

MEGAN CULLER FREEMAN MD, PhD

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EDUCATION AND TRAINING

- 2018-2022 Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA, Pediatrics Infectious Disease Fellowship
- 2016-2018 Children's Hospital of Pittsburgh of UPMC, Pittsburgh, PA, Pediatrics Residency Accelerated Research Pathway, Pediatric Scientist Development Program
- 2008-2016 Vanderbilt University, Nashville, TN, Medical Scientist Training Program
Ph.D., Microbiology and Immunology, 2014
Dissertation: Cell Biology of Coronavirus Infection
Advisor: Mark Denison, MD
M.D., 2016
- 2004-2008 University of Kentucky, Lexington, KY
B.S., Agricultural Biotechnology, *magna cum laude*

MEDICAL AND BOARD LICENSURE

- 2019-present Board certified, General Pediatrics, American Board of Pediatrics
- 2019-present PA Medical Physician and Surgeon
- 2016-present PA Graduate Medical Trainee

FUNDING

- 2021-2023 Institute for Infection, Inflammation, and Immunity in Children Acute Flaccid Myelitis Pilot Grant
- 2019-2022 Pediatric Infectious Disease Society St. Jude Children's Research Hospital Fellowship Award in Basic and Translational Research
- 2020 CTSI COVID-19 Pilot Program Award
- 2019 CTSI Research Across the Lifespan Pilot Award
- 2006-2007 Beckman Foundation Fellowship for Undergraduate Research

PUBLICATIONS

<https://www.ncbi.nlm.nih.gov/myncbi/1VQWdbrffnyM95/bibliography/public/>

PRIMARY RESEARCH ARTICLES

**co-first authors*

^corresponding author

1. Mitchell SL, Orris S, Freeman T, **Freeman MC**, Adams M, Axe M, Gribschaw J, Suyama J, Hoberman A, Wells, A. Performance of SARS-CoV-2 Antigen Testing in Symptomatic and Asymptomatic Adults: A Single Center Evaluation. 2021. *BMC Infectious Diseases*. Under review.
2. **Freeman MC**, Sinder A, Gray W, Keljo D, and Kim SC. Pediatric Patients Newly Diagnosed with Inflammatory Bowel Diseases Lack Sufficient Antibody Titers to Vaccine Preventable Illnesses. 2021. *Clinical Biochemistry*. Under review.
3. **Freeman MC**, Wells AI, Ciomperlik-Patton J, Myerburg MM, Yang L, Konopka-Anstadt J, and Coyne CB. Respiratory and intestinal epithelial cells exhibit differential susceptibility and innate immune responses to contemporary EV-D68 isolates. 2021. *eLife*. Jul 1;10:366687. doi: 10.7554/eLife.66687. PMID: 34196272
4. Rapsinski GR*, **Freeman MC***, Bell S, Hadir G, Wheeler SE. Pediatric SARS-CoV-2 Seroprevalence During Mitigation Procedures in Southwestern Pennsylvania. 2021. *Journal of Clinical Virology Plus*. Accepted.
5. Geisler D, **Freeman MC**, Rapsinski GJ, Wheeler SE. 2021. Unexpected false positive rates in pediatric SARS-CoV-2 serology using the Euroimmun Anti-SARS-CoV-2 IgG assay. *American Journal of Clinical Pathology*. 155 (6):773-775. doi: [10.1093/ajcp/aqab033](https://doi.org/10.1093/ajcp/aqab033). PMID: 33899091.

6. **Freeman MC**, Giaetto K, DiCicco LA, Rauenswinter S, Squire J, Aldewereld Z, Rapsinski G, Iagnemma J, Campfield B, Wolfson D, Kazmerski T, Forno E. 2020. A Comprehensive clinical Description of Pediatric SARS-CoV-2 Infection in Western Pennsylvania. *medRxIV*. doi: <https://doi.org/10.1101/2020.12.14.20248192>
7. **Freeman MC**^{*^}, Rapsinski GR^{*}, Zilla M, and Wheeler SE. 2020. Immunocompromised Seroprevalence and Course of Illness of SARS-CoV-2 in One Pediatric Quaternary Care Center. *Journal of the Pediatric Infectious Diseases Society*. <https://doi.org/10.1093/jpids/piaa123>
8. **Freeman MC**, Haddadin, Z, Lawrence, L, Piya, B, Krishnaswami, S, Faouri, S, Shehabi, A, Williams, JV, Khuri-Bulos, N, and Halasa N. 2020. Utility of RSV Rapid Diagnostic Assays in Hospitalized Children in Amman, Jordan. *Journal of Medical Virology*. doi: 10.1002/jmv.26546
9. Wang L, Shi W, Joyce MG, Modjarrad K, Zhang Y, Leung K, Lees CR, Zhou T, Yassine HM, Kanekiyo M, Yang Z, Chen X, Becker M, **Freeman MC**, Vogel L, Johnson J, Olinger G, Todd JP, Bagci U, Solomaon J, Mollura DJ, Hensley L, Jahrling P, Denison MR, Rao SS, Subbarao K, Kwong PD, Mascola JR, Kong W, Graham, BS. 2015. Evaluation of candidate vaccine approaches for MERS-CoV. *Nature Communications*. 6:7712. doi: 10.1038/ncomms8712.
10. **Freeman MC**, Peek CT, Becker MM, Smith EC, Denison MR. 2014. Coronaviruses induce entry-independent, continuous macropinocytosis. *mBio*. 5(4):e01340-14
11. **Freeman MC**, Graham RL, Lu X, Peek CT, Denison MR. 2014. Coronavirus replicase-reporter fusions provide quantitative analysis of replication and replication complex formation. *J Virol*. 88(10):5319-27
12. Smith EC, **Culler MR**, Hellman L, Fried M, Creamer T, and RE Dutch. 2012. Beyond anchoring: the expanding role of the Hendra virus F protein transmembrane domain in protein folding, stability and function. *J Virol*. 86(6): 3003-13. Epub2012 Jan 11

REVIEW ARTICLES

1. **Freeman MC**, Coyne C, Green M, Williams JV, and Silva L. 2019. Emerging Arboviruses and Implications for Pediatric Transplantation: A Review. *Pediatric Transplantation*. e13303. <https://doi.org/10.1111/ptr.13303>.

BOOK CHAPTERS

1. **Freeman MC**, Denison MR. (2016) Coronaviruses. In Kliegman RM, Stanton BF, St. Geme III J, Schor N. (Ed.), *Nelson Textbook of Pediatrics, 20th Edition*, (pp. 1613-1616) Philadelphia, PA: Elsevier

CASE REPORTS/CASE SERIES

1. **Freeman MC**, Mitchell S, Ibrahim J, and Williams JV. 2019. Neonatal toxic shock syndrome (TSS)-like exanthematous disease (NTED) in North America. *Journal of the Pediatric Infectious Diseases Society*, 351, 1614–2. <http://doi.org/10.1093/jpids/piz060>
2. Cramer N, Munjal N, Ware D, Ramgopal S, Simon D, **Freeman MC**, Michaels MG, Stem C, Thakkar K, Williams JV, Panigraphy A, Neville DNW, Owusu-Ansah S. 2019. New Cluster of Acute Flaccid Myelitis in Western Pennsylvania. *Ann Emerg Med*. pii: S0196-0644(19)30051-4. doi: 10.1016/j.annemergmed.2019.01.024. [Epub ahead of print]

VIEWPOINT

1. **Freeman MC**. 2020. A man was reinfected with coronavirus after recovery-what does this mean for immunity? *The Conversation* 2020.08.25
2. **Freeman MC**, Pickett J, and Webel M. 2020. Compare the flu pandemic of 1918 and COVID-19 with caution-the past is not a prediction. *The Conversation* 2020.06.04
3. **Freeman MC**. 2021. 7 reasons to be excited about COVID-19 vaccines for teens. *The Hill* 2021.05.13

INVITED ORAL SEMINARS RESEARCH

Children's Hospital of Pittsburgh Pediatric Scientist Development Program Retreat. June 2021.
 "Respiratory and intestinal epithelial cells exhibit differential susceptibility and innate immune responses to contemporary EV-D68 isolates"

Pediatric Infectious Diseases Society/St. Jude Meeting. Virtual. March 2021. "Respiratory and intestinal epithelial cells exhibit differential susceptibility and innate immune responses to contemporary EV-D68 isolates"

Children's Hospital of Pittsburgh Department of Pediatrics Grand Rounds. Pittsburgh, PA. July 2020.
 "Acute Flaccid Myelitis"

Children's Community Pediatrics Lunch and Learn Series. Pittsburgh, PA. July 2020. "Acute Flaccid Myelitis"

Children's Community Pediatrics Lunch and Learn Series. Pittsburgh, PA. May 2020. "Acute Flaccid Myelitis"

Pediatric Infectious Diseases Society/St. Jude Meeting. Memphis, TN, March 2020. "Human intestinal tract serves as an unrecognized route of infection for Enterovirus D68" *Cancelled due to SARS-CoV-2 pandemic*.

Children's Hospital of Pittsburgh Pediatric Residency Research Day, Pittsburgh, PA. May 2018.
 "Vaccine Response in Pediatric Patients Newly Diagnosed with Inflammatory Bowel Disease"

Pediatric Academic Society, Toronto, Canada, May 2018. "Vaccine Response in Pediatric Patients Newly Diagnosed with Inflammatory Bowel Disease"

American Society for Virology 33rd Annual Meeting, Fort Collins, CO. June 2014. "Coronaviruses induce entry-independent, continuous macropinocytosis."

Southeastern Regional Virology Conference, Atlanta, GA, April 2014. "Coronaviruses induce entry-independent, continuous macropinocytosis"

Southeastern Regional Virology Conference, Atlanta, GA. April 2012. "Murine hepatitis virus infection results in plasma membrane modifications and ruffling"

University of Kentucky ABT 101. Lexington, KY. October 2012. "Careers in Science"

Posters at the Capitol, Frankfort, KY. February 2007. "Cellular protein interactions with the cytoplasmic tail of Paramyxovirus fusion proteins"

EDUCATION

UPMC ID Grand Rounds: Double the Fun-Two Unusual Presentations of a Common Organism, May 27, 2021.

Pittsburgh Public Schools Town Hall: COVID-19 Vaccines, Invited expert. March 2021

PPHN Community Partners Webinar: COVID-19 Vaccines, Invited expert. January 2021

UPMC Children's Hospital of Pittsburgh COVID-19 Vaccine Town Hall. Invited Panelist. January 2021.

Down Syndrome Association of Pittsburgh COVID-19 Town Hall. Invited Panelist. December 2020

Women for a Healthy Environment 5th Annual Healthy Schools Summit. Invited panelist. "Public Health Decision Making in Public Schools." December 2020.

PPHN Community Partners Panel re: COVID-19 and school safety. Invited panelist. November 2020.

Allegheny Branch of the American Society for Microbiology Annual Meeting, Keynote Speaker, "COVID-19 Basic to Bedside" November 2020

Society for the Immunotherapy of Cancer, Invited panelist COVID-19 in Cancer Immunotherapy Panel. October 2020

Washington Health System Family Medicine Residency Guest Lecturer. "COVID-19 and Pediatrics." October 2020.

Transform for Tomorrow and Remake Learning Series: So Now What? Helping Parents and Caregivers Navigate a School Year Like No Other. "COVID-19 and Kids Health: An evidence-based practical guide & FAQ" September 2020.

UPMC Children's Hospital of Pittsburgh Pediatric Hematology/Oncology Division Conference. "COVID-19 and Immunocompromised Kids." September 2020.

Allegheny Partners for Out-of-School Time-United Way of Southwestern PA. "COVID-19 411 What You Need to Know About the Current Pandemic" August 2020.

Pittsburgh Public School Nurses. Pittsburgh, PA. August 2020. "SARS-CoV-2 FAQ: A practical guide"

Adventures in Science Series at the Monroeville Public Library. Pittsburgh, PA. August 2020.
 “Emerging Infectious Diseases”

Allegheny County Certified School Nurses Association COVID discussion. Pittsburgh, PA. July 2020.
 Invited Coronavirus Expert.

Children’s Hospital of Pittsburgh Department of Pediatrics Grand Rounds. Pittsburgh, PA. July 2020.
 “SARS-CoV-2 and Children”

Down Syndrome Medical Interest Group Annual Symposium. Panelist/Coronavirus expert. Virtual meeting. June 2020.

Pediatric Education Series Webinar with the UPMC Children’s Hospital of Pittsburgh Community Health Division. Pittsburgh, PA. May 2020. “SARS-CoV-2 and COVID-19”

Children’s Community Pediatrics Lunch and Learn Series. Pittsburgh, PA. April 2020. “COVID-19 antibodies and serology.”

Children’s Community Pediatrics Lunch and Learn Series. Pittsburgh, PA. March 2020. “COVID-19 in Pediatrics.”

Children’s Community Pediatrics Lunch and Learn Series. Pittsburgh, PA. March 2020. “COVID-19 Pandemic.”

University of Pittsburgh COVID-10 Teach-in, Department of Global Studies, Pittsburgh, PA. February 2020. Coronavirus

AUDIO PUBLICATIONS

Freeman MC. Invited speaker. “COVID-19 Vaccine-Where are we now?” PHM from Pittsburgh. December 8, 2020. <https://pedhospmed.libsyn.com/covid-19-vaccine-where-are-we-now>

Freeman MC. Invited expert. Interview by Angela Davis. “This holiday season, spread cheer, not COVID-19” MPR News with Angela Davis. October 27, 2020. <https://www.mprnews.org/episode/2020/10/26/davis-this-holiday-season-spread-cheer-not-covid19>

Freeman MC. Invited expert. Interview by Catharine Richert. “The growing science on children and COVID-19.” MPR News with Kerri Miller. August 31, 2020. <https://www.mprnews.org/episode/2020/08/31/the-growing-science-on-children-and-covid19>

Freeman MC. Invited speaker. “The Function of Children as Spreaders in the COVID-19 Pandemic.” PHM from Pittsburgh. August 25, 2020. <https://pedhospmed.libsyn.com/the-function-of-children-as-spreaders-in-the-covid-19-pandemic>

Freeman MC. Invited expert. “Natchez Glen House Stories Season 3 Dr. Megan Freeman on COVID 19” Natchez Glen Podcast Stories. July 21, 2020. <https://natchezglenhouse.podbean.com/e/natchez-glen-house-stories-season-3-dr-megan-freeman-on-covid-19/>

Freeman MC. Invited expert. “Is COVID-19 more common in Down syndrome.” Down Syndrome Center of Western Pennsylvania Podcast. June 17, 2020. <https://directory.libsyn.com/episode/index/id/14858375>

Freeman MC. Invited speaker. “Learn About How COVID-19 Affects Children with Dr. Freeman.” That’s Pediatrics. June 4, 2020. <https://www.chp.edu/health-care-professionals/podcast/how-covid-19-affects-children>

Freeman, MC. Invited expert. Interview by Kerri Miller. “The latest of the science of the novel coronavirus.” MPR News with Kerri Miller. April 20, 2020. <https://www.mprnews.org/episode/2020/04/20/the-latest-on-the-science-of-the-novel-coronavirus>

Freeman MC. Invited expert. “Coronavirus Teach-in 2.0.” Coronavirus Teach-in 2.0 Podcast. April 13, 2020. <https://www.ucis.pitt.edu/global/home>

Freeman MC. Invited speaker. “COVID-19 A Further Review of the Literature.” PHM from Pittsburgh. March 26, 2020. <https://pedhospmed.libsyn.com/covid-19-a-further-review-of-the-literature>

Freeman MC. Invited speaker. “Learn About Coronaviruses with Dr. Megan Freeman.” That’s Pediatrics. March 24, 2020. <https://www.chp.edu/health-care-professionals/podcast/learn-about-covid-19-with-dr-megan-freeman>

Freeman, MC. Invited expert. Interview by Kerri Miller. "The science of coronavirus: your questions answered." MPR News with Kerri Miller. March 24, 2020.
<https://www.mprnews.org/story/2020/03/24/the-science-of-coronavirus-your-questions-answered>

Freeman MC. Invited speaker. "COVID 19- What's the Deal?" PHM from Pittsburgh. March 7, 2020.
<https://pedhospmed.libsyn.com/covid-19-whats-the-deal>

Freeman MC. Guest "Naturally Curious Chimeras." This Week in Virology. April 19, 2015.
<https://www.microbe.tv/twiv/twiv-333-naturally-curious-chimeras/>

LECTURES

2/2021 CHP Resident teaching: COVID vaccine (30 students)
6/2020 U Pitt Medical School: Pediatric fever lecture (10 students)
4/2020 CHP Resident teaching: Diagnostic stewardship lecture (30 students)
3/2020 CHP Resident teaching: COVID-19 (30 students)
3/2020 CHP ID Division Teaching: Review of the Literature on COVID-19
2/2020 CHP Resident teaching: COVID-19 (20 students)
2/2020 ID Fellow Teaching: Diagnostic stewardship lecture
1/2020 ID Fellow Teaching: Skin and soft tissue infections lecture
11/2019 ID Fellow Teaching: Myocarditis, pericarditis, septic thrombophlebitis lecture
11/2019 U Pitt Medical School: Pediatric Advanced Physical Exam Course Instructor (2 students)
10/2019 U Pitt Medical School: Pediatric fever lecture (10 students)
8/2019 ID Fellow Teaching: Influenza lecture
7/2019 ID Fellow Teaching: Upper respiratory tract infections lecture
6/2019 U Pitt Medical School: Pediatric fever lecture (10 students)
5/2019 ID Fellow Teaching: ID Epidemiology and Study types lecture
3/2019 ID Fellow Teaching: HIV lecture
8/2018 ID Fellow Teaching: Phagocyte Function lecture

POSTER PRESENTATIONS

1. **Freeman MC** and Coyne CB. Human intestinal tract serves as an unrecognized route of infection for EV-D68. American Society for Virology 39th Annual Meeting. Fort Collins, CO, June 2020 *Cancelled due to COVID-19 Pandemic*
2. **Freeman MC** and Coyne CB. Human intestinal tract serves as an unrecognized route of infection for EV-D68. Association of Medical School Pediatric Department Chairs. Long Beach, CA, February 2020.
3. **Freeman MC**, Lawrence L, Khuri-Bulos N, Faouri S, Shehabi A, Williams JV, Halasa N. Utility of RSV and Rapid Diagnostic Assays in Hospitalized Children in Amman, Jordan. Macrae Foundation's XVIII International Symposium on Respiratory Viral Infections. Lisbon, Portugal, April 2016
4. **Freeman MC**, Peek CT, Becker MM, Smith EC, Denison MR. Coronaviruses induce entry-independent, continuous macropinocytosis. NIAID/IDSA Research Careers Meeting. Bethesda, MD, June 2015
5. **Freeman MC**, Graham RL, Lu X, Peek CT, Denison MR. Coronavirus replicase-reporter fusions provide quantitative analysis of replication and replication complex formation. American Society for Virology 32nd Annual Meeting. State College, PA, July 2013
6. **Culler MR**, Graham RL, Peek CT, and MR Denison. Murine hepatitis virus infection results in plasma membrane modifications and ruffling. XIIth International Nidovirus Symposium. Acme, Michigan, June 2011
7. **Culler MR**, Graham, RL, and MR Denison. Murine hepatitis virus infection of cells results in plasma membrane modifications and ruffling. American Society for Virology 29th Annual Meeting. Bozeman, Montana, July 2010
8. **Culler MR**, Wurth MA, and RE Dutch. Analysis of serine placement in the transmembrane domain of Hendra Virus fusion protein. American Chemical Society Presidential Event "Ten Years of Beckman Scholars". New Orleans, LA, April 2008

9. **Culler MR**, Wurth MA, McCann RO, and RE Dutch. Cellular protein interactions with the cytoplasmic tail of Paramyxovirus fusion proteins. Annual Beckman Symposium. Irvine, California, July 2007
10. **Culler MR**, Wurth MA, McCann RO, and RE Dutch. Cellular protein interactions with the cytoplasmic tail of Paramyxovirus fusion proteins. 21st National Conference on Undergraduate Research. San Rafael, California, April 2007

AWARDS

- 2019 UPMC Children’s Hospital of Pittsburgh First Year Fellow of the Year given by Pediatric Residents
- 2018 Children’s Hospital of Pittsburgh of UPMC Resident Research Award
- 2018 Gold Humanism Honor Society Inductee
- 2017 Gold Foundation Humanism and Intern Excellence in Teaching/ “Little Apple” Award given by the U. Pitt Medical School Class of 2018
- 2015 NIAID/IDSA Research Careers Meeting Travel Award
- 2010, 2012 American Society of Virology Student Travel Award
- 2012 Poster Award, Vanderbilt MSTP Retreat
- 2008 University of Kentucky Oswald Award for Biological Research
- 2004-2008 Dean’s List, 8 semesters
- 2004-2008 Otis A. Singletary Scholarship, merit-based full tuition and stipend

REVIEWER/EDITORIAL ACTIVITIES

Ad hoc reviewer for: *Pediatrics*, *Clinical Infectious Diseases*, *The Pediatric Infectious Disease Journal*, *PLOS Pathogens*, *Nature*, *mSphere*, *Journal of Clinical Virology*, *Pediatric Transplantation*

LEADERSHIP

- 2021 i4Kids Media Team
- 2020 CHP Preprocedure COVID screening working group
- 2020 CHP Pediatric ID Fellowship Social Media Director
- 2020 CHP MIS-C Response Team
- 2020 CHP COVID-19 Pediatrics Emergency Preparedness Leadership Team
- 2012-2014 MSTP Faculty Advisory Council Member
- 2012-2013 Member of VMS curricular redesign committee, Chair of MSTP focus group
- 2011-2012 MSTP Retreat planning committee
- 2009-2012 MSTP Seminar Series Committee Chair
- 2009-2012 Microbes and Defense Academic Society President
- 2010 Director/co-organizer of Vanderbilt Medical School Production of *The Vagina Monologues* to benefit the Sexual Assault Center of Nashville
- 2008-2010 MSTP Student Advisory Council Member
- 2008-2009 Vanderbilt Medical School Cadaver Ball Chair, elected position
- 2005-2008 University of Kentucky College of Agriculture Ambassador

SERVICE

- May 2021 Greensburgh Area Schools High School Science Fair Judge
- Feb 2021 Careers and Coronavirus guest speaker for Staley High School, Kansas City, MO
- Dec 20-Jan21 Avonworth school COVID advisor
- Jan 2021 Children’s Hospital Pittsburgh COVID Vaccine Town Hall invited expert
- Jan 2021 St. Edmund’s Academy COVID town hall invited expert
- Dec 2020 Down Syndrome Association of Pittsburgh COVID virtual town hall expert
- Oct 2020 Invited speaker for Pitt SOM Pediatric and Adolescent Interest Group: Coronavirus and Careers (12 students)
- Sep 2020 Careers discussion guest speaker for Paul Laurence Dunbar HS Math, Science, and Technology Magnet Program in Lexington, KY
- Aug 2020 Panel discussion for Beaver County School Nurses re: COVID-19

Fall 2020 Pennsylvania Pediatric Health Network COVID-19 back to school advisory panel
Fall 2020 Allegheny County Certified School Nurses Association COVID-19 panel discussion
Fall 2020 Advisor for Allegheny County School System re: COVID19
3-4/2020 Virology for kids (Classroom virtual visitor to discuss COVID-19)
2019, 20 Antibiotic Awareness Week 'Bug Bowl' Volunteer
7/2019 Poster judge for Children's Hospital of Pittsburgh summer research program
2008-2016 Shade Tree Clinic volunteer, a medical student run free clinic, Nashville, TN
2009-2010 PENCIL reading partner at Shawab Elementary, Nashville, TN
2009-2010 MiniMSTP volunteer-science outreach program for middle school students
2007-2008 Team Captain and Dancer for DanceBlue 2008, fundraiser and 24-hour dance marathon for Pediatric Oncology at University of Kentucky, Lexington, KY

TEACHING/MENTORING

2012-2014 Mentored an undergraduate student in the Denison lab (1 student)
2012-2014 TA for Vanderbilt Medical School Microbiology lab course (12 students per cycle)
2011-2012 Individual microbiology tutor, paid, Vanderbilt University School of Medicine (4 students)
2010-2012 Microbiology group review teacher, Vanderbilt University School of Medicine (3 classes per year, 100 students per cycle)
2007- 2008 University of Kentucky BioExcel Workshop Leader (20 students)

MEDIA

Regarding COVID-19
CNN, NPR, USA Today, Philadelphia Inquirer, Sixth Tone (Shanghai), MPR (Minnesota Public Radio), Science Vs Podcast, ABC, KDKA-TV, PolitiFact, Tribune, UPMC HealthBeat, New York Magazine, Pittsburgh Post Gazette

Freeman MC. Contributor. Pien Huang. Pfizer FDA Authorization, Israeli-Palestinian Violence, Pipeline Hack Fallout. NPR Up First. May 11, 2021.

<https://www.npr.org/2021/05/09/995261738/pfizer-fda-approval-israeli-palestinian-violence-pipeline-hack-fallout>

Freeman MC. Contributor. Pien Huang. India's COVID-19 Crisis, US Jobs Numbers, Vaccines for Ages 12-15. NPR Up First. May 8, 2021.

<https://www.npr.org/2021/05/02/992918660/indias-covid-19-crisis-u-s-jobs-numbers-vaccines-for-ages-12-15>

Freeman MC. Contributor. Paola Rosa-Aquino. Shots in Little Arms: When Can Kids Get the Vaccine? New York Magazine. April 20, 2021.

<https://nymag.com/intelligencer/2021/04/when-can-kids-get-the-covid-vaccine-heres-what-we-know.html>

Freeman MC. Contributor. Pien Huang. Why the Novel Coronavirus Has the Power to Launch a Pandemic. NPR Goats and Soda. July 29, 2020.

<https://www.npr.org/sections/goatsandsoda/2020/07/29/888957450/why-the-novel-coronavirus-has-the-power-to-launch-a-pandemic>

Freeman MC. Contributor. Adrianna Rodriguez. Can kids spread the coronavirus? 'Conclusively, without a doubt-yes,' experts say. USA TODAY. July 17, 2020.

<https://www.usatoday.com/story/news/health/2020/07/17/coronavirus-can-kids-spread-covid-19-spreadquestions-answered/5450062002/>

Freeman MC. Contributor. Andrew Joseph. A silver lining to the pandemic response? Doctors hope to see fewer cases of a polio-like condition that affects children. STAT. July, 17 2020.

<https://www.statnews.com/2020/07/17/social-distancing-and-afm-children/>

- Freeman MC. Contributor. Jason Beaubien. Coronavirus Mystery: Are Kids Less Likely To Catch It Than Adults Are? NPR. June 20, 2020. <https://www.npr.org/sections/goatsandsoda/2020/06/20/880983822/coronavirus-mystery-are-kids-less-likely-to-catch-it-than-adults-are>
- Freeman MC. Contributor. Jonathan Lai. “Should I wash my clothes after I go outside to prevent coronavirus infection?” Philadelphia Inquirer. April 3, 2020. <https://www.inquirer.com/health/coronavirus/coronavirus-covid19-laundry-clothes-20200403.html>
- Freeman, MC. Contributor. Jonathan Lai. “No, seriously, coronavirus parties for herd immunity are a bad idea, experts say ‘Absolutely not.’” Philadelphia Inquirer. April 2, 2020. <https://www.inquirer.com/health/coronavirus/no-coronavirus-parties-20200402.html>
- Freeman, MC. Contributor. Tom Avril. “Why the coronavirus and most other viruses have no cure.” The Philadelphia Inquirer. March 18, 2020. <https://www.inquirer.com/health/coronavirus/coronavirus-covid19-antiviral-cure-antibiotic-20200318.html>
- Freeman, MC. “Informing the Community on Novel Coronavirus.” PittWire Health. February 13, 2020. <https://www.pittwire.pitt.edu/news/informing-community-novel-coronavirus>
- Freeman, MC. Elise Roessner. “Community gathers at teach-in to learn more about novel coronavirus.” The Pitt News. February 13, 2020. <https://pittnews.com/article/155087/news/community-gathers-at-teach-in-to-learn-more-about-novel-coronavirus/>
- Freeman, MC. “University Of Pittsburgh Holds Session To Dispel Myths About Coronavirus Outbreak” CBS Pittsburgh. February 13, 2020. <https://pittsburgh.cbslocal.com/2020/02/12/pitt-holds-session-on-coronavirus/>

PROFESSIONAL MEMBERSHIPS

- 2018-present Pediatric Infectious Diseases Society Member
- 2019-present Society for Pediatric Research Junior Member
- 2016-present American Medical Association (AMA)
- 2015-present Infectious Disease Society of America (IDSA)
- 2010-present American Society for Virology (ASV)

OTHER INTERESTS

Present Cooking, gardening, yoga, travel, musical theatre, Yelp Elite alum, UK basketball