

**Name**  
Department of Microbiology  
University of Pennsylvania  
Philadelphia, PA 19104  
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E-mail

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*Curriculum vitae* as of June 1, 2006

**Personal Data**

Date and Place of Birth: October 31, 1970; New York, NY  
Citizenship: U.S.A.

**Academic Training**

7/1993-6/1998 M.D., Columbia University College of Physicians & Surgeons  
7/1993-6/1997 M.P.H., Columbia University School of Public Health  
8/1989-6/1993 B.A. *cum laude*, Biology, Yale University

**Traineeship**

7/2002-8/2006 Postdoctoral Fellow, Microbiology, University of Pennsylvania  
7/2001-6/2004 Clinical Fellow, Pediatric Infectious Diseases, Children's Hospital of Philadelphia  
7/1998-6/2001 Resident, Pediatrics, Children's Hospital of New York, Columbia University

**Board Certification**

8/2005 Subboard of Pediatric Infectious Diseases, American Board of Pediatrics  
8/2001 American Board of Pediatrics

**Professional Organizations & Societies**

Infectious Diseases Society of America  
American Association of Immunologists  
American Society for Microbiology  
American Association for the Advancement of Science  
Pediatric Infectious Disease Society (PIDS)  
Fellow, American Academy of Pediatrics (AAP)  
Member, AAP Section on Infectious Diseases (SOID)

**Hospital Appointments**

9/2006-present Assistant Professor of Pediatrics  
Assistant Attending Physician  
Columbia University College of Physicians & Surgeons  
Children's Hospital of New York-Presbyterian  
7/2004-6/2006 Assistant Attending Physician, Children's Hospital of Philadelphia

**Honors**

**Invited Society Memberships**

Fellow, American Academy of Pediatrics

**Invited Lectures**

2006 Institut Pasteur Euroconference; Paris, France  
Keystone Symposium on Innate Immunity; Banff, Alberta  
PIDS-St. Jude Pediatric Microbial Research Conference; Memphis, TN  
Department of Pediatrics, Memorial-Sloan Kettering Cancer Center; New York, NY  
2005 Nanjing University Medical School; Nanjing, China  
Department of Pediatrics, Zhong Da Hospital; Nanjing, China  
Department of Microbiology, University of Chicago; Chicago, IL  
Section of Infectious Diseases, Memorial-Sloan Kettering Cancer Center; New York, NY

- PIDS-St. Jude Pediatric Microbial Research Conference; Memphis, TN  
 Center for Emerging Pathogens, Mount Sinai School of Medicine; New York, NY  
 2004 PIDS-St. Jude Pediatric Microbial Research Conference; Memphis, TN  
 2003 Department of Anesthesiology Grand Rounds, University of Medicine & Dentistry of N.J.  
 PIDS-St. Jude Pediatric Microbial Research Conference; Memphis, TN  
 2000 North American Cystic Fibrosis Conference; Baltimore, MD  
 1998 Pediatric Academic Societies' Annual Meeting; New Orleans, LA  
 1991 First International Congress on Xenotransplantation; Minneapolis, MN

### **Fellowship & Grant Support**

#### **Active Support**

- 2005-2009 NIH K08 AI065450, "Polymicrobial Induction of Epithelial Inflammation" (P.I.)

#### **Past Support**

- 2006 Keystone Symposia Travel Award  
 2001-2006 PIDS-St. Jude Fellowship Program in Basic Research  
 2000 AAP Resident Research Grant  
 1999 AAP Resident Research Grant  
 1999-2000 New York-Presbyterian Hospital House Staff Research Grant  
 1996-1997 Cystic Fibrosis Foundation Predoctoral Research Fellowship  
 1996 NIH Medical Student Training Grant (DK-39693)

### **Committee Responsibilities**

- 2005-present Program and Meetings Committee, Pediatric Infectious Diseases Society  
 2005-present Education Subcommittee, Section on Infectious Diseases, AAP

### **Teaching Experience**

- 2004-2006 Section Leader, Module II Microbiology/Infectious Diseases Course  
 University of Pennsylvania School of Medicine  
 2001-2006 Section Leader, Module I Microbiology/Infectious Diseases Course  
 University of Pennsylvania School of Medicine

### **Other Professional Activities**

#### **Journal Peer Review**

*Journal of Clinical Investigation*  
*Infection and Immunity*  
*Cellular Microbiology*  
*Clinical Infectious Diseases*  
*Pediatrics*  
*Epidemiology and Infection*  
*Archives of Internal Medicine*  
*BMC Microbiology*  
*Expert Review of Vaccines*

#### **Abstract Referee**

Infectious Disease Society of America Annual Meeting  
 Pediatric Academic Societies' Annual Meeting

#### **Board Examination Question Author**

American Board of Pediatrics, Subboard of Pediatric Infectious Diseases

#### **Volunteer Physician**

Children of China Pediatrics Fund Mission  
 Doctors of the World

## Publications

### Original, Peer-reviewed Articles

1. **Authors' Names.** Lymphocyte xenoantigens recognized by preformed antibodies. *Transplant Proc* 1992; 24:583-5.
2. **Authors' Names.** Relation of anti-HLA antibodies and graft atherosclerosis in human cardiac allograft recipients. *J Heart Lung Transplant* 1992; 11:S120-3.
3. **Authors' Names.** Photochemotherapy in human heart transplant patients at high risk for fatal rejection. *J Heart Lung Transplant* 1992; 11:746-50.
4. **Authors' Names.** Activation of NF- $\kappa$ B by adherent *Pseudomonas aeruginosa* in normal and cystic fibrosis respiratory epithelial cells. *J Clin Invest* 1998; 101:2598-605.
5. **Authors' Names.** *Pseudomonas aeruginosa* induction of apoptosis in respiratory epithelial cells: analysis of the effects of CFTR dysfunction and bacterial virulence factors. *Am J Respir Cell Mol Biol* 2000; 23:304-12.
6. **Authors' Names.** Cystic fibrosis pathogens activate Ca<sup>2+</sup>-dependent MAPK signaling pathways in airway epithelial cells. *J Biol Chem* 2001; 276:19267-75.
7. **Authors' Names.** Nosocomial rotavirus in a pediatric hospital. *Infect Control Hosp Epidemiol* 2001; 22:299-301.
8. **Authors' Names.** Varicella-related hospitalizations in the vaccine era. *Pediatr Infect Dis J* 2002; 21:931-4.
9. **Authors' Names.** Antibody-enhanced pneumococcal adherence requires IgA1 protease. *Proc Natl Acad Sci* 2003; 100: 4215-20.
10. **Authors' Names.** Varicella-related hospitalizations: an update. *Pediatr Infect Dis J* 2004; 23:377.
11. **Authors' Names.** Synergistic proinflammatory responses induced by polymicrobial colonization of epithelial surfaces. *Proc Natl Acad Sci* 2005; 102: 3429-34.
12. **Authors' Names.** The role of innate immune responses in the outcome of interspecies competition for colonization of mucosal surfaces. *PLoS Pathogens* 2005; 1: e1.
13. **Authors' Names.** Trends in invasive pneumococcal disease-associated hospitalizations. *Clin Infect Dis* 2006; 42: e1-5.
14. **Authors' Names.** Emergence of vaccine-related pneumococcal serotypes as a cause of bacteremia. *Clin Infect Dis* 2006; 42: 907-14.
15. **Authors' Names.** Epithelial cells are sensitive detectors of bacterial pore-forming toxins. *J Biol Chem* 2006; 281: 12994-8.

### Case Reports

1. **Authors' Names.** *Plesiomonas shigelloides* sepsis and splenic abscess in an adolescent with sickle-cell disease. *Pediatr Infect Dis J* 2001; 20:1178-9.
2. **Authors' Names.** *Citrobacter* mediastinitis following cardiac surgery in a neonate. *J Infect.* 2002; 44:52-3.

3. **Authors' Names.** Cat-scratch disease presenting as orbital abscess and osteomyelitis. *J Clin Microbiol* 2003; 41:3991-3.

#### Reviews, Chapters, and Editorials

1. **Authors' Names.** Current immunosuppressive therapy: immunosuppression for cardiac transplantation. *Anesth Rep* 1991; 3:390-396.
2. **Authors' Names.** Xenografts. In: *Encyclopedia of Bioethics*. Simon & Schuster MacMillan: New York. 1995; 2593-2597.
3. **Authors' Names.** Cardiac allograft vasculopathy. *Transplant Proc* 1995;27(3):1930.
4. **Authors' Names.** Rotavirus: clinical and epidemiologic aspects. *Emerg Office Peds* 1999; 12:182-184.
5. **Authors' Names.** Lactoperoxidase: a new role for an "old" enzyme in airway defenses. *Am J Respir Cell Mol Biol* 2000; 22:642-4.
6. **Authors' Names.** Host-bacterial interactions in the initiation of inflammation. *Paediatr Respir Rev* 2001; 2:245-52.
7. **Authors' Names.** In: *Current Pediatric Therapy 17*. W.B. Saunders & Company: Philadelphia. 2002; 44-46.
8. **Authors' Names.** Staphylococcal Infections. In: *Current Pediatric Therapy 17*. W.B. Saunders & Company: Philadelphia. 2002; 95-98.
9. **Authors' Names.** Hospital-acquired viral infections in the NICU. *Semin Perinat* 2002; 26:346-56.
10. **Authors' Names.** Anaerobic infections. In: *The 5-minute Pediatric Consult, 4<sup>th</sup> ed.* Lippencott, Williams, & Wilkins: Philadelphia. 2005; 118-119.
11. **Authors' Names.** Competitive and cooperative interactions in the respiratory microflora. In: *Colonization of Mucosal Surfaces*. Nataro JP, Cohen PS, Mobley HLT, Weiser JN, eds. ASM Press: Washington, DC. 2005; 87-95.
12. **Authors' Names.** Endocarditis. In: *Requisites in Pediatrics*. Elsevier Science: Philadelphia. 2006; in press.

#### Selected Meeting Abstracts

1. **Authors' Names.** *Pseudomonas aeruginosa* induces cytokine production in epithelial cells by a calcium- and NF- $\kappa$ B dependent mechanism. Gordon Research Conference on Molecular Mechanisms of Bacterial Adhesion and Signaling. Newport, RI, August 3-8, 1997.
2. **Authors' Names.** *Pseudomonas aeruginosa*-induced cytokine production by epithelial cells is a calcium-dependent process. Eleventh Annual North American Cystic Fibrosis Conference. Nashville, TN, October 23-26, 1997.
3. **Authors' Names.** Activation of NF- $\kappa$ B in CF and normal epithelial cells. Eleventh Annual North American Cystic Fibrosis Conference. Nashville, TN, October 23-26, 1997.
4. **Authors' Names.** *Pseudomonas aeruginosa* attachment to respiratory epithelial cells induces intracellular Ca<sup>2+</sup> fluxes which are required for cytokine expression. American Lung Association/American Thoracic Society International Conference. Chicago, IL, April 24-29, 1998.

5. **Authors' Names.** Rapid induction of signal transduction in respiratory epithelial cells in response to *Pseudomonas aeruginosa* ligands. Pediatric Academic Societies' Annual Meeting. New Orleans, LA, May 1-5, 1998.
6. **Authors' Names.** *Pseudomonas aeruginosa* interactions with epithelial cells: adherence, invasion, and apoptosis. Pediatric Academic Societies' Annual Meeting. New Orleans, LA, May 1-5, 1998.
7. **Authors' Names.** CF pathogens activate epithelial cytokine expression by stimulating Ca<sup>2+</sup>-dependent signaling cascades. Twelfth Annual North American Cystic Fibrosis Conference. Montreal, Quebec, Canada, October 15-18, 1998.
8. **Authors' Names.** Multiple cystic fibrosis pathogens activate a common proinflammatory pathway in respiratory epithelial cells. American Academy of Pediatrics Conference. Chicago, IL, October 28-November 1, 2000.
9. **Authors' Names.** *Haemophilus influenzae* stimulates a Ca<sup>2+</sup>-MAPK-NFκB-dependent pathway in respiratory epithelial cells that is independent of LOS modification. Fourteenth Annual North American Cystic Fibrosis Conference. Baltimore, MD, November 9-12, 2000.
10. **Authors' Names.** Epithelial innate immune responses to polymicrobial stimulation are mediated by entry of peptidoglycan fragments through toxin pores. Keystone Symposium on Innate Immunity. Banff, Alberta, February 10-15, 2006.
11. **Authors' Names.** Interspecies competition through neutrophil-mediated opsonophagocytosis requires expression of the peptidoglycan receptor, Nod1. American Association of Immunologists Annual Meeting. Boston, MA, May 12-16, 2006.