Author:	*Majd Alsoubani ^{1,2}
	 Division of Geographic Medicine and Infectious Diseases, Department of Medicine, Tufts Medical Center, Boston, Massachusetts, USA The Stuart B. Levy Center for the Integrated Management of Antimicrobial Resistance, School of Medicine, Tufts University, Boston, Massachusetts, USA *Correspondence to Majd.Alsoubani@tuftsmedicine.org
Disclosure:	Alsoubani has received grant funding from Carb-X as a principal investigator.
Keywords:	Health access, HIV prevention, IDWeek 2025, public health.
Citation:	Microbiol Infect Dis AMJ. 2025;3[1]:23-26. https://doi.org/10.33590/microbiolinfectdisam/RVPF8742

ATLANTA, Georgia, USA, homebase for the CDC and a fitting stage for public health discourse, welcomed thousands of clinicians, scientists, pharmacists, and trainees for IDWeek 2025. The 4-day meeting combined late-breakers, pragmatic debates, hands-on workshops, and the ever-busy BugHub stages.

SETTING THE STAGE AT IDWEEK 2025

Javier Muñoz, actor and advocate, opened IDWeek 2025 with a deeply personal reflection on living with HIV. His story brought data to life, grounding science in real human experience and reminding everyone that innovation only matters when it reaches the people who need it most.

The Opening Plenary embraced the spirit of IDWeek's host city, with speakers highlighting the resilience and dedication of public health professionals at the CDC and across partner organizations. The theme, 'Reflection and renewal: advancing public health in challenging times', struck a balance between realism and optimism. It acknowledged workforce fatigue and funding challenges while emphasizing

readiness, stronger communication, and the power of implementation science to drive progress.

From there, speakers emphasized that preparedness is not just about responding to the next emergency, but a constant commitment to building surveillance, communications, and clinical capacity. They called for continued vigilance in vaccine confidence and safety, practical approaches to antimicrobial stewardship, and a sustained focus on equity and access to care.

IDWeek's awards underscored the community's depth and breadth. The Infectious Diseases Society of America (IDSA) recognized leaders across clinical care, research, mentorship, and public health. Awardees included John Boyce, J.M.

Boyce Consulting, New Haven, Connecticut, USA, who received the Society for Healthcare Epidemiology of America (SHEA) award for his career-long impact on hand hygiene research and preventing healthcare-associated infections; Walter Orenstein, Emory University, Atlanta, Georgia, USA, who was awarded the Pediatric Infectious Diseases Society (PIDS) award recognizing decades of work shaping U.S. and global immunization policy; and David Ha, Stanford, Menlo Park, California, USA, who accepted the Society of Infectious Diseases Pharmacists (SIDP) 2025 Outstanding Clinician Award. The IDSA Society Citation Award was presented to the IDSA Chief Executive Officer, Christopher D. Busky, Arlington, Virginia, USA, for nearly a decade of steady leadership of the Society and the IDSA Foundation.

A signature moment was the HIV Medicine Association (HIVMA)'s Transformative Leader Award for Demetre Daskalakis, Atlanta, Georgia, USA, who was recognized for 2 decades of work spanning his 'status-neutral' prevention model in New York City, USA, to national leadership roles at the CDC and the White House. His acceptance speech framed a bracing moral call to action. Daskalakis began by reminding the room that "vaccines, antiretroviral therapy, antimicrobials, [and] infectious-disease care, these are all miracles," born of centuries of science and dedication. An effective response to the current challenges, he argued, rests on "three pillars: science, political will, and co-creation with communities." Using a striking metaphor, he described today as a kind of "dark age," urging the field to be the renaissance. When those pillars are strained, the answer is not a retreat but transformative leadership at every level, in clinics and pharmacies, in public health agencies, and in policy. The standing ovation that followed reflected both the moment and the messenger: an equityfirst leader whose recent resignation from the CDC over the politicization of vaccine policy has made his appeal for courage and community even more resonant.

IDSA's top lifetime honor, the IDSA Alexander Fleming Award for Lifetime Achievement, went

to Cynthia L. Sears from The Johns Hopkins University School of Medicine, Baltimore, Maryland, USA. She was celebrated as a world-renowned physician-scientist, mentor, and leader. The Society noted her career as one that has embodied the virtues the Fleming Award exists to recognize: scientific excellence, mentorship, and service, making her a fitting recipient to open IDWeek's celebration of the field's most enduring contributors.

Paige Alexander, CEO of The Carter Center, Atlanta, Georgia, USA, framed infectious diseases within broader issues of institutional trust and global health. The Carter Center was founded by former U.S. President Jimmy Carter and former First Lady Rosalynn Carter on a very simple premise: "Waging peace, fighting disease, and building hope." From that starting point, the Center has helped 22 countries eliminate at least one neglected tropical disease, distributed more than 1.1 billion doses of medicine, provided sight-restoring surgery to roughly one million people, and

IDWeek's awards underscored the community's depth and breadth

monitored more than 125 elections in 48 countries. Most dramatically was the Guinea worm eradication, cutting cases from an estimated 3.5 million a year in 21 countries to just 15 human cases in 2024 through partnerships with local governments and communities. The Carter Center perspective underscored the importance of public trust: "Health security is impossible without public trust; if people don't believe you, they won't drink the filtered water, they won't take the medicine, and they won't show up for vaccines."

In the closing minutes of the Plenary, speakers previewed a new collaboration between the Center for Infectious Disease Research and Policy (CIDRAP) and a journal house to publish rapid "Public Health Alerts," intended to disseminate vetted outbreak and safety signals at Morbidity and Mortality Weekly Report (MMWR)-like speed.

The Annual Meeting included Meet-the-Professor, career fair, and mentorship sessions, which emphasized the real investment in building a new generation of infectious disease clinicians. The most infectious event, the IDBugBowl, kept everyone on the edge of their seats, with the University of Alabama clinching the win on the final Jeopardy-style question.

KEY THEMES EMERGING FROM IDWEEK 2025

The big themes of IDWeek revolved around prevention first. The clinical efficacy of twice-yearly lenacapavir pre-exposure prophylaxis in women, and the very high efficacy in men and gender-diverse people, was highlighted in several discussions. Additional favorable data on safety and efficacy in youth, pregnant people, and people who use substances were presented. Now that lenacapavir is approved by the FDA, the pressing next step is focusing on accessability and affordability. How will lenacapvair pre-exposure prophylaxis be delivered, paid for, and reach the individuals least likely to stay in care?

PREVENTION FIRST: HIV PRE-EXPOSURE PROPHYLAXIS, RESPIRATORY SYNCYTIAL VIRUS, AND MATERNAL-INFANT STRATEGIES

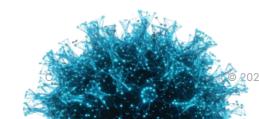
A second theme was respiratory protection. Real-world data on the respiratory syncytial virus vaccination in older adults and patients with immunocompromising conditions reassured clinicians that these vaccines prevent hospitalization and critical illness.^{4,5} However, the protection wanes over time, especially in immunocompromised people.⁶

Maternal–infant prevention also got a big boost: a Phase 4, randomized, openlabel study showed that infants have high neutralizing antibody levels whether the mother was vaccinated in pregnancy, the infant received nirsevimab after birth, or both. There were no safety concerns across the board.⁷

NEW EVIDENCE IN INPATIENT INFECTIOUS DISEASE PRACTICE

IDWeek emphasized the need for healthcare that finds patients, not the other way around. Inpatient programs that screen for hepatitis C and start direct-acting antivirals at the bedside showed that they can capture people who would otherwise be lost to care after discharge.8 Telehealth-based treatment, as well as point-of-care testing and treatment initiation, were also ways to reach patients, including people who use drugs or those with unstable housing.9

Lastly, on the inpatient infectious diseases practice side, the dalbavancin DOTS trial offered another option for the treatment of complicated Staphylococcus aureus bacteremia with a long-acting agent, sparing patients from peripherally inserted central catheter lines and the logistics of home intravenous therapy.¹⁰ New options for S. aureus bacteremia could be on the horizon. In a recent Phase 2a trial, an intravenous bacteriophage cocktail, AP-SA02, with best available therapy showed significantly higher clinical cure rates, earlier resolution of infection, and shorter hospital stays. demonstrating early efficacy signals and a favorable safety profile.¹¹ The PIVOT-PO trial presented the safety and efficacy data of oral tebipenem pivoxil hydrobromide (oral carbapenem) compared with imipenemcilastatin for the treatment of complicated urinary tract infection. Tebipenem showed similar efficacy, including in participants with extended-spectrum beta-lactamaseproducing Enterobacterales.¹²





References

- Bekker LG et al.; PURPOSE 1 Study Team. Twice-yearly lenacapavir or daily F/TAF for HIV prevention in cisgender women. N Engl J Med. 2024;391(13):1179-92.
- Kelley CF et al.; PURPOSE 2 Study Team. Twice-yearly lenacapavir for HIV prevention in men and genderdiverse persons. N Engl J Med. 2025;392(13):1261-76.
- Fairhead C et al. Generic lenacapavir HIV pre-exposure prophylaxis could be produced for \$25 per person per year. Presentation 174. IDWeek, October 19-22, 2025.
- Link-Gelles R et al. Effectiveness of RSV vaccines in older adults in the United States, VISION Network, 2023-2025. Presentation 221. IDWeek, October 19-22, 2025.
- 5. Mayer EF et al. Safety, tolerability, and immunogenicity of the mRNA-1345

- RSV vaccine in solid organ transplant recipients aged ≥18 years. Presentation 223. IDWeek, October 19-22, 2025.
- Hage C et al. Durability of RSV antibodies following RSV vaccination in solid organ transplant recipients. Am J Transplant. 2025;25(8):S98-9.
- Rostad CA et al. The immunology and safety of maternal RSV vaccination, infant nirsevimab immunization, or both products- interim analysis of a randomized clinical trial. Presentation 225. IDWeek, October 19-22, 2025.
- McCrary LM et al. large scale implementation of opportunistic HCV treatment during hospitalization in a US tertiary care hospital. Presentation 201. IDWeek, October 19-22, 2025.
- Di Paola A et al. Highway to health: mobile pharmacy and clinic providing hepatitis C testing and treatment. Presentation 198. IDWeek, October 19-22, 2025.

- Turner NA et al. Dalbavancin for treatment of Staphylococcus aureus bacteremia: the DOTS randomized clinical trial. JAMA. 2025;DOI:10.1001/ jama.2025.12543.
- Miller LG et al. A phase 2a randomized, double-blind, controlled trial of the efficacy and safety of an intravenous (IV) bacteriophage cocktail (AP-SA02) vs. placebo in combination with best available antibiotic therapy (BAT) in patients with complicated Staphylococcus aureus bacteremia. Presentation 549. IDWeek, October 19-22, 2025.
- Hong DK et al. Oral tebipenem pivoxil hydrobromide versus intravenous imipenem-cilastatin in patients with complicated urinary tract infections or acute pyelonephritis: efficacy and safety results from the phase 3 PIVOT-PO study. Presentation 173. IDWeek, October 19-22, 2025.

