovation Award from the Pediatric Infectious Diseases Society in 2013.

Dr. Milstone’s academic trajectory is exemplary one for young pediatric infectious diseases fellows and investigators who wish to develop a successful career in academics. He was the recipient of a fellowship award from the PIDS, followed by a KL2 for Multidisciplinary Clinical Research Career Development. He subsequently launched a successful K23, entitled “MRSA in children: epidemiology, pathogenesis and prevention,” resulting in a total of 40 publications. He has recently been awarded a RO1 grant entitled “Decreasing neonatal Staphylococcal aureus disease through parental intervention.”

Dr. Milstone has been highly prolific, as shown by a total of 49 peer-reviewed publications with 12 as first author and 14 as last author. In addition, he is well recognized for his excellence in clinical care and teaching as well as for his eagerness to provide mentorship to students and residents.

Healthcare epidemiology is an emerging field in public health. Developing research scientists to study the epidemiologic aspects of disease in these settings is paramount, and Dr. Milstone has become a national leader in his chosen field.

2014–2016 PIDS Fellowship Award

Laura A. Vella, MD, PhD, The Children’s Hospital of Philadelphia, Philadelphia, Pennsylvania (Figure 4)
Title: The Role of Intestinal Microbiota in a Mouse Model of Streptococcus pneumoniae Colonization
Mentors: Jeffrey Weiser, MD and Hamid Bassiri, MD, PhD

Figure 4. PIDS Fellowship Award recipient Laura A. Vella (second from right) with PIDS president David Kimberlin (left), David Hunstad (second from left), and Hamid Bassiri (right).
2014–2016 PIDS Fellowship Award Supported by Stanley and Susan Plotkin and Sanofi Pasteur

James M. Davis, MD, PhD, University of Wisconsin, Madison, Wisconsin (Figure 5)

Title: Understanding Fungal Morphogenesis and Dissemination Using In Vivo Imaging of a Larval Zebrafish Model

Mentors: Bruce Klein, MD and Anna Huttenlocher, MD

Figure 5. PIDS Fellowship Award supported by Stanley and Susan Plotkin and Sanofi Pasteur recipient James M. Davis (second from right) with PIDS president David Kimberlin (left), David Hunstad (center), Ellen Wald (second from left), and David Greenberg (right).

Anthony W. Orvedahl, MD, PhD, Washington University, St. Louis, Missouri (Figure 6)

Title: Immune Regulation of Genome Stability

Mentors: Gregory A. Storch, MD and Herbert W. Virgin IV, MD, PhD

2014–2017 PIDS–St. Jude Fellowship Program in Basic Research

Figure 6. PIDS–St. Jude Fellowship Award recipient Anthony W. Orvedahl (second from right) with PIDS president David Kimberlin (left), David Hunstad (second from left), and Gregory Storch (right).