

CURRICULUM VITAE
University of Pittsburgh School of Medicine

BIOGRAPHICAL

Name: John V. Williams, M.D.

Business Address: [REDACTED]

Email: [REDACTED]

Business Phone: [REDACTED]

EDUCATION and TRAINING

UNDERGRADUATE:

Dates Attended	Name and Location	Degree Received	Major
1984-1988	Northern Virginia Community College, Alexandria, VA		General studies
1988-1990	University of Virginia Charlottesville, VA	BS with distinction	Biology

GRADUATE:

1990-1994	Virginia Commonwealth University/Medical College of Virginia Richmond, VA	MD	Medicine
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POSTGRADUATE:

1994-1997	Children's Hospital of Pittsburgh Pittsburgh, PA	Pediatric internship/ Residency
2000-2003	Vanderbilt University Medical Center Nashville, TN	Fellowship in Pediatric Infectious Diseases

APPOINTMENTS and POSITIONS

ACADEMIC:

Years Inclusive	Name and Location	Rank/Title
2003-2011	Department of Pediatrics Division of Pediatric Infectious Diseases Vanderbilt University School of Medicine Nashville, TN	Assistant Professor
2007-2011	Department of Microbiology & Immunology Vanderbilt University School of Medicine Nashville, TN	Assistant Professor
2011-2015	Department of Pediatrics Division of Pediatric Infectious Diseases Vanderbilt University School of Medicine Nashville, TN	Associate Professor (with tenure)

2011-2015	Department of Microbiology & Immunology Vanderbilt University School of Medicine Nashville, TN	Associate Professor
2015	Department of Pediatrics, Pediatric Infectious Diseases University of Pittsburgh School of Medicine UPMC Children's Hospital of Pittsburgh, Pittsburgh, PA	Professor (tenured) and Division Chief
2016	Department of Molecular Microbiology and Genetics UPSON, Pittsburgh, PA	Professor
2017	Henry L. Hillman Endowed Chair in Pediatric Immunology	Professor
2019	Institute for Infection, Inflammation, and Immunity in Children (i4Kids)	Director
2020-2022	COVID-19 Medical Response Office, Univ of Pittsburgh	Director

CLINICAL:

1997-2000	Pediatric Emergency Department Chippingham Medical Center Richmond, VA	Attending Physician
2003-2015	Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, TN	Attending Physician
2015-Present	UPMC Children's Hospital of Pittsburgh Pittsburgh, PA	Attending Physician

CERTIFICATION and LICENSURE

SPECIALTY CERTIFICATION:

Certifying Board	Year
American Board of Pediatrics, Pediatric Infectious Diseases sub board	2003, 2013

MEDICAL or OTHER PROFESSIONAL LICENSURE:

Pennsylvania State Board of Medicine	1996-2000, 2015-Present
Tennessee Board of Medical Examiners	2000-2015
Virginia Board of Medicine	1997-2000
New Hampshire	2022-
Minnesota	2023-

MEMBERSHIP in PROFESSIONAL and SCIENTIFIC SOCIETIES

American Society for Virology	Present
Pediatric Infectious Diseases Society	Present
Infectious Diseases Society of America	Present
American Society for Microbiology	Present
Society for Mucosal Immunology	Present
American Association of Immunologists	Present
Society for Pediatric Research (elected)	2006
American Pediatric Society (elected)	2020
Alpha Omega Alpha	1993

HONORS

Title of Award	Year
A. H. Robins Scholarship award, Medical College of Virginia	1991, 1993
Seymour Schotz Scholarship award, Medical College of Virginia	1992
Alpha Omega Alpha (elected third year medical school)	1993
Sidney Barham Scholarship award, Medical College of Virginia (Top class score on USMLE I)	1993
NICU teaching resident award, Children's Hospital of Pittsburgh	1997
NIH Pediatric Research Loan Repayment Program	2002-2008
Elliot V. Newman Award for Basic Science Oral Presentation, 23 rd Annual Vanderbilt Housestaff Research Forum	2003
Young Investigator Award, Pediatric Infectious Disease Society	2007
Vanderbilt Mary Ann and John H. Hash Award for Outstanding Teaching of Graduate Students in Microbiology and Immunology	2008, 2014
Vanderbilt Academy for Excellence in Teaching	2014
E. Mead Johnson Award in Pediatric Research, Society for Pediatric Research	2014
Inaugural Caroline B. Hall lecture, Infectious Disease Society of America	2015
John M. Adams Memorial Lecture, Department of Pediatrics, UCLA	2016
Saul Krugman Memorial Lecture, NYU Langone Medical Center	2017
Norman J. Siegel New Member Outstanding Science Award, American Pediatric Society	2020
Fellow, Pediatric Infectious Disease Society	2020
University of Pittsburgh Special Chancellor's Distinguished Service Award	2022

PUBLICATIONS

1. ORIGINAL PEER-REVIEWED ARTICLES

(178 peer-reviewed research publications Google Scholar h-index 64; i10-index 155; 13698 citations; Web of Science H-index 49, 7836 citations)

Link to full bibliography: <https://www.ncbi.nlm.nih.gov/myncbi/john.williams.2/bibliography/public/>

NOTE: Williams trainee authors underlined

1. Andersen WA, Franquemont DW, **Williams JV**, Taylor PT and Crum CP. Vulvar squamous cell carcinoma and papillomaviruses: two separate entities? *Am J Obstet Gynecol* 1991; 165:329-35. PMID: [1651647](#)
2. Barber SR, Werdel J, Symbula M, **Williams JV**, Burkett BH, Taylor PT, Roche JK and Crum CP. Seroreactivity to HPV-16 proteins in women with early cervical neoplasia. *Cancer Immunol Immunother* 1992; 35:33-8. PMID: [1319282](#)
3. Ward BE, Saleh AM, **Williams JV**, Zitz JC, and Crum CP. Papillary immature neoplasia of the cervix: a distinct subset of exophytic cervical condyloma associated with HPV-6/11 nucleic acids. *Mod Pathol* 1992; 5:391-5. PMID: [1323109](#)
4. Weitkamp JH, Kallewaard N, Kusuhara K, Bures E, **Williams JV**, LaFleur B, Greenberg HB, Crowe JE Jr. Infant and adult human B cell responses to rotavirus share common immunodominant variable gene repertoires. *J Immunol* 2003; 171:4680-4688. PMID: [14568943](#)

5. **Williams JV**, Harris PA, Tollefson SJ, Halburnt-Rush LL, Pingsterhaus JM, Edwards KM, Wright PF, Crowe JE Jr. Human metapneumovirus and lower respiratory tract disease in otherwise healthy infants and children. *N Engl J Med* 2004; 350:443-50. PMCID: [PMC1831873](#)
6. Tai J, **Williams JV**, Edwards KM, Wright, PF, Crowe JE, Dermody TS. Prevalence of reovirus-specific antibodies in young children in Nashville, TN. *J Infect Dis* 2005;191:1221-4. PMID: [15776366](#)
7. **Williams JV**, Tollefson SJ, Carper HT, Heymann PW, Patrie J, Crowe Jr JE. Human metapneumovirus infection in children hospitalized for wheezing. *J Allergy Clin Immunol* 2005; 115:1311-2. PMCID: [PMC1476700](#)
8. **Williams JV**, Enriquez R, Minton P, Griffin M, Crowe JE Jr., Hartert TV. Human metapneumovirus infection in adults hospitalized for acute asthma exacerbations. *J Infect Dis* 2005 192:1149–53. PMCID: [PMC1476781](#)
9. **Williams JV**, Martino R, Rabella N, Otegui M, Parody R, Heck JM, Crowe JE Jr. A prospective study comparing human metapneumovirus with other respiratory viruses in adults with hematological malignancies and respiratory tract infections. *J Infect Dis* 2005; 192:1061-5. PMCID: [PMC1483060](#)
10. Halasa NB, **Williams JV**, Wilson GJ, Walsh WF, Wright PF, Schaffner W. Medical and economic impact of a respiratory syncytial virus outbreak in a neonatal intensive care unit. *Pediatr Infect Dis J* 2005; 24:1040-4. PMID: [16371862](#)
11. Martino R, Porras RP, Rabella N, **Williams JV**, Ramila E, Margall N, Labeaga R, Crowe JE Jr, Coll P, Sierra J. Prospective study of the incidence, clinical features, and outcome of symptomatic upper and lower respiratory tract infections by respiratory viruses in adult recipients of hematopoietic stem cell transplants for hematologic malignancies. *Biol Blood Marrow Transplant* 2005; 11:781-96. PMCID: [PMC3347977](#)
12. **Williams JV**, Tollefson SJ, Johnson JE, Crowe JE Jr. The cotton rat (*Sigmodon hispidus*) is a permissive small animal model of human metapneumovirus infection, pathogenesis and protective immunity. *J Virol* 2005; 79:10944-51. PMCID: [PMC1193579](#)
13. Shimizu C, Shike H, Baker SC, Garcia F, Hoek L, Kuijpers TW, Reed SL, Rowley AH, Shulman ST, Talbot HK, **Williams JV**, Burns JC. Human coronavirus NL63 is not detected in the respiratory tracts of children with acute Kawasaki disease. *J Infect Dis* 2005; 192:1767-71. PMCID: [PMC2888540](#)
14. **Williams JV**, Tollefson SJ, Nair S, Chonmaitree T. Association of human metapneumovirus with acute otitis media. *Int J Pediatr Otorhinolaryngol* 2006; 70:1189-93. PMCID: [PMC1476701](#)
15. **Williams JV**, Wang CK, Yang C-F, Tollefson SJ, House FS, Heck JM, Chu M, Brown JB, Lintao L, Quinto JD, Chu D, Spaete RR, Edwards KM, Wright PF, Crowe, JE Jr. The role of human metapneumovirus in upper respiratory infections in children: a twenty-year experience. *J Infect Dis* 2006; 193:387-95. PMCID: [PMC1586246](#)
16. Baker SC, Shimizu C, Shike H, Garcia F, van der Hoek L, Kuijper TW, Reed SL, Rowley AH, Shulman ST, Talbot HK, **Williams JV**, Burns JC. Human coronavirus-NL63 infection is not associated with acute Kawasaki disease. *Adv Exp Med Biol.* 2006;581:523-6. PMCID: [PMC2868826](#)
17. Mehlmann M, Bonner AB, **Williams JV**, Dankbar DM, Moore CL, Kuchta RD, Podsiad AB, Tamerius JD, Dawson ED, Rowlen KL. Comparison of the MChip to viral culture, reverse transcription-PCR and the QuickVue® Influenza A+B test for rapid diagnosis of influenza. *J Clin Microbiol* 2007; 45:1234-7. PMCID: [PMC1865827](#)
18. Miller SA, Tollefson S, Crowe JE Jr. **Williams JV**, Wright DW. Examination of a fusogenic hexameric core from human metapneumovirus and identification of a potent synthetic peptide inhibitor from the heptad repeat 1 region. *J Virol*, 2007; 81:141-9. PMCID: [PMC1797239](#)
19. Cseke G, Wright DW, Tollefson SJ, Johnson JE, Crowe JE Jr. **Williams JV**. Human metapneumovirus fusion protein vaccines that are immunogenic and protective in cotton rats. *J Virol*, 2007; 81:698-707. PMCID: [PMC1797435](#)
20. **Williams JV**, Chen Z, Cseke G, Wright DW, Keefer CJ, Tollefson SJ, Podsiad A, Shepherd B, Crowe JE Jr. Williamson RA. A recombinant human monoclonal antibody to human metapneumovirus fusion protein that neutralizes virus in vitro and is effective therapeutically in vivo. *J Virol* 2007; 81:8315-24. PMCID: [PMC1951312](#)

21. Lu X, Holloway B, Dare RK, Kuypers J, Yagi S, **Williams JV**, Hall CB, Erdman DD. Real-time RT-PCR assay for comprehensive detection of human rhinoviruses. *J Clin Microbiol* 2008; 46:533-9. PMCID: PMC2238069
22. Derdowski A, Peters TR, Glover N, Qian R, Utley TJ, Burnett A, **Williams JV**, Spearman PS, Crowe JE Jr. Human metapneumovirus nucleoprotein and phosphoprotein interact and provide the minimal requirements for inclusion body formation. *J Gen Virol* 2008; 89:2698-708. PMCID: PMC2876975
23. Mok H, Tollefson SJ, Podsiad AB, Shepherd BE, Polosukhin VV, Johnston RE, **Williams JV**, Crowe JE Jr. An alphavirus replicon-based human metapneumovirus vaccine is immunogenic and protective in mice and cotton rats. *J Virol* 2008; 82:11410-8. PMCID: PMC2573258
24. Miller EK, Edwards KM, Weinberg GA, Iwane MK, Griffin MR, Hall CB, Zhu Y, Szilagyi PG, Morin L-L, Heil LH, Lu X, **Williams JV**. A novel group of rhinoviruses is associated with asthma hospitalizations. *J Allergy Clin Immunol* 2009; 123:98-104. PMID: 19027147
25. Moore ML, Chi MH, Luongo C, Lukacs NW, Polosukhin VV, Huckabee MH, Newcomb DC, Buchholz UJ, Crowe JE Jr., Goleniewska K, **Williams JW**, Collins PL, Peebles RS Jr. A chimeric A2 strain respiratory syncytial virus (RSV) with the fusion protein of RSV strain line 19 exhibits enhanced viral load, mucus, and airway dysfunction. *J Virol* 2009; 83:4185-94. PMCID: PMC2668460
26. Talbot HK, Poehling K, **Williams JV**, Zhu Y, Chen Q, McNabb P, Edwards KM, Griffin MR. Influenza in Older Adults: Impact of vaccination of school children. *Vaccine* 2009; 27:1923-7. PMCID: PMC2670238
27. Sato M, Li H, Ikizler MR, Werkhaven JA, **Williams JV**, Chappell JD, Tang YW, Wright PF. Detection of viruses in human adenoid tissues using multiplex-PCR. *J Clin Microbiol* 2009; 47:771-3. PMCID: PMC2650959
28. Poehling KA, Talbot HK, **Williams JV**, Zhu Y, Lott J, Patterson L, Edwards KM, Griffin MR. Impact of a school-based influenza immunization program on disease burden: comparison of two Tennessee counties. *Vaccine* 2009; 27:2695-2700. PMID: 1942881
29. Talbot HK, Shepherd BE, Crowe JE Jr., Griffin MR, Edwards KM, Podsiad AB, Tollefson SJ, Wright PF and **Williams JV**. The pediatric burden of human coronaviruses evaluated for 20 years. *Pediatr Infect Dis J* 2009; 28:682-7. PMCID: PMC2765860
30. Talbot HK, Crowe JE Jr., Edwards KM, Griffin MR, Zhu Y, Weinberg G, Szilagyi P, Hall CB, Podsiad AB, Iwane MK and **Williams JV**. Coronaviruses are associated with hospitalization for acute respiratory illness in young children. *J Med Virol* 2009; 81:853-6. PMCID: PMC2767383
31. Miller EK, MD, Khuri-Bulos N, **Williams JV**, Shehabi AA, Faouri S, Jundi IA, Chen Q, Heil L, Mohamed Y, Morin LL, Ali A, Halasa NB. Human rhinovirus C associated with wheezing in hospitalized children in the Middle East. *J Clin Virol* 2009; 46:85-9. PMCID: PMC2759319
32. **Williams JV**, Weitkamp J-H, Blum DL, LaFleur BJ, Crowe JE Jr. The human neonatal B cell response to respiratory syncytial virus uses a biased antibody variable gene repertoire that lacks somatic mutations. *Mol Immunol* 2009; 47:407-14. PMCID: PMC2788105
33. Cseke G, Maginnis M, Cox RG, Tollefson SJ, Podsiad AB, Wright DW, Dermody TS, **Williams JV**. AlphaV beta1 integrin promotes infection by human metapneumovirus. *Proc Natl Acad Sci U S A* 2009; 106:1566-71. PMCID: PMC2629439
34. Yang C-F, Wang CK, Tollefson SJ, Piyaratna R, Lintao LD, Chu M, Liem A, Mark M, Spaete RR, Crowe, JE Jr, **Williams JV**. Genetic diversity and molecular evolution of human metapneumovirus fusion protein over twenty years. *Virol J* 2009; 6:138. PMCID: PMC2753315
35. Khuri-Bulos N, **Williams JV**, Shehabi AA, Faouri S, Al Jundi I, Mansour OM, Chen Q, Ali SA, Vermund S, MD, Halasa NB. Burden of respiratory syncytial virus in Hospitalized infants and young children in Amman, Jordan. *Scand J Infect Dis* 2010; 42:368-74. PMCID: PMC2854220
36. Talbot HK, **Williams JV**, Zhu Y, Poehling KA, Griffin MR, Edwards KM. Failure of routine diagnostic methods to detect influenza in hospitalized older adults. *Infect Control Hosp Epidemiol.* 2010;31:683-8. PMID: 20470035
37. Hartert TV, Carroll K, Gebretsadik T, Woodward K, Minton P; Vanderbilt Center for Asthma and Environmental Health Research Investigators and Collaborators. The Tennessee Children's Respiratory Initiative: Objectives, design and recruitment results of a prospective cohort study investigating infant viral

- respiratory illness and the development of asthma and allergic diseases. *Respirology*. 2010;15:691-9. PMCID: PMC2992986
38. Ali SA, Williams JV, Chen Q, Faori S, Khuri-Bulos N, Halasa N. Human metapneumovirus in hospitalized children in Amman, Jordan. *J Med Virol* 2010; 82:1012-6. PMCID: PMC3347978
39. Williams JV, Wang CK, Yang C-F, Silva D, Ye D, House FS, Chu M, Ta A, Spaete RR, Edwards KM, Crowe, JE Jr. Population-based incidence of human metapneumovirus in hospitalized children. *J Infect Dis* 2010; 201:1890-8. PMCID: PMC2873123
40. Tollefson SJ, Cox RG, Williams JV. Studies of culture conditions and environmental stability of human metapneumovirus. *Virus Res* 2010;151:54-9. PMCID: PMC2894476
41. Ryder AB, Tollefson SJ, Podsiad AB, Johnson JE, Williams JV. Soluble recombinant hMPV G protein is immunogenic but not protective. *Vaccine* 2010; 28:4145-52. PMCID: PMC2894472
42. Monsalvo AC, Bataille JP, Lopez MF, Krause JC, Klemenc J, Zea Hernandez J, Maskin B, Bugna J, Rubinstein C, Aguilar L, Dalurzo L, Libster R, Savvy V, Baumeister E, Aguilar L, Cabral G, Font J, Solari L, Weller KP, Johnson J, Echavarria M, Edwards KM, Chappell JD, Crowe JE Jr, Williams JV, Melendi GA, Polack FP. Severe pandemic 2009 H1N1 influenza disease due to pathogenic immune complexes. *Nat Med* 2011, 17:195-9. PMCID: PMC3034774
43. Talbot HK, Griffin MR, Chen Q, Zhu Y, Williams JV, Edwards KM. Effectiveness of seasonal vaccine in preventing confirmed influenza-associated hospitalizations in community dwelling older adults. *J Infect Dis* 2011, 203:500-8. PMCID: PMC3071231
44. Miller EK, Williams JV, Gebretsadik T, Carroll KN, Dupont WD, Mohamed YA, Morin L, Heil L, Minton PA, Woodward K, Liu Z, Hartert TV. Host and viral factors associated with severity of human rhinovirus-associated infant respiratory tract illness. *J Allergy Clin Immunol* 2011, Apr;127(4):883-91. PMCID: PMC3070861
45. Stokes KL, Chi MH, Sakamoto K, Newcomb DC, Currier MG, Huckabee MM, Lee S, Goleniewska K, Pretto C, Williams JV, Hotard A, Sherrill TP, Peebles RS, Moore ML. Differential Pathogenesis of Respiratory Syncytial Virus (RSV) Clinical Isolates in BALB/c Mice. *J Virol* 2011, Jun;85(12):5782-93. PMCID: PMC3126300
46. Bordelon H, Adams NM, Klemm AS, Russ PK, Williams JV, Talbot HK, Wright DW, and Haselton FR. Development of a low resource RNA extraction cassette based on surface tension valves. *ACS Appl Mater Interfaces* 2011, Jun;3(6):2161-8. PMCID: PMC3129697
47. Ali SA, Gern JE, Hartert TV, Edwards KM, Griffin MR, Miller EK, Gebretsadik T, Pappas T, Lee WM and Williams JV. Real-World comparison of two molecular methods for detection of respiratory viruses. *Virol J* 2011, Jun 29;8:332. PMCID: PMC3154182
48. Piyaratna R, Tollefson SJ and Williams JV. Genomic analysis of four human metapneumovirus prototypes. *Vir Res* 2011, Sep;160(1-2):200-5. PMCID: PMC3347971
49. Griffin MR, Monto AS, Belongia EA, Treanor JJ, Chen Q, Chen J, Talbot HK, Ohmit SE, Coleman LA, Lofthus G, Petrie JG, Meece JK, Hall CB, Williams JV, Gargiullo P, Berman L, and Shay DK; for the U.S. Flu-VE Network. Effectiveness of non-adjuvanted pandemic influenza A vaccines for preventing pandemic influenza acute respiratory illness visits in 4 US communities. *PLoS One* 2011;6(8):e23085. PMCID: PMC3155536
50. Miller EK, Hernandez JZ, Wimmenauer V, Shepherd BE, Hijano D, Libster R, Serra ME, Bhat N, Bataille JP, Mohamed Y, Reynaldi A, Rodriguez A, Otello M, Pisapia N, Bugna J, Bellabarba M, Kraft D, Coviello S, Ferolla M, Chen A, London SJ, Siberry GK, Williams JV, Polack FP. A mechanistic role for type III interferon- λ 1 in asthma exacerbations mediated by human rhinoviruses. *Am J Respir Crit Care Med* 2011 Dec 1. PMCID: PMC3361761
51. Iwane MK, Prill MM, Lu X, Miller EK, Edwards KM, Hall CB, Griffin MR, Staat MA, Anderson LJ, Williams JV, Weinberg GA, Ali A, Szilagyi PG, Zhu Y, Erdman DD. Human rhinovirus species associated with hospitalizations for acute respiratory illness in young US children. *J Infect Dis* 2011 Dec;204(11):1702-10. PMID: 22013207
52. Prill MM, Iwane MK, Edwards KM, Williams JV, Weinberg GA, Staat MA, Willby M, Talbot HK, Hall CB, Szilagyi PG, Griffin MR, Curns AT, Erdman DD. Human coronaviruses OC43, 229E, HKU1 and NL63 in

- young children hospitalized with acute respiratory illness and asymptomatic controls. *Pediatr Infect Dis J* 2012 Mar;31(3):235-240. PMCID: PMC3288315
53. Judkins MV, Barr FE, Strohler B Shalaby TM; Patel NR, **Williams JV**. High incidence of respiratory viruses in critically ill children. *Open J of Pediatrics* 2012;2(1):27-30. DOI: [10.4236/ojped.2012.21003](https://doi.org/10.4236/ojped.2012.21003)
54. Carroll KN, Gebretsadik T, Minton P, Woodward K, Liu Z, Miller EK, **Williams JV**, Dupont WD, Hartert TV. Influence of maternal asthma on etiology and severity of infant acute respiratory infection. *J Allergy Clin Immunol* 2012 Feb 13. PMCID: PMC3340428
55. Shaikh FY, Cox RG, Liflande AW, Hotard AL, **Williams JV**, Moore ML, Santangelo PJ, Crowe JE, Jr. A critical phenylalanine residue in the respiratory syncytial virus fusion protein cytoplasmic tail mediates assembly of internal viral proteins into viral filaments and particles. *mBio* 2012, Feb 7;3(1). pii: e00270-11. PMCID: PMC3280462
56. Self WH, Grijalva CG, Zhu Y, Talbot HK, Jules A, Widmer KE, Edwards KM, **Williams JV**, Shay DK, Griffin MR. The burden of emergency department visits due to 2009 pandemic H1N1 influenza in Davidson County, Tennessee. *Emerg Infect Dis* 2012 May;18(5):863-5. PMCID: PMC3358080
57. Jules A, Grijalva CG, Zhu Y, Talbot HK, **Williams JV**, Edwards KM, Schaffner W, Shay D, Griffin MR. Estimating age-specific influenza-related hospitalization rates during the pandemic (H1N1) 2009 in Davidson Co, TN. *Influenza Other Respi Viruses* 2012 May;6(3):e63-71. PMID: [22360812](https://pubmed.ncbi.nlm.nih.gov/22360812/)
58. Widmer K, Zhu Y, **Williams JV**, Griffin MR, Edwards KM, H. Keipp Talbot HK. Rates of Hospitalizations for Respiratory syncytial virus, human metapneumovirus, and influenza virus in older adults. *J Infect Dis* 2012 Jul;206(1):56-62. PMCID: PMC3415933
59. Wen X, Krause JC, Leser GP, Cox RG, Lamb RA, **Williams JV**, Crowe, JE Jr., Jardetzky TS. The structure of the human metapneumovirus fusion protein in complex with a neutralizing antibody identifies a novel pneumovirus antigenic site. *Nat Struct Mol Biol* 2012 Mar 4;19(4):461-3. PMID: [22388735](https://pubmed.ncbi.nlm.nih.gov/22388735/)
60. Klemenc J, Ali SA, Johnson M, Tollefson SJ, Talbot HK, Hartert TV, Edwards KM, **Williams JV**. Real-time reverse transcriptase PCR Assay for improved detection of human metapneumovirus. *J Clin Viro* 2012 Aug;54(4):371-5. PMCID: [PMC3412361](https://pubmed.ncbi.nlm.nih.gov/PMC3412361/).
61. Treanor JJ, Talbot HK, Ohmit SE, Coleman LA, Thompson MG, Cheng P-Y, Petrie JG, Lofthus G, Meece JK, **Williams JV**, Berman L, Hall CB, Monto AS, Griffin MR, Belongia EA, and Shay DK. Effectiveness of seasonal influenza vaccines in the United States during a season with circulation of all three vaccine strains. *Clin Infect Dis* 2012 Oct;55(7):951-9. PMID: [22843783](https://pubmed.ncbi.nlm.nih.gov/22843783/)
62. Erickson JJ, Gilchuk P, Hastings AK, Tollefson, SJ, Johnson M, Downing MB, Boyd KL, Johnson JE, Kim AS, Joyce S, **Williams JV**. Viral acute lower respiratory infections impair CD8⁺ T cells through PD-1. *J Clin Invest* 2012 Aug 1;122(8):2967-82. PMCID: PMC3408742
63. Cox RG, Livesay SB, Johnson M, Ohi MD, **Williams JV**. The human metapneumovirus fusion protein mediates entry via an interaction with RGD-binding integrins. *J Virol* 2012 Nov;86(22):12148-60. PMID: [22933271](https://pubmed.ncbi.nlm.nih.gov/22933271/)
64. Carroll KN, Griffin MR, Edwards KM, Ali SA, Zhu Y, Iwane MK, Szilagyi PG, Staat MA, Stevens TP, Hall CB, **Williams JV** and Hartert TV. Adherence to guidelines for RSV immunoprophylaxis among infants in three United States counties. *Pediatr Infect Dis J* 2012 Nov;31(11):e229-31. PMID: [22760537](https://pubmed.ncbi.nlm.nih.gov/22760537/)
65. Self WH, McNaughton CD, Grijalva CG, Zhu Y, Chappell JD, **Williams JV**, Talbot HK, Shay DK, Griffin MR. Diagnostic performance of the BinaxNow Influenza A&B rapid antigen test in ED patients. *Am J Emerg Med.* 2012 Nov;30(9):1955-61. PMID: [22795995](https://pubmed.ncbi.nlm.nih.gov/22795995/)
66. Chien Y-W, Vidal JE, Grijalva CG, Bozio C, Edwards KM, **Williams JV**, Griffin MR, Verastegui H, Hartinger SM, Gil AI, Lanata CF, and Klugman KP. Density interactions between *Streptococcus pneumoniae*, *Haemophilus influenzae* and *Staphylococcus aureus* in nasopharyngeal colonization of young children living in the Peruvian Andes. *Pediatr Infect Dis J* 2013 Jan;32(1):72-7. PMID: [22935873](https://pubmed.ncbi.nlm.nih.gov/22935873/)
67. Linder JE, Kraft DC, Mohamed Y, Lu Z, Heil L, Tollefson S, Saville BR, Wright PF, **Williams JV**, Miller EK. Human Rhinovirus C: age, season, and lower respiratory illness over the past three decades. *J Allergy Clin Immunol* 2013 Jan;131(1):69-77. PMID: [23146382](https://pubmed.ncbi.nlm.nih.gov/23146382/)
68. Esbenshade JC, Edwards KM, Esbenshade AJ, Talbot HK, Rodriguez VE, Joseph MF, Nwosu SK, Chappell JD, Gern JE, **Williams JV**, Talbot TR. Respiratory virus shedding in a cohort of on-duty

- healthcare workers undergoing prospective surveillance. *Infect Control Hosp Epidemiol*. 2013 Apr;34(4):373-8. PMID: [23466910](#)
69. Yang C-F, Wang CK, Tollefson SJ, Lintao LD, Liem A, Chu M, **Williams JV**. Human metapneumovirus G protein is highly conserved within but not between genetic lineages. *Arch Virol* 2013, Jun;158(6):1245-52. PMID: [23385328](#)
70. Edwards KM, Zhu Y, Griffin MR, Weinberg GA, Hall CB, Szilagyi PG, Staat MA, Iwane M, Prill MM, **Williams JV**. The burden of human metapneumovirus infection in young children. *N Engl J Med* 2013;368:633-43. PMID: [23406028](#)
71. Iwane MK, Chaves SS, Szilagyi PG, Edwards KM, Staat MA, Griffin MR, Hall CB, Weinberg GA, Brown C, Prill MM, Poehling KA, **Williams JV** and Bridges CB. Disparities between black and white children in hospitalizations associated with acute respiratory illness, and laboratory-confirmed influenza and respiratory syncytial virus in three US counties – 2002-2009. *Am J Epidemiol* 2013, Apr 1;177(7):656-65. PMID: [23436899](#)
72. Gilchuk P, Spencer C, Conant S, Hill T, Gray J, Niu X, Zheng M, Erickson JJ, Boyd K, McAfee J, Oseroff C, Hadrup S, Bennink J, Hildebrand W, Edwards KM, Crowe JE Jr., **Williams JV**, Buus S, Sette A, Schumacher TN, Link A, Joyce S. Discovering protective T-cell responses by interrogating naturally processed antigenic determinants. *J Clin Invest* 2013 May 1;123(5):1976-87. PMCID: [PMC23543059](#).
73. Talbot HK, Zhu Y, Chen Q, **Williams JV**, Thompson MG, Griffin MR. Effectiveness of influenza vaccine for preventing laboratory-confirmed influenza hospitalizations in adults, 2011-2012 influenza season. *Clin Infect Dis* 2013 Jun;56(12):1774-7. PMID: [23449269](#)
74. Ferolla FM, Hijano DR, Acosta PL, Rodríguez A, Dueñas K, Sancilio A, Barboza E, Caría A, Fernández Gago G, Egües Almeida R, Castro L, Pozzolo C, Martínez MV, Alva Grimaldi L, Rebec B, Calvo M, Henrichsen J, Nocito C, González M, Barbero G, Ves Losada J, Caballero MT, Zurankovas V, Raggio M, Schavlovsky G, Kobylarz A, Wimmenauer V, Bugna J, **Williams JV**, Sastre G, Flamenco E, Rodríguez Pérez A, Ferrero F, Libster R, Grijalva CG, Polack FP. Macronutrients during pregnancy and life-threatening respiratory syncytial virus infections in children. *Am J Respir Crit Care Med*. 2013 May 1;187(9):983-90. PMID: [23449690](#)
75. Grijalva CG, Griffin MR, Edwards KM, **Williams JV**, Gil AI, Verastegui H, Hartinger SM, Vidal JE, Klugman KP, Lanata CF. The study of respiratory pathogens in Andean children. *Int J Epidemiol*. 2013 Jun 14. PMID: [23771719](#)
76. Miller EK, Gebretsadik T, Carroll KN, Dupont WD, Mohamed YA, Morin L-L, Heil L, Minton PA, Woodward K, Liu Z, Hartert TV, **Williams JV**. Viral etiologies of infant bronchiolitis, croup, and URI during four consecutive years. *Pediatr Infect Dis J* 2013 Sep;32(9):950-5. PMID: [23694832](#)
77. Hall CB, Weinberg GA, Blumkin AK, Edwards KM, Staat MA, Schultz F, Poehling KA, Szilagyi PG, Griffin MR, **Williams JV**, Zhu Y, Grijalva CG, Prill MM, Erdman DD, Iwane MK. Respiratory syncytial virus-associated hospitalizations among children less than 24 months of age. *Pediatrics* 2013 Aug;132(2):341-8. PMID: [23878043](#)
78. Dunn SR, Ryder AB, Tollefson SJ, Xu M, Saville BR, and **Williams JV**. Seroepidemiology of human metapneumovirus and respiratory syncytial virus in young children determined using a new recombinant fusion protein ELISA. *Clin Vaccine Immunol* 2013 Oct;20(10):1654-6. PMID: [23945161](#)
79. Cho SH, Raybuck A, Wei M, Erickson JJ, Nam KT, Cox RG, Trochtenberg A, Thomas JW, **Williams JV**, Boothby M. B cell intrinsic and extrinsic regulation of antibody responses by PARP14, an intracellular ADP-ribosyltransferase. *J Immunol* 2013 Sep 15;191(6):3169-78. PMID: [23956424](#)
80. Papenburg J, Carboneau J, Isabel S, Bergeron MG, **Williams JV**, De Serres G, Hamelin M-E, Boivin G. Genetic Diversity and Molecular Evolution of the Major Human Metapneumovirus Surface Glycoproteins over a Decade. *J Clin Virol* 2013 Nov;58(3):541-7. PMID: [24041471](#)
81. Sakai F, Talekar SJ, Lanata CF, Grijalva CG, Klugman KP, Vidal JE, for the RESPIRA PERU Group. Expression of *Streptococcus pneumoniae* Virulence-Related Genes in the Nasopharynx of Healthy Children. *PLOS One* 2013 Jun;8(6):e67147. PMCID: [PMC3688971](#)

82. Budge PJ, Griffin MR, Edwards KM, **Williams JV**, Verastegui H, Hartinger SM, Johnson M, Klemenc JM, Zhu Y, Gil AI, Lanata CF, Grijalva CG. A Household-Based Study of Acute Viral Respiratory Illnesses in Andean Children. *Pediatr Infect Dis J* 2013 Dec 30. PMID: [24378948](#)
83. Khuri-Bulos N, Payne D, Lu X, Erdman D, Wang L, Faouri S, Shehabi A, Johnson M, Becker M, Denison M, **Williams JV**, Halasa NB. Middle East Respiratory Syndrome Coronavirus Novel Human Coronavirus Not Detected in Children Hospitalized with Acute Respiratory Illness in Amman, Jordan, March 2010 – September 2012. *Clinical Microbiology and Infection* 2013 Oct 30. PMID: [24313317](#)
84. Widmer K, Griffin MR, Zhu Y, **Williams JV**, Talbot HK. RSV- and HMPV-associated Emergency Department and Hospital Burden in Adults. *Influenza and Other Respiratory Viruses* 2014 Feb 7. PMID: [24512531](#)
85. Budge PJ, Griffin MR, Edwards KM, **Williams JV**, Verastegui H, Hartinger SM, Mäusezahl D, Johnson M, Klemenc JM, Zhu Y, Gil AI, Lanata CF, Grijalva CG. Impact of home environment interventions on the risk of influenza-associated ARI in Andean children: observations from a prospective household-based cohort study. *PLOS One* 2014 Mar 12;9(3):e91247. PMCID: [PMC3951509](#)
86. Grijalva CG, Griffin MR, Edwards KM, **Williams JV**, Gil AI, Verastegui H, Hartinger SM, Vidal JE, Klugman KP, Lanata CF. The role of influenza and parainfluenza infections in nasopharyngeal pneumococcal acquisition among young children. *Clin Infect Dis* 2014 May;58(10):1369-76. PMID: [24621951](#)
87. Grijalva CG, Griffin MR, Edwards KM, Johnson M, Gil AI, Verastegui H, Lanata CF, **Williams JV**. Concordance between RT-PCR-based detection of respiratory viruses from nasal swabs collected for viral testing and nasopharyngeal swabs collected for bacterial testing. *J Clin Virol* 2014 Jul;60(3):309-12. PMID: [24875136](#)
88. Cox RG, Erickson JJ, Hastings AK, Becker JC, Craven RE, Tollefson SJ, Boyd KL, **Williams JV**. Human Metapneumovirus Virus-like Particles Induce Protective B and T cell Responses in a Mouse Model. *J Virol* 2014 Jun;88(11):6368-79. PMID: [24672031](#)
89. Schuster JE, Cox RG, Hastings AK, Boyd KL, Wadia J, Chen Z, Burton DR, Williamson RA, **Williams JV**. A Broadly Neutralizing Human Monoclonal Antibody Exhibits In Vivo Efficacy Against Both Human Metapneumovirus And Respiratory Syncytial Virus. *J Infect Dis* 2015 Jan 15;211(2):216-25. PMID: [24864121](#)
90. Wen SC, Tollefson SJ, Johnson M, Gilchuk P, Boyd KL, Shepherd B, Joyce S, **Williams JV**. Acute Clearance of Human Metapneumovirus Occurs Independently of Natural Killer Cells. *J Virol* 2014, Sep;88(18):10963-9. PMID: [24965465](#)
91. Erickson JJ, Rogers MC, Hastings AK, Tollefson SJ, **Williams JV**. PD-1 Impairs Secondary Effector Lung CD8⁺ T Cells during Respiratory Virus Reinfection. *J Immunol* 2014 Nov 15;193(10):5108-17. PMID: [25339663](#)
92. Jules A, Grijalva CG, Zhu Y, Talbot HK, **Williams JV**, Edwards KM, Shay D, Schaffner W, Griffin MR. Age-Specific Influenza-Related Emergency Department Visits and Hospitalizations in 2010-2011 Compared With the Pandemic Year 2009-2010. *Infect Dis Clin Pract* 2014 September; 22(5); 271-278. doi: [10.1097/IPC.0000000000000137](#).
93. *Loria C, *Domm JA, Halasa NB, Heitman E, Miller EK, Xu M, Saville BR, Frangoul H, **Williams JV**. Human Rhinovirus C Infections in Pediatric Hematology and Oncology Patients. *Pediatr Transplant* 2015 Feb;19(1):94-100. PMID: [25377237](#)
94. Jules A, Grijalva C, Zhu Y, Talbot K, **Williams JV**, Chaves S, Poehling K, Edwards K, Schaffner W, Shay D, Griffin M. Influenza-Related Hospitalization and ED visits in children less than 5 years: 2000-2011. *Pediatrics* 2015 Jan;135(1):e66-74. PMID: [25489015](#)
95. Chen Q, Griffin MR, Nian H, Zhu Y, **Williams JV**, Edwards KM, Talbot HK. Influenza Vaccine Prevents Medically Attended Influenza-Associated Acute Respiratory Illness in Adults 50 Years or Older. *J Infect Dis* 2015 Apr 1;211(7):1045-50. PMID: [25336724](#)
96. Plachco T, Libster R, Linder JE, Bossi L, Aspres N, Bauer G, **Williams JV**, Polack FP, Miller EK, and the Argentina Premature Asthma and Respiratory Team (APART). The Argentina Premature Asthma and Respiratory Team (APART): objectives, design, and recruitment results of a prospective cohort study of viruses and wheezing in very low birth weight infants. *Adv Ped Res* 2014; 1(7):1-8. DOI: <http://dx.doi.org/10.12715/apr.2014.1.7>

97. Hastings AK, Erickson JJ, Schuster JE, Boyd KL, Tollefson SJ, Johnson M, Gilchuk P, Joyce S, **Williams JV**. Role of type I interferon signaling in human metapneumovirus pathogenesis and control of viral replication. *J Virol* 2015 Apr;89(8):4405-20. PMID: [25653440](#)
98. Oliveira DBL, Iwane MK, Prill MP, Weinberg GA, **Williams JV**, Griffin MR, Szilagyi PG, Edwards KM, Staat MA, Hall CB, Durigon EL, Erdman DD. Molecular Characterization of Respiratory Syncytial Viruses Infecting Children Reported To Have Received Palivizumab Immunoprophylaxis. *J Clin Virol* 2015 Apr;65:26-31. PMID: [25766983](#)
99. Grijalva CG, Goeyvaerts N, Verastegui H, Edwards KM, Gil AI, Lanata CF, Hens N, RESPIRA PERU project (Griffin MR, **Williams JV**, Edwards KM, Budge PJ, Zhu Y, Johnson M, Grijalva CG, Vidal JE, Klugman KP, Gil AI, Verastegui H, Lanata CF). A household-based study of contact networks relevant for the spread of infectious diseases in the highlands of Peru. *PLoS One* 2015 Mar 3;10(3):e0118457. PMID: [25734772](#)
100. Lindegren ML, Griffin MR, **Williams JV**, Edwards KM, Zhu Y, Mitchel E, Fry AM, Schaffner W, Talbot HK. Antiviral Treatment among Older Adults Hospitalized with Influenza, 2006-2012. *PLOS One* 2015 Mar 25;10(3):e0121952. PMID: [25807314](#)
101. Bose ME, He J, Shrivastava S, Nelson MI, Bera J, Halpin RA, Town CD, Lorenzi HA, Noyola D, Falcone V, Gerna G, De Beenhouwer H, Videla C, Kok T, Venter M, **Williams JV**, Henrickson KJ. Sequencing and Analysis of Global Human Respiratory Syncytial Virus A and B Genome Sequences. *PLOS One* 2015 Mar 20;10(3):e0120098. PMID: [25793751](#)
102. Talbot HK, Nian H, Zhu Y, Chen Q, **Williams JV**, Griffin MR. Clinical Effectiveness of Split-Virion Versus Subunit Trivalent Influenza Vaccines in Older Adults. *Clin Infect Dis*. 2015 Apr 15;60(8):1170-5. PMID: [25697739](#)
103. Howard LM, Johnson M, **Williams JV**, Zhu Y, Gil AI, Edwards KM, Griffin MR, Lanata CF, Grijalva CG, for the RESPIRA-PERU Group. Respiratory Viral Detections During Symptomatic and Asymptomatic Periods in Young Andean Children. *Pediatr Infect Dis J* 2015 Jun 24;10(6):e0130233. PMID: [26121205](#)
104. Wen SC, Schuster JE, Gilchuk P, Boyd KL, Joyce J, **Williams JV**. Lung CD8+ T cell impairment occurs during human metapneumovirus infection despite virus-like particle (VLP) induction of functional CD8+ T cells. *J Virol* 2015 Sep;89(17):8713-26. PMID: [26063431](#)
105. Wu A, Budge PJ, Williams JV, Griffin MR, Edwards KM, Johnson M, Zhu Y, Hartinger S, Verastegui H, Gil AI, Lanata CF, Grijalva C. Incidence and Risk Factors for Respiratory Syncytial Virus and Human Metapneumovirus Infections Among Children in the Remote Highlands of Peru. *PLOS One* 2015, Jun 24; 10(6). PMID: [26107630](#)
106. Miller EK, Linder J, Kraft D, Johnson M, Lu P, Saville BR, **Williams JV**, Griffin MR, Talbot HK. Hospitalizations and Outpatient Visits for Rhinovirus - Associated Acute Respiratory Illness in Adults. *J Allergy Clin Immunol* 2016 Mar;137(3):734-743.e1. PMCID: [PMC4744574](#).
107. Moon TD, Johnson M, Foster MA, Silva WP, Buene M, Valverde E, Morais L, **Williams JV**, Vermund SH, Brentlinger PE. Identification of invasive *Salmonella enterica* serovar Typhimurium ST313 in ambulatory HIV-infected adults in Mozambique. *J Global Infect Dis* 2015 Oct-Dec;7(4):139-42. PMCID: [PMC4693304](#).
108. Halasa NB, **Williams JV**, Faouri S, Shehabi S, Vermund SV, Wang L, Fonnesbeck C, Khuri-Bulos N. Natural History and Epidemiology of Respiratory Syncytial Virus Infection in the Middle East: Hospital surveillance for Children under Age Two in Jordan. *Vaccine* 2015 Nov 25;33(47):6479-87. PMID: [26314623](#)
109. Erickson JJ, Lu P, Wen SC, Hastings AK, Gilchuk P, Joyce J, Shyr Y, **Williams JV**. Acute viral respiratory infection rapidly induces a CD8⁺ T cell exhaustion-like phenotype. *J Immunol* 2015 Nov 1;195(9):4319-30. PMID: 26401005; PMCID: [PMC4733528](#).
110. Schuster JE, Khuri-Bulos N, Faouri S, Shehabi A, Johnson M, Wang L, Fonnesbeck C, **Williams JV***, Halasa NB. Human Metapneumovirus Infection in Jordanian Children: Epidemiology and Risk Factors for Severe Disease. *Pediatr Infect Dis J* 2015 Dec; 34(12): 1335-41. PMID: [26372450](#). * corresponding author.
111. Cox RG, Mainou B, Johnson M, Hastings AK, Schuster JE, Dermody TS, **Williams JV**. Human Metapneumovirus is Capable of Entering Cells by Fusion with Endosomal Membranes. *PLOS Pathog* 2015 Dec 2;11(12):e1005303. PMCID: [PMC4667933](#).

112. Bates JT, Pickens JA, **Schuster JE**, Johnson M, Tollefson SJ, **Williams JV**, Davis NL, Johnston RE, Schultz-Darken N, Slaughter JC, Smith-House F, Crowe JE Jr. Immunogenicity and efficacy of alphavirus-derived replicon vaccines for respiratory syncytial virus and human metapneumovirus in nonhuman primates. *Vaccine* 2016;34(7):950-6. PMCID: [PMC4731299](#).
113. Howard LM, Johnson M, Gil AI, Griffin MR, Edwards KM, Lanata CF, **Williams JV**, Grijalva CG, for the RESPIRA-PERU Group. Molecular Epidemiology of Rhinovirus Detections in Young Children. *Open Forum Infect Dis* 2016 Jan;3(1):ofw001. PMCID: [PMC4759584](#).
114. Dare R, Zhu Y, **Williams JV**, Griffin MR, H. Keipp Talbot HK. Detection of Influenza by Real Time RT-PCR is Not Affected by Delays in Respiratory Specimen Processing. *J Clin Virol* 2016;2016 Apr 18. PMID: [27089468](#).
115. Cherry CB, Griffin MR, Edwards KM, **Williams JV**, Gil AI, Verastegui H, Lanata CF, MD, Grijalva CG. Spatial and temporal spread of acute viral respiratory infections in young children living in high-altitude rural communities: a prospective household-based study. *Pediatr Infect Dis J* 2016 Oct;35(10):1057-61. PMID: [27404599](#).
116. Hastings AK, Gilchuk P, Joyce S, **Williams JV**. Novel HLA-A2-restricted human metapneumovirus epitopes reduce viral titers in mice and are recognized by human T cells. *Vaccine* 2016;2016 May 23;34(24):2663-70. PMID: [27105560](#).
117. Hastings AK, Amato KR, Wen SC, Peterson LP, **Williams JV**. Human metapneumovirus small hydrophobic (SH) protein downregulates type I IFN pathway signaling by affecting STAT1 expression and phosphorylation. *Virology* 2016 Apr 27;494:248-256. PMID: [27131212](#).
118. Erickson JJ, Rogers MC, Tollefson SJ, Boyd KL, Williams JV. Multiple inhibitory pathways contribute to lung CD8+ T cell impairment and protect against immunopathology during acute viral respiratory infection. *J Immunol* 2016 Jul 1;197(1):233-43. PMID: [27259857](#).
119. El Shesheny R, Halasa NB, **Williams JV**, Shehabi AA, Faouri S, Kayali G, Khuri-Bulos N. Molecular epidemiology and evolution of A(H1N1) pdm09 and H3N2 viruses in Jordan, 2011-2013. *East Mediterr Health J.* 2016 Oct 2;22(7):491-502. PMID: [27714744](#).
120. Fan RR, Howard LM, Griffin MR, Edwards KM, Zhu Y, **Williams JV**, Vidal JE, Klugman KP, Gil AI, Lanata CF, Grijalva CG. Nasopharyngeal Pneumococcal Density and Evolution of Acute Respiratory Illnesses in Young Children, Peru, 2009-2011. *Emerg Infect Dis.* 2016 Nov;22(11):1996-1999. PMID: [27767919](#).
121. Rowan NR, Wang EW, Kanaan A, Sahu N, Phillips CD, **Williams JV**, Lee S. Respiratory Viral Detection in the Paranasal Sinuses of Patients with Cystic Fibrosis. *American J Rhinology and Allergy* 2017 Mar 1;31(2):105-108. PMID: [28452706](#).
122. Howard LM, Edwards KM, Zhu Y, Griffin MR, Weinberg GA, Szilagyi PG, Staat MA, Payne DC, **Williams JV**. Clinical Features of Human Metapneumovirus Infection in Ambulatory Children 5-13 Years of Age. *J Pediatr Infect Dis Soc* 2017 Mar 24. doi: 10.1093/jpids/pix012. PMID: [28369564](#).
123. Nesmith N, **Williams JV**, Johnson M, Zhu Y, Marie Griffin MR, Talbot HK. Sensitive diagnostics confirm that influenza C is an uncommon cause of medically attended respiratory illness in adults. *Clin Infect Dis* 2017 May 25. doi: 10.1093/cid/cix471. PMID: [28541414](#).
124. Hilmes MA, Dunnivant FD, Singh SP, Ellis WD, Payne DC, Zhu Y, Griffin MR, Edwards KM, **Williams JV**. Chest Radiographic Features of Human Metapneumovirus Infection in Pediatric Patients. *Pediatr Radiol* 2017, Dec;47(13):1745-1750. PMID: [28831577](#)
125. Howard LM, Fan RR, Zhu Y, Griffin MR, Edwards KM, Hartinger S, **Williams JV**, Vidal JE, Klugman KP, Gil AI, Lanata CF, Grijalva CG. Nasopharyngeal pneumococcal density is associated with viral activity but not with use of improved stoves among young Andean children. *Open Forum Infect Dis* 2017 Aug 2;4(3):ofx161. doi: 10.1093/ofid/ofx161. PMID: [28929126](#)
126. Shi T, McAllister DA, O'Brien KL, ... Nair H, for RSV Global Epidemiology Network. Global, regional, and national disease burden estimates of acute lower respiratory infections due to respiratory syncytial virus in young children in 2015: a systematic review and modelling study. *Lancet* 2017 Sep 2;390(10098):946-958. doi: 10.1016/S0140-6736(17)30938-8. Epub 2017 Jul 7. PMID: [28689664](#)

127. Das S, Raundhal M, Chen J, Oriss TB, Huff R, **Williams JV**, Ray A, Ray P. Respiratory Syncytial Virus Infection Induces A Pathogenic Innate Immune Response In the Lungs of Newborns In the Absence of CX3CR1. *JCI Insight* 2017 Sep 7;2(17). pii: 94605. doi: 10.1172/jci.insight.94605. PMID: [28878128](#)
128. Howard LM, Johnson M, Gil AI, Pekosz A, Griffin MR, Edwards KM, Lanata CF, Grijalva CG, **Williams JV**. A novel real-time RT-PCR assay for influenza C tested in Peruvian children. *J Clin Virol* 2017 Nov; 96:12-16. doi: 10.1016/j.jcv.2017.08.014. PMID: [28917132](#)
129. Raybuck AL, Cho SH, Li J, Rogers MC, Lee K, Williams CL, Shlomchik M, Thomas JW, Chen J, **Williams JV**, Boothby MR. B cell-intrinsic mTORC1 promotes GC-defining transcription factor gene expression, somatic hypermutation, and memory B cell generation in humoral immunity. *J Immunol* 2018 Apr 15;200(8):2627-2639. doi: 10.4049/jimmunol.1701321. PMID: [29531165](#)
130. Khuri-Bulos N, Lawrence L, Piya B, Wang L, Fonnesbeck C, Faouri S, Shehabi AA, Vermund SH, **Williams JV**, Halasa NB. Severe outcomes associated with respiratory viruses in newborns and infants: a prospective viral surveillance study in Jordan. *BMJ Open* 2018 May 20;8(5):e021898. doi: 10.1136/bmjopen-2018-021898. PMID: [29780032](#)
131. Xu J, Zhang Y, **Williams JV**. Development and optimization of a direct plaque assay for trypsin-dependent human metapneumovirus strains. *J Virol Methods*. 2018 May 25. pii: S0166-0934(18)30116-2. doi: 10.1016/j.jviromet.2018.05.012. PMID: [29807042](#)
132. Rogers MC, Lamens KD, Shafagati N, Johnson M, Oury TD, Joyce S, **Williams JV**. CD4⁺ regulatory T cells exert differential functions during early and late stages of the immune response to respiratory viruses. *J Immunol* 2018 Jul 11. pii: ji1800096. doi: 10.4049/jimmunol.1800096. PMID: [29997123](#)
133. Becker JC, Tollefson SJ, Weaver D, and **Williams JV**. A medium-throughput screen for inhibitors of human metapneumovirus. *Antiviral Chemistry & Chemotherapy* 2019, Jan-Dec;27:2040206619830197. doi: 10.1177/2040206619830197. PMID: [30759993](#)
134. Kujawski SA, Midgley CM, Rha B, Lively JY, Nix WA, Curns AT, Payne DC, Englund JA, Boom JA, **Williams JV**, Weinberg GA, Staat MA, Selvarangan R, Halasa NB, Klein EJ, Sahni LC, Michaels MG, Shelley L, McNeal M, Harrison CJ, Stewart LS, Lopez AS, Routh JA, Patel M, Oberste MS, Watson JT, Gerber SI. Enterovirus D68-Associated Acute Respiratory Illness - New Vaccine Surveillance Network, United States, July–October, 2017 and 2018. *MMWR Morb Mortal Wkly Rep*. 2019 Mar 29;68(12):277-280. doi: 10.15585/mmwr.mm6812a1. PMID: [30921299](#)
135. Maes P, Amarasinghe GK, Ayllón MA, Basler CF, Bavari S, Blasdell KR, Briese T, Brown PA, Bukreyev A, Balkema-Buschmann A, Buchholz UJ, Chandran K, Crozier I, de Swart RL, Dietzgen RG, Dolnik O, Domier LL, Drexler JF, Dürrwald R, Dundon WG, Duprex WP, Dye JM, Easton AJ, Fooks AR, Formenty PBH, Fouchier RAM, Freitas-Astúa J, Ghedin E, Griffiths A, Hewson R, Horie M, Hurwitz JL, Hyndman TH, Jiāng D, Kobinger GP, Kondō H, Kurath G, Kuzmin IV, Lamb RA, Lee B, Leroy EM, Li J, Marzano SL, Mühlberger E, Netesov SV, Nowotny N, Palacios G, Pályi B, Pawęska JT, Payne SL, Rima BK, Rota P, Rubbenstroth D, Simmonds P, Smithers SJ, Song Q, Song T, Spann K, Stenglein MD, Stone DM, Takada A, Tesh RB, Tomonaga K, Tordo N, Towner JS, van den Hoogen B, Vasilakis N, Wahl V, Walker PJ, Wang D, Wang LF, Whitfield AE, **Williams JV**, Yè G, Zerbini FM, Zhang YZ, Kuhn JH. Taxonomy of the order Mononegavirales: second update 2018. *Arch Virol*. 2019 Apr;164(4):1233-1244. doi: 10.1007/s00705-018-04126-4. PMID: [30663023](#)
136. Kinder JT, Klimyte EM, Chang A, **Williams JV**, Dutch RE. Human metapneumovirus fusion protein triggering: Increasing complexities by analysis of new HMPV fusion proteins. *Virology*. 2019 Mar 7;531:248-254. doi: 10.1016/j.virol.2019.03.003. PMID: [30946995](#)
137. Lopez SMC*, Martin JM*, Johnson M, Kurs-Lasky M, Horne WT, Marshall CW, Cooper VS, **Williams JV#**, Shaikh N#. A method of processing nasopharyngeal swabs to enable multiple testing. *Pediatr Res*. 2019 Jul 9. doi: 10.1038/s41390-019-0498-1. *, # = equal contribution. PMID: [31288247](#)
138. Howard LM, Zhu Y, Griffin MR, Edwards KM, **Williams JV**, Gil AI, Videal JE, Klugman KP, Lanata CF, Grijalva CG. Nasopharyngeal Pneumococcal Density during Asymptomatic Respiratory Virus Infection and Risk for Subsequent Acute Respiratory Illness. *Emerg Infect Dis*. 2019;25(11):2040-2047. PMID: [31625844](#)

139. Ferdinands JM, Gaglani M, Martin ET, Middleton D, Monto AS, Murthy K, Silveira FP, Talbot HK, Zimmerman R, Alyanak E, Strickland C, Spencer S, Fry AM, **HAIVEN Study Investigators**. Prevention of Influenza Hospitalization Among Adults in the United States, 2015-2016: Results from the US Hospitalized Adult Influenza Vaccine Effectiveness Network (HAIVEN). *J Infect Dis.* 2019;220(8):1265-75. Epub 2018/12/19. doi: 10.1093/infdis/jiy723. PMID: [30561689](#); PMCID: PMC6743848.
140. Feldstein LR, Ogokeh C, Rha B, Weinberg GA, Staat MA, Selvarangan R, Halasa NB, Englund JA, Boom JA, Azimi PH, Szilagyi PG, McNeal M, Harrison CJ, **Williams JV**, Klein EJ, Sahni LC, Singer MN, Lively JY, Payne DC, Fry AM, Patel M, Campbell AP. Vaccine Effectiveness Against Influenza Hospitalization Among Children in the United States, 2015-2016. *J Pediatric Infect Dis Soc.* 2020 Feb 28. doi: 10.1093/jpids/piaa017. PMID: [32108879](#).
141. Rha B, Curns AT, Lively JY, Campbell AP, Englund JA, Boom JA, Azimi P, Weinberg GA, Staat MA, Selvarangan R, Halasa NB, McNeal M, Klein EJ, Harrison CJ, **Williams JV**, Szilagyi P, Nayakwadi Singer, M, Sahni LC, Figueroa-Downing D, McDaniel D, Prill MM, Whitaker BL, Stewart LS, Schuster JE, Pahud B, Weddle G, Avadhanula V, Munoz F, Piedra PA, Payne DC, Langley G, Gerber SI. Respiratory Syncytial Virus-Associated Hospitalizations Among Young Children — 2015–2016. *Pediatrics* 2020 Jul;146(1):e20193611. PMID: [32546583](#)
142. Rha B, Lively JY, Englund JA, Staat MA, Weinberg GA, Selvarangan R, Halasa NB, **Williams JV**, Boom JA, Sahni LC, Michaels MG, Stewart LS, Harrison CJ, Szilagyi PG, McNeal M, Klein EJ, Strelitz B, Lacombe K, Schlaudecker E, Moffatt ME, Schuster JE, Pahud B, Weddle G, Hickey RW, Avadhanula V, Wikswo ME, Hall AJ, Curns AT, Gerber SI, Langley G. SARS-CoV-2 Infections in Children - Multi-Center Surveillance, United States, January–March 2020. *J Pediatric Infect Dis Soc.* 2020 Nov 10;9(5):609-612. PMID: [32556327](#)
143. Das S, St. Croix C, Good M, Chen J, Zhao J, Hu S, Ross M, Myerburg MM, Pilewski JM, **Williams J**, Wenzel SE, Kolls JK, Ray A, Ray P. Interleukin-22 Inhibits Respiratory Syncytial Virus Production by Blocking Virus- Mediated Subversion of Cellular Autophagy. *iScience* 2020 Jul 24;23(7):101256. PMID: [32580124](#)
144. Rogers MC, Miranda-Katz MK, Zhang Y, Oury TD, Uccellini B, Garcia-Sastre A, **Williams JV**. STAT2 limits host species specificity of human metapneumovirus. *Viruses* 2020 Jul 4;12(7):724. doi: 10.3390/v12070724. PMID: [32635475](#)
145. Flannery B, Meece JK, **Williams JV**, Martin ET, Gaglani M, Jackson ML, Talbot HK. Systematic testing for influenza and COVID-19 among patients with respiratory illness. *Clin Infect Dis.* 2020. Epub 2020/07/21. doi: 10.1093/cid/ciaa1023. PMID: [32687197](#); PMCID: PMC7454355.
146. Rolsma SL**, Rankin DA**, Haddadin Z, Hamdan L, Rahman HK, Faouri S, Shehabi A, **Williams JV**, Najwa Khuri-Bulos N*, and Halasa NB*. Assessing the Epidemiology and Seasonality of Influenza Among Children Under Two Hospitalized in Amman, Jordan, 2010-2013. *Influenza and Other Respir Vir* 2021;15(2):284-92. doi: 10.1111/irv.12813. PubMed PMID: [33175456](#); PMCID: PMC7902256.
147. Human S, Hotard A, Rostad C, Lee S, McCormick L, Larkin E, Peret T, Jorba J, Lanzone J, Gebretsadik T, **Williams JV**, Bloodworth M, Stier M, Carroll K, Peebles RS, Anderson L, Hartert TV, and Moore M. A respiratory syncytial virus attachment (G) gene variant associated with more severe disease in infants decreases fusion (F) protein expression which may facilitate immune evasion. *J Virol* 2020 Dec 22;95(2):e01201-20. doi: 10.1128/JVI.01201-20. PMID: [33115881](#)
148. Hendricks MR, Melvin JA, Lane S, Ouyang Y, Stoltz DB, **Williams JV**, Sadovsky Y, and Bomberger JM. Extracellular vesicles promote transkingdom nutrient transfer during respiratory syncytial virus polymicrobial infections. *Cell Reports* 2021;34(4):108672. doi: 10.1016/j.celrep.2020.108672. PMID: [33503419](#); PMCID: PMC7918795.
149. Campbell AP, Ogokeh C, Lively JY, Staat MA, Selvarangan R, Halasa NB, Englund JA, Boom JA, Weinberg GA, **Williams JV**, McNeal M, Harrison CJ, Stewart LS, Klein EJ, Sahni LC, Szilagyi PG, Michaels MG, Hickey RW, Moffat ME, Pahud BA, Schuster JE, Weddle GM, Rha B, Fry AM, Patel M. Vaccine Effectiveness Against Pediatric Influenza Hospitalizations and Emergency Visits. *Pediatrics*. 2020;146(5). Epub 2020/10/07. doi: 10.1542/peds.2020-1368. PMID: [33020249](#)
150. Balasubramani GK, Choi WS, Nowalk MP, Zimmerman RK, Monto AS, Martin ET, Belongia EA, McLean HQ, Gaglani M, Murthy K, Jackson ML, Jackson LA, Chung JR, Spencer S, Fry AM, Patel M, Flannery B,

Investigators USFVN. Relative effectiveness of high dose versus standard dose influenza vaccines in older adult outpatients over four seasons, 2015-16 to 2018-19. *Vaccine*. 2020;38(42):6562-9. Epub 2020/08/18. doi: 10.1016/j.vaccine.2020.08.011. PMID: [32800465](#); PMCID: PMC7508973.

151. Freeman MC, Lawrence L, Khuri-Bulos N, Piya B, Krishnaswami S, Faouri S, Shehabi A, **Williams JV**, Halasa NB. Utility of RSV Rapid Diagnostic Assays in Hospitalized Children in Amman, Jordan. *J Med Virol* 2020 Epub 2020/09/24. doi: 10.1002/jmv.26546. PMID: [32966624](#)
152. Haddadin Z, Chappell J, McHenry R, Pulido CG, Rahman H, Gu W, Rankin D, Talj R, Howard L, **Williams JV**, Faouri S, Shehabi A, Khuri-Bulos N, Halasa NB. Coronavirus surveillance in a pediatric population in Jordan from 2010 to 2014: A prospective viral surveillance study. *Ped Infect Dis J* 2021;40(1):e12-e7. doi: 10.1097/INF.0000000000002965. PMID: [33165274](#)
153. Martin ET, Cheng C, Petrie JG, Alyanak E, Gaglani M, Middleton DB, Ghamande S, Silveira FP, Murthy K, Zimmerman RK, Monto AS, Trabue C, Talbot HK, Ferdinands JM; **HAIVEN Study Investigators**. Low influenza vaccine effectiveness against A(H3N2) associated hospitalizations in the 2016-2017 and 2017-2018 seasons of the Hospitalized Adult Influenza Vaccine Effectiveness Network (HAIVEN). *J Infect Dis*. 2021 Jun 15;223(12):2062-2071. doi: 10.1093/infdis/jiaa685. PMID: [33140094](#)
154. Tenforde MW, Talbot HK, Trabue CH, Gaglani M, McNeal TM, Monto AS, Martin ET, Zimmerman RK, Silveira FP, Middleton DB, Olson SM, Garten Kondor RJ, Barnes JR, Ferdinands JM, Patel MM; **HAIVEN Study Investigators**. Influenza vaccine effectiveness against hospitalization in the United States, 2019-2020. *J Infect Dis*. 2021 Sep 1;224(5):813-820. doi: 10.1093/infdis/jiaa800. PMID: [33378531](#)
155. Hughes K, Middleton DB, Nowalk MP, Balasubramani GK, Martin ET, Gaglani M, Talbot HK, Patel MM, Ferdinands JM, Zimmerman RK, Silveira FP; **HAIVEN Study Investigators**. Effectiveness of Influenza Vaccine for Preventing Laboratory-Confirmed Influenza Hospitalizations in Immunocompromised Adults. *Clin Infect Dis*. 2021 Dec 6;73(11):e4353-e4360. doi: 10.1093/cid/ciaa1927. PMID: [33388741](#)
156. Yanis A*, Haddadin Z*, Rahman H, Guevara C, McKay KG, Probst V, **Williams JV**, Faouri S, Shehabi A, Khuri-Bulos N**, Halasa NB**. The Clinical Characteristics, Severity, and Seasonality of RSV Subtypes among Hospitalized Children in Jordan. *Pediatr Infect Dis J* 2021 Sep 1;40(9):808-813. doi: 10.1097/INF.0000000000003193. PMID: [34260483](#)
157. Haddadin Z, Schuster JE, Spieker A, Rahman H, Stewart L, Campbell AP, Rha B, Lively JY, Langley GE, Michaels MG, **Williams JV**, Boom JA, Sahni LC, Staat M, McNeal M, Selvarangan R, Harrison CJ, Weinberg GA, Szilagyi PG, Englund J, Klein EJ, Patel M, Halasa NB, for the New Vaccine Surveillance Network. Acute Respiratory Illness in Children During the SARS-CoV-2 Pandemic: A Prospective Multicenter Surveillance Study. *Pediatrics* 2021 Aug;148(2):e2021051462. doi: 10.1542/peds.2021-051462. PMID: [33986150](#)
158. Hamdan L, Probst V, Haddadin Z, Rahman H, Spieker AJ, Vandekar S, Stewart LS, **Williams JV**, Boom JA, Munoz F, Englund JA, Selvarangan R, Staat MA, Weinberg GA, Azimi PH, Klein EJ, McNeal M, Sahni LC, Singer MN, Szilagyi PG, Harrison CJ, Patel M, Campbell AP, Halasa NB. Influenza clinical testing and oseltamivir treatment in hospitalized children with acute respiratory illness, 2015–2016. *Influenza and Other Respir Vir* 2022 Mar;16(2):289-297. PMID: [34704375](#)
159. Rankin DA, Khankari NK, Haddadin Z, Hamdan O, Yanis A, Faouri S, Shehabi A, Williams JV, Khuri-Bulos N, Halasa NB. Antibiotic use for respiratory syncytial virus in the Middle East: A surveillance study in hospitalized Jordanian children. *PLoS One*. 2021 Nov 29;16(11):e0260473. doi: 10.1371/journal.pone.0260473. PMID: [34843571](#)
160. Probst V, Rankin DA, Haddadin Z, Hamdan L, Rahman HK, Yanis A, Talj R, Spieker AJ, Stewart LS, Guevara C, Yepsen E, Faouri S, Shehabi A, **Williams JV**, Chappell J, Khuri-Bulos N, Halasa NB. Adenovirus Infection in Hospitalized Children with Acute Respiratory Infection in Jordan. *Pediatr Infect Dis J* 2021 Apr 1;41(4):277-283. doi: 10.1097/INF.0000000000003423. PMID: [35315822](#).
161. Freeman KG, Wetzel KS, Zhang Y, Zack KM, Jacobs-Sera D, Walters SM, Barbeau DJ, McElroy AK, **Williams JV**, Hatfull GF. A mycobacteriophage-based vaccine platform: SARS-CoV-2 antigen expression and display. *Microorganisms* 2021 Nov 23;9(12):2414. doi: 10.3390/microorganisms9122414. PMID: [34946016](#).

162. **Miranda-Katz M, Erickson JJ, Lan J, Ecker A, Zhang Y, Joyce S, Williams JV.** Novel HLA-B7-restricted human metapneumovirus epitopes enhance viral clearance in mice and are recognized by human CD8+ T cells. *Sci Rep* 2021 Oct 21;11(1):20769. doi: 10.1038/s41598-021-00023-0. PMID: [PMC8531189](#)
163. Shah MS, Perez A, Lively JY, Weinberg GA, Boom JA, Selvarangan R, Halasa NB, Schlaudecker Klein EJ, Michaels MG, **Williams JV**, Hickey R, Otten C, Staat MA, Stewart L, Harrison CJ, Sahni LC, Fregoe W, Routh JA, Langley G, Gerber SI, McMorrow M, Rha B, Midgley CM. Enterovirus D68-Associated Acute Respiratory Illness — New Vaccine Surveillance Network, United States, July–November, 2018–2020. *MMWR Morb Mortal Wkly Rep* Nov 26;70(47):1623-1628. doi: 10.15585/mmwr.mm7047a1. PMID: [34818320](#).
164. Kim SS, Naioti EA, Halasa NB, Stewart LS, **Williams JV**, Michaels MG, Selvarangan R, Harrison CJ, Staat MA, Schlaudecker EP, Weinberg GA, Szilagyi PG, Boom JA, Sahni LC, Englund JA, MD, Klein EJ, Ogokeh CE, Campbell AP, Patel MM, for the New Vaccine Surveillance Network. Vaccine Effectiveness against Influenza Hospitalization and Emergency Department Visits in Two A(H3N2) Dominant Influenza Seasons among Children <18 Years Old, New Vaccine Surveillance Network 2016-17 and 2017-18. *J Infect Dis* 2022 Aug 12;226(1):91-96. doi: 10.1093/infdis/jiab624. PMID: [34951451](#)
165. Tenforde MW, Olson SM, Self WS, Talbot HK, Lindsell CJ, Steingrub JS, Shapiro NI, Ginde AA, Douin DJ, Prekker ME, Brown SM, Peltan ID, Gong MN, Mohamed A, Khan A, Exline MC, Files C, Gibbs KW, Stubblefield WB, Casey JD, Rice TW, Grijalva CG, Hager DN, Shehu A, Qadir N, Chang SY, Wilson JG, Gaglani M, Murthy K, Calhoun N, Monto AS, Martin ET, Malani A, Zimmerman RK, Silveira FP, Middleton DB, Zhu Y, Wyatt D, Stephenson M, Baughman A, Womack KN, Hart KW, Kobayashi M, Verani JR, Patel MM, IVY Network; **HAIVEN Investigators**. Effectiveness of Pfizer-BioNTech and Moderna Vaccines Against COVID-19 Among Hospitalized Adults Aged ≥65 Years - United States, January–March 2021. *MMWR Morb Mortal Wkly Rep* 2021 May 7;70(18):674-679. doi: 10.15585/mmwr.mm7018e1. PMID: [33956782](#)
166. Lopez SMC*, Shaikh N*. Johnson M, Liu H, Martin JM#, **Williams JV**#. Viral coinfection and nasal cytokines in children with clinically diagnosed acute sinusitis. *Frontiers in Pediatrics, Ped Pulmonology* 2022 Jan 12;9:783665. doi: 10.3389/fped.2021.783665. PMID: [35096705](#)
167. Amin AB, Lash TL, Tate JE, Waller LA, Wikwo ME, Parashar UD, Stewart LS, Chappell JD, Halasa NB, **Williams JV**, Michaels MG, Hickey RW, Klein EJ, Englund JA, Weinberg GA, Szilagyi PG, Staat MA, McNeal MM, Boom JA, Sahni LC, Selvarangan R, Harrison CJ, Moffatt ME, Schuster JE, Pahud BA, Weddle GM, Azimi PH, Johnston SH, Payne DC, Bowen MD, Lopman BA. Understanding Variation in Rotavirus Vaccine Effectiveness Estimates in the United States: The Role of Rotavirus Activity and Diagnostic Misclassification. *Epidemiology* 2022 Sep 1;33(5):660-668. PMID: [35583516](#)
168. Probst V†, Spieker AJ†, Stopczynski T, Stewart LS, Haddadin Z, Selvarangan R, Harrison CJ, Schuster JE, Staat MA, McNeal M, Weinberg GA, Szilagyi PG, Boom JW, Sahni LC, Piedra PA, Englund JA, Klein EJ, Michaels MG, **Williams JV**, Campbell AP, Patel M, Gerber SI, and Halasa NB. Clinical presentation and severity of adenovirus detection alone vs. adenovirus co-detection with other respiratory viruses in U.S. children with acute respiratory illness from 2016-2018. *J Pediatric Infect Dis Soc*. 2022 Oct 25;11(10):430-439. doi: 10.1093/jpids/piac066. PMID: [35849119](#)
169. Tenforde MW, Campbell AP, Michaels MG, Harrison CJ, Klein EJ, Englund JA, Selvarangan R, Halasa NB, Stewart LS, Weinberg GA, **Williams JV**, Szilagyi PG, Staat MA, Boom JA, Sahni LC, Singer MN, Azimi PH, Zimmerman RK, McNeal MM, Talbot HK, Monto AS, Martin ET, Gaglani M, Silveira FP, Middleton DB, Ferdinands JM, Rolfes MA. Clinical Influenza Testing Practices in Hospitalized Children at United States Medical Centers, 2015-2018. *J Pediatric Infect Dis Soc* 2022 Jan 27;11(1):5-8. PMID: [34643241](#)
170. McElroy AK, Barbeau D, Martin J, Carney E, Dougherty E, Doyle J, Demody TS, Hoberman A, **Williams JV**, Michaels MG, Alcorn JF, and Duprex W. Comparative analysis of human immune responses following SARS-CoV-2 vaccination with BNT162b2, mRNA-1273, or Ad26.COV2.S. *NPJ Vaccines*. 2022 Jul 6;7(1):77. doi: 10.1038/s41541-022-00504-x. PMID: [35794181](#)
171. Talj R†, Amarin JZ†, Rankin DA, Bloos SM, Shawareb Y, Rahman H, Haddadin Z, Howard LM, Probst V, Naffa RG, Johnson M, Lane S, Kinzler AJ, Spieker AJ, Faouri S, Shehabi A, Chappell J, Khuri-Bulos N, **Williams JV***, Halasa NB.*Clinical characteristics, outcomes, and seasonality of acute respiratory infection

associated with single and co-detected rhinovirus species among hospitalized children in Amman, Jordan. *J Med Virol* 2022 c;94(12):5904-5915. doi: 10.1002/jmv.28042. PMID: [35918790](#). †, * equal contributions.

172. Sahni LC, Naioti EA, Olson SM, Campbell AP, Michaels MG, **Williams JV**, Staat MA, Schlaudecker EP, McNeal MM, Halasa NB, Stewart LS, Chappell JD, Englund JA, Klein EJ, Szilagyi PG, Weinberg GA, Harrison CJ, Selvarangan R, Schuster JE, Azimi PH, Singer MN, Avadhanula V, Piedra PA, Munoz FM, Patel MM, Boom JA, for the New Vaccine Surveillance Network. Sustained within-season vaccine effectiveness against influenza-associated hospitalization in children: Evidence from the New Vaccine Surveillance Network, 2015-2016 through 2019-2020. *Clin Infect Dis* 2022 Jul 22:ciac577. doi: 10.1093/cid/ciac577. Online ahead of print. PMID: [35867698](#)
173. Weslander E, Thomas H, Jeune R, Green M, **Williams JV**. Cefadroxil Use for Musculoskeletal Infections in an Academic Pediatric Hospital. *J Pediatric Infect Dis Soc* 2022 Dec 28;11(12):590-593. doi: 10.1093/jpids/piac104. PMID: [36112393](#)
174. Suryadevara N, Kumar A, Gilchuk P, Ye X, Rogers M, **Williams JV**, Wilson JT, Karijolich J, Joyce S. A molecular signature of lung-resident CD8+ T cells elicited by subunit vaccination. *Sci Rep* 2022 Nov 9;12(1):19101. doi: 10.1038/s41598-022-21620-7. PMID: [36351985](#)
175. Ma KC, Winn A, Moline HL, Scobie HM, Midgley CM, Kirking HL, Adjemian J, Hartnett KP, Johns D, Jones JM, Lopez A, Lu X, Perez A, Perrine CG, Rzucidlo AE, McMorrow ML, Silk BJ, Stein Z, Vega E, **New Vaccine Surveillance Network Collaborators**, Hall AJ. Increase in Acute Respiratory Illnesses Among Children and Adolescents Associated with Rhinoviruses and Enteroviruses, Including Enterovirus D68 — United States, July–September 2022. *MMWR Morb Mortal Wkly Rep*. 2022 Oct 7;71(40):1265-1270. doi: 10.15585/mmwr.mm7140e1. PMID: [36201400](#)
176. Perez A, Lively JY, Curns A, Weinberg GA, Halasa NB, Staat MA, Szilagyi PG, Stewart LS, McNeal MM, Clopper B, Zhou Y, Whitaker BL, LeMasters E, Harker E, Englund JA, Klein EJ, Selvarangan R, Harrison CJ, Boom JA, Sahni LC, Michaels MG, **Williams JV**, Langley GE, Gerber SI, Campbell A, Hall AJ, Rha B, McMorrow M, New Vaccine Surveillance Network Collaborators. Respiratory Virus Surveillance Among Children with Acute Respiratory Illnesses — New Vaccine Surveillance Network, United States, 2016–2021. *MMWR Morb Mortal Wkly Rep* 2022 Oct 7;71(40):1253-1259. doi: 10.15585/mmwr.mm7140a1. PMID: [36201373](#).
177. Krauland MG, Zimmerman RK, Williams KV, Raviotta JM, Harrison LH, **Williams JV**, Roberts MS. Agent-based Model of the Impact of Higher Influenza Vaccine Efficacy on Seasonal Influenza Burden. *Vaccine* 2023 Apr; 13:100249. doi: 10.1016/j.vacx.2022.100249. PMID: [36536801](#).
178. Williams KV, Krauland MG, Harrison LH, **Williams JV**, Roberts MS, Zimmerman RK. Can a Two-Dose Influenza Vaccine Regimen Better Protect Older Adults? An Agent-Based Modeling Study. *Vaccines* (Basel). 2022 Oct 26;10(11):1799. doi: 10.3390/vaccines10111799. PMID: [36366307](#)
179. Freeman KG, Robotham AC, Parks OB, Abad L, Jacobs-Sera D, Lauer MJ, Podgorski JM, Zhang Y, **Williams JV**, White SJ, Kelly JF, Hatfull GF, Pope WH. Virion glycosylation influences mycobacteriophage immune recognition. *Cell Host Microbe*. 2023 Jul 12;31(7):1216-1231.e6. doi: 10.1016/j.chom.2023.05.028. Epub 2023 Jun 16. PMID: [37329881](#)
180. O'Donnell C, Brownlee K, Martin E, Suyama J, Albert S, Anderson S, Bhatte S, Bonner K, Burton C, Corn M, Eng H, Flage B, Frerotte J, Balasubramani GK, Haggerty C, Haight J, Harrison LH, Hartman A, Hitter T, King WC, Ledger K, Marsh JW, McDonald MC, Miga B, Moses K, Newman A, Ringler M, Roberts M, Sax T, Shekhar A, Sterne M, Tenney T, Vanek M, Wells A, Wenzel S, **Williams JV**. SARS-CoV-2 Control on a Large Urban College Campus Without Mass Testing. *J Amer College Health* 2023 Jan 3:1-9. doi: 10.1080/07448481.2022.2153600. Online ahead of print. PMID: [36595575](#)
181. Rankin DA, Spieker AJ, Perez A, Stahl AL, Rahman HK, Stewart LS, Schuster JE, Lively JY, Haddadin Z, Probst V, Michaels MG, **Williams JV**, Boom JA, Sahni LC, Staat MA, Schlaudecker EP, McNeal M, Harrison CJ, Weinberg GA, Szilagyi PG, Englund JA, Klein EJ, Gerber SI, McMorrow M, Rha B, Chappell JD, Selvarangan R, Midgley CM*, Halasa NB*, and the NVSN Network Investigators. Circulation of Rhinoviruses in Children with Acute Respiratory Illness Before and During the COVID-19 Pandemic in the US. *JAMA Netw Open*. 2023 Feb 1;6(2):e2254909. doi: 10.1001/jamanetworkopen.2022.54909. PMID: [36749589](#)

182. Parks OB, Eddens T, Zhang Y, Oury TD, McElroy AK, **Williams JV**. Human Metapneumovirus Reinfection in Aged Mice Recapitulates Increased Disease Severity in Elderly Humans Infected with Human Metapneumovirus. *Immunohorizons*. 2023 Jun 1;7(6):398-411. doi: 10.4049/immunohorizons.2300026. PMID: [37261717](#)
183. Rick AM, Lentscher A, Xu L, Wilkins MS, Nasser A, Tuttle DJ, Megli C, Marques ETA, McElroy AK, **Williams JV**, Martin JM. Impact of maternal SARS-CoV-2 booster vaccination on blood and breastmilk antibodies. *PLoS One*. 2023 Jun 13;18(6):e0287103. doi: 10.1371/journal.pone.0287103. eCollection 2023. PMID: [37310982](#)
184. Srinivasa VR, Griffith MP, Waggle KD, Johnson M, Zhu L, **Williams JV**, Marsh JW, Van Tyne D, Harrison LH, Martin EM. Genomic Epidemiology of Severe Acute Respiratory Syndrome Coronavirus 2 Transmission Among University Students in Western Pennsylvania. *J Infect Dis*. 2023 Jun 28;228(1):37-45. doi: 10.1093/infdis/jiad041. PMID: [36805719](#)
185. Aguglia A, Coyne CB, Dermody TS, **Williams JV**, Culler Freeman MC. Contemporary Enterovirus-D68 Infects Human Spinal Cord Organoids. *mBio* 2023, in press.
186. Curns AT, Rha T, Lively JY, Sahni LC, Englund JA, Weinberg GA, Halasa NB, Staat MA, Selvarangan R, Michaels MG, Moline H, Zhou Y, Perez A, Rohlfs C, Hickey R, Lacombe K, McHenry R, Whitaker B, Schuster J, Guevara Pulido C, Strelitz B, Quigley C, Weddle G, Avadhanula V, Harrison CJ, Stewart LS, Schlaudecker EP, Szilagyi PG, Klein EJ, Boom JA, **Williams JV**, Langley GF, Gerber SI, Hall AJ, and McMorrow M. Respiratory Syncytial Virus-Associated Hospitalizations Among Children <5 Years Old: 2016-2020. *Pediatrics* 2023, in press.
187. Shope TR, Chedid K, Hashikawa AN, Martin ET, Sieber MA, Des Ruisseaux G, **Williams JV**, Wheeler S, Johnson M, Stiegler M, D'Agostino H, Balasubramani GK, Wang-Erickson A. SARS-CoV-2 Surveillance in Child Care Centers. *JAMA Network Open* 2023, in press.
188. Parks OB, Eddens T, Sojati J, Lan J, Zhang Y, Oury TD, Ramsey M, Erickson JJ, Byersdorfer CA, **Williams JV**. Terminally exhausted CD8+ T cells contribute to age-dependent severity of respiratory virus infection. *Immunity & Ageing* 2023, in press.

2. OTHER PEER-REVIEWED PUBLICATIONS

INVITED REVIEWS AND EDITORIALS

1. Crowe JE Jr, **Williams JV**. Immunology of viral respiratory tract infection in infancy. *Paediatric Respiratory Reviews*. 2003; 4:112-9. PMID: [12758048](#)
2. **Williams JV**. The Clinical Presentation and Outcomes of Children Infected with Newly Identified Respiratory Tract Viruses. *Infectious Disease Clinics of North America* 2005;19:569-84. PMID: [16102649](#)
3. **Williams JV**. Human metapneumovirus: an important cause of respiratory disease in children and adults. *Current Infectious Disease Reports*, 2005;7:204-210. PMID: [15847723](#)
4. Schildgen O, Simon A, Wilkesmann A, **Williams JV**, Eis-Hübingen A-M, Roggendorf M, and Viazov S. The human metapneumovirus (HMPV): biology, epidemiological features, and clinical characteristics of infection. *Reviews in Medical Microbiology*, 2006;17:11-25.
5. Schildgen O, Viazov S, Simon A, **Williams JV**. Animal models for HMPV infections. *Veterinary Research*, 2007;38:117-126.
6. **Williams JV**. Update on new and re-emerging pediatric respiratory viruses. *Pediatric Health* 2007;1:63-76.
7. **Williams JV**. Déjà vu All Over Again: Koch's Postulates and Virology in the 21st Century. *J Infect Dis* 2010, 2010; 201:1611-4. PMID: [20415534](#)
8. Schildgen V, van den Hoogen B, Fouchier R, Tripp R, Alvarez R, Manoha C, **Williams JV**, Oliver Schildgen O. Human metapneumovirus: Lessons learned over the first decade. *Clin Micro Rev* 2011, Oct;24(4):734-54. PMID: [21976607](#)
9. Cox RG, **Williams JV**. Breaking In: Human Metapneumovirus Fusion and Entry. *Viruses* 2013;5(1):192-210. doi: 10.3390/v5010192. PMID: [23325326](#)
10. Schuster JE, Williams JV. Human Metapneumovirus. *Pediatr Rev*. 2013 Dec;34(12):558-65.

11. Wen SC, Williams JV. New Approaches for Immunization and Therapy Against Human Metapneumovirus. *Clin Vaccine Immunol* 2015, Aug;22(8):858-66. PMID: [26063237](#)
12. Schuster JE, Williams JV. Human Metapneumovirus. *Microbiol Spectr* 2014 Oct;2(5). PMID: [26104361](#)
13. Maitre NL, **Williams JV**. Human metapneumovirus in the preterm neonate: current perspectives. *Res Rep Neonatol*. 2016;6:41-49. PMID: [27891060](#)
14. Shafagati N, **Williams JV**. Human metapneumovirus - what we know now. *F1000 Faculty Reviews* 2018 Feb 1;7:135. PMID: [29744035](#)
15. Schuster JE, **Williams JV**. Emerging Respiratory Viruses in Children. *Infect Dis Clin North Am*. 2018 Mar;32(1):65-74. PMID: [29406977](#)
16. Rogers MC, **Williams JV**. Quis Custodiet Ipsos Custodes? Regulation of Cell-Mediated Immune Responses Following Viral Lung Infections. *Annu Rev Virol*. 2018 Sep 29;5(1):363-383. PMID: [30052492](#)
17. Freeman MC, Coyne CB, Green M, **Williams JV**, and Silva LA. Emerging Arboviruses and Implications for Pediatric Transplantation: A Review. *Pediatr Transplant* 2019 Feb;23(1):e13303. PMID: [30338634](#)
18. Rogers MC, **Williams JV**. Reining in the CD8+ T cell: Respiratory virus infection and PD-1-mediated T cell impairment. *PLOS Path* 2019 Jan 3;15(1):e1007387. PMID: [30605483](#)
19. Sederdahl BK, **Williams JV**. Epidemiology and Clinical Characteristics of Influenza C Virus. *Viruses* 2020 Jan 13;12(1). doi: 10.3390/v12010089. PMID: [31941041](#)
20. Eddens T, Parks OB, **Williams JV**. Neonatal Immune Responses to Respiratory Viruses. *Front Immunol*. 2022 Apr 14;13:863149. doi: 10.3389/fimmu.2022.863149. PMID: [35493465](#)

CASE REPORTS

1. Esbenshade A, Esbenshade J, **Williams JV**, Frangoul H. Severe ehrlichia infection in pediatric oncology and stem cell transplant patients. *Pediatr Blood Cancer* 2010, 54:776-778. PMID: [20052776](#)
2. Lo A, Verrall R, **Williams JV**, Stratton C, Della-Latta P, Tang Y. Carbapenem resistance via the blaKPC-2 gene in *Enterobacter cloacae* blood culture isolate. *Southern Medical Journal* 2010, 2010;103(5):453-4. PMID: [20375954](#)
3. Dulek DE, **Williams JV**, Creech CB, Schulert AK, Frangoul HA, Domm J, Denison MR, Chappell JD. Use of intravenous zanamivir after development of oseltamivir resistance in a critically ill immunosuppressed child infected with 2009 pandemic influenza A (H1N1) virus. *Clinical Infectious Diseases* 2010, 50(11):1493-6. PMID: [20415572](#)
4. McElroy JA, Monahan SH, **Williams JV**. A Female Neonate Presenting with Fever and Rash. *Clinical Pediatrics* 2011; 50(8):779-81. PMID: [20724318](#)
5. Thomsen I, Creech CB, Graham TB, **Williams JV**. Chronic Granulomatous Disease Masquerading as Behcet Disease: A Case Report And Review of the Literature. *Pediatric Infectious Disease Journal* 2012 May;31(5):529-31. PMID: [22228233](#)
6. de St Maurice A, Frangoul H, Coogan A, **Williams JV**. Prolonged fever and splenic lesions caused by *Malassezia restricta* in an immunocompromised patient. *Pediatr Transplant*. 2014 Dec;18(8):E283-6. PMID: [25187171](#)
7. Winstead M, Nowalk A, Ozolek J, **Williams JV**, Vander Lugt M, Lin PL. Disseminated *Lichtheimia ramons* infection after hematopoietic stem cell transplantation in a child with chronic granulomatous disease. *Pediatr Infect Dis J* 2017 Dec;36(12):1222-1224. PMID: [28333712](#)
8. Cramer N, Munjal N, Ware D, Ramgopal S, Simon D, Freeman MC, Michaels MG, Stem C, Thakkar K, **Williams JV**, Panigrahy A, Neville DNW, Owusu-Ansah S. New Cluster of Acute Flaccid Myelitis in Western Pennsylvania. *Ann Emerg Med*. 2019 Feb 27. pii: S0196-0644(19)30051-4. doi: 10.1016/j.annemergmed.2019.01.024. PMID: [30826069](#)
9. Brayer S*, Linn A*, Holt S, Ellery K, Mitchell S, **Williams JV**. *Enteroroccus hirae* bacteremia in an infant: a Case Report and Review of the Literature. *J Pediatr Infect Dis Soc* 9 Dec 27;8(6):571-573.
10. doi: 10.1093/jpids/piz028. PMID: [31209486](#)

11. Freeman MC, Mitchell S, Ibrahim J, **Williams JV**. Neonatal toxic shock syndrome (TSS)-like exanthematous disease (NTED) in North America. *J Pediatr Infect Dis Soc* 2021 Mar 26;10(2):205-206. doi: 10.1093/jpids/piz060. PMID: [31550351](#)
12. Alcamo AM*, Wolf MS*, Alessi LJ, Chong HJ, Green M, **Williams JV**, Simon DW. Successful Use of Cidofovir in an Immunocompetent Child with Severe Adenoviral Sepsis. *Pediatrics*. 2020 Jan;145(1). doi: 10.1542/peds.2019-1632. PubMed PMID: [31826930](#)
13. Ahmed MY, Taylor JB, Aneja RK, Wang Q, **Williams JV**. A Case Series of Persistent SARS-CoV-2 Infection in Immunocompromised Pediatric Patients. *Case Reports in Critical Care* 2023. <https://doi.org/10.1155/2023/1699770>

3. OTHER NON-PEER-REVIEWED PUBLICATIONS

Media

Media appearances include interviews with CNN, Washington Post, National Geographic, Wall Street Journal, New York Times, USA Today, Newsweek, ABC News, CBS News, Bloomberg News, Vox, Fatherly.com, CBS' "The Doctors" TV show, KCUR Public Radio Kansas City, MSN, the Pittsburgh Post-Gazette, the Pittsburgh Tribune-Review, KDKA-TV, KDKA radio, The Almanac, TribLive, WPXI, WTAE, The Conversation, and others.

4. BOOKS, BOOK CHAPTERS, AND MONOGRAPHS

1. Crowe Jr JE, Weitkamp H, **Williams JV**. B Cell Development. 2003. Chapter 163 in *Fetal and Neonatal Physiology*, 3rd edition, Polin et al.
2. **Williams JV**, Crowe Jr JE. Paramyxoviruses: Measles, Mumps, and Respiratory Syncytial Virus. 2006. Chapter 34 in Schaecter's *Mechanisms of Microbial Disease*, 4th edition, Engleberg et al.
3. **Williams JV**. Avian influenza viruses: a severe threat of a pandemic in children? 2007. *Pediatric Infectious Diseases Revisited*, Birkhaeuser Advances in Infectious Diseases.
4. **Williams JV**, Crowe Jr JE. Human Metapneumovirus. 2009. Chapter 240 in *Principles and Practice of Pediatric Infectious Diseases*, 3rd edition, Long et al.
5. **Williams JV**, Piedra PA, Englund JA. 2009. Respiratory Syncytial Virus, Human Metapneumovirus, and Parainfluenza Viruses. Chapter 36 in *Clinical Virology*, 3rd edition, Douglas and Hayden.
6. Miller EK, **Williams JV**. Rhinoviruses. 2011. Chapter 255 in *Nelson Textbook of Pediatrics*, 19th edition, Kliegman et al.
7. **Williams JV**. Adenoviruses. 2011. Chapter 254 in *Nelson Textbook of Pediatrics*, 19th edition, Kliegman et al.
8. Crowe Jr JE, **Williams JV**. Metapneumoviruses. 2011. Chapter 11 in *The Biology of Paramyxoviruses*, 1st edition, Samal.
9. **Williams JV**, Crowe Jr JE. Human Metapneumovirus. 2012. Chapter 226 in *Principles and Practice of Pediatric Infectious Diseases*, 4th edition, Long et al.
10. **Williams JV**, Crowe Jr JE. Paramyxoviruses: Measles, Mumps, and Respiratory Syncytial Virus. 2012. Chapter 34 in Schaecter's *Mechanisms of Microbial Disease*, 5th edition, Engleberg et al.
11. Schuster JE, **Williams JV**. Human Metapneumovirus. 2013. Feigin & Cherry's *Textbook of Pediatric Infectious Diseases*, 7th edition, Cherry et al.
12. Schuster JE, **Williams JV**. Human Bocaviruses. 2013. Feigin & Cherry's *Textbook of Pediatric Infectious Diseases*, 7th edition, Cherry et al.
13. Crowe Jr JE, **Williams JV**. Paramyxoviruses: Respiratory Syncytial Virus and Metapneumovirus. 2014. *Viral Infections in Humans: Epidemiology and Control*, 5th edition, Kaslow et al.
14. Schuster JE, **Williams JV**. Human Metapneumovirus Infections. *Human Respiratory Viral Infections*. 2015 Taylor and Francis.
15. Schuster JE, **Williams JV**. Human Metapneumovirus. *Antibodies for Infectious Diseases*. 2015 American Society for Microbiology press.

16. Weinberg JB, **Williams JV**. Adenoviruses. 2016. Chapter 262 in *Nelson Textbook of Pediatrics*, 20th edition, Kliegman et al.
 17. Miller EK, **Williams JV**. The Common Cold. 2016. Chapter 379 in *Nelson Textbook of Pediatrics*, 20th edition, Kliegman et al.
 18. Miller EK, **Williams JV**. Rhinoviruses. 2016. Chapter 263 in *Nelson Textbook of Pediatrics*, 20th edition, Kliegman et al.
 19. **Williams JV**, Piedra PA, Englund JA. 2017. Respiratory Syncytial Virus, Human Metapneumovirus, and Parainfluenza Viruses. Chapter 37 in *Clinical Virology*, 4th edition, Richman, Whitley and Hayden.
 20. Schuster JE, **Williams JV**. Human Metapneumovirus. 2017. Feigin & Cherry's *Textbook of Pediatric Infectious Diseases*, 8th edition, Cherry et al.
 21. Schuster JE, **Williams JV**. Human Bocaviruses. 2017. Feigin & Cherry's *Textbook of Pediatric Infectious Diseases*, 8th edition, Cherry et al.
 22. Michaels MG, **Williams JV**. Infectious Diseases. 2017. *Atlas Of Pediatric Physical Diagnosis*, 7th edition, Zitelli, McIntire, and Nowalk.
 23. Schuster JE, **Williams JV**. Human Metapneumovirus. 2017. Chapter 226 in *Principles and Practice of Pediatric Infectious Diseases*, 5th edition, Long et al.
 24. Lopez SMC, **Williams JV**. The Common Cold. 2019. Chapter 407 in *Nelson Textbook of Pediatrics*, 21st edition, Kliegman et al.
 25. Lopez SMC, **Williams JV**. Rhinoviruses. 2019. Chapter 290 in *Nelson Textbook of Pediatrics*, 21st edition, Kliegman et al.
 26. Weinberg JB, **Williams JV**. Adenoviruses. 2019. Chapter 289 in *Nelson Textbook of Pediatrics*, 21st edition, Kliegman et al.
 27. Michaels MG, **Williams JV**. Infectious Diseases. 2021. *Atlas of Pediatric Physical Diagnosis*, 8th edition, Zitelli, McIntire, and Nowalk.
 28. Mouse JJ, Williams JV, Crowe JE Jr. Pneumoviruses: Respiratory Syncytial Virus and Human Metapneumovirus. 2022. *Kaslow Viral Infections of Humans*.
-

PROFESSIONAL ACTIVITIES

TEACHING:

Medical School Courses:

- 2001-2015 Lecturer, Vanderbilt Medical Technologist students "Respiratory viruses in pediatrics"
- 2004-2015 Microbial Topics Small Group Leader, Medical Microbiology and Immunology
- 2005-2015 Lecturer, VMS I Virology Course; "Orthomyxoviruses", "Paramyxoviruses", "Rotavirus" and "Problem of the Week: RNA Viruses"
- 2005-2015 Lecturer, VMS III Clerkship "Pediatric Infectious Diseases"
- 2007 Course Co-director (with Natasha Halasa) VMSI Intersession: "The Immunocompromised Host". Developed a new weeklong course comprising lectures, small group activities and patient encounters.
- 2008-2011 Lecturer, Capstone VMS IV course "Influenza"
- 2009-2012 Batson College, Faculty Affiliate Advisor
- 2012-2015 Batson College Research Course Director
- 2013 Williams, John, and Batson Advisory College at Vanderbilt Medical School. Research I Course, Stories in Science: "Finding Your Niche: A Focus on the Physician Researcher" (2013). Director, film documentary. Awarded "Most Inspiring Film". Url link: <https://freeform.vanderbilt.edu/Video/Video.aspx?id=215>.
- 2013-2015 Portfolio Coach, VMS Curriculum 2.0
- 2013-2015 Small group facilitator, VMS3 Diagnostics and Therapeutics course
- 2016-2020 University of Pittsburgh School of Medicine MSTP small group lecture, 1-2/year

Graduate School Courses:

- 2005-2015 Lecturer, Molecular Virology, Department of Microbiology and Immunology; "Orthomyxoviruses", "Paramyxoviruses", "Poxvirus" and "Emerging Viruses"
- 2005-2015 Lecturer, Foundations in Microbiology and Immunology, Department of Microbiology and Immunology; "Pathogenesis of H5N1 Influenza"
- 2005-2015 Lecturer, Molecular Immunology Course, Department of Microbiology and Immunology; "Viral Infection and Immunity II", "Viral Immune Evasion"
- 2012-2015 Course Director, Molecular Basis of Microbial Pathogenesis
- 2017-pres Innate Immunity (MSIMM/MSMVM 3270-1040/3270-1041), "Interplay of Innate and Adaptive Immunity"
- 2018-pres Comprehensive Immunology (MSIMM 2210) "Immune Responses to Chronic Infection"
- 2018-pres Comprehensive Microbiology (MSMMVM 3410) "Viruses and Adaptive Immunity"

Clinical Teaching:

- 2003-2007 General Pediatrics teaching attending, one month yearly
- 2003-pres Pediatric Chief Resident's Conferences and ID Morning Report
- 2003-pres Pediatric Infectious Disease clinical service, including medical students, residents and fellows, 6-8 weeks annually
- 2018-2022 Advanced Practice Provider Bootcamp, "Febrile Neonate" and "Fever without Localizing Signs"

Invited Clinical Teaching Talks Intramural or at other Institutions (last 5 years):

- 2016 "Baby Be Cool: Evaluation and Management of the Febrile Neonate", Three Rivers Pediatric Symposium, Children's Hospital of Pittsburgh
- 2016 "Lyme Disease and Mononucleosis", Conemaugh Memorial Medical Center, Johnstown, PA
- 2017 "Lyme Disease", Indiana Regional Medical Center, Indiana, PA
- 2017 "New and Emerging Infectious Diseases", 26th Annual Pediatric Update, Mount Nittany Medical Center, State College, PA
- 2017 "Vaccination Update", 26th Annual Pediatric Update, Mount Nittany Medical Center, State College, PA
- 2018 "Fever in neutropenic pediatric patients with malignancies (Keynote lecture)"; "Viral respiratory disease in pediatric HSCT patients"; "RSV in infants: future trends in antiviral therapy and prophylaxis options", 7th Congreso Internacional de Infectologia Pediatrica y Vacunas, Buenos Aires, Argentina
- 2020-2022 Multiple formal COVID-19 talks, listed below
- 2022 "Respiratory Viruses", Allegheny County Health Department

Research Supervision:

Postdoctoral Fellows

- 2003-2005 Jennifer Domm, MD. Pediatric Hematology-Oncology fellow, MSCI student. *Recipient of a K12 Vanderbilt Mentored Clinical Research Scholar Award.* Current position: Private Hematology-Oncology practice, Tristar Health.
- 2004-2006 Mercedes Judkins, MD. Pediatric Critical Care fellow, MSCI student. *Recipient of a MedImmune Fellowship Award for Pediatric Research.* Current position: Attending Pediatric Intensivist, Via Christi Regional Medical Center, Wichita, KS.
- 2004-2006 Keipp Talbot, MD. Infectious Diseases fellow, MPH student. *Recipient of a K12 Vanderbilt Mentored Clinical Research Scholar Award.* Successfully obtained an NIH/NIAID R03 grant,

	K23, and now R01. Current position: Associate Professor (tenured) in Medicine at Vanderbilt University School of Medicine.
2005-2007	E. Kathryn Miller, MD. Pediatric Allergy/Immunology fellow, MPH student. Current position: Allergy Private Practice, Nashville, TN. <i>Recipient of a MedImmune Fellowship Award, T-32, Vanderbilt Clinical and Translational Research Scholar Award, Thrasher Research Fund New Researcher Award and NIH K23. Had highly scored R01 but left academia for family reasons.</i>
2006-2008	S. Asad Ali, MBBS. Pediatric Infectious Diseases fellow, MPH student. Recipient of a MedImmune Fellowship Award for Pediatric Research and an NIH/ Fogarty International Center Global Research Initiative Program for New Foreign Investigators (GRIP R01). Current position: Associate Professor (tenured) of Pediatrics, Aga Khan University, Pakistan.
2011-2014	Jennifer Schuster, MD. Pediatric Infectious Disease fellow. <i>T32 recipient.</i> Current position: Associate Professor of Pediatric Infectious Diseases at Children's Mercy Hospital, Kansas City/ University of Missouri-Kansas City School of Medicine. <i>CDC & NIH funded.</i>
2016-2022	Yu Zhang, PhD. Postdoctoral fellow. <i>T32 recipient.</i> Current position: Staff Scientist, Moderna.
2016-2018	Nazly Shafagati, PhD. Postdoctoral fellow. <i>T32 recipient.</i> Current position: Associate Science Director, Molecular Infectious Disease – Quest Diagnostics.
2016-2018	Santiago Lopez, MD. Pediatric Infectious Disease fellow. <i>TL1 recipient.</i> Current position: Associate Professor of Pediatric Infectious Diseases at Sanford Children's Hospital, University of South Dakota School of Medicine.
2018-2021	Anne-Marie Rick, MD, PhD. Pediatric Infectious Disease fellow. <i>St. Jude/PIDS Basic Research Award recipient.</i> Current position: Assistant Professor of General Academic Pediatrics at University of Pittsburgh School of Medicine. <i>K23 recipient.</i>
2019-2022	Megan Freeman, MD, PhD. Pediatric Infectious Disease fellow. <i>St. Jude/PIDS Basic Research Award recipient.</i> Current position: Assistant Professor of Pediatric Infectious Diseases at University of Pittsburgh School of Medicine. <i>K08 recipient.</i>
2019-	Taylor Eddens, MD/PhD. Pediatric Residency/Allergy-Immunology Fellowship. <i>Pediatric Scientist Development Program recipient.</i>

Graduate Students

2003-2006	Gabriella Cseke, MS, PhD student, Department of Chemistry, Vanderbilt University. Completed post-doc at National Institute for Medical Research, London, England. Current position: Staff scientist, Heptares Therapeutics, UK.
2008-2012	Reagan G. Cox, MPH, PhD student, Department of Microbiology and Immunology, Vanderbilt Medical School. <i>T32 and PEO Scholarship recipient.</i> Completed post-doc at University of Pennsylvania. Currently not in research for family reasons.
2009-2013	John J. Erickson, MSTP student, Department of Microbiology and Immunology, Medical Scientist Training Program, Vanderbilt Medical School. Current position: Assistant Professor of Neonatology at Cincinnati Children's Hospital, investigator track.
2010-2015	Andrew K. Hastings, PhD student, Department of Microbiology and Immunology, Vanderbilt Medical School. Completed postdoctoral fellowship at Yale University and AAAS policy fellowship. Current position: Public Health Analyst at National Institute of Allergy and Infectious Diseases (NIAID).
2011-2013	Jennifer Becker, M.S. student, Department of Microbiology and Immunology, Vanderbilt Medical School. <i>T32 recipient.</i> Current position: research assistant, Vanderbilt.
2011-2015	Sherry Wen, MSTP student, Department of Microbiology and Immunology, Medical Scientist Training Program, Vanderbilt Medical School. Current position: Attending Neurologist, MultiCare Medical Associates, Tacoma, WA.
2013-2018	Meredith C. Rogers, MSTP student, Department of Microbiology and Immunology, Medical Scientist Training Program, Vanderbilt Medical School. Current position: Dermatology resident, University of Texas Southwestern Medical Center.

2017-2019	Kristina Lamens, MS student, University of Pittsburgh. <i>T32 recipient.</i> Current position: Advanced Research Associate/Team Lead, Bio-Techne.
2019-pres	Adam Brynes, PhD student. <i>T32 recipient.</i>
2019-pres	Jorna Sojati, MSTP student. <i>T32 recipient.</i>
2019-pres	Olivia Parks, MSTP student. <i>T32 recipient, F30 recipient.</i>
2023-pres	Maria Kala, Pitt Public Health PhD student.

Medical Students

2004-2007	Rohith Piayratna, Emphasis program, Vanderbilt Medical School. <i>Recipient of an IDSA Summer Scholarship for Medical Students Award, Kass award for best oral presentation by a student or housestaff and Pediatric Infectious Disease Society Award for best poster at IDSA 2007 Annual Meeting.</i> Current position: private practice anesthesiologist.
2005-2008	Sarah Dunn, Emphasis program, Vanderbilt Medical School. <i>Recipient of an IDSA Summer Scholarship for Medical Students Award.</i> Current position: Emergency Medicine physician.
2005-2008	Alex Ryder, Emphasis program, Vanderbilt Medical School. <i>Recipient of an IDSA Summer Scholarship for Medical Students Award, Pediatric Infectious Disease Society Award for best poster at IDSA 2007 Annual Meeting, and HHMI/ NIH Cloisters award.</i> Current position: Pathology faculty on physician-scientist track at LeBonheur Children's Hospital/Univ TN Health Sciences Center.
2010-2011	Laura Peterson, Vanderbilt Medical School. Current position: Assistant Professor of Neonatology at Cincinnati Children's Hospital, investigator track.
2016	Hannah Morrissey, West Virginia University School of Medicine. Current position: Pediatric resident, West Virginia University.
2016-2018	Jiuyang Xu. Visiting two-year Tsinghua University research scholar. Current position: Internal Medicine resident.
2018-2021	Bethany Sederdahl, University of Pittsburgh School of Medicine. <i>Recipient of Infectious Diseases Society of America G.E.R.M research fellowship.</i> Current position: OB/GYN resident.

Undergraduate Students

2007-2009	B. Kate Snowden, Undergraduate Student, Vanderbilt University (Current position: Maternal Fetal medicine fellow at Louisiana State University Health Sciences Center New Orleans)
2009-2010	Sanah Ladhani, Undergraduate Student, Vanderbilt University (Current position: Assistant Professor of Medicine, UT Southwestern)
2017	Margot Miranda-Katz, Colby College (Current position: MSTP, University of Wisconsin-Madison)
2018	Jenna Nosek, Butler University (Current position: graduate student, Univ. of Pittsburgh)
2019	Alwyn Ecker, Wheaton College (Current position: graduate school, Duke University)
2021	Cole Varela, Boston University
2021-2023	Amina Adebiyi, University of Pittsburgh, Microbiology and Immunology Diversity Scholar
2022	Rebekah Fowler, Grove City College
2022-	Atalia Pleskovitch, University of Pittsburgh

PhD Thesis Committees

VUMC	PITT
2005-2010	Mark Gadlage
2006-2011	Jeremy Ramsey
2007-2011	Rory Pruitt
2007-2012	Johnna (Allen) Frierson
2009-2013	Josh Doyle (<i>Chair</i>)
2009-2013	James Pask
	2015-2020 Kate Carroll
	2015-2018 Ben Treat
	2016-2018 Whitney Lane
	2016-2019 Helen Rich
	2016-2020 Sharie Ganchua
	2017-2019 Adolfo Frias

2010-2012	Magda Bokiej	2017-2020	Anthony Lentscher
2010-2013	Caroline Lai	2017-2018	Eileen Wong
2011-2014	Megan Culler (<i>Chair</i>)	2017-2019	Hiroshi Yano
2011-2014	Jennifer Stencel	2017-2021	Joseph Perez
2011-2015	Allison Ashbrook (<i>Chair</i>)	2018-2022	Alex Wells
2012-2015	Mallori Burse (<i>Chair</i>)	2018-2022	Jennifer Grousd
2012-2015	Ryan Craven	2019-2023	Allison Welp
2013-2015	Paula Zamora	2020-	Priya Manandhar
2013-2015	Danica Sutherland	2021-2023	Janie French
2013-2015	Matt Surdel	2021-2023	Hector Nieves Rosado
2014-2015	Allie Greenplate		
2014-2015	Sandhya Bangaru (<i>Chair</i>)		
2014-2015	Brett Case		
2014-2015	Alberto Cisneros		
2014-2017	Matt Stier		
2014-2017	Melissa Harintho		

RESEARCH:

CURRENT GRANT SUPPORT

Grant Number	Title	Role (effort)	Years inclusive	Source	Amount (total)
R01 AI085062-12	Host determinants of human metapneumovirus immunity and pathogenesis	PI 20%	2010-27	NIH/NIAID	\$1,865,963
U01 IP001052	New Vaccine Surveillance Network	PI 20%	2021-26	CDC/NCIRD	\$7,010,615
U01 IP001141	Agent Based Simulation of Seasonal and Pandemic Influenza	Co-I 5%	2020-23	CDC	\$49,948
U01 IP001184-01	Evaluating Respiratory Virus Vaccine Effectiveness	Co-I 10%	2022-23	CDC/NCIRD	\$121,130
R01 AI158484	Role of Preexisting Immunity on Airborne Transmissions	Co-I 5%			
Merck	Assessment of Otopathogens in Young Children with Acute Otitis Media	Co-I 5%		Merck	\$121,740

PENDING GRANT SUPPORT

Grant Number	Title	Role (effort)	Years inclusive	Source	Amount (total)
R21 AI180460-01	Discovery of human metapneumovirus epitopes Priority score 29; current NIAID payline 29	PI 10%	9/1/23 – 8/31/25	NIH/NIAID	\$429,580
R03 AI180626	Epidemiology, phylogeny, and evolution of human metapneumovirus	Co-PI 5%	9/1/23 – 8/31/25	NIH/NIAID	\$159,000
R01 AI181893-01	Mechanisms of HMPV Pathogenesis	PI 10%	4/1/24 – 3/31/29	NIH/NIAID	\$2,839,818
Not Assigned	Strategies to optimize prevention of respiratory syncytial virus infection in the era of changing epidemiology and emerging vaccines and monoclonal antibodies	Co-I 5%	9/1/23 – 8/31/28	NIH/NIAID	\$3,963,908

PREVIOUS GRANT SUPPORT (in chronological order)

Grant Number	Title	Role (effort)	Years inclusive	Source	Amount (total)
Pasteur Merieux Connaught	Ontogeny of the Neonatal Immune Response to RSV	PI 75%	2000-02	IDSA	\$80,000
R03 AI054790	Human Metapneumovirus Infections in Children	PI 75%	2003-05	NIH/NIAID	\$153,500
K08 AI56170	Determinants of Protective Immunity to Human Metapneumovirus	PI 75%	2003-06	NIH/NIAID	\$331,350
Turner-Hazinski Award	Candidate DNA and Protein Vaccines for Human Metapneumovirus in a Cotton Rat Model	PI 10%	2005-07	Vanderbilt	\$100,000
U01 IP00022	Enhanced Surveillance for Newly Vaccine Preventable Diseases	Co-I 10%	2005-11	CDC/NCIRD	\$1,557,640
Industry	Molecular Diagnosis of Influenza and RSV	PI 5%	2006-09	Quidel	\$115,570
N01 AI25462	Serological Response to Recombinant Avian Influenza H5 Protein in Recipients of Inactivated H5 Vaccine Subcontract Protocol # 06-0014	PI 5%	2003-05	NIH/NIAID	\$115,802
Industry	Influenza Vaccine Trial Laboratory Evaluation	PI 5%	2007-09	Protein Sciences Corporation	\$123,187
R03 AI068069	Epidemiology and Clinical Features of Human Coronavirus	PI 5%	2007-09	NIH/NIAID	\$153,500
Industry	Evaluation of the Prevalence of PIV3 Associated Respiratory Tract Infection in Children	PI 5%	2008-09	MedImmune	\$55,660
U18 IP000184	Annual Estimates of Influenza Vaccine Effectiveness: Davidson County, TN	Co-I 10%	2008-11	CDC/NCIRD	\$938,699
Industry	Molecular Viral Diagnostics Study	PI 5%	2008-09	Binax Corporation	\$4,454
R21 AI073697	Cell Entry of Human Metapneumovirus	PI 5%	2008-11	NIH/NIAID	\$421,938
R21 AI082417	Attenuated Strains of Human Metapneumovirus for Vaccines and Pathogenesis	PI 5%	2009-11	NIH/NIAID	\$421,938
R01 AI072414	The Human Antibody Response to Metapneumovirus: Prophylaxis and Vaccine Design	Co-PI 10%	2009-12	NIH/NIAID	\$2,175,802
R01 AI085062	Host determinants of human metapneumovirus immunity and pathogenesis	PI 20%	2011-15	NIH/NIAID	\$1,500,000
02832-9	The role of influenza virus and <i>Streptococcus pneumoniae</i> coinfection in severe-acute respiratory infections in young children	Co-I 10%	2011-13	Thrasher Research Fund	
GHG OPP1018614	Burden of Severe RSV Lung Disease in Infants and Young Children	Co-I 10%	2010-13	Bill and Melinda Gates Foundation	
UBS Optimus Foundation	Respiratory viral infection and vitamin D in Jordanian infants	Co-I 5%	2010-13	UBS Foundation	\$2,430,000

U01 IP000464	Enhanced Surveillance for New Vaccine Preventable Disease	Co-I 5%	2011-15	CDC/NCIRD	\$3,000,000
R21 AI107145	High-throughput Screening for Inhibitors of Human Metapneumovirus	PI 15%	2013-16	NIH/NIAID	\$387,900
U01 IP000467	Influenza Surveillance and Vaccine Effectiveness	Co-I 10%	2011-16	CDC/NCIRD	
R61 HL137077	Impact of Virome on Microbial Communities in the Respiratory Tract	Co-I 5%	2017-19	NIH/NHLBI	\$528,000
U01 IP00046769	Flu Vaccine Effectiveness in Those Hospitalized in a Large Diverse Health System	Co-I 10%	2016-21	CDC/NCIRD	\$2,800,000
U01 IP001051	New Vaccine Surveillance Network	PI 20%	2016-21	CDC/NCIRD	\$5,400,000
Merck	SARS-CoV-2 Surveillance in Child Care Centers	Co-I 5%	2021-23	Merck	\$448,151
U01 IP000035	Outpatient VE for Seasonal Flu, Pandemic Flu and RSV in a Large, Diverse Network	Co-I 10%	2021-22	CDC/NCIRD	\$5,500,000
75 D30121 C12246	Development of innovative methods, tools, and strategies to evaluate effectiveness of vaccines in preventing outpatient, laboratory-confirmed illness	Co-I 10%	2021-22	CDC/NCIRD	\$5,500,000
R33 HL137077	Impact of Virome on Microbial Communities in the Respiratory Tract	Co-I 5%	2017-22	NIH/NHLBI	\$528,000

FUNDING AWARDED TO WILLIAMS TRAINEES

IDSA Summer Scholarship for Medical Students Award
Rohith Piyaratna, First-year Vanderbilt Medical Student

IDSA Summer Scholarship for Medical Students Award
Alex Ryder, First-year Vanderbilt Medical Student

IDSA Summer Scholarship for Medical Students Award
Sarah Dunn, First-year Vanderbilt Medical Student.

MedImmune Fellowship Award for Pediatric Research
Mercedes Judkins, M.D. Fellow in Pediatric Critical Care

K12 RR017697 (PI: Brown) Vanderbilt Mentored Clinical Research Scholar Program
Jennifer Domm, M.D. Fellow in Pediatric Oncology

K12 RR017697 (PI: Brown) Vanderbilt Mentored Clinical Research Scholar Program
H. Keipp Talbot, M.D. Fellow in Adult Infectious Diseases

K12 RR017697 (PI: Brown) Vanderbilt Mentored Clinical Research Scholar Program
E. Kathryn Miller, M.D. Fellow in Pediatric Allergy/Immunology

MedImmune Pediatric fellowship award
E. Kathryn Miller, MD Pediatric Allergy/Immunology fellow

MedImmune Pediatric fellowship award
S. Asad Ali, MD Pediatric Infectious Disease fellow

K23 AI074863
H. Keipp Talbot, M.D., ID Fellow/Instructor

T32 AI007611 (PI: Hawiger) Cellular and Molecular Microbiology training grant
Reagan G. Cox, graduate student

PEO International Scholarship
Reagan G. Cox, graduate student

T32 HL69765 (PI: Hawiger) Immunobiology of Blood and Vascular Systems training grant
Jennifer Becker, graduate student

T32 HD060554 (PI: Cooper) Conducting Child Health Care Research in Vulnerable Populations training grant
Jennifer Schuster, MD, postdoctoral fellow

T32 AI060525 (PI: Flynn) Immunology of Infectious Disease training grant
Nazly Shafagati, PhD, postdoctoral fellow

TL1 TR000145 (PI: Reis) Clinical and Translational Science Fellowship training grant
Santiago Lopez, MD, postdoctoral fellow

CHP RAC Fellowship Award
Yu Zhang, Ph.D., postdoctoral fellow

Grants For Emerging Researchers (GERM) Award, Infectious Diseases Society of America
Bethany Sederdahl, medical student

T32 AI060525 (PI: Flynn) Immunology of Infectious Disease training grant
Kristina Lamens, graduate student

T32 AI089443 (PI: Shlomchik) Immunopathogenesis and Autoimmunity training grant
Yu Zhang, postdoctoral fellow

T32 AI049820 (PI: Deluca) Molecular Microbial Persistence and Pathogenesis
Adam Brynes, graduate student

K12 HD000850 (PI: Permar) Pediatric Scientist Development Program (K12)
Taylor Eddens, postdoctoral fellow

ARCS Foundation Scholarship
Olivia Parks, MSTP graduate student

T32 AI049820138954 (PI: Harrison) Training Program in Antimicrobial Resistance
Jorna Sojati, MSTP graduate student

K23 AI159399
Anne-Marie Rick, MD, PhD, General Academic Pediatrics Fellow

CHP RAC Trainee Award
Olivia Parks, MSTP graduate student

CHP RAC Trainee Award
Jorna Sojati, MSTP graduate student

Pediatric Infectious Diseases Society SUMMERS Program
Jorna Sojati, MSTP graduate student

F30 HL159915
Olivia Parks, MSTP graduate student

K08 AI171177
Megan Freeman, MD, PhD, PID Fellow

KL2 TR001856-08 (PI: Rubio)
Anna Wang-Erickson, PhD, junior faculty

OTHER RESEARCH RELATED ACTIVITIES

PATENTS

U.S. Patent Application Serial No. 12/238,130 "Vaccines for RSV and MPV"

U.S. Patent Application Serial No. 12/311,587 "Human Antibodies Neutralizing Human Metapneumovirus"

U.S. Provisional Patent Application No. 62/000,874 "Compositions and methods for treatment and detection of metapneumovirus and respiratory syncytial virus"

EDITORIAL BOARDS

- 2008-2015 *Journal of Infectious Diseases*
2012- *Journal of the Pediatric Infectious Diseases Society*
2012- *Journal of Virology*

JOURNAL REFEREEING

American Journal of Respiratory and Critical Care Medicine, Cell Host & Microbe, Cell Reports, Clinical and Developmental Immunology, Clinical and Vaccine Immunology, Clinical Microbiology Reviews, Expert Opinion on Investigational Drugs, Emerging Infectious Diseases, European Journal of Clinical Microbiology & Infectious Diseases, European Journal of Pediatrics, Immunity, Infectious Disease Reports, Infections in Medicine, Immunological Investigations, Influenza and Other Respiratory Viruses, Journal of Clinical Microbiology, Journal of Clinical Virology, Journal of Infectious Diseases, Journal of Medical Virology, Journal of Pediatric Infectious Diseases, Journal of Virology, Journal of Virological Methods, Influenza and Other Respiratory Viruses, mBio, Pediatric Infectious Diseases Journal, Pediatrics, Pediatric Transplantation, PLOS One, PLOS Pathogens, Respiratory Research, Scandinavian Journal of Infectious Diseases, Science Reports, Treatments in Respiratory Medicine, Vaccine, Virology

NIH STUDY SECTIONS

- 2009 NIH/NHLBI RFA-09-006 "Microbiome of the Lung and Respiratory Tract in HIV-Infected Individuals and HIV-Uninfected Controls"
2009 NIH/NIAID Special Emphasis Panels ZRG1 IDM-C and ZRG1 IMM-E
2011-2015 Scientific Review Group 08 ZHD1 DSR-K (LR) 1 NIH Loan Repayment Program
2013 NIH Microbiology and Infectious Diseases (MID-A), ad hoc
2013-2017 NIH Virology B Study Section, ad hoc
2017-2018 NIH CRFS Study Section, ad hoc
2017-2023 NIH Microbiology and Infectious Diseases Study Section (MID-B), *standing member*
2020-2023 NIAID Laboratory of Infectious Diseases Extramural Review Panel

EXTRAMURAL GRANT REVIEWING

- 2007 Thrasher Research Fund, grant reviewer
2011 Infectious Diseases Clinical Research Program, Uniformed Services University of the Health Sciences, grant reviewer
2013 Cystic Fibrosis Trust Research Foundation, grant reviewer
2017 French Research Agency (ANR)

Specialty Board Memberships

- 2011-2022 Scientific Advisory Board, Quidel
2015-2022 Independent Data Monitoring Committee, GlaxoSmithKline

LIST of CURRENT RESEARCH INTERESTS:

- | | |
|-----------------------------|------------------------------|
| Human metapneumovirus | Pneumoviruses |
| Respiratory syncytial virus | Influenza virus |
| Respiratory virus vaccines | Respiratory virus immunology |

SEMINARS and INVITED LECTURESHIPS RELATED to RESEARCH

INTRAMURAL

- 2003 "Human Metapneumovirus Infections in Children", Infectious Disease Grand Rounds, Vanderbilt University Medical Center
- 2004 "Human Metapneumovirus: A Common Pediatric Infection" Pediatric Grand Rounds, Monroe Carell Jr. Children's Hospital at Vanderbilt
- 2004 "Human Metapneumovirus Infections in Adults And Children." Invited talk, Tennessee Infectious Diseases Society Annual Meeting, Nashville, TN
- 2005 "Human Metapneumovirus Update" Infectious Disease Grand Rounds, Vanderbilt University Medical Center
- 2005 "Human Metapneumovirus: A New Respiratory Pathogen" Pathology Research Conference, Vanderbilt University Medical Center
- 2005 "New Respiratory Viruses in Children" Pediatric Grand Rounds, Monroe Carell Jr. Children's Hospital at Vanderbilt
- 2006 "Human Metapneumovirus Pathogenesis and Disease: In second place but trying harder" Vanderbilt Department of Microbiology and Immunology Seminar
- 2007 "Human Metapneumovirus: A New Respiratory Pathogen" Medicine Grand Rounds, Vanderbilt University Medical Center
- 2007 "Human Metapneumovirus: In Second Place but Trying Harder" Pediatric Grand Rounds, Monroe Carell Jr. Children's Hospital at Vanderbilt
- 2008 "Human Metapneumovirus Fusion Protein and its Role in Immunity and Cell Entry" Microbiology and Immunology Research Conference, Vanderbilt University Medical Center
- 2008 "Cell Entry of Human Metapneumovirus" Pediatric Faculty Research Conference, Vanderbilt University Medical Center
- 2010 "Human Metapneumovirus: Lulling the Sentries to Sleep" Pulmonary Grand Rounds, Vanderbilt University Medical Center
- 2011 "Human Metapneumovirus: Breaking In and Bribing the Guards" Pathology, Microbiology, and Immunology Research Conference
- 2012 "An Assay to Screen for Inhibitors of Human Metapneumovirus" Vanderbilt Institute for Chemical Biology Symposium: Chemical Biology of Infectious Diseases
- 2012 "Human Metapneumovirus: the Second Decade" Vanderbilt Vaccine Center International Respiratory Virus Symposium
- 2015 "Asleep on the Job or Watchfully Waiting? Respiratory Viruses and T cell Immunity" Vanderbilt Symposium on Infection and Immunology
- 2015 "Human Metapneumovirus: Steeler of Breath" Three Rivers Pediatric Update, Children's Hospital of Pittsburgh
- 2015 "Respiratory Viruses and T cells: Who Will Guard the Guardians?" Rangos Molecular Medicine Seminar, Pittsburgh, PA
- 2015 "Human Metapneumovirus: The Most Important Virus They Didn't Teach You About in School". Pediatric Grand Rounds, Children's Hospital of Pittsburgh
- 2016 "Human Metapneumovirus: Turning Strengths into Weaknesses". Molecular Genetics & Microbiology Seminar, University of Pittsburgh
- 2016 "Asleep on the Job or Watchfully Waiting? Respiratory Viruses and CD8+ T Cells" Immunology and Molecular Genetics & Microbiology Retreat, University of Pittsburgh
- 2019 "Human metapneumovirus: A problem for the ages?" Adult ID Grand Rounds, UPSOM
- 2020 "Human metapneumovirus innate immunity and pathogenesis - Friendly fire?" Magee Women's Research Institute Seminar

2021 "A Tale of Two Cytokines: Human Metapneumovirus and Interferon" Richard K. Mellon Institute Seminar

INVITED TALKS AT OTHER INSTITUTIONS - NATIONAL

- 2003 "Human Metapneumovirus: A New Pathogen." Third Annual North Carolina Congress on Respiratory Viruses, Greensboro, NC.
- 2007 "Human Metapneumovirus: A New Pediatric Pathogen" Pediatric Grand Rounds, West Virginia University Health Sciences Center, Morgantown, WV
- 2008 "Human Metapneumovirus: A New Respiratory Pathogen" Pediatric Grand Rounds, Uniformed Services Health Sciences University, Bethesda, MD
- 2008 "Human Metapneumovirus: Number Two but Trying Harder" Pediatric Grand Rounds, LeBonheur Children's Hospital, Memphis, TN
- 2008 "Sneezes, Sniffles and Wheezes: New Respiratory Viruses in Children" Pediatric Grand Rounds, Milwaukee Children's Hospital, Milwaukee, WI
- 2010 "Human Metapneumovirus: A New Decade for a Not-so-new Virus" UT Southwestern, Dallas, TX
- 2011 "Human Metapneumovirus: Breaking In and Bribing the Guards" University of Michigan Microbiology and Immunology Seminar, Ann Arbor, MI
- 2012 "Human Metapneumovirus: Breaking In and Bribing the Guards" Emory University Microbiology and Molecular Genetics Seminar, Atlanta, GA
- 2013 "Wheezing in Memphis: Human Metapneumovirus" Pediatric Grand Rounds, LeBonheur Children's Hospital, Memphis, TN
- 2013 "Viva Las Virus: Human Metapneumovirus Sends T Cells to Heartbreak Hotel" St. Jude Children's Research Hospital, Memphis, TN
- 2013 "Human Metapneumovirus and T Cells: Swimming with the Current?" Pediatric Grand Rounds, University of Virginia, Charlottesville, VA
- 2015 "Why Pulmonary CD8+ T cells Won't Fight, Fight, Fight for Iowa" Department of Immunology Symposium, University of Iowa, Cedar Rapids, IA
- 2015 "Human Metapneumovirus: Turning Strengths into Weaknesses" Molecular Microbiology & Microbial Pathogenesis Seminar, Washington University in St Louis, St. Louis, MO
- 2016 "Human Metapneumovirus and Pulmonary T Cells: Learned Helplessness or Studied Indifference?" Lung Biology Research Seminar Series, University of Rochester Medical Center, Rochester, NY
- 2016 "Human Metapneumovirus: Weakness of Memory or a Memory of Weakness?" Ohio State University College of Veterinary Medicine, Columbus, OH
- 2016 "Human Metapneumovirus: Sneaking in Through the Side Door" Nationwide Children's Hospital, Columbus, OH
- 2016 John M. Adams Memorial Lecture, "Human Metapneumovirus: from Discovery to Disruption", Department of Pediatrics, David Geffen School of Medicine at UCLA
- 2016 "Human metapneumovirus: the end of the beginning", Pediatric Grand Rounds, Emory University School of Medicine, Atlanta, GA
- 2017 "Human metapneumovirus: from Holland to the Bronx", Pediatric Grand Rounds, Children's Hospital at Montefiore, Albert Einstein College of Medicine, NY, NY
- 2017 "Saul Krugman Memorial Lecture Violets Are Blue: Human Metapneumovirus Pneumonia", Hassenfeld Children's Hospital of New York, NYU Langone Medical Center
- 2019 "Human metapneumovirus: innate and adaptive immunity" Global Health and Emerging Pathogens Institute (GHEPI) Seminar Series at Icahn School of Medicine at Mount Sinai, New York, NY
- 2019 "A Tale of Two Cytokines: Adaptive and innate immunity to human metapneumovirus" Nationwide Children's Hospital Research Institute, Columbus, OH
- 2023 "Sometimes the Joy Really is in the Journey: 20 Years of Metapneumovirus Research" University of Virginia, Charlottesville, VA

2023 "Human Metapneumovirus: Coming of Age?" Massachusetts Infectious Disease Society annual meeting, Boston MA

INVITED TALKS AT OTHER INSTITUTIONS - INTERNATIONAL

- 2008 "Emerging Respiratory Viruses" Invited talk, Peru National Institutes of Health (Instituto Nacional de Salud - INS), Laboratory of Respiratory Viruses, Lima, Peru
- 2009 "Human Metapneumovirus: Number Two But Trying Harder" Invited talk, Fundación INFANT, Buenos Aires, Argentina
- 2017 "Human metapneumovirus: haciendo tos de Buenos Aires" Invited talk, Fundación INFANT, Buenos Aires, Argentina
- 2017 "Human metapneumovirus in Jordanian Children" Invited talk, University of Jordan, Amman, Jordan

INVITED TALKS AT SCIENTIFIC MEETINGS - NATIONAL

- 2003 "Human Metapneumovirus Infections in Tennessee Children", *peer-reviewed oral presentation*, St. Jude/ Pediatric Infectious Disease Society Research Conference
- 2003 "Association of Human Metapneumovirus with Lower Respiratory Tract Disease in Normal Infants and Children", *peer-reviewed oral presentation*, Society for Pediatric Research
- 2005 "The Cotton Rat (*Sigmodon hispidus*) is a Highly Permissive Small Animal Model of Human Metapneumovirus Infection", *peer-reviewed oral presentation*, St. Jude/ Pediatric Infectious Disease Society Research Conference
- 2006 "DNA and Protein Vaccines Protect Against Human Metapneumovirus Infection in the Cotton Rat", *peer-reviewed oral presentation*, St. Jude/ Pediatric Infectious Disease Society Research Conference
- 2006 "DNA and Protein Vaccines Protect Against Human Metapneumovirus Infection in the Cotton Rat", *peer-reviewed oral presentation*, Society for Pediatric Research
- 2006 "Human Metapneumovirus Infection", *invited symposium talk*, New Pediatric Respiratory Viral Pathogens Symposium, Infectious Diseases Society of America, Toronto, CA
- 2006 "Emerging Respiratory Infections", *invited talk*, 12th Annual Emerging Infections in Clinical Practice and Public Health, Univ. of Minnesota, Minneapolis, MN
- 2006 "New Respiratory Viruses in Children", *invited talk*, 18th Annual Infectious Disease Conference, Univ. of Alabama, Huntsville, AL
- 2007 Piyaratna R, Tollefson, SJ, Podsiad AB, **Williams JV**. "Full Genome Sequencing and Analysis of Human Metapneumovirus Prototypes from Each Major Lineage", *peer-reviewed oral presentation*, Infectious Diseases Society of America Annual Meeting
- 2010 Erickson JJ, Podsiad AB, Tollefson, SJ, **Williams JV**. "The C57BL/6 Mouse Model of Human Metapneumovirus Infection", *peer-reviewed oral presentation*, Eleventh Southeastern Regional Virology Conference
- 2011 Edwards KM, Zhu Y, Griffin MR, Weinberg GA, Hall CB, Szilagyi PG, Staat MA, MD, Iwane M, Prill M, **Williams JV**. "The Burden of Human Metapneumovirus Infection in Young Children", *peer-reviewed oral presentation*, Society for Pediatric Research
- 2011 Cox RG, Tollefson SJ, **Williams JV**. "Human Metapneumovirus Entry is Facilitated by RGD-binding Integrins", *peer-reviewed oral presentation*, American Society for Virology
- 2012 Hastings AK, Wen SC, Peterson L, **Williams JV**. "Human Metapneumovirus And The Innate Immune System: The War Wages But Where Are The Weapons?" *peer-reviewed oral presentation*, Twelfth Southeastern Regional Virology Conference
- 2012 Cox RG, Livesay B, Mainou BA, Ohi M, Dermody TS, **Williams JV**. "The Human Metapneumovirus Fusion Protein Mediates Entry Via an Interaction with RGD-binding Integrins", *peer-reviewed oral presentation*, American Society for Virology

- 2013 Schuster JE, Tollefson SJ, Boyd KL, Williamson RA, Burton DR, **Williams JV**. "The DBA/2 Mouse is a Novel Animal Model for Human Metapneumovirus". *Peer-reviewed oral presentation*, St. Jude/ Pediatric Infectious Disease Society Research Conference
- 2013 Schuster JE, Tollefson SJ, Boyd KL, Williamson RA, Burton DR, **Williams JV**. "Human Monoclonal Antibody 54G10 is Highly Effective against Human Metapneumovirus *in Vivo* in a New Mouse Model". *Peer-reviewed oral presentation*, Infectious Diseases Society of America Annual Meeting (IDWeek 2013)
- 2014 "Human Metapneumovirus: A Decade of Discovery". *Invited presentation for Frontiers in Infectious Diseases*, St. Jude/ Pediatric Infectious Disease Society Research Conference, Memphis, TN
- 2014 Hastings AK, Wen SC, Peterson L, **Williams JV**. "HMPV SH Protein and the JAK/STAT Pathway: A New Weapon in the Viral War Against Host Immune Responses", *peer-reviewed oral presentation*, Thirteenth Southeastern Regional Virology Conference
- 2014 Schuster JE, Cox RG, Hastings AK, Tollefson SJ, Boyd KL, Williamson RA, Burton DR, **Williams JV**. "A Broadly Neutralizing Human Monoclonal Antibody Exhibits Efficacy Against Both Human Metapneumovirus And Respiratory Syncytial Virus", *peer-reviewed oral presentation*, Thirteenth Southeastern Regional Virology Conference
- 2015 "Human Metapneumovirus Prevention and Therapy". *Invited presentation*, 31st Annual Clinical Virology Symposium, Daytona Beach, FL
- 2015 "CD8⁺ T Cell Impairment During Respiratory Virus Infection "Southeastern Immunology Symposium, Atlanta, GA
- 2015 Rogers MC, Erickson JJ, Tollefson, SJ, **Williams JV**. "Suppression by Regulatory T Cells in Human Metapneumovirus Infection", *peer-reviewed oral presentation*, American Society for Virology
- 2015 "Human Metapneumovirus - from Kids with Colds to Conundrums and Cures". Caroline B. Hall award lecture, Infectious Disease Society of America ID Week 2015, San Diego, CA
- 2016 "Human Metapneumovirus and T Cell Impairment: The Pause that Refreshes". Center for Childhood Infections and Vaccines Annual Symposium, Atlanta, GA
- 2021 "No Flu or RSV in 2020: What Does This Respiratory Season Hold?" Infectious Diseases in Children Annual Meeting, NY
- 2022 "Déjà Vu All Over Again: Why Reinfections with Covid are the Rule, not the Exception", Pediatric Travel Club Annual Meeting, Pittsburgh, PA

INVITED TALKS AT SCIENTIFIC MEETINGS - INTERNATIONAL

- 2005 "Human Metapneumovirus Update" and "Human Metapneumovirus Pathogenesis," *invited talks*, VII International Symposium on Respiratory Viral Infections, Curacao, Netherlands Antilles
- 2008 "Disease Burden of Respiratory Viruses", *invited talk*, X International Symposium on Respiratory Viral Infections, Singapore
- 2009 "New Respiratory Viruses", *invited talk*, IX Congreso Centroamericano de Parásitología y Medicina Tropical, San Jose, Costa Rica
- 2014 "New viruses right under our nose: Human Metapneumovirus", *invited talk*, Third Annual International Symposium, Buenos Aires, Argentina
- 2014 "Human Metapneumovirus: Golden Oldie or New Kid on the Block?" *invited talk*, Society for General Microbiology Annual Conference, Liverpool, UK
- 2017 "Human Metapneumovirus: The Acute Takes a Page from the Chronic" *invited talk*, American Society for Virology Annual Meeting, Madison, WI
- 2018 "Respiratory viruses in hematopoietic stem cell transplant recipients", *invited talk*, 7th Annual Congress of the Argentina Society of Pediatric Infectious Diseases, Buenos Aires, Argentina
- 2019 "Translational research on HMPV: from bench to epidemiology", *invited talk*, 29th Annual Challenge in Virology Seminar, Swiss Academic Foundation for Education in Infectious Diseases (SAFE-ID), Grindelwald, Switzerland

- 2020 "A Wolf in Sheep's Clothing: Human Metapneumovirus in Adults" *invited talk*, IDWeek
- 2021 "Twenty Years of Human Metapneumovirus Research: Follow Your Nose" Pediatric Academic Societies annual meeting, Norman Siegal New APS Member Science Award
- 2022 "Metapneumovirus: A Leading Cause of Human Respiratory Disease", National Pediatric Respiratory Forum, Chengdu, China
- 2023 "Human Metapneumovirus in Children", XII International Congress of Pediatric Infectious Diseases and Vaccines - SADIP 2023

LOCAL/REGIONAL COVID-RELATED PRESENTATIONS

Pitt Faculty Town Hall 7.23.2020

Pitt Faculty Senate Updates 10.15.20, 11.12.20, 12.10.20, 1.21.21, 2.17.21, 3.25.21, 4.22.21, 5.20.21

Pitt Student Town Hall 7.28.2020, 2.4.2021

Pitt Staff Town Hall 8.5.2020

Pitt Student Mental Health Awareness Month Covid-19 Panel Discussion 10.5.2020, 10.14.2021

Pitt Graduate School Faculty Town Hall 10.13.2020

UP SOM Dept of Pediatrics Grand Rounds 12.17.2020

UPMC Children's Hospital of Pittsburgh Town Hall monthly updates June 2020 – Spring 2022

Pitt Faculty Update on Covid Vaccines 1.6.2021

Pitt Student Government Town Hall 10.20.2021

SERVICE:

University and Medical School

Institutional Committees/Activities

Vanderbilt University

- 2005-2008 Laboratory Based Biomedical Research Emphasis Committee, VUMC
- 2006-2015 Faculty Advisor, Microbes and Defense Academic Society, VUMC
- 2004-2007 Academic Advisor, first year medical students (1-2 students/year), VUMC
- 2007-2013 Faculty Affiliate Advisor, Batson College, VUMC
- 2007-2008 Pharmacy and Therapeutics Committee, MCJCHV
- 2007-2010 Pediatric Infectious Diseases Fellowship Committee
- 2011-2015 Hazinski Society for Junior Faculty Development, Steering Committee member
- 2012-2015 Hazinski Society for Junior Faculty Development, Small group facilitator
- 2014-2015 Chair, Institutional Biosafety Committee
- 2012-2014 Institutional Shared Resources Oversight Committee
- 2012-2015 Graduate Education Committee, Department of Pathology, Microbiology, and Immunology

University of Pittsburgh

- 2016-2018 Director, Rangos Molecular Medicine Research Conference
- 2017-2020 University Tenured Faculty Promotions Committee
- 2020-2022 Director, Covid-19 Medical Response Offices

National service

- 2012-2015 American Society for Virology, Education Committee

2013-2016 Fellowship Awards Committee, Pediatric Infectious Disease Society
2013-2016 Society for Pediatric Research Mentoring Committee
2013-2016 Pediatric Infectious Disease Society Research Committee
2016-2019 Chair, Fellowship Awards Committee, Pediatric Infectious Disease Society
2016-2019 Chair, Society for Pediatric Research Young Investigator Coaching Program
2017-2020 Nominations and Awards Committee, Pediatric Infectious Disease Society
2017-pres International Committee on Taxonomy of Viruses Pneumoviridae Study Group