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ANGELA K SHEN, SCD, MPH  
 CAPTAIN (RET) US PUBLIC HEALTH SERVICE

**Innovative, strategic, goal-driven public health leader** with over 25 years of hands-on experience in Public Health Practice, Health Policy, Global Health, and Health Services Research. Ability to build, develop, and maintain partnerships and collaborations in the design, implementation, and evaluation of **domestic and international** programs to inform and optimize long-term impact.

Expertise in:

- Vaccines & Immunizations
- Program Planning & Evaluation
- Global Health and Development
- Biologics Regulation
- Education, Training, & Development
- Pandemic Preparedness & Readiness

PROFESSIONAL EXPERIENCE



**LLAMA PUBLIC HEALTH CONSULTING LLC – PHILADELPHIA, PA** 09/2018 – Present  
**Managing Director, Founder**

- Provide strategic consultation in public health toward improving population health outcomes, decreasing disparities, increasing access, strengthening public health infrastructure, and improving value for health spending with a focus on immunizations across the life course. Support country readiness and response to public health emergencies. Lead program evaluations for new vaccine introductions (influenza, COVID-19) and support countries in strengthening vaccination programs.

**US DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS), OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH, NATIONAL VACCINE PROGRAM OFFICE (NVPO) – WASHINGTON, DC** 10/2015 – 08/2018  
**Senior Science Policy Advisor**


- Provided strategic, analytical, scientific, and programmatic leadership on long-range operational and management goals and objectives to support national priorities through coordinated efforts with partners at the global, national, and state levels on vaccination across the life course. Designated Federal Official of the National Vaccine Advisory Committee (NVAC) federal advisory committee.

**ADMINISTRATION FOR CHILDREN AND FAMILIES, OFFICE OF REFUGEE RESETTLEMENT, UNACCOMPANIED CHILDREN PROGRAM – WASHINGTON, DC** 11/2016 – 03/2017  
**Director, Influx Planning and Operations** (detail)


- Command staff responsible for strategic support (shelter provisions, children services) of the complex interagency engagement of children fleeing violence in Central America (9,400 children, FY2016) including development of short and long-range goals for surge capacity capabilities for influx shelter operations.

**US AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID) – WASHINGTON, DC** 09/2012 – 09/2015  
**Senior Public Health Advisor for Maternal & Child Health**

- Provided technical and strategic advice in support (\$50 million) of low- and middle- income countries through the analysis and strengthening of systems and service delivery programs in countries with the highest maternal and child mortality. Represented USAID in high level engagements with key immunization partners (WHO, UNICEF, and Gavi the Vaccine Alliance).

 US DEPARTMENT OF HEALTH AND HUMAN SERVICES, OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH,  
NATIONAL VACCINE PROGRAM OFFICE – WASHINGTON, DC 07/2006 – 08/2012  
**Director, Policy & Vaccine Development**

- Provided strategic counsel to senior government officials to improve policy and programmatic outcomes for children and families; Led, managed, and coordinated policy and technical working groups on global vaccine development, vaccine financing, access, and delivery to care, supply chain shortages, and sustainable influenza capacity production in the developing world and coordinated federal and non-federal partners (e.g., WHO, Bill and Melinda Gates Foundation, PhRMA, BIO, consumer organizations).
- Directed contracts, budget initiatives and strategic planning activities for short- and long-term projects and established analytical and implementation program reviews and led research on barriers to vaccine development, innovation, and access to and disparities in the delivery of services including monitoring key provisions of the Patient Protection and Affordable Care Act and the Vaccines for Children program (VFC).

 US FOOD AND DRUG ADMINISTRATION (FDA), CENTER FOR BIOLOGICS EVALUATION & RESEARCH  
(CBER) – ROCKVILLE, MD 07/2000 – 06/2006  
**Director Regulatory Review Officer**

- Chair and member of over 100 regulatory licensing and review committees of biologic products (vaccines, therapeutics, plasma-derived products, and cell and gene therapy). Conducted scientific and administrative reviews of Biologic License Applications and provided advice, input, and guidance to manufacturers, consumers, other FDA Centers, and federal agency committees on scientific and policy issues for biological products.
- Expert in chemistry, manufacturing, and controls (CMC) and quality systems and pre-license and pre-approval inspections. Select committees:
  - Acambis ACAM 2000 (smallpox vaccine), 2007
  - Merck & Company Rotavirus Vaccine, Live, Oral, Pentavalent, 2006
  - ZLB Behring LLC Immune Globulin Subcutaneous (Human), 2006
  - Glaxo SmithKline Biologics Influenza Virus Vaccine, 2005
  - Baxter Healthcare Corporation Thrombin (Human) (For Further Manufacturing Use), 2005
  - Baxter Healthcare Corporation, ADVATE [Antihemophilic Factor (Recombinant)], 2003
  - MedImmune Flumist Influenza Virus Vaccine, Live, Intranasal), 2003
  - Omrix Biopharmaceuticals, Ltd Crosseal (Fibrin Sealant (Human), 2003
  - Eli Lilly and Co Xigris [Drotrecogin alfa (activated)], 2001
  - Evans Vaccine Limited Influenza Viral Vaccine (thimerosal reduced), 2001

 US CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)|GLOBAL AIDS PROGRAM – GABARONE,  
BOTSWANA 10/2003 – 12/2003  
**Public Health Advisor, Supply Chain PEPFAR** (detail)

- Evaluated Botswana’s National Voluntary Counseling and Testing Centers; Developed and implemented a drug procurement and distribution tool to prevent shortages in HIV test kits in national HIV/AIDS prevention program; Managed over \$5.1 million in cooperative agreements.

 OFFICE OF THE PRESIDENT, US FDA & CDC 07/1998 – 07/2000  
ROCKVILLE, MD & ATLANTA, GA  
**Presidential Management Fellow**

- Competitively selected from over 1,600 individuals for public service as a problem solver, strategic thinker, and future leader. Over 160 hours of formal training on leadership, management, and policy.
- At FDA: Served as INSPECTOR, in the Office of Regulatory Affairs; INTERNATIONAL PROGRAM ANALYST, in the Office of the Director of CBER and Office of the Commissioner in International Programs, and CASE MANAGER, in the Office of Compliance in CBER. At CDC: POLICY ANALYST AND SPECIAL ASSISTANT, in the Office of the Director of the National Center for HIV, STD & TB Prevention



US CENTERS FOR DISEASE CONTROL AND PREVENTION | NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY & HEALTH – MORGANTOWN, WV 04/1997 – 06/1998

**Associated Schools of Public Health Clinical Research Epidemiology Fellow**

- Developed, formulated, and recommended prevention strategies for medical screening among workers at risk for occupational asthma among insect rearing workers. Technical scientific reviewer for cooperative agreements for state-based surveillance activities.

### FACULTY APPOINTMENTS



PERELMAN SCHOOL OF MEDICINE, DEPARTMENT OF MEDICAL ETHICS AND HEALTH POLICY

**Adjunct Associate Professor** 2020 - Present

LEONARD DAVIS INSTITUTE OF HEALTH ECONOMICS, **Senior Fellow** (2021-2024)

CENTER FOR PUBLIC HEALTH, DEPARTMENT OF FAMILY MEDICINE AND COMMUNITY HEALTH, **Senior Fellow** (2024 – Present), UNIVERSITY OF PENNSYLVANIA

CHILDREN’S HOSPITAL OF PHILADELPHIA, **Visiting Scientist**, Vaccine Education Center (2019-2024)

DREXEL UNIVERSITY DORNSIFE SCHOOL OF PUBLIC HEALTH, Department of Health Management & Policy,

**Adjunct Associate Professor** (2018-2020); **JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH**, Department of International Health **Associate Scientist** (2017-2018)

### EDUCATION

TULANE UNIVERSITY SCHOOL OF PUBLIC HEALTH & TROPICAL MEDICINE. **Doctor of Science, Health Systems Management (2011), Who’s Who in American Universities (2005)**. New Orleans, LA.

UNIVERSITY OF GENEVA, FONDATION MÉRIUEX. **Vaccine Certificate. (2008)**. Annecy, France.

LOMA LINDA UNIVERSITY SCHOOL OF PUBLIC HEALTH. **Master of Public Health, International Health (1997), Alumnus of the Year (2014), United Nations Intern (1997)**. Loma Linda, CA.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES. **Bachelor of Science, Biochemistry (1994), UCLA Community Service Award (1994), American Red Cross Team Award (1994)**. Los Angeles, CA.

### CONSULTATIONS | ADVISORY BOARDS

NATIONAL COMMITTEE ON QUALITY ASSURANCE, WASHINGTON, DC, **Immunization Measurement Advisory Panel (IPAP) (2023–PRESENT), Adult Immunization Measurement Advisory Panel (2020-2023)**

VOICES FOR VACCINES, DECATUR, GA, **Scientific Advisory Board**, ALLIANCE FOR HEALTH POLICY, WASHINGTON, DC, **Expert Resource (2020–PRESENT)**

PENNSYLVANIA IMMUNIZATION COALITION, **Volunteer Board Member** (2023-2024); 2024 National Conference for Immunization Coalitions and Partnerships (NCICP) Conference Chair [2024 NCICP Archive - NCICP](#)

ST. LOUIS UNIVERSITY NURSING HOME COVID-19 PROJECT STAKEHOLDER ADVISORY COUNCIL MEETING, ST. LOUIS, MO, **St. Louis University Nursing Home Project Advisory Council** (2022–2023)

ASIAN AMERICAN GOVERNMENT EXECUTIVES NETWORK, WASHINGTON, DC, **Senior Executive Service Development Program Graduate** 2017-2018 Cohort (2016- PRESENT); WORLD HEALTH ORGANIZATION CONSULTATIONS, **Liberia (2014), Zambia (2014), WHO Africa Region – Democratic Republic of Congo (2013), Tanzania (2013)**, TASK FORCE FOR GLOBAL HEALTH, **Ghana (2023), Sierra Leone (2023), Kyrgyzstan (2023), Republic of Moldova (2023)**

## AWARDS

Received 11 civilian awards including the **HHS Secretary’s Award for Distinguished Service (2006)** and the Assistant Secretary for Health’s Special Recognition Award (2008).

CAPT (ret) United States Public Health Service Commissioned Corps (2002-2018); Received 31 Uniformed Service awards including the **Meritorious Service Medal (2017)**, four Outstanding Service Medals (2017, 2017, 2007, 2007), three Commendation Medals (2017, 2012, 2010), the Surgeon General’s Exemplary Service Medal (2006), the **Presidential Unit Citation (2015)**, the Foreign Duty Award (2004), and the Junior Officer of the Year (2007).

## PROFESSIONAL WORKGROUPS

### NATIONAL LEADERSHIP POSITIONS

- Chair National Conference of Immunization Coalitions and Partnerships (NCICP), 2024 [2024 NCICP Archive - NCICP](#); NCICP Planning Committee, 2025.
- Co-Founder & Co-Chair of the National Adult and Influenza Immunization Summit (NAIIS), 2012, 2015-2018; NAIIS Co-Chair | Quality Measures Working Group, Maternal Immunization, Adult Composite, and End Stage Renal Disease, 2012, 2015-2018
- HHS Interagency Chair | 21<sup>st</sup> Century Cures Act Report to Congress on Vaccine Innovation, 2017-2018
- Chair | HHS Interagency Influenza Task Force, Employer Working Group, 2010-2012
- Chair | NVAC Financing Working Group, 2006-2009

### EXPERT GROUPS

- National Quality Forum, Adult Immunization Strategy Expert Panel, January 2021
- Washington, DC Department of Health, Immunization Practices Advisory Committee, 2016-2018
- Pharmacy Quality Alliance Adult Immunization Task Force, 2016-2018
- WHO Global Ebola Vaccine Deployment Team, 2015
- Gavi 2016-2020 Coverage and Equity Alliance Advisory Group, 2014-2015
- Maternal and Child Health Integrated Project Family Planning Immunization Integration Working Group, 2014-2015
- MenAfriNet (regional meningitis surveillance network), 2014-2015

### EXTERNAL & FEDERAL COMMITTEES & WORKING GROUPS

- National Academies of Sciences, Engineering, and Medicine rapid expert consultation (REC) related to COVID-19 through the Facilitating Rapid and Actionable Responses to Social,

Behavioral, and Economic-Related COVID Questions: the Societal Experts Action Network (SEAN) on Strategies for Building COVID-19 Vaccine Confidence, 2021  
<https://www.nap.edu/catalog/26068/strategies-for-building-confidence-in-the-covid-19-vaccines>

- Promoting Pediatric Primary Prevention (P4 Challenge) Innovations in Pediatric Primary Care to Improve Child Health. Department of Health and Human Services – Health Resources and Services Administration, Maternal and Child Health Bureau, Challenge Advisor and Judge, 2020-2021 <https://www.challenge.gov/challenge/promoting-pediatric-primary-prevention/>
- Assistant Secretary for Preparedness and Response (ASPR) Enterprise Executive Committee (EEC), 2017-2018
- HHS Committee on the Consensus-Based Entity Committee, 2016-2018
- Centers for Medicare & Medicaid Services (CMS) Measures Policy Council, 2016-2018
- Health People 2020: Immunization and Infectious Diseases Working Group, 2016-2018
- Advisory Committee on Immunization Practices (ACIP) Adult Working Group, 2016-2018
- Department of Homeland Security (DHS) Unified Coordination Group, Administration for Children and Families (ACF) representative, 2016-2017
- USAID Working Groups on sustainability and measurement (2014-2015)
- HHS Interagency Lyme Disease Working Group, 2007–2012
- CDC Working Groups (2007-2012):
  - International Vaccine Stability, Vaccine Supply, Vaccine Stockpile
- Commissioned Corps Working Groups (2006-2017)
  - Applied Public Health Team, eCommissioned Corps Issuance System Oversight Integrated Project Team, Surgeon General’s Professional Advisory Committee, Commissioned Corps Transformation Applied Public Health Functional Group
- CBER Committees (2001-2006)
  - Meeting Minutes, Chemistry Manufacturing and Controls (CMC) Review Templates, Cellular and Gene Therapy Product Manufacturing Facilities Guidance, CMC Coordinating Committee, Electronic Document Room, Documentation Standards
- National Institute for Occupational Safety and Health Committees (1997-1998)
  - Appalachian Laboratories Occupational Safety and Health Occupational Asthma Conference Planning Committee; National Occupational Injury Research Symposium Session Staff; Agricultural Health and Safety Conference Session Staff

## PUBLICATIONS

Peer Reviewer: Open JAMA, Vaccine, American Journal of Preventive Medicine, PLoS, Health Affairs, Human Vaccines and Immunotherapies, Global Health Science and Practice, Health Policy and Planning, BMJ Paediatrics

PEER REVIEWED PUBLICATIONS

ORCID: 0000-0003-3761-0016

<https://pubmed.ncbi.nlm.nih.gov/?cmd=search&term=shen%20AK%5Bau%5D&dispmax=50>

1. Otorbaeva D, Akmatova R, Cooley KM, Iwamoto C, Jacques-Carroll LA, Jones CE, Matanock AM, **Shen AK**, Tupps C. Post-introduction evaluation (PIE) of the seasonal influenza vaccination program in Kyrgyzstan. *Submitted to Vaccine*.

2. Amponsa-Achiano K, **Shen AK**, Carlton JG, Laryea EB, Mohammed NT, Sally ET, Adjei MR, Opare W, Osei-Sarpong F, Diamenu S, Abiodun P, Owusu D, Ortiz N, Bawa J, Bonsu G. Post-Introduction Evaluation of COVID-19 Vaccine Deployment in Ghana: Lessons Learnt to Inform Future New Vaccine Introductions and Strengthen Public Health Readiness, 2023. *Submitted to BMC Public Health*.
3. Srivastava T, Chavada B, Brien K, Kuter B, Feemster K, **Shen AK**. A Systematic Review of Student Vaccine Attitudes and Vaccine Policy on College and University Campuses, 2000-2022. *The Journal of American College Health*. *Journal of American College Health*. 1-13. <https://doi.org/10.1080/07448481.2024.2409687>
4. **Shen AK**, Gutu V, Druc A, Ebama M, Belayneh A, Adams B, Valleau M, Paraschiv A. An Evaluation of the National Influenza Vaccination Program in the Republic of Moldova, 2023-2024. *Vaccine*. 2024;42(26):126322. <https://doi.org/10.1016/j.vaccine.2024.126322>
5. **Shen AK**, Gutu V, Druc A, Capcelea A, Ebama M, Adams B, Belayneh A, Valleau M, Paraschiv A. Vaccination should be everyone's business: challenges in vaccinating pregnant persons against influenza in the Republic of Moldova. *Int J Gynecol Obstet*. 2024;00:1-3. <https://doi.org/10.1002/ijgo.15896>
6. Milliken Loren, Ransom Montreice, Bhatti Alexandra, **Shen Angela**, eds. *First National Vaccine Law Conference Papers and Proceedings*. Chicago, Illinois: ABA Book Publishing, 2024. <https://www.americanbar.org/products/inv/book/437456942/>
7. **Shen AK**, Browne S, Srivastava T, Kornides ML, Tan ASL. Trusted Messengers and Trusted Messages: The Role of Community-Based Organizations in Promoting COVID-19 and Routine Immunizations. *Vaccine*. 2023;41(12):1994-2002. <https://www.sciencedirect.com/science/article/pii/S0264410X23001809>
8. **Shen AK**, Browne S, Srivastava T, Kornides ML, Tan ASL. Persuading the "Movable Middle": Characteristics of Effective Messages to Promote Routine and COVID-19 Vaccinations for Adults and Children – The Impact of COVID-19 on Beliefs and Attitudes. *Vaccine*. 2023;41(12):2055-2062. <https://www.sciencedirect.com/science/article/pii/S0264410X2300141X>
9. **Shen AK**, Grundmeier RW, Michel JJ. Trends in Vaccine Refusal and Acceptance Using Electronic Health Records from a Large Pediatric Hospital Network, 2013–2020: Strategies for Change. *Vaccines*. 2022; 10(10):1688. <https://doi.org/10.3390/vaccines10101688>
10. Srivastava T, **Shen AK**, Browne S, Michel JJ, Tan ASL, Kornides ML. Comparing COVID-19 Vaccination Outcomes with Parental Values, Beliefs, Attitudes, and Hesitancy Status, 2021–2022. *Vaccines*. 2022; 10(10):1632. <https://doi.org/10.3390/vaccines10101632>
11. **Shen AK**, Browne S, Srivastava T, Michel JJ, Tan ASL, Kornides M. Factors Influencing Parental and Individual COVID-19 Vaccine Decision-Making in a Pediatric Network. *Vaccines*. 2022; 10(8):1277. <https://doi.org/10.3390/vaccines10081277>
12. **Shen AK**, Sobczyk EA, Coyle R, Tirmal A, Hannan C. How ready was the US vaccination infrastructure and network of immunization information systems for COVID-19 vaccination campaigns: Recommendations to strengthen the routine vaccination program and prepare for the next pandemic. *Hum Vaccin Immunother*. 2022 Jul 7:2088010. doi:

10.1080/21645515.2022.2088010. Epub ahead of print. PMID: 35796624.  
<https://www.tandfonline.com/doi/pdf/10.1080/21645515.2022.2088010?needAccess=true>

13. **Shen AK**, Yu MA, Lindstrand A, Baxi SJ, Jousset O, O'Brien K, Boulanger LL. The WHO Partners Platform: Accelerating Coordinated Country Response and Readiness for COVID-19 From Assessment to Vaccination. *Glob Health Sci Pract.* 2021;9(4):725-732.  
<https://doi.org/10.9745/GHSP-D-21-00460>
14. **Shen AK**, Lindstrand A, Schreiber B, O'Brien K. Optimizing the supply of vaccines for COVID-19. *Bull World Health Organ.* 2021;99(12):848-848A. <https://doi.org/10.2471/BLT.21.287513>
15. **Shen AK**. Adult Immunization Measurement: The road to progress following new HEDIS® measures and COVID-19 vaccination efforts. *Popul Health Manag.* Ahead of print.  
<http://doi.org/10.1089/pop.2021.0316>
16. Browne SK, Feemster KA, **Shen AK**, Green-McKenzie J, Momplaisir FM, Faig W, Offit PA, Kuter BJ. Coronavirus disease 2019 (COVID-19) vaccine hesitancy among physicians, physician assistants, nurse practitioners, and nurses in two academic hospitals in Philadelphia. *Infect Control Hosp Epidemiol.* 2021 Sep 20:1-9. <https://doi.org/10.1017/ice.2021.410>
17. **Shen AK**, Tan SL, Trust, Influence and Community: Why pharmacists and pharmacies are central for addressing vaccine hesitancy. *J Am Pharm Assoc.* 62(2022):305-308.  
<https://doi.org/10.1016/j.japh.2021.10.001>
18. **Shen AK**, Kimmins LM, Bramer CA, Swanson R, Vranesich P, Orenstein W. Vaccine Coverage Across the Life Course in Michigan During the COVID-19 Pandemic: January-September 2020. *Am J Public Health.* 2021;111(11):2027-2035. <https://doi.org/10.2105/AJPH.2021.306474>
19. Momplaisir FM, Kuter BJ, Ghadimi F, Browne S, Nkwihoreze H, Feemster KA, Frank I, Faig W, **Shen AK**, Offit PA, Green-McKenzie. Racial/Ethnic Differences in COVID-19 Vaccine Hesitancy Among Health Care Workers in 2 Large Academic Hospitals. *JAMA Netw Open.* 2021;4(8):e2121931.  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2783615>
20. **Shen AK**, Michel JJ, Langford AT, Sobczyk EA. Shared clinical decision-making on vaccines: out of sight, out of mind. *J Am Med Inform Assoc.* 2021;28(11):2523-2525.  
<https://doi.org/10.1093/jamia/ocab147>
21. Byron SC, Roth L, Acton RM, **Shen AK**. Harnessing electronic clinical data to report adult and prenatal immunization quality measures. *J Am Med Inform Assoc.* 2021;28(10):2226-2232.  
<https://doi.org/10.1093/jamia/ocab125>
22. Schmidt H, Weintraub R, Sadecki E, Williams M, Sadecki E, Wu H, Doiphode A, Gostin L, **Shen A**. Equitable allocation COVID-19 in the United States. *Nat Med* (2021).  
<https://doi.org/10.1038/s41591-021-01379-6>  
SSRN [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3740041](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3740041). Updated:  
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3803582](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3803582)

23. Yu MA, **Shen AK**, Ryan MJ, Boulanger LL. Enabling a Digital Environment for Coordination, Readiness, and Response to the COVID-19 Pandemic for Vaccine Deployment and More. *Bull World Health Organ* 2021;99:171-171. <http://dx.doi.org/10.2471/BLT.21.285550>
24. Kuter BJ, Browne S, Momplaisir FM, Feemster KA, **Shen AK**, Green-McKenzie J, Faig W, Offit PA. Perspectives on the Receipt of a COVID-19 Vaccine: A Survey of Employees in Two Large Hospitals in Philadelphia. *Vaccine*. 2021;39(12):1693-1700. <https://doi.org/10.1016/j.vaccine.2021.02.029>
25. Trotter AB, Abbott EK, Coyle R, **Shen AK**. Preparing for COVID-19 Vaccination: A Call to Action for Clinicians in the United States on Immunization Information systems. *Annals of Internal Medicine*. 2 February 2021. <https://www.acpjournals.org/doi/10.7326/M20-7725>
26. **Shen AK**, Hughes R, DeWald E, Rosenbaum S, Pisani A, Orenstein W. Ensuring Equitable Access to Novel COVID-19 Vaccines in the US: Current System Challenges and Opportunities. *Health Affairs*. 2021;40(1):62-69. <https://doi.org/10.1377/hlthaff.2020.01554>
27. Bramer CA, Kimmins LM, Swanson R, Kuo J, Vranesich P, Jacques-Carroll LA, **Shen AK**. Decline in Child Vaccination Coverage During the COVID-19 Pandemic — Michigan Care Improvement Registry, May 2016–May 2020. *MMWR Morb Mortal Wkly Rep*. 2020 May 18;(29). <https://dx.doi.org/10.15585/mmwr.mm6920e1>
28. **Shen AK**, Orenstein W. Continued Challenges with Medicaid Coverage of Adult Vaccines and Vaccination Services. *JAMA Netw Open*. 2020;3(4):e203887. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2764807>
29. **Shen AK**, Peterson A. The pharmacist and pharmacy have evolved to become more than the corner drugstore: a win for vaccinations and public health. *Hum Vaccin Immunother*. 2020 May 3;16(5):1178-1180. doi: 10.1080/21645515.2019.1660119. Epub 2019 Sep 17. PMID: 31456479; PMCID: PMC7227669.
30. **Shen AK**. Finding a Way to Address a Wicked Problem: Vaccines, Vaccination, and a Shared Understanding. *Human Vaccines & Immunotherapeutics*. 2020;16(5):1030-1033. <https://doi.org/10.1080/21645515.2019.1695458>
31. **Shen AK**, Warnock R, Selna W, Chu S, Kelman JA. Patient Characteristics of Medicare Beneficiaries Who Report Not getting Influenza and Pneumococcal Vaccinations, 2001-2013. *Human Vaccines & Immunotherapeutics*. <https://doi.org/10.1080/21645515.2019.1688033>
32. **Shen AK**, Warnock R, Selna W, MaCurdy TE, Chu S, Kelman JA. Characteristics of Vaccinating Providers Reported through Medicare Claims in Office-Based Settings: Volume of Influenza and Pneumococcal Vaccinations. *Vaccine*. <https://doi.org/10.1016/j.vaccine.2019.10.029>
33. Yarnoff B, Khavjou L, King G, Bates L, Zhou F, Leidner AJ, **Shen AK**. Analysis of the Profitability of Adult Vaccination in 13 Private Provider Practices in the United States. *Vaccine*. 2019; 37(42):6180-6185. <https://doi.org/10.1016/j.vaccine.2019.08.056>
34. Poland GA, Hall LL, Powell JA, for the **Advisory Group**. Effective and equitable influenza vaccine coverage in older and vulnerable adults: The Need for evidence-based innovation and



transformation. *Vaccine*. 2019;37(16):2167-2170.  
<https://doi.org/10.1016/j.vaccine.2019.02.076>

35. **Shen AK**, Groom AV, Leach DL, Bridges CB, Tsai AY, Tan L. Promoting Adult Vaccination through the Development and Use of Composite Measurement: A Partnership-Driven Roadmap to Strengthen the Vaccine Delivery System. *Vaccine*. 2019;37:1277-1283.  
<https://doi.org/10.1016/j.vaccine.2019.01.044>
36. **Shen AK**, Warnock R, Selna W, Chu S, Kelman JA. Vaccination Among Medicare-Fee-For Service Beneficiaries: Characteristics and Predictors of Vaccine Receipt, 2014-2017. *Vaccine*. 2019;37(9):1194-1201. <https://doi.org/10.1016/j.vaccine.2019.01.010>
37. **Shen AK**, Khavjou L, King G, Bates L, Zhou F, Leidner AJ, Yarnoff B. Provider Time and Costs to Vaccinate Adult Patients: Impact of Time Counseling Without Vaccination. *Vaccine*. 2019;37(6):792-797. <https://doi.org/10.1016/j.vaccine.2018.12.045>
38. **Shen AK**, Williams WW, O'Halloran AC, Groom AV, Lu P, Tsai AY, Lindley MC. Promoting Adult Immunization Using Population-Based Data for a Composite Measure. *Am J Prev Med*. 2018;55(4):517-523. <https://doi.org/10.1016/j.amepre.2018.04.050>
39. **Shen AK**, Warnock R, Chu S, Kelman JA. Receipt of Other Routinely Recommended Vaccines Relative to Receipt of Seasonal Influenza Vaccines: Trends from Medicare Administrative Data, 2013-2015. *Vaccine*. 2018. 36(30):4399-4403. <https://doi.org/10.1016/j.vaccine.2018.06.020>
40. **Shen AK**, Warnock R, Brereton S, McKean S, Wernecke M, Chu S, Kelman JA. Influenza Vaccination Coverage Estimates in the Fee-For Service Medicare Beneficiary Population 2006 - 2016: Using Population-Based Administrative Data to Support a Geographic Based Near Real-Time Tool. *Hum Vaccin Immunother*. 2018:1-10.  
<https://doi.org/10.1080/21645515.2018.1462067>
41. **Shen AK**, Warnock R, Kelman JA. Driving Immunization through the Medicare Annual Wellness Visit: A Growing Opportunity. *Vaccine*. 2017;35(50):6938-6940.  
<https://doi.org/10.1016/j.vaccine.2017.10.055>
47. **Shen AK**, Kelman JA, Warnock R, Zhang W, Brereton S, McKean S, Wernecke M, Chu S, Gellin BG. Beneficiary Characteristics and Vaccinations in the End-Stage Renal Disease Medicare Beneficiary Population, An Analysis of Claims Data 2009-2015. *Vaccine*. 2017;35(52):7302-7308. <https://doi.org/10.1016/j.vaccine.2017.10.105>
57. Nowak GJ, **Shen AK**, Schwartz JL. Using campaigns to improve perceptions of the value of adult vaccination in the United States: Health Communication Considerations and Insights. *Vaccine*. 2017;35(42):5543-5550. <https://doi.org/10.1016/j.vaccine.2017.08.064>
58. **Shen AK**, Tsai AY, Birkhead GS. A review of policy, practices, and players governing and involved in the United States vaccine and immunization enterprise. *International Journal of Health Governance*. 2017;22(3):138-151. <https://doi.org/10.1108/IJHG-05-2017-0023>
59. Cowen AE, Clark SJ, Gordon J, Bok K, **Shen, AK**. Vaccine purchasing groups: An overview of their policies and practices. *Vaccine*. 2016;34:5060-5065.  
<https://doi.org/10.1016/j.vaccine.2016.08.080>

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#### OTHER SELECT ARTICLES

79. **Angela K. Shen**. The Perfect Storm: Mitigating a Convergence of Forces to Optimize Vaccination. *Health Affairs Forefront*. October 30, 2024. <https://www.healthaffairs.org/content/forefront/perfect-storm-mitigating-convergence-forces-optimize-vaccination>
80. **Angela K. Shen**, Kristina Crane, Rebecca Coyle. Beyond Floppy Disks and Fax Machines: Modernizing Immunization Information Systems for the Future Readiness. *Health Affairs Forefront*. October 23, 2024 <https://www.healthaffairs.org/content/forefront/beyond-floppy-disks-and-fax-machines-modernizing-immunization-information-systems>
81. **Angela K. Shen**. My sister refused to call an ambulance, fearing the cost. But Californians needn't worry. *The Sacramento Bee*. July 16, 2024. <https://www.sacbee.com/opinion/oped/article288531737.html>. Accessible here: <https://www.aol.com/news/sister-refused-call-ambulance-fearing-120000817.html> Also in the Modesto Bee, Fresno Bee, SLO Tribune, and Merced Sun-Star
82. **Angela K. Shen**. How I lost weight on the “Gelato Diet”. *Philadelphia Inquirer*. September 27, 2023. <https://www.inquirer.com/health/pasta-pizza-gelato-diet-walking-italy-20230927.html>
83. **Angela K. Shen**, Jason Schwartz, Phyllis Arthur. Vaccine Development After The COVID-19 Pandemic: Are Programs And Policies Ready To Embrace Innovation? *Health Affairs Forefront*. February 9, 2023. <https://www.healthaffairs.org/content/forefront/vaccine-development-after-covid-19-pandemic-programs-and-policies-ready-embrace>

84. **Angela K. Shen** The Pandemic is Over, Right? No. We're in a Calmer Phase but Expect Flare-ups. Leonard Davis Institute of Health Economics. University of Pennsylvania. November 2, 2023. <https://ldi.upenn.edu/our-work/research-updates/the-pandemic-is-over-right-no-were-in-a-calmer-phase-but-expect-flare-ups/>
85. **Angela K. Shen** and Tuhina Srivastava. We all have a role to play in public health messaging about vaccination. Philadelphia Inquirer. November 2, 2022. <https://www.inquirer.com/health/flu-shot-covid-booster-social-media-20221102.html>
86. **Angela K. Shen** and Tuhina Srivastava. Vaccinating the Vaccine-Hesitant. Three Things That Can Be Done. Leonard Davis Institute of Health Economics. University of Pennsylvania. September 21, 2022. <https://ldi.upenn.edu/our-work/research-updates/vaccinating-the-vaccine-hesitant/>
87. **Angela K. Shen** and Jason Schwartz. COVID-19, from Pandemic to Endemic: Strengthening Routine Adult Vaccination Programs. Health Affairs Forefront. September 8, 2022. <https://www.healthaffairs.org/content/forefront/covid-19-pandemic-endemic-strengthening-routine-adult-vaccination-programs>
88. **Angela K. Shen** and Tuhina Srivastava. Hesitancy is Not Set in Stone. Leonard Davis Institute of Health Economics. University of Pennsylvania. August 29, 2022. <https://ldi.upenn.edu/our-work/research-updates/vaccine-hesitancy-is-not-set-in-stone/>
89. **Angela K. Shen** and Jason Schwartz. Expert Advice in U.S. Vaccination Policy – Improving Coordination and Trust Beyond COVID-19. Health Affairs Forefront. July 21, 2021. DOI: 10.1377/forefront.20220718.676654 <https://www.healthaffairs.org/content/forefront/bolster-expert-advice-vaccination-policy-beyond-covid-19-improve-coordination-and-trust>
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91. Amelia Van Pelt and **Angela K Shen**. The wicked problem of booster shots for Americans | Expert Opinion. The Philadelphia Inquirer. August 24, 2021. <https://www.inquirer.com/opinion/commentary/booster-shots-covid-vaccine-global-impact-20210824.html>
92. **Angela K. Shen** and Andy SL Tan. The danger of 'wait and see' when it comes to vaccines for kids. The Philadelphia Inquirer. July 8, 2021. <https://www.inquirer.com/opinion/commentary/delta-variant-covid-vaccine-children-20210708.html>
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94. Sansanee Craig, **Angela Shen**, Kate Wallis, Priscilla Ortiz, Suzinne Pak-Gorstein S, Katherine Yun, George Dalembert. How Health Systems Can Help Address Language Barriers to Achieve

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95. **Angela K. Shen**, Elizabeth Sobczyk, Safa Browne, Charlotte Moser. Reaching Herd Immunity for COVID-19 Vaccine Means Long-Term Investments. *Health PolicySense*. May 13, 2021. Leonard Davis Institute of Health Economics. University of Pennsylvania.  
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96. Jonathan D. Moreno, **Angela K. Shen**, and Jason L. Schwartz. Efficacy is Relative in a Public Health Crisis: Evaluating the Next Wave of Covid-19 Vaccines. *The Hastings Center*. January 29, 2021. <https://www.thehastingscenter.org/efficacy-is-relative-in-a-public-health-crisis-evaluating-the-next-wave-of-covid-19-vaccines/>
97. **Angela K. Shen** and Elizabeth Sobczyk. Unraveling a composite measure to drive immunization uptake in adults: a critical compromise. *Health Affairs Blog*. August 20, 2020.  
<https://www.healthaffairs.org/doi/10.1377/hblog20200817.901186/full/>
98. **Angela K. Shen**. Vaccinate Yourself and Your Family: Call, Don’t Delay. *Voices for Vaccines*. August 2020. <https://www.voicesforvaccines.org/vaccinate-yourself-and-your-family-call-dont-delay/>
99. **Angela K. Shen**. Why Routine Immunizations are a Must—Even During a Pandemic. June 11, 2020. *ASTHO Experts Blog*. <https://www.astho.org/StatePublicHealth/Why-Routine-Immunizations-are-a-Must-Even-During-a-Pandemic/06-11-20/>
100. **Angela K. Shen**, Richard Hughes IV, Emily Sobel, Alessandra Fix, Marissa Shaw. Shaping the 2020 National Vaccine Plan in a Changing Immunization Landscape. *Health Affairs Blog*. December 16, 2019. DOI:10.1377/hblog20191212.484779  
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101. **Angela K. Shen** and Elizabeth Sobczyk. Moving More Electrons to Optimize New Adult Composite Immunization Measures. *Health Affairs Blog*. September 20, 2019. DOI: 10.1377/hblog20190919.68890  
<https://www.healthaffairs.org/doi/10.1377/hblog20190919.68890/full/>
102. **Angela K. Shen**. Measles Madness and Value: Gene Therapy, Prevention, and the Pre-Vaccine Era. *Health Affairs Blog*. June 12, 2019. DOI: 10.1377/hblog20190610.789872  
<https://www.healthaffairs.org/doi/10.1377/hblog20190610.789872/full/>
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106. **Shen AK.** Riding the Winds of Change. Frontlines Magazine. July/August 2014. Available at <http://www.usaid.gov/news-information/frontlines/grand-challenges/riding-winds-change>
107. National Vaccine Advisory Committee. Protecting the Public's Health: Critical Functions of the Section 317 Immunization Program—A Report of the National Vaccine Advisory Committee. *Public Health Rep.* 2013;128:78-95. <https://doi.org/10.1177/0033354919893029>
108. **Shen, AK.** Delivering Immunisations to Children and Adolescents in the United States. *Vaccine in Practice.* 2012;5(1); 9-11.
109. National Vaccine Advisory Committee. Financing Vaccination of Children and Adolescents: National Vaccine Advisory Committee Recommendations. *Pediatrics.* 2009; 124(suppl 5); S558-S562. <https://doi.org/10.1542/peds.2009-1542P>

#### RESEARCH SUPPORT

- 2022-2023 AMDA - The Society for Post-Acute and Long-Term Care Medicine. **Improving Adult Immunization Rates for COVID-19, Influenza, and Routine Adult Vaccinations through Partnerships with Medical Subspecialty Professional Societies and the Long-Term Care Professional Society.** Role: Vaccine Expert (\$10.5 million). <https://movingneedles.org/frontline-staff-survey-and-in-service/>
- 2020-2023 The Greenwall Foundation. **Evidence and Uncertainty in COVID-19 Vaccination Policy-Making.** Role: Vaccine Expert (\$187,771)

#### PRINCIPAL INVESTIGATOR

- 2024-2025 Center for Public Initiatives, University of Pennsylvania and GlaxoSmithKline. Co-Principal Investigator. **Listening Sessions to Assess Knowledge, Attitudes, Barriers to and Priorities for Vaccination: Interviews with Community Organizations and Residents in Philadelphia.** (\$218,643).
- 2023 American Academy of Pediatrics. **Trusted Messenger Engagement to Dispel Mis-/Dis-information and Promote Vaccine Confidence in Hard-to-Reach Communities of Philadelphia for Routine and COVID-19 Vaccinations.** (\$34,000).
- 2022-2023 Children's Hospital of Philadelphia Office of Community Impact Children's Fund Award. **Vaccine Education and Autism: Supporting Provider and Community Needs** - Development of five education modules. (\$25,000).
- 2021-2022. Philly Community Alliance Against COVID-19 (Philly CEAL) funded by the National Institutes of Health Community Engagement Alliance (NIH CEAL) against COVID-19

Disparities. **COVID-19 Parental Attitudes, Confidence, and Vaccination Outcomes in the CHOP Network** (\$50,000).

2021-2022. Children’s Hospital of Philadelphia Office of Community Relations. **Persuasive Communication to Address Vaccine Hesitancy in Philadelphia Communities** (\$15,000). Final Training Module: CHOP Vaccine Education Center: Communicating about Vaccines – COVID-19 & More. direct link: [https://rise.articulate.com/share/BMEqluFnOoAw7CzkWUMuxqrefAyDEcJ\\_#/](https://rise.articulate.com/share/BMEqluFnOoAw7CzkWUMuxqrefAyDEcJ_#/)

Children’s Hospital of Philadelphia. **Vaccine hesitancy and vaccination outcomes despite hesitancy markers: pediatric trends using electronic health records, 2012-2020; Exploring Changes in the Medical Home Using the PhilaVax Immunization Information System** (\$10,000)

2020-2021. Children’s Hospital of Philadelphia Office of Community Relations. **Community-Based Approaches in Developing Trusted Messages to Vaccinate with Confidence in Southeastern Pennsylvania** (\$20,000)

## PODCASTS

“Primary Care Perspectives: Vaccine Hesitancy - Episode 155” Children’s Hospital of Philadelphia. September 29, 2023. <https://podcasts.apple.com/us/podcast/primary-care-perspectives-vaccine-hesitancy-episode-155/id1173973702?i=1000629656415> and <https://soundcloud.com/childrensphiladelphia/sets/primary-care-perspectives>

“Vaccine Distribution Equity After May 1” PENN LDI CoVEReD COVID Vaccine Equity Research Dialogue. March 18, 2021. <https://www.youtube.com/watch?v=UVNnH9Cm3h8>

“Ensuring equitable access to a COVID-19 vaccine once it’s here” A Health Podyssey. Health Affairs Podcast. November 24, 2020. <https://share.transistor.fm/s/53b7c43e>

“Vaccines Outlook: Hesitancy, Uptake, and Infrastructure with Dr. Angela Shen” Avalere. September 1, 2020. <https://avalere.com/podcasts/vaccines-outlook-hesitancy-uptake-and-infrastructure-with-dr-angela-shen>

“Immunization and Universal Health Coverage: A Lifesaving Combination,” Take as Directed, April 28, 2020. Center for Strategic and International Studies. Podcast. <https://www.csis.org/podcasts/take-directed/immunization-and-universal-health-coverage-lifesaving-combination>

“E3 – Get the Facts on COVID-19: A Comparison to Other Outbreaks.” Avalere. March 23, 2020. <https://avalere.com/podcasts/e3-get-the-facts-on-covid-19-a-comparison-to-other-outbreaks>

## PRESENTATIONS

Over 50 key-note, plenary and meeting presentations in the public and private sectors including at the BIO International Convention (2022), American Medical Group Association (2018), National Foundation for Infectious Diseases (2017,2018), National Immunization Conference (2007, 2016,

2018), Women in Government (2017), BIO International Conference (2007), World Vaccine Congress (2009, 2018), and GTC BIO Vaccines: All Things Considered (2007-2013).

1. "Vaccine Confidence: Addressing the Elephant in the Room" – APIC Northeastern NY. Lantham, NY, 3-Oct-2024.
2. "Misinformation, Media, and More" and "Training Healthcare Personnel" – National Conference for Immunization Coalitions and Partnerships. Philadelphia, PA, 10-April-2024.
3. Global Exchange Forum on Integrated Immunization Programs and Enhanced Pandemic Preparedness. London, UK, 18-19-Oct-2023.
4. NCQA Roundtable Measuring and Addressing Adult Immunizations. Virtual, 16-Jun-2023.
5. "Vaccine and Immunization Landscape 2023" – Vaccine Summit - National Governors Association. Washington DC, 14-15 Jun-2023.
6. "HEDIS® Adult and Prenatal Immunization Quality Measures" – National Adult and Immunization Summit. Atlanta, GA 2-Nov-2022.
7. "Legal Structure of Funding and Distribution" – National Vaccine Law Conference. Arlington, VA 15-Sept-2022.
8. "Translating Vaccine Confidence Research into Practice" – Association of Immunization Managers (AIM). Webinar. 6-Sept-2022.  
<https://www.immunizationmanagers.org/resources/translating-vaccine-confidence-research-into-practice/>
9. "Vaccine Innovation and the Future of Life-Course Immunization" – BIO International Convention. San Diego, CA, 14-Jun 2022.
10. "Vaccine Confidence: Addressing the Elephant in the Room" – National Center for Quality Assurance (NCQA) Childhood and Adolescent Vaccination Learning Collaborative (with federally qualified health centers), 8-Jun 2022.
11. Poster Presentation "Trust and influence in vaccine messengers and messages for routine and COVID-19 vaccines" – Academy Health Annual Conference on the Science of Dissemination and Implementation 13-16-Dec 2021.
12. "COVID-19: Past, Present and Future" - Rotary International District 7390, 1-May 2021.
13. "COVID-19 Vaccination Virtual Town Hall" - Asian American Coalition, 16-Mar-2021.
14. "Cutting Through the Noise: Market Evolution and Pathways to Access for COVID-19 Vaccines" Panel – World Vaccine Congress. Washington, DC (held virtually), 18-Sept 2020.
15. "Equitable access to COVID-19 vaccines in the United States: The Last Hurdle" – Health Affairs Symposium: Promoting Innovation and Equity as COVID-19 Vaccines & Treatment Emerge. Washington, DC (held virtually), 24-Aug 2020.  
<https://www.healthaffairs.org/doi/10.1377/he20200803.313351/full/>
16. "All Things Vaccines: Influenza Vaccination, 2020-2021" – Bucks County Immunization Coalition. Bucks County, PA, 19-Aug 2020.
17. "Demonstrating Rising Influenza Vaccine Equity (DRIVE) Demonstration Project: Plaza del Sol Family Health" – Sustainable Health Communities. Queens, NY, 17-Nov 2018.
18. "AIM Webinar – Quality Measures" – Association of Immunization Manager, 18-Dec 2018.
19. "Demonstrating Rising Influenza Vaccine Equity (DRIVE) Demonstration Project: Christina Care Health System" – Sustainable Health Communities. Wilmington, DE, 17-Nov 2018.
20. Keynote speaker: "Future Vaccines: What's coming down the horizon" – American Medical Group Association Adult Immunization Best Practices Learning Collaborative. San Antonio, Tx, 19-Oct 2018.
21. Keynote speaker: Region IV Stakeholder Engagement Meeting: "Improving Adult Immunizations Rates: Partnering to Develop Strategies to Overcome Barriers", 14-Jun-2018.
22. "Driving Immunization Through the Medicare Annual Wellness Visit: A Growing opportunity" (Poster) – 2018 National Adult and Influenza Immunization Summit, 18-May-2018.



23. "A Fireside Chat About Quality Measurement in Prevention: Levers in the HealthCare Delivery System" – 2018 National Immunization Conference, 17-May-2018.
24. "New Measures for Adult Immunization on the Horizon: A Prenatal and An Adult Composite Measure" – 2018 National Immunization Conference, 16-May-2018.
25. "Driving Immunization Through the Medicare Annual Wellness Visit: A Growing opportunity" – 2018 National Immunization Conference, 15-May-2018
26. "Adult Immunization: Challenges and Opportunities" – Women in Government: Learning Exchange on Adult Vaccine Policies and Planning. Hollywood, FL, 1-Aug-2017.
27. "Adult Immunizations Get Yours Now! How Providers Can Improve Immunization Rates" – Atlantic Quality Improvement Network – District of Columbia." Webinar, 24-July-2017.
28. "Immunizing Adults: Gaps in Coverage, Updated Recommendations, & Standards of Practice" and "Addressing Challenges in Vaccine and Vaccination Financing" – Missouri's First Adult Immunization & Billing Summit. Columbia, Missouri, 20-July-2017.
29. "Addressing Challenges in Adult Vaccine Financing" – National Foundation for Infectious Diseases. Webinar, 8-Jun-2017.
30. "Using Vaccination Technologies" – 2017 National Adult and Influenza Immunization Summit. Atlanta, GA, 10-May-2017.
31. "Provider Payment for Adult Immunization" – Adult Immunization NetConference Series. Current Issues in Immunization. Webinar. 19-April-2017.
32. "Developing and Implementing Policies for your IIS" – 2016 Post-National Immunization Conference Workshop. Atlanta, GA, 16-Sept-2016.
33. "Strategies to Advance the National Adult Immunization Plan Through a Focus on Influenza" – The Gerontological Society of America, Washington, DC, 2-August 2016.
34. "Adult Immunizations and Hepatitis B" US Department of Health and Human Services World Hepatitis Day: Hepatitis B Town Hall Meeting, Washington, DC, 28-July-2016.
35. "College Immunization Requirements" – University of Pennsylvania, Philadelphia, PA, 21-July-2016
36. Keynote speaker: "Vaccination Through the Years: Staying Healthy for a Lifetime" – DC Immunization Conference, Washington, DC, 18-July-2016
37. "Domestic and International Vaccine and Vaccination Financing: Isn't it all the same?" – Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, 17-Feb-2016
38. USAID Co-Chair with Gavi – Immunization Satellite Session, USAID-World Bank Measurement and Accountability for Health Summit, Washington DC, 12-Jun-2015.
39. "Vaccine Financing in the Decade of Vaccines" – Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, 16-Feb-2015
40. "A Vaccine's Journey" – George Washington School of Public Health, Washington DC, 7-March-2014
41. "Vaccine Policy Issues: Domestic and International Financing" – Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD, 29-Jan-2014
42. "The Role of USAID in this Decade of Vaccines" – GTC BIO – Vaccines: All Things Considered, Boston, MA, 9-July-2013
43. "The First National Adult Immunization Summit and the 12<sup>th</sup> National Influenza Vaccine Summit" – GTC BIO – Vaccines: All Things Considered, San Francisco, CA, 10-July-2012
44. "The State of Adult Immunizations – 2012" – Adult Immunization Toolkit Region VIII, Denver, CO, 17-April-2012
45. "The US National Vaccine Plan – from strategy to implementation" – GTC BIO – Vaccines: All Things Considered, Boston, MA, 09-Nov-2011
46. "Examining first dollar coverage of HPV vaccine for adolescents girls and female adults" – Infectious Disease Society of America, Boston, MA, 21-Oct-2011

47. "Prioritizing Vaccine Targets for Development: A Roadmap for the Future" – GTC BIO – Vaccines: All Things Considered, Washington, DC, 08-Nov-2010
48. "The Role of Federal Advisory Committees: H1N1 Case Study" – GTC BIO – Vaccines: All Things Considered, Washington, DC, 10-ct-2009
49. "The Vaccine and Immunization Enterprise" – World Vaccine Congress, Washington, DC, 21-April-2009
50. "Vaccine Innovation: The Risk - Reward" – GTC BIO – Vaccines: All Things Considered, Washington, DC, 14-Nov-2008
51. "The Government's Role in Vaccine Policy and the National Vaccine Plan" GTC BIO – Vaccines: All Things Considered, Washington, DC, 08-Nov-2007
52. "Cultural Competency: More than Awareness" Commissioned Officers Association Annual Meeting, Cincinnati, Ohio, 06-Jun-2007 – presented by Helen Hunter
53. Panel Session Chair Global Health Track "Vaccine Innovation: Sustaining Innovation to Improve Public Health – The Government's Role in Vaccine Policy" BIO International Conference 2007, Boston, MA, 07-May-2007
54. Roundtable: Vaccine Financing – Challenges, problems, solutions. 41<sup>st</sup> National Immunization Conference (CDC, Task Force for Child Survival), Kansas City, MO, 06-Mar-2007
55. "Bioshield: Steps Towards Bioterrorism Preparedness and Crisis Response – FDA's Role" Commissioned Officers Association Annual Meeting, Denver, CO, 04-May-2006
56. "Biological Product Shortages: Lessons Learned from Influenza Response in Preparation for the Future" Commissioned Officers Association Annual Meeting, Denver, CO, 04-May-2006
57. "Case Studies on Sterilization" Fundamentals of Parenteral Science and Technology, Center for Biologics Evaluation and Research, FDA. Kensington, MD, 22-Feb-2006
58. "Biologics in Global Health" International Health Grand Rounds, Loma Linda University School of Public Health, Loma Linda, CA, 11-Nov-2005
59. "FDA Perspectives in Cold Chain Control of Biopharmaceuticals." Biopharm Manufacturing and Distribution Summit, Reston, VA, 12-Dec-2005
60. "Challenges of Manufacturing Vaccines and Biological Drugs of Public Health Importance and Global Health." Commissioned Officers Association Annual Meeting, Philadelphia, PA, 6-Jun-2005
61. "The Development and Use of a Monitoring and Evaluation Plan in the Implementation of a Voluntary Counseling and Testing Program, Botswana 2001-2004." Commissioned Officers Association Annual Meeting, Anchorage, Alaska, 15-May-2004
62. "Achieving Sterility: Future Direction in Aseptic Processing – Facility Considerations." American Association of Pharmaceutical Scientists. Washington, DC, 08-Dec-2003
63. Public Leadership Education Network – *Preparing for Your Career in Science and Technology Policy* – Panel Speaker. Washington, DC, 10-Jan-2003, 16-Jan-2004
64. "Expectations for GMPs During Drug Development." Regulatory Affairs Professional Society Annual Meeting, Washington, DC, 07-Oct-2002
65. "Inspection Responsibilities for Biopharmaceuticals. "Well Characterized Biological Products Annual Meeting, Washington, DC, 27-Jan-2002
66. Public Service Excellence Awards, Judge. Public Employees Roundtable. Washington, DC, 2001-2003
67. Expanding Your Horizons: Women in Science Career Panelist. Pittsburgh, PA, 1998
68. Peer Based Multicultural Youth HIV/AIDS Prevention Education in Orange County. San Francisco, CA, 1998

## MEDIA & TELEVISION

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