2024 Charles C. Shepard Science Awards

Thursday, October 24, 2024
1:00PM to 2:30PM

HEALING MOTHERS, SAVING LIVES:
Ending the Maternal Health Crisis

Keynote Speaker:

Dr. Elizabeth A. Howell

CONTENTS

CHARLES C. SHEPARD • BIOGRAPHY

The preeminent science awards of the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR), inaugurated in 1986, are named in honor of Charles C. Shepard, MD, the internationally recognized microbiologist who was chief of the Leprosy and Rickettsia Branch at CDC for more than 30 years, until his death on February 18, 1985. Charles Carter Shepard was born in Ord, Nebraska, on December 18, 1914. He attended Stanford University (1932–1935) and then transferred to Northwestern University, where he received BS, MS, and MD degrees. In 1941, he joined the Commissioned Corps of the Public Health Service. From 1942 through 1948, he worked at the National Institutes of Health (NIH) in Bethesda, Maryland.

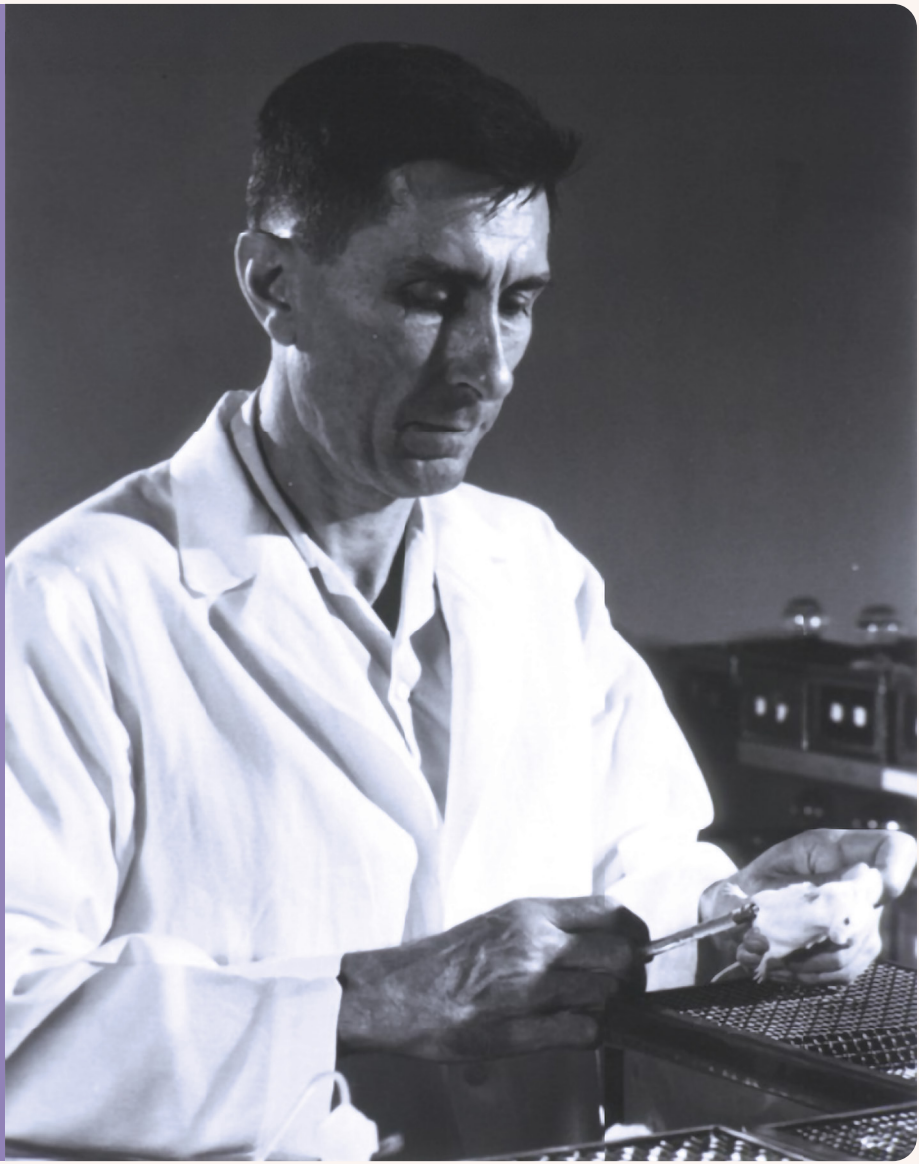
While on sabbatical during 1948 through 1949, he worked in the laboratory of Arne Tiselius in Uppsala, Sweden, and learned the new physical separation techniques that would revolutionize immunology and biochemistry. He returned to Bethesda for a year before moving to the Rocky Mountain Laboratory, National Institute of Allergy and Infectious Diseases, NIH, in Hamilton, Montana, to study various pathogenic bacteria and their phages at the biochemical and ultrastructural levels. In 1953, he came to CDC, where he continued his outstanding work with rickettsiae and began his distinguished and definitive experiments with mycobacteria, culminating in the cultivation of the leprosy bacillus, *Mycobacterium leprae*, in mice. His landmark article, "The Experimental Disease that Follows the Injection of Human Leprosy Bacilli into Foot-Pads of Mice" (*Journal of Experimental Medicine* 1960;112:445–454), is still considered a classic in microbiology. His achievement made possible the large-scale evaluation of antibiotic efficacy and reduced testing time from several years to only months. It also paved the way for leprosy vaccine studies.

Dr. Shepard made significant early contributions to the diagnosis, natural history, and epidemiology of Rocky Mountain spotted fever; Q fever; and scrub, murine, and epidemic typhus. He was also codiscoverer (with Joseph McDade) of the Legionnaires' disease bacterium (*Legionella pneumophila*) after the now famous outbreak of virulent pneumonia in Philadelphia in 1976.

Dr. Shepard received numerous awards, among them the Gorgas Medal (1962), the Kimble Methodology Award (1962), the Philip R. Edwards Award (1964), the World Leprosy Day Award (1970), and the first CDC Medal of Excellence (1977). He also received the HEW Distinguished Service Medal (1978), the Raol Folleraux Award (1978), and the Richard and Hinda Rosenthal Award (1979). He was active in multiple professional organizations, including the Armed Forces Epidemiologic Board Commission on Rickettsial Diseases, the World Health Organization (WHO) Immunology of Leprosy Program, the WHO Advisory Panel on Leprosy, the Heiser Program for Research in Leprosy, and the Leprosy Research Council, which he chaired. He was

also involved in many editorial activities, having served on the board of directors of the *International Journal of Leprosy* and as a frequent reviewer for numerous prestigious journals.

Although Dr. Shepard's contributions to science and public health were prodigious, perhaps his greatest legacy is the influence he has had on the CDC scientists who have followed in his footsteps and have continued to find inspiration in the scientific integrity and excellence he has come to represent.



AWARDS PROGRAM

OCTOBER 24, 2024 • 1:00 P.M.

CHARLES C. SHEPARD SCIENCE AWARDS INFORMATION

Point of Contact: ODOSSHEP@cdc.gov

CDC Shepard Awards Website: https://www.cdc.gov/os/shepardaward/index.html

CDC Shepard Awards Intranet: https://intranet.cdc.gov/os/od/shepardaward/

Welcome

Althea Grant-Lenzy, PhD

Greeting and Introduction of Keynote Speaker

Mandy K. Cohen, MD, MPH

Keynote Address

Healing Mothers, Saving Lives: Ending the Maternal Health Crisis

Elizabeth A. Howell, MD, MPP

Award Ceremony Opening

Sam Posner, PhD

Presentation of the 2024 Charles C. Shepard Science Awards

- Assessment
- Data Methods and Study Design
- Health Equity Science
- Laboratory Science
- Prevention and Control
- Lifetime Scientific Achievement
- 2024 Lifetime Scientific Achievement Award Winner—Acceptance

Closing

Debra Houry, MD, MPH

KEYNOTE SPEAKER

ELIZABETH A. HOWELL, MD, MPP

Elizabeth Howell, MD, MPP, is the Harrison McCrea Dickson, MD, president's distinguished professor and chair of the Department of Obstetrics & Gynecology in the Perelman School of Medicine at the University of Pennsylvania. Howell is an NIH-funded health services researcher whose research interests lie at the intersection between quality of care and disparities in maternal mortality and morbidity. She has served on several expert committees at the Institute of Medicine, NIH, the Joint Commission, and the American College of Obstetricians and Gynecologists. She co-chaired the Alliance for Innovation on Maternal Health Working Group on Reduction of Peripartum Racial Disparities, served on the New York State Governor's Taskforce on Maternal Mortality and Disparate Racial Outcomes, and the New York City Maternal Mortality and Morbidity Steering Committee for the New York City Department of Health. She has testified to the US Congress on maternal healthcare legislation, co-chaired the National Quality Forum Committee on Maternal Morbidity and Mortality and was invited to the White House by Vice President Kamala Harris to participate in a roundtable on Black maternal Health. She shared her research on maternal mortality disparities in a TEDMED talk that has been viewed more than 2 million times. She is a member of the National Academy of Medicine.

Howell received her undergraduate degree from Stanford University and her medical and public policy degrees from Harvard Medical School and the Harvard Kennedy School of Government. She completed her residency at Cornell/New York Hospital and her fellowship at Yale Medical School.

Perelman
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PUBLICATION AWARD NOMINEES

Publications nominated by the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry (CDC/ATSDR) for the 2024 Charles C. Shepard Science Awards were judged on scientific merit and the significance of their effect on CDC/ATSDR's mission. The following is a complete citation and brief description of each article, listed by category and in alphabetical order by the first author's last name.

ASSESSMENT

Jordan Cates, Julia M. Baker, Olivia Almendares, Neha Balachandran, Erin R. McKeever, Anita K. Kambhampati, Caelin Cubenas, Jan Vinjé, Jennifer L. Cannon, Preeti Chhabra, Brandi Freeman, Sarah Reagan-Steiner, Julu Bhatnagar, Paul A. Gastañaduy, Hannah L. Kirking, David Sugerman, Umesh D. Parashar, Jacqueline E. Tate, and the Hepatitis of Unknown Etiology Group

Paediatric Acute Hepatitis of Unknown Aetiology: A National Surveillance Investigation in the USA During 2021 and 2022

The Lancet Child and Adolescent Health 2023;7(11):773–785

Adenovirus is a known cause of hepatitis in immunocompromised children. Following reports of hepatitis of unknown cause and adenovirus in the blood of immunocompetent children in the United States and United Kingdom, CDC and state and local health departments began national surveillance of pediatric acute hepatitis of unknown cause. Findings suggest adenovirus might play a role in hepatitis infection among immunocompetent children, but the physiologic mechanism of liver injury is unclear.

Carolyn V. Gould, Rebecca J. Free, Julu Bhatnagar, Raymond A. Soto, Tricia L. Royer, Warren R. Maley, Sean Moss, Matthew A. Berk, Rebecca Craig-Shapiro, Rosy Priya L. Kodiyanplakkal, Lars F. Westblade, Thangamani Muthukumar, Yoram A. Puius, Amresh Raina, Azam Hadi, Kymberly A. Gyure, Danielle Trief, Marcus Pereira, Matthew J. Kuehnert, Vennus Ballen, Debra A. Kessler, Kimberly Dailey, Charles Omura, Thuy Doan, Steve Miller, Michael R. Wilson, Jennifer A. Lehman, Jana M. Ritter, Elizabeth Lee, Luciana Silva-Flannery, Sarah Reagan-Steiner, Jason O. Velez, Janeen J. Laven, Kelly A. Fitzpatrick, Amanda Panella, Emily H. Davis, Holly R. Hughes, Aaron C. Brault, Kirsten St. George, Amy B. Dean, Joel Ackelsberg, Sridhar V. Basavaraju, Charles Y. Chiu, J. Erin Staples, and the Yellow Fever Vaccine Virus Transplant and theTransfusion Investigation Team

Transmission of Yellow Fever Vaccine Virus Through Blood Transfusion and Organ Transplantation in the USA in 2021: Report of an Investigation

The Lancet Microbe 2023;4(9):e711–e721

After four patients who had received organ transplants developed encephalitis from a common organ donor, the authors investigated. They tested various specimens from the organ donor and recipients, finding yellow fever virus in all four patients. Findings substantiate the use of metagenomic sequencing for detection of rare or unexpected pathogens. They also suggest the need for health workers to inform vaccine recipients of the need to defer blood donations for at least two weeks after receiving a yellow fever vaccine.

Kelly M. Hatfield, James Baggs, Alexander Maillis, Sarah Warner, John A. Jernigan, Sameer S. Kadri, Michael Klompas, and Sujan C. Reddy

Assessment of Hospital-onset SARS-CoV-2 Infection Rates and Testing Practices in the US, 2020–2022

JAMA Network Open 2023;6(8):e2329441

Hospital-onset SARS-CoV-2 infections are an obvious threat to patient safety in the United States. This study found that 1 in 12 hospitalized patients with SARS-CoV-2 infection may have acquired their infection through SARS-CoV-2 transmission occurring within the hospital. Findings suggest community-onset SARS-CoV-2 infection rates can inform a hospital of when the risk for hospital transmission of SARS-CoV-2 is highest, which can guide optimization of infection control strategies to reduce in-hospital transmission of SARS-CoV-2.

Ashutosh Kumar, Lyudmyla Kompaniyets, Brook Belay, Samantha L. Pierce, Scott D. Grosse, and Alyson B. Goodman

Body Mass Index and Associated Medical Expenditures in the US Among Privately Insured Individuals Aged 2 to 19 Years in 2018

JAMA Pediatrics 2023;177(8):827–836

Overweight children are at risk for disease, stigma, and poor health. Although nationally representative estimates indicate that more than 13% of children aged 2–5 years have obesity, expenditures associated with high or low body mass index (BMI) for this age group were previously unknown. The authors calculated estimates for BMI-associated expenditures and provided economic value (cost-averted) of evidence-based treatment strategies and interventions that help support healthy child growth among US children and adolescents aged 2–19 years.

Alysha R. Meyers, Steven J. Wurzelbacher, Edward F. Krieg, Jessica G. Ramsey, Kenneth Crombie, Annette L. Christianson, Lian Luo, and Susan Burt

Work-related Risk Factors for Rotator Cuff Syndrome in a Prospective Study of Manufacturing and Healthcare Workers

Human Factors 2023;65(3):419–434

Rotator cuff syndrome (RCS) is common, painful, and disabling. Each year, billions are spent on workers' compensation claims related to RCS in the United States. This study quantified dose-response risk of developing RCS due to work-related biomechanical exposures among healthcare and manufacturing workers. The authors provide evidence that is helping to shift the narrative of RCS prevention that previously focused on reducing awkward arm postures to develop holistic interventions that also include reducing workers' exposure to forceful and repetitive tasks.

Scott A. Nabity, Suzanne M. Marks, Neela D. Goswami, Shona R. Smith, Evan Timme, Sandy F. Price. Lon Gross, Julie L. Self, Katelynne Gardner Toren, Masahiro Narita, Donna H. Wegener, Shu-Hua Wang, and the National Tuberculosis Controllers Association/CDC TB-COVID-19 Collaboration

Characteristics of and Deaths Among 333 Persons with Tuberculosis and COVID-19 in Cross-sectional Sample from 25 Jurisdictions, United States

Emerging Infectious Diseases 2023;29(10):2016–2023

Little is known about co-occurring tuberculosis (TB) and COVID-19 in places where the rate of TB infection is low. The authors collected data from 25 jurisdictions across the United States to analyze characteristics associated with death among people who had both TB and COVID-19 in the early stages of the COVID-19 pandemic. Their better understanding helped the authors develop a knowledge base to inform responses to future waves of COVID-19 and other viral respiratory diseases.

Julia K. Petras, Mindy G. Elrod, Maureen C. Ty, Patrick Dawson, Kevin O'Laughlin, Jay E. Gee, Jennifer Hanson, Carloa Boutwell, Gail Ainsworth, Cari A. Beesley, Elke Saile, Rebekah Tiller, Christopher A. Gulvik, Daphne Ware, Theresa Sokol, Gary Balsamo, Kathryn Taylor, Johanna S. Salzer, William A. Bower, Zachary P. Winer, María E Negrón, Alex R. Hoffmaster, and Paul Byers

Locally Acquired Melioidosis Linked to Environment—Mississippi, 2020–2023

The New England Journal of Medicine 2023;177(8):827–836

Melioidosis, a rare but potentially fatal bacterial disease endemic to tropical and subtropical regions worldwide, is typically acquired via contact with contaminated soil or fresh water. In this investigation into unexplained melioidosis cases in Mississippi, the authors identified the causative agent, *Burkholderia pseudomallei*, in the environment. Findings have public health implications for the prevention and control of melioidosis in the United States, as the disease is now considered endemic to parts of the Mississippi Gulf Coast.

Jonathan P. Smith, Kyle Milligan, Kimberly D. McCarthy, Walter Mchembere, Elisha Okeyo, Susan K. Musau, Albert Okumu, Rinn Song, Eleanor S. Click, and Kevin P. Cain

Machine Learning to Predict Bacteriologic Confirmation of *Mycobacterium Tuberculosis* in Infants and Very Young Children

PLOS Digital Health 2023;2(5):e0000249

Before this study, there were no accurate methods to confirm tuberculosis (TB) diagnoses among children under age 5. About 96% of children die of TB because they are diagnosed too late if at all. The authors used machine learning frameworks to accurately confirm TB diagnoses. Findings suggest simplified, easily obtainable data captured at the child's first clinical encounter could be used to accurately predict microbial confirmation of TB disease in young children with an accuracy between 84%–90%.

Sarah E. Smith-Jeffcoat, Jessica E. Biddle, H. Keipp Talbot, Kerry Grace Morrissey, Melissa S. Stockwell, Yvonne Maldonado, Huong Q. McLean, Katherine D. Ellingson, Natalie M. Bowman, Edwin Asturias, Alexandra M. Mellis, Sheroi Johnson, Hannah L. Kirking, Melissa A. R. Rolfes, Vanessa Olivo, Lori Merrill, Steph Battan-Wraith, Ellen Sano, Son H. McLaren, Celibell Y. Vargas, Sara Goodman, Clea C. Sarnquist, Prasanthi Govindaranjan, Joshua G. Petrie, Edward A. Belongia, Karla Ledezma, Kathleen Pryor, Karen Lutrick, Ayla Bullock, Amy Yang, Quenla Haehnel, Suchitra Rao, Yuwei Zhu, Jonathan Schmitz, Kimberly Hart, Carlos G. Grijalva, and Phillip P. Salvatore

Symptoms, Viral Loads, and Rebound Among COVID-19 Outpatients Treated with Nirmatrelvir/Ritonavir Compared with Propensity Score-matched Untreated Individuals

Clinical Infectious Diseases 2024;15(5):1175–1184 (Published online November 14, 2023)

Nirmatrelvir/ritonavir (N/R) reduces severe outcomes from COVID-19. However, rebound after treatment has been reported. In this study, the authors monitored the symptoms, medication use, and respiratory specimens of patients with severe cases of COVID-19 who were eligible for N/R treatment for 10 days. Their findings suggest patients who completed N/R treatment experienced fewer symptoms and lower viral load, but rebound occurred more often compared with untreated patients. Providers should prescribe N/R, when indicated, and communicate rebound risk to patients.

Lauren J. Tanz, Christopher M. Jones, Nicole L. Davis, Wilson M. Compton, Grant T. Baldwin Beth Han, and Nora D. Volkow

Trends and Characteristics of Buprenorphine-involved Overdose Deaths Prior to and During the COVID-19 Pandemic

JAMA Network Open 2023;6(1):e2251856

Buprenophine remains underused in treating opioid use disorder, despite its effectiveness. Early in the COVID-19 pandemic, the US government relaxed prescribing regulations for buprenorphine. The authors looked at whether the rate of buprenorphine-involved overdose deaths increased with the policy change. Findings suggest that even though monthly opioid overdose deaths increased during the pandemic, easier access to buprenorphine-based treatment did not increase the proportion of overdose deaths involving buprenorphine.

Bryant J. Webber, Heather C. Yun, and Geoffrey P. Whitfield

Leisure-time Physical Activity and Mortality from Influenza and Pneumonia: A Cohort Study of 577,909 US Adults

British Journal of Sports Medicine 2023;57(19):1231–1237

Physical inactivity is a risk factor for severe COVID-19 illness and potentially for influenza and pneumonia. In this large US cohort study, adults who met the aerobic and muscle-strengthening physical activity guidelines were found to be about half as likely to die of influenza and pneumonia as peers who met neither guideline. Findings suggest physical activity is also associated with lower rates of several medical conditions, including stroke and coronary heart disease, which further increase the risk of acquiring pneumonia.

Andrea Winquist, James M. Hodge, W. Ryan Diver, Juan L. Rodriguez, Alyssa N. Troeschel, Johnni Daniel, and Lauren R. Teras

Case–Cohort Study of the Association Between PFAS and Selected Cancers Among Participants in the American Cancer Society's Cancer Prevention Study II LifeLink Cohort

Environmental Health Perspectives 2023;131(12):127007

Exposure to per- and polyfluoroalkyl substances (PFAS) is widespread, and the effects of exposure to this large group of complex, synthetic "forever chemicals" has been associated with various cancers. The authors examined this association with various cancers, including blood cancers. Their findings suggest a link with kidney cancer, especially among women, and contributed to evidence relating to PFAS exposure to various blood cancers that have been less frequently studied, especially at general-population-level exposures.

Ashley M. Woodall, Anne K. Driscoll, Ali Mirzazadeh, and Amy M. Branum

Disparities in Mortality Trends for Infants of Teenagers: 1996 to 2019

Pediatrics 2023;151(5):e2022060512

Although mortality rates are highest for infants of teen mothers, long-term trends by race and ethnicity, residential community, and maternal age have been mostly unexplored. This paper examined these trends and found that the racial and ethnic disparity in infant mortality endured over the 24-year study period, despite declining teen birth and infant mortality rates, suggesting contextual factors driving the disparity have not improved.

DATA METHODS AND STUDY DESIGN

Elizabeth C. Ailes, Weiming Zhu, Elizabeth A. Clark, Ya-Lin A. Huang, Margaret A. Lampe, Athena P. Kourtis, Jennita Reefhuis, and Karen W. Hoover

Identification of Pregnancies and their Outcomes in Healthcare Claims Data, 2008–2019: An Algorithm

PLOS One 2023;18(4):e0284893

Pregnancy is a condition of broad interest to health researchers, but it is not easily identified in healthcare claims data, as there is typically no marker for pregnancy status, outcome, gestational age, or delivery date. The authors developed an algorithm to identify pregnancies, their gestational age, and outcomes, using administrative data. This algorithm may be useful to reproductive health researchers investigating a range of pregnancy and infant outcomes.

Ian E. Fellows, Wolfgang Hladik, Jeffrey W. Eaton, Andrew C. Voetsch, Bharat S. Parekh, and Ray W. Shiraishi

Improving Biomarker-based HIV Incidence Estimation in the Treatment Era

Epidemiology 2023;34(3):353–364

Cross-sectional surveys are essential for estimating HIV infection rates. However, the utility of these estimates can be compromised by how false recency rate (FRR) and mean duration of recent infection (MDRI) are applied. This article proposes a new way to calculate appropriate context-specific estimates of FRR and MDRI. Applying the method to 11 cross-sectional surveys in Africa resulted in good agreement with previous incidence estimates, except in two countries with high reported testing rates.

Robert E. Fontaine, Yulei He, and Bao-Ping Zhu

Untangling the Effects of Multiple Exposures with a Common Reference Group in an Epidemiologic Study: A Practical Revisit

PLOS One 2023;18(12):e0295915

When assessing multiple exposures in epidemiologic studies, epidemiologists often use multivariable regression models with main effects only to control for confounding. Using real data examples, the authors showed that using common reference group analysis results in estimates of individual and joint effects that are mutually comparable and free of each other's confounding effects. This method yielded a clear, accurate, intuitive, and simple summary of findings involving multiple exposures of interest.

Thomas J. Hoerger, Rainer Hilscher, Simon Neuwahl, Matthew B. Kaufmann, Hui Shao, Michael Laxy, Yiling J. Cheng, Stephen Benoit, Haiying Chen, Andrea Anderson, Tim Craven, Wenya Yang, Inna Cintina, Lisa Staimez, Ping Zhang, and the Look AHEAD Research Group

A New Type 2 Diabetes Microsimulation Model to Estimate Long-term Health Outcomes, Costs, and Cost-effectiveness

Value in Health 2023;26(9):1372–1380

This study aimed to develop a microsimulation model to estimate the health effects, costs, and cost-effectiveness of public health and clinical interventions for preventing and managing type 2 diabetes. Using equations exclusively derived from US studies, this new microsimulation model achieves good prediction accuracy in US populations. The model can be used to estimate the long-term health impact, costs, and cost-effectiveness of interventions for type 2 diabetes in the United States.

Lyudmyla Kompaniyets, Ryan E. Wiegand, Adewole C. Oyalowo, Lara Bull-Otterson, Heartley Egwuogu, Trevor Thompson, Ka'imi Kahihikolo, Lori Moore, Nkenge Jones-Jack, Roua El Kalach, Arunkumar Srinivasan, Ashley Messer, Tamara Pilishvili, Aaron M. Harris, Adi V. Gundlapalli, Ruth Link-Gelles, and Tegan K. Boehmer

Relative Effectiveness of Coronavirus Disease 2019 Vaccination and Booster Dose Combinations Among 18.9 Million Vaccinated Adults During the Early Severe Acute Respiratory Syndrome Coronavirus 2 Omicron Period—United States, 1 January 2022 to 31 March 2022

Clinical Infectious Diseases 2023;76(10):1753–1760

Small sample sizes have limited studies' ability to capture severe COVID-19 outcomes, especially among Ad26.COV2.S vaccine recipients. This study of adults assessed the effectiveness in three groups: (1) primary Ad26.COV2.S vaccine and Ad26.COV2.S booster (2 Ad26.COV2.S), (2) primary Ad26.COV2.S vaccine and mRNA booster (Ad26.COV2.S+mRNA), (3) two doses of primary mRNA vaccine and mRNA booster (3 mRNA). Findings suggest that Ad26.COV2.S+mRNA doses were as good as three doses of mRNA and better than two doses of Ad26.COV2.S.

Elena V. Kuklina, Alexander C. Ewing, Glen A. Satten, William M. Callaghan, David A. Goodman, Cynthia D. Ferre, Jean Y. Ko, Lindsay S. Womack, Romeo R. Galang, and Charlan D. Kroelinger

Ranked Severe Maternal Morbidity Index for Population-level Surveillance at Delivery Hospitalization Based on Hospital Discharge Data

PLOS One 2023;18(11):e0294140

Severe maternal morbidity (SMM) is an unexpected and potentially life-threatening event associated with labor and delivery. CDC has produced 21 indicators to identify SMM cases. The authors determined the 15 indicators that identified the most in-hospital mortality at delivery hospitalization in the United States. Continued testing of SMM indicators can improve measurement and surveillance of the most severe maternal complications at the population level.

Angela B. Mariotto, Trevor D. Thompson, Chris Johnson, Xiao-Cheng Wu, and Lori A. Pollack

Breast and Colorectal Cancer Recurrence-free Survival Estimates in the US: Modeling Versus Active Data Collection

Cancer Epidemiology 2023;85:102370

Population-based cancer registries are an important data source for understanding cancer survival. However, US state-based central cancer registries do not routinely follow patients longitudinally to collect intermediate outcomes such as disease recurrence or progression. This study showed modeled estimates were similar to those from directly collected data. Therefore, this method could be used to fill this surveillance knowledge gap without putting a substantial and costly burden on central cancer registries.

Elizabeth A. Swedo, Alen Alic, Royal K. Law, Steven A. Sumner, May S. Chen, Marissa L. Zwald, Miriam E. Van Dyke, Daniel A. Bowen, and James A. Mercy

Development of a Machine Learning Model to Estimate US Firearm Homicides in Near Real Time

JAMA Network Open 2023;6(3):e233413

Firearm homicides are a major public health concern, but lack of timely mortality data presents challenges to effective response. Near real-time data sources offer potential for more timely estimation of firearm homicides. In this study of diverse secondary data on machine learning, the authors used ensemble modeling to produce accurate, near real-time estimates of weekly and annual firearm homicides and decreased data source time lags. Ensemble model forecasts can accelerate the ability to respond to shifts in firearm homicides.

Yuting Xue, Davood Bahrami, and Lihong Zhou

Identifying the Location and Size of an Underground Mine Fire with Simulated Ventilation Data and Random Forest Model

Mining, Metallurgy & Exploration 2023;404(4):1399–1407

Underground mine fires are a threat to the safety and health of mine workers. The timely determination of the location and size of an underground fire is important for developing firefighting strategies and reducing the risk of injuries. Machine learning was used in this paper to develop a predictive model for fire location and fire size in an underground mine. The result from this study can help mine safety personnel make informed decisions during a mine fire emergency.

HEALTH EQUITY SCIENCE

Samrawit G. Ashenafi, Gisela Medina Martinez, Tara C. Jatlaoui, Ram Koppaka, Moria Byrne-Zaaloff, Adolph P. Falcón, Alexa Frank, Sheree H. Keitt, Katherine Matus, Synovia Moss, Charmaine Ruddock, Tracy Sun, Mary B. Waterman, and Tsu-Yin Wu

Design and Implementation of Federal Program to Engage Community Partners to Reduce Disparities in Adult COVID-19 Immunization Uptake, United States, 2021–2022

Public Health Reports 2024;139(1_Suppl):23S–29S (Published online December 18, 2023)

To increase vaccine equity of racial and ethnic populations, CDC designed the Partnering for Vaccine Equity program in 2021. CDC also partnered with national organizations such as the National Urban League and Asian & Pacific Islander American Health Forum to engage community-based organizations to take action. Building on lessons learned through these efforts will ensure CDC and health partners continue to advance vaccine equity, increase vaccine uptake, improve health outcomes, and build trust with communities.

Ethan R. Bornstein, Allison D. Miller, Laura D. Zambrano, Anna R. Yousaf, Adria Apostolou, Thomas Weiser, Angela P. Campbell

Multisystem Inflammatory Syndrome in American Indian/Alaska Native Children, March 2020–May 2022

The Pediatric Infectious Disease Journal 2023;42(4):e105–e108

The authors describe characteristics, clinical features, and outcomes of pediatric multisystem inflammatory syndrome (a severe complication of SARS-CoV-2 infection) in American Indian and Alaska Native (AI/AN) children compared with the same syndrome in non-Hispanic White children. AI/AN patients with pediatric multisystem inflammatory syndrome were younger, more often obese, and from areas of higher social vulnerability. A greater proportion of AI/AN patients had severe respiratory involvement and shock.

Rewa Choudhary, Emily Carter, Jose Monzon, Allison Stewart, Jennifer Slotnick, Leslie L. Samayoa Jerez, David S. Rodriguez Araujo, Emily Zielinski-Gutierrez, and Parminder S. Suchdev

Sociodemographic Factors Associated with COVID-19 Vaccination Among People in Guatemalan Municipalities

Vaccines 2023;11(4):745

Guatemala's reported COVID-19 vaccination coverage is among the lowest in the Americas, and there are few studies describing the disparities in vaccine uptake within the country. The authors performed a cross-sectional ecological analysis using multilevel modeling to identify several sociodemographic characteristics associated with low vaccination coverage. Poverty remained significantly associated with low vaccination coverage, and focusing public health interventions in municipalities most affected by poverty may help reduce health disparities in Guatemala.

Sherry Everett Jones, Marci F. Hertz, Sarah A. DeGue, Caitlin L. Merlo, Rumour P. Piepenbrink, Vi D. Le, Patricia J. Dittus, Aaron L. Houston, Jemekia E. Thornton, and Kathleen A. Ethier

Family Economics and Mental Health Among High-School Students During COVID-19

American Journal of Preventive Medicine 2023;64(3):414–422

The COVID-19 pandemic has had unprecedented socioeconomic and health impacts in the US. This study examined racial/ethnic and school poverty status differences in the relationship between parent job loss, experiences with hunger, and indicators of mental health problems among public high-school students nationwide during the COVID-19 pandemic. Findings suggest students who experience parent job loss and hunger are likely to also experience poor mental health and may be at higher risk for suicide.

NaTasha D. Hollis, Tianyi Zhou, Catherine E. Rice, Marshalyn Yeargin-Allsopp, Robyn A. Cree, James A. Singleton, Tammy A. Santibanez, and A. Blythe Ryerson

Inequities in COVID-19 Vaccination Coverage for Adolescents with and Without Disability, National Immunization Survey—Child COVID Module, July 22, 2021–February 26, 2022

Disability and Health Journal 2023;16(4):101509

People with disabilities are likely at increased risk of health problems from COVID-19. The authors used data from the National Immunization Survey—Child COVID Module to assess COVID-19 vaccination status for adolescents with and without disabilities. Findings suggest parents of adolescents with disability reported higher intent to get their adolescents vaccinated, but among unvaccinated adolescents with disability, parents reported greater difficulty in accessing COVID-19 vaccines. This finding highlights the need for prioritized outreach to increase COVID-19 vaccination for this population.

Bereneice M. Madison, Gerardo R. Lazaro, Marranda S. Scott, Dina N. Greene, Thomas S. Lorey, and Víctor R. DeJesús

Effective Access to Laboratory Test Results: A Health Equity Issue that Enhances Diagnostic Excellence

The Journal of Applied Laboratory Medicine 2023;8(3):635–644

Access to laboratory test results through patient portals is a health equity issue for patients with limited English proficiency (LEP), particularly Spanish-speaking patients. Gaps ranging from linguistic, cultural, and socioeconomic disparities to lack of systematic approaches are among the identified factors that limit LEP patients' access to patient portals. The authors summarize initiatives that healthcare providers, laboratory professionals, and portal developers can use to reduce disparities affecting more than 26 million LEPs while improving their health equity.

Lauren M. Menger-Ogle, Devin Baker, Rebecca J. Guerin, and Thomas R. Cunningham

A Staffing Perspective on Barriers to and Facilitators of Temporary Worker Safety and Health

American Journal of Industrial Medicine 2023;66(9):736–749

Researchers have long known that temporary workers incur higher rates of work-related injuries. The authors recorded, transcribed, and analyzed in-depth interviews with temporary workers. Findings suggest differential treatment of temporary workers by host employers, lack of understanding among host employers and staffing companies of safety and health responsibilities, and workers' fear of job loss or other repercussions if they report injuries or illnesses or voice safety and health concerns. Findings can help inform the tailoring of safety and health programs.

Matthew J. O'Brien, Yan Zhang, Stacy C. Bailey, Sadiya S. Khan, Ronald T. Ackermann, Mohammed K. Ali, Stephen R. Benoit, Giuseppina Imperatore, Christopher S. Holliday, and Kai McKeever Bullard

Screening for Prediabetes and Diabetes: Clinical Performance and Implications for Health Equity

American Journal of Preventive Medicine 2023;64(6):814–823

In 2021, the US Preventive Services Task Force lowered the age recommendation to begin screening for diabetes from 40 to 35 years of age. This study examined the utility of these recommendations and alternative age and body mass index cutoffs in the US population, as well as separately by race and ethnicity. Findings suggest the new screening criteria will identify more adults with prediabetes and diabetes in all racial and ethnic groups and further improve early detection in diverse populations.

Cynthia A. Pate, Xiaoting Qin, Carol Johnson, and Hatice S. Zahran

Asthma Disparities Among US Children and Adults

Journal of Asthma 2023;60(12):2214–2223

The authors analyzed health survey data to determine associations between health outcomes and demographic and socioeconomic factors. Asthma was more common among children who were male, Black, whose parents' education was less than bachelor's degree, or who had public health insurance, and among adults who had less than a bachelor's degree, did not own a home, or were unemployed. Findings suggest asthma disparities persist, and findings can be used to increase public awareness to better deliver more effective interventions.

Ghasi S. Phillips-Bell, Yousra A. Mohamoud, Russell S. Kirby, Sharyn E. Parks, Yvette C. Cozier, and Carrie K. Shapiro-Mendoza

Neighborhood Deprivation and Privilege: An Examination of Racialized-Economic Segregation and Preterm Birth, Florida 2019

Journal of Racial and Ethnic Health Disparities 2024;11:72–80
(Published online January 18, 2023)

Racial disparity in preterm birth is not fully explained by social, behavioral, or clinical risk factors. The Index of Concentration at the Extremes (ICE) measures the effects of structural racism and income distributions on health. The authors used multilevel modeling techniques to analyze these structural effects along with those of individual factors such as age and poverty on preterm birth disparities. Findings suggest deprivation captured by ICE was associated with increased likelihood of preterm birth.

Fred Tusabe, Judith Nanyondo, Matthew J. Lozier, Maureen Kesande, Olive Tumauhairwe, Martin Watsisi, Fred Twinomugisha, Alexandra Medley, Julius Mutoro, Mohammed Lamorde, and David Berendes

Improving Access to WHO Formulations of Alcohol-based Hand Rub in Healthcare Facilities: A District-wide Approach

The American Journal of Tropical Medicines and Hygiene 2023;109(1):191–200

Alcohol-based hand rub (ABHR) is an effective hand hygiene measure in healthcare facilities (HCFs). However, availability in low- and middle-income countries is limited. The authors sought to establish local production of ABHR to increase provider access at public HCFs in Western Uganda. This district-wide production met quality standards and supplied ABHR to many HCFs where facility-level production would be unfeasible. Findings suggest low- and middle-income countries may consider district models to expand ABHR production and supply to smaller HCFs.

Avital R. Wulz, J. Danielle Sharpe, Garielle F. Miller, and Amy F. Wolkin

Association Between Social Vulnerability Factors and Unintentional Fatal Injury Rates—United States, 2015–2019

Journal of Safety Research 2023;86:245–252

Differences in social and environmental factors can contribute to disparities in fatal injury rates. The purpose of this study was to examine the relationship between social and environmental factors and unintentional fatal injury across counties in the United States and how this relationship varies by geography. Findings suggest the social vulnerability of counties is associated with unintentional fatal injury rates and that this study might help give researchers an index to investigate other upstream factors related to injury.

LABORATORY SCIENCE

Joel Leonard Nicholas Barratt, John Shen, Katelyn Houghton, Travis Richins, Sarah G. H. Sapp, Vitaliano Cama, Michael J. Arrowood, Anne Straily, and Yvonne Qvarnstrom

Cyclospora cayentanensis Comprises at Least 3 Species that Cause Human Cyclosporiasis

Parasitology 2023;150(3):269–285

Cyclosporiasis is an intestinal illness caused by eating produce or drinking water contaminated with the microscopic parasite *C. cayetanensis*. The authors' genotyping data generated for thousands of sequenced cyclospora strains were clustered, showing that *C. cayetanensis* is composed of three genetic populations. Following a deeper investigation of the alleles comprising genotypes categorized to each of these genetic types of cyclospora, evidence suggested the three types are reproductively isolated from one another and constitute distinct species.

Jessica C. Chen, Kane Patel, Peyton A. Smith, Eshaw Vidyaprakash, Caroline Snyder, Kaitlin A. Tagg, Hattie E. Webb, Morgan N. Schroeder, Lee S. Katz, Lori A. Rowe, Dakota Howard, Taylor Griswold, Rebecca L. Lindsey, and Heather A. Carleton

Reoccurring *Escherichia coli* O157:H7 Strain Linked to Leafy Greens-Associated Outbreaks, 2016–2019

Emerging Infectious Diseases 2023;29(9):1895–1899

Shiga toxin-producing *E. coli* (STEC) infection can result in hemolytic uremic syndrome, which can cause kidney failure and even death. In this study the authors analyzed genomic data from short- and long-read DNA sequencing to characterize the molecular epidemiology and genomics of an important *E. coli* O157:H7 strain associated with seven disease outbreaks between 2016 and 2020. This work constitutes a major advance toward the prevention and control of reoccurring STEC strains.

Youkyung Choi, Grace Sanghee Lee, Song Li, Jeong Woo Lee, Tonya Mixson-Hayden, Jungreem Woo, Dengning Xia, Mark R. Prausnitz, Saleem Kamili, Michael A. Purdy, and Rania A. Tohme

Hepatitis B Vaccine Delivered by Microneedle Patch: Immunogenicity in Mice and Rhesus Macaques

Vaccine 2023;41(24):3663–3672

Hepatitis B virus (HBV) infections occur mainly through perinatal or early childhood transmission. The most effective strategy to prevent perinatal HBV transmission is birth dose delivery of the hepatitis B vaccine. The authors developed and tested a microneedle patch consisting of micron-scale needles capable of delivering vaccines through the skin. The patch is made of biocompatible, water-soluble materials that dissolve in the skin, thereby generating no sharps waste, and is small, simple to administer, and thermostable without refrigeration.

Matthew D. Pauly, Sabrina Weis-Torres, Tonya M. Hayden, Lilia M. Ganova-Raeva, and Saleem Kamili

Development of Simple, Rapid, and Sensitive Methods for Detection of Hepatitis C Virus RNA from Whole Blood Using Reverse Transcription Loop-mediated Isothermal Amplification

Journal of Clinical Microbiology 2023;61(11):e0077123

Hepatitis C is a major global health problem with some 58 million people currently infected. Because of the asymptomatic nature of hepatitis C and a lack of a simple diagnostic test, more than 60 percent of infected people remain undiagnosed. The authors developed and evaluated three ways to extract hepatitis C RNA from small amounts of blood for diagnostic testing. Each method takes less than one hour from sample to result and can be performed with inexpensive equipment.

William J. H. Sutton, Paul J. Branham, Yulanda M. Williamson, Hans C. Cooper, Fabio N. Najjar, Carrie L. Pierce-Ruiz, John R. Barr, and Tracie L. Williams

Quantification of SARS-CoV-2 Spike Protein Expression from mRNA Vaccines Using Isotope Dilution Mass Spectrometry

Vaccine 2023;41(26):3872–3884

The introduction of mRNA and viral vector vaccines during the COVID-19 pandemic showed the power and effectiveness of such vaccine technology. These vaccines use lipid-encapsulated forms of mRNA that have been optimized to cause a protective immune response and have shown great promise in applications that range from influenza and Zika virus to cancer vaccines. This paper reports on a new way to quantify the antigen expressed from an mRNA vaccine to aid in vaccine development and evaluate mRNA potency.

Stephen R. Welch, Jessica R. Spengler, Sarah C. Genzer, JoAnn D. Coleman-McCray, Jessica R. Harmon, Teresa E. Sorvillo, Florine E. M. Scholte, Sergio E. Rodriguez, T. Justin O'Neal, Jana M. Ritter, Georgia Ficarra, Katherine A. Davies, Markus H. Kainulainen, Elif Karaaslan, Éric Bergeron, Cynthia S. Goldsmith, Michael K. Lo, Stuart T. Nichol, Joel M. Montgomery, and Christina F. Spiropoulou

Single-dose Mucosal Replicon-particle Vaccine Protects Against Lethal Nipah Virus Infection up to 3 Days After Vaccination

Science Advances 2023;9(31):eadh4057

The World Health Organization has listed Nipah virus as a pathogen likely to cause major epidemics with notable pandemic potential. There is no approved vaccine or therapy to prevent or treat Nipah virus infection. The authors showed that an experimental vaccine candidate, based on a replicating but non-spreading viral vaccine platform, can protect multiple animal models from Nipah virus disease and is a step toward a vaccine that can protect people against Nipah virus within days of receiving a single dose.

Isabella C. Young, Ivana Massud, Mackenzie L. Cottrell, Roopali Shrivastava, Panita Maturavongsadit, Alka Prasher, Andres Wong-Sam, Chuong Dinh, Tiancheng Edwards, Victoria Mrotz, James Mitchell, Josilene Nascimento Seixas, Aryani Pallerla, Allison Thorson, Amanda Schauer, Craig Sykes, Gabriela De la Cruz, Stephanie A. Montgomery, Angela D. M. Kashuba, Walid Heneine, Charles W. Dobard, Martina Kovarova, J. Victor Garcia, J. Gerardo Garcia-Lerma, and S. Rahima Benhabbour

Ultra-long-acting In-situ Forming Implants with Cabotegravir Protect Female Macaques Against Rectal SHIV Infection

Nature Communications 2023;14(1):708

HIV pre-exposure prophylaxis (PrEP) taken orally every day is highly effective at preventing HIV infection, but missing doses reduces the regimen's effectiveness. The authors describe the development and characteristics of a new, long-acting implant that uses the antiretroviral drug cabotegravir for PrEP. The study describes the stability, structure, injectability, release kinetics, safety, and PrEP protection in a macaque model. Findings suggest this method is promising and may result in expedited regulatory approval.

PREVENTION AND CONTROL

Nirma D. Bustamante, Erin Sauber-Schatz, Deborah Lee, Kibrten Hailu, Yecai Liu, Clelia Pezzi, Joel Yonkman, Jose Gonzalez, Allen Appelgate, Nina Marano, Drew L. Posey, Martin Cetron, and Edgar Monterroso

The Implementation of CDC COVID-19 Recommendations for Testing, Isolation, Quarantine and Movement at Emergency Intake Sites of Unaccompanied Children in the United States, April 1–May, 2021

Journal of Immigrant and Minority Health 2023;25:1059–1064

Limiting the spread of disease in group settings is essential during public health responses to disease outbreaks. The authors evaluated the COVID-19 Zone Plan used in emergency intake sites operated by the HHS Office of Refugee Resettlement to house and care for unaccompanied migrant children during the pandemic. The goal of the plan was to prevent the transmission of COVID-19 and other communicable diseases in these sites and thus protect the health of unaccompanied children, healthcare workers, and other facility staff.

Nicholas P. Deputy, Joseph Deckert, Anna N. Chard, Neil Sandberg, Danielle L. Moulia, Eric Barkley, Alexandra F. Dalton, Cory Sweet, Amanda C. Cohn, David R. Little, Adam L. Cohen, Danessa Sandmann, Daniel C. Payne, Jacqueline L. Gerhart, and Leora R. Feldstein

Vaccine Effectiveness of JYNNEOS Against Mpox Disease in the United States

The New England Journal of Medicine 2023;388(26):2434–2443

CDC does its best to detect emerging health threats and provide better data faster for public health decision-making. This paper describes a case-control study to estimate the effectiveness of the JYNNEOS vaccine in preventing medically attended mpox (formerly monkeypox) disease among adults. Findings informed the use of JYNNEOS vaccine to prevent and control the spread of mpox during the global outbreak of 2022–2023 and have continued to inform routine use of the vaccine.

Nina B. Masters, Andrew S. Beck, Adria D. Mathis, Jessica Leung, Kelley Raines, Prabasaj Paul, Scott E. Stanley, Alden L. Weg, Emily G. Pieracci, Shannon Gearhart, Madina Jumabaeva, Bettina Bankamp, Paul A. Rota, David E. Sugerman, and Paul A. Gastañaduy

Measles Virus Transmission Patterns and Public Health Responses During Operation Allies Welcome: A Descriptive Epidemiological Study

The Lancet Public Health 2023;8(8):e618–e628

In 2021, more than 80,000 Afghans were evacuated to the United States and housed at US military bases. A measles outbreak among evacuees prompted mass vaccination of more than 70,000 evacuees in just three weeks. This paper assesses the impact of public health measures on the measles outbreak using traditional epidemiologic methods, mathematical transmission models, and advanced molecular techniques. Findings underscore how concerted public health responses can curb measles transmission even in challenging settings with a large vulnerable population.

Mohammad M. Rahman, Chaquetta Johnson, Stephanie N. Taylor, Thomas A. Peterman, Tammy S. Bennett, Danielle Haydel, Daniel R. Newman, and Bruce W. Furness

Extragenital Sexually Transmitted Infection Testing Among Louisiana Parish Health Units, 2016–2019

Sexually Transmitted Diseases 2023;50(5):274–279

CDC recommends that men who have sex with men (MSM) get tested annually for urethral and rectal chlamydia, gonorrhea, and pharyngeal gonorrhea. There are no national recommendations to screen women and heterosexual men at extragenital sites. The authors assessed extragenital chlamydia and gonorrhea screening among men and women in Louisiana. Findings suggest many chlamydia and gonorrhea infections would have been missed with urogenital-only screening. MSM had much higher extragenital infection rates than women and heterosexual men.

Perri Zeitz Ruckart, Frank J. Bove, and Cham Dallas

Evaluating the Effectiveness of State-level Policies on Childhood Blood Lead Testing Rates

Journal of Public Health Management and Practice 2023;29(2):241–249

Lead exposure can harm nearly every organ in the human body. Millions of US children are exposed to significant lead hazards, which can decrease children's intelligence and their ability to focus their attention. Because most US children do not receive blood lead tests, the true magnitude of children exposed to lead is likely worse than estimated. The authors reviewed the literature and concluded that more studies are needed to examine the relationship between policies and childhood blood lead testing rates.

Aline Uwimana, Reena Sethi, Monique Murindahabi, Celestin Ntirandeka, Emily Piercefield, Noella Umulisa, Andrew Abram, Erin Eckert, Kaendi Munguti, David Sullivan, Didier Uyizeye, Aimable Mbituyumuremyi, and Julie R. Gutman

Effectiveness of Intermittent Screening and Treatment of Malaria in Pregnancy on Maternal and Birth Outcomes in Selected Districts in Rwanda: A Cluster Randomized Controlled Trial

Clinical Infectious Diseases 2023;77(1):127–134

As African populations grow, an increasing number of pregnant women are exposed to malaria parasite infection each year. WHO estimated that nearly 14 million pregnant women were infected with malaria in 2022. Using a randomized controlled trial, the authors assessed the effectiveness of intermittent preventive treatment in pregnancy (IPTp) with sulfadoxine pyrimethamine at antenatal care visits and determined it was more effective than first testing pregnant women for malaria and treating only those who tested positive.

Amanda L. Wilkinson, Khalequ Zaman, Masuma Hoque, Concepción F. Estívariz, Cara C. Burns, Jennifer L. Konopka-Anstadt, Bernardo A. Mainou, Stephanie D. Kovacs, Qian An, Jacquelyn S. Lickness, Mohammad Yunus, Cynthia J. Snider, Yiting Zhang, Elizabeth Coffee, Talha Abid, Steven G. F. Wassilak, Mark A. Pallansch, M. Steven Oberste, John F. Vertefeuille, and Abhijeet Anand

Immunogenicity of Novel Oral Poliovirus Vaccine Type 2 Administered Concomitantly with Bivalent Oral Poliovirus Vaccine: An Open-label, Non-inferiority, Randomised, Controlled Trial

The Lancet Infectious Diseases 2023;23(9):1062–1071

Polio eradication is currently one of two global disease eradication goals. Poliomyelitis can be caused by three poliovirus serotypes, each requiring a distinct poliovirus vaccine to grant immunity. This study assessed the immunogenicity of two poliovirus vaccines administered simultaneously versus separately. Findings suggest that combining the three Sabin-strain vaccine types into a single trivalent oral poliovirus vaccine reduced their effectiveness.

LIFETIME SCIENTIFIC ACHIEVEMENT

The following current or former CDC/ATSDR employees were nominated for the Lifetime Scientific Achievement Award, which recognizes individuals for a body of work contributing to public health. Nominees are judged on their work's scientific merit, its effect on public health and the CDC/ATSDR mission, and on their leadership and recognition by peers.

Antonia M. Calafat, PhD

National Center for Environmental Health

During her nearly 30 years at CDC, Dr. Antonia Calafat has made outstanding contributions to human exposure science. She provides critical expertise and direction for the development and use of state-of-the-art biomonitoring methods to assess human exposure to organic chemicals that are of national and international concern in environmental public health. These chemicals include potential and known carcinogens and endocrine disruptors, such as pesticides; polycyclic aromatic hydrocarbons; chemicals added to consumer and personal care products such as phthalates, parabens, and phenols; flame retardants; and persistent organic pollutants such as polybrominated diphenyl ethers and per- and polyfluoroalkyl substances (PFAS).

Before she started CDC's PFAS biomonitoring program in 2002, the extent of Americans' exposure to PFAS was unknown. Her laboratory's discovery that 99% of the general US population had PFAS in their blood launched hundreds of studies to better understand these exposures and their health effects. Dr. Calafat has also contributed her visionary guidance to efforts to enhance national and international biomonitoring capacity and capability. She serves as co-chair of the Association of Public Health Laboratories (APHL) National Biomonitoring Network steering committee and supports APHL's work to launch and maintain a formal, national network of regional, state, and local laboratories. This network brings the United States closer to having a national, state-based environmental health surveillance system needed to conduct high-quality routine and emergency biomonitoring.

Dr. Calafat has authored more than 670 peer-reviewed publications (more than 660 during her CDC career). She has also held editorial roles at premier public health journals including the *International Journal of Hygiene and Environmental Health* and the *Journal of Exposure Science and Environmental Epidemiology*, indicating her stellar scientific reputation among her peers. She is a sought-after collaborator among leading scientists in exposure science, epidemiology, and public health, and she engages in studies that best advance CDC's environmental public health agenda. She further amplifies the impact of CDC's science by serving as a CDC representative on initiatives such as Human Biomonitoring for Europe and the International Board of the Partnership for the Assessment of Risks from Chemicals. Her expertise, partnerships, and excellence help CDC save lives and protect people from health threats.

Jean Cox-Ganser, PhD

National Institute for Occupational Safety and Health

Dr. Jean Cox-Ganser has devoted more than 30 years of her life to public health research and service with NIOSH's Respiratory Health Division in scientific and leadership roles, working to improve the lives of workers by improving the air they breathe at work in a diverse array of industries. Dr. Cox-Ganser's research on indoor air quality problems associated with mold and dampness fundamentally changed the scientific approach to indoor mold overgrowth assessment. She showed that the presence of visible mold and detectable odors in an environment where people are experiencing health symptoms consistent with irritant and allergic symptoms is enough to determine that mold and dampness are problems. By demonstrating scientifically that indoor microbial sampling is unnecessary to make decisions about the presence of visible indoor mold for people with irritant or allergic symptoms, building managers and safety officers have been equipped with evidence to inform interventions. Dr. Cox-Ganser's work also serves as a guide for clinicians in making recommendations for remediation in efforts to reduce work-related impairment and disability.

Dr. Cox-Ganser's application of science to actual practice embodies the mission of CDC/ATSDR in promoting health and quality of life by preventing disease, disability, and premature death. In addition to her research efforts, she served as a field investigator as part of the NIOSH Health Hazard Evaluation Program. In this capacity, Dr. Cox-Ganser interacted directly with workers, Union representatives, employers, and state and local health departments to understand specific workplace practices, opportunities for exposures, and manifestation of health effects in order to recommend workplace improvements.

Dr. Cox-Ganser has contributed to over 87 peer-review publications as author or co-author, five book or study reports, 55 scientific presentations, eight proceedings, 23 NIOSH official reports or documents, and over 100 oral or poster presentations. Beyond citations in scientific journals, her works are cited by news media, policy references, social media, and video. Altmetric ranks her 2007 publication "Hydrophilic Fungi and Ergosterol Associated with Respiratory Illness in a Water-Damaged Building" with an Attention Score of 221. Her 2018 paper "Dental Personnel Treated for Idiopathic Pulmonary Fibrosis at a Tertiary Care Center—Virginia, 2000–2015," has an Attention Score of 194, and her 2019 paper "Hurricane-Associated Mold Exposures Among Patients at Risk for Invasive Mold Infections After Hurricane Harvey—Houston, Texas, 2017" has an Attention Score of 95. Respected investigators around the globe cite her papers with impact reaching much further even than specialty audiences.

Judith R. Qualters, PhD, MPH

National Center for Injury Prevention and Control

Dr. Judith Qualters has served CDC for 35 years and tackled some of the nation's most pressing public health challenges. Her early career included investigating cancer among Vietnam veterans as part of the Agent Orange projects, analyzing cancer and non-cancer health risks among communities exposed to contaminants from nuclear weapons production and testing, and contributing to two large national chronic disease programs—CDC's Breast and Cervical Cancer Early Detection Program and the National Program of Cancer Registries. From 2002 to 2010, she led the development of the National Center on Environmental Health's flagship surveillance program, the National Environmental Public Health Tracking Network. Her work in environmental health also addressed health issues such as asthma in children and climate change effects on health.

In 2017, Dr. Qualters became the director of NCIPC's Division of Injury Prevention. In this role she is leading the division into new areas of surveillance, data visualization and modernization, and the use of artificial intelligence to reduce injuries and help save lives. She has led efforts to move the division into leadership roles in state-of-the-art science and practice and science partnerships. Much of this work has focused on growing the agency's suicide prevention efforts.

Dr. Qualters has authored and contributed to over 60 scientific publications and reports, the range of which includes multiple cancers, radiation fallout from nuclear weapons testing, mercury exposure, air pollution effects on cardiac health, public health surveillance, data modeling uses in public health, ozone exposure effects on life expectancy, COVID-19 vaccinations, older adult mortality, traumatic brain injuries, motor vehicle transportation safety, suicide data trends, and health equity.

Most recently, Dr. Qualters served for more than a year responding to the Biden-Harris administration's request for a 10-year national strategy for suicide prevention and federal action plan to help reverse increasing suicide rates. She provided leadership and expertise, and the resulting documents apply a "whole-of-society" approach to suicide prevention including, for the first time, a federal action plan with more than 200 actions committed to by more than 20 federal agencies. This work was recently recognized during a White House launch event hosted by the second gentleman, Doug Emhoff, and US Surgeon General Dr. Vivek Murthy.

Dr. Qualters has been involved in numerous professional organizations and committees. Currently she has a leadership role in the HHS Behavioral Health Coordinating Council and the American Academy of Pediatrics Council on Injury, Violence, and Poison Prevention.

Jimmy Stephens, PhD

Public Health Infrastructure Center

Dr. Jimmy Stephens has dedicated over 30 years to advancing CDC's mission. He joined CDC in 1992 as a research chemist at the National Institute for Occupational Safety and Health (NIOSH), where he studied respirable particles and developed techniques for presenting complex data. In 1999, he became a senior scientist, and in 2004 he was appointed associate director for science. By 2006, his leadership had set his career on a fast-paced trajectory. In 2010, he became director of the Office of Science Quality, advising on CDC scientific issues, chairing the CDC Excellence in Science Committee, and developing guideline standards. In 2013, he was appointed deputy director of the National Center for Injury Prevention and Control, and in 2014, he joined the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry, holding roles that included acting deputy director and director of the Division of Toxicology and Human Health Sciences. In 2018, he went on to provide high-level supervision to three programs: the Community Guide Branch, the Office of Public Health Genomics, and the Stephen B. Thacker CDC Library while serving as deputy director for science in the Division of Public Health Information Dissemination. During the COVID-19 pandemic, he served as both the principal science deputy and associate director for science from 2020 to 2022.

During several emergency responses, Dr. Stephens developed processes for scientific review that have improved timeliness and scientific rigor. His influence is evident in Lyme disease, pandemic influenza A (H1N1), and urgent reviews of Emergency Use Authorization requests to the Food and Drug Administration. By introducing innovative strategies and rigorous scientific protocols, he has improved the landscape of public health research, ensuring timely and effective responses to emerging health threats.

Dr. Stephens' body of scientific work has had a transformative impact on public health research and practice. His contributions have not only led to the development of targeted public health interventions and improved technologies but have also influenced public health policies, response strategies to crises, and collaborative efforts that enhance the effectiveness of public health initiatives. His contributions to scientific literature are extensive and impactful. His co-authored paper, "Domains of Excellence: A CDC Framework for Developing High-Quality, Impact-Driven Public Health Science Publications," has set a new standard for CDC publications. His research on the impact of COVID-19 mask mandates provided vital insights into public health interventions during the pandemic.

Kim Workowski, MD

National Center for HIV, Viral Hepatitis, STD, and TB Prevention

Sexually transmitted infections affect millions of Americans annually, yet evidence for their diagnosis and treatment are limited. Dr. Kim Workowski has worked in the field of sexually transmitted infections (STI) to improve the evidence base and translate the evidence into guidelines for clinicians for more than 30 years. She has led the development of the CDC's *STI Treatment Guidelines* for the past 6 issues (starting with the 1998 edition) and served as the editor of the clinical infectious disease supplement with background data. She has also published more than 150 peer-reviewed manuscripts on STI, hepatitis C and HIV.

The combination of Dr. Workowski's primary research and her development of the *STI Treatment Guidelines* has had an indelible mark on the STI field. The *STI Treatment Guidelines* have often been called the "Bible" of STIs. Not only do they guide clinicians on how to screen, diagnose, treat, and prevent STIs, but they also show where data are not conclusive enough to make evidence-based recommendations. This has led many researchers to use these guidelines to guide their own research questions. The guidelines are one of the most cited documents in the medical field, and the 2021 *STI Treatment Guidelines* web page alone has received more than 11 million views since their release. They are consulted by doctors and researchers around the world.

Dr. Workowski is known as one of the most senior clinical STI researchers in the field. Not only has she developed CDC's *STI Treatment Guidelines* over the past 30 years, but she has also led numerous clinical trials through her position at Emory University. She is a sought-after principal investigator and serves on the NIH's Infectious Disease Clinical Research Consortium. She also served under its previous iteration, the STI Clinical Trials Group. She has been invited to give over 70 national or international invited talks at prestigious conferences such as the International Antiviral Society, the Society for STD Research, the Infectious Disease Society of America, the National Ryan White Conference, American College of Physicians, and the Conference on Retroviruses and Opportunistic Infections.

Dr. Workowksi has produced highly consequential primary research. She has synthesized existing research to make guidelines clinicians use to diagnose, treat, and manage patients. She has cultivated collaboration across CDC centers, the field, and among individuals. She has mentored junior STI researchers. And through her work she has pushed the field forward.

Marshalyn Yeargin-Allsopp, MD, FAAP

National Center on Birth Defects and Developmental Disabilities

For the past 43 years, Dr. Marshalyn Yeargin-Allsopp's research has laid the foundation for healthcare providers, schools, and support organizations to provide better services to the more than 12 million US children with developmental disabilities and their families. Today, as a developmental pediatrician and senior medical officer in the Division of Human Development and Disability, Dr. Yeargin-Allsopp oversees the clinical aspects of developmental disabilities and disability in general, the prevalence and identification of childhood disabilities, partnerships with medical and pediatric organizations, and implementation of guiding principles for the transition from pediatric to adult health care. She remains committed to improving the lives of children and has maintained her clinical expertise by serving as the medical director of the Clayton Early Intervention Program in metropolitan Atlanta for more than 25 years.

Dr. Yeargin-Allsopp joined CDC's Epidemic Intelligence Service (EIS) in 1981. Her CDC research began by studying the epidemiology of intellectual disabilities, cerebral palsy, hearing and vision impairment, and epilepsy. During EIS, she developed the first population-based surveillance system to measure the prevalence of these developmental disabilities among school-age children. For nearly 20 years, she laid a foundation of developmental disability surveillance, and when public and clinical interest in autism spectrum disorder increased in the late 1990s, her work provided the capacity to do more in that area. Today, the CDC webpages that cover these developmental disabilities are among the most trafficked in the agency.

Dr. Yeargin-Allsopp's scientific contributions include more than 100 publications that have been cited more than 7,000 times. Her developmental disabilities epidemiology studies are considered among the best in the world and have been used as the foundation of clinical guidelines and policy change for people with developmental disabilities. She has been invited to present, moderate, or serve on conference panels for a range of disabilities that include attention-deficit/hyperactivity disorder, autism spectrum disorder, bilirubin-induced brain injury/kernicterus, cerebral palsy, COVID-19, Down syndrome, epilepsy, fetal alcohol syndrome in school-age children, folic acid in the prevention of neural tube defects, neurodevelopmental and related disabilities, and Zika virus.

Dr. Yeargin-Allsopp served as a US commissioned officer for 20 years and retired as a captain of the US Public Health Service. In 2022, Dr. Yeargin-Allsopp was inducted into the Federal Government Hall of Fame, which celebrates distinguished civil servants who have demonstrated sustained achievement and dedication to public service throughout their careers.

PREVIOUS WINNERS

of the Charles C. Shepard Science Awards

2023

ASSESSMENT

Matthew E. Oster, David K. Shay, John R. Su, Julianne Gee, C. Buddy Creech, Karen R. Broder, Kathryn Edwards, Jonathan H. Soslow, Jeffrey M. Dendy, Elizabeth Schlaudecker, Sean M. Lang, Elizabeth D. Barnett, Frederick L. Ruberg, Michael J. Smith, M. Jay Campbell, Renato D. Lopes, Laurence S. Sperling, Jane A. Baumblatt, Deborah L. Thompson, Paige L. Marquez, Penelope Strid, Jared Woo, River Pugsley, Sarah Reagan-Steiner, Frank DeStefano, and Tom T. Shimabukuro

Myocarditis Cases Reported After mRNA-based COVID-19 Vaccination in the US from December 2020 to August 2021

JAMA 2022;327(4):331–340

DATA METHODS AND STUDY DESIGN

Zhaohui Cui, Ellyn P. Marder, Eleanor S. Click, Robert M. Hoekstra, and Beau B. Bruce

Nearest-neighbors Matching for Case-control Study Analyses: Better Risk Factor Identification from a Study of Sporadic Campylobacteriosis in the United States

Epidemiology 2022;33(5);633–641

HEALTH EQUITY SCIENCE

Shichao Tang, Daniel A. Bowen, Laura Chadwick, Emily Madden, and Robin Ghertner

Are Home Evictions Associated with Child Welfare System Involvement? Empirical Evidence from National Eviction Records and Child Protective Services Data

Child Maltreatment 2022;10775595221125917

LABORATORY SCIENCE

Crystal M. Gigante, Bette Korber, Matthew H. Seabolt, Kimberly Wilkins, Whitni Davidson, Agam K. Rao, Hui Zhao, Todd G. Smith, Christine M. Hughes, Faisal Minhaj, Michelle A. Waltenburg, James Theiler, Sandra Smole, Glen R. Gallagher, David Blythe, Robert Myers, Joann Schulte, Joey Stringer, Philip Lee, Rafael M. Mendoza, LaToya A. Griffin-Thomas, Jenny Crain, Jade Murray, Annette Atkinson, Anthony H. Gonzalez, June Nash, Dhwani Batra, Inger Damon, Jennifer McQuiston, Christina L. Hutson, Andrea M. McCollum, and Yu Li

Multiple Lineages of Monkeypox Virus Detected in the United States, 2021–2022

Science 2022;378(6619):560–565

PREVENTION AND CONTROL

Emma K. Accorsi, Amadea Britton, Katherine E. Fleming-Dutra, Zachary R. Smith, Nong Shang, Gordana Derado, Joseph Miller, Stephanie J. Schrag, and Jennifer R. Verani

Association Between 3 Doses of mRNA COVID-19 Vaccine and Symptomatic Infection Caused by the SARS-CoV-2 Omicron and Delta Variants

JAMA 2022;327(7):639–651

LIFETIME SCIENTIFIC ACHIEVEMENT

Andy Cecala, MBA

Andy Cecala was recognized for his global expertise in dust monitoring and engineering control as well as for his contributions to research in this area, which have dramatically reduced workers' exposure to respirable dust.

2022

ASSESSMENT

Michael A. Johansson, Talia M. Quandelacy, Sarah Kada, Pragati Venkata Prasad, Molly Steele, John T. Brooks, Rachel B. Slayton, Matthew Biggerstaff, and Jacy C. Butler

SARS-CoV-2 Transmission from People Without COVID-19 Symptoms

JAMA Network Open 2021;4(1):32035057

DATA METHODS AND STUDY DESIGN

Zuguo Mei, O. Yaw Addo, Maria Elena Jefferds, Andrea J. Sharma, Rafael C. Flores-Ayala, and Gary M. Brittenham

Physiologically Based Serum Ferritin Thresholds for Iron Deficiency in Children and Non-Pregnant Women: A US National Health and Nutrition Examination Surveys (NHANES) Serial Cross-sectional Study

The Lancet Hematology 2021;8(8):e572–e582

HEALTH EQUITY SCIENCE

Austin M. Williams, Heather B. Clayton, and James A. Singleton

Racial and Ethnic Disparities in COVID-19 Vaccination Coverage: The Contribution of Socioeconomic and Demographic Factors

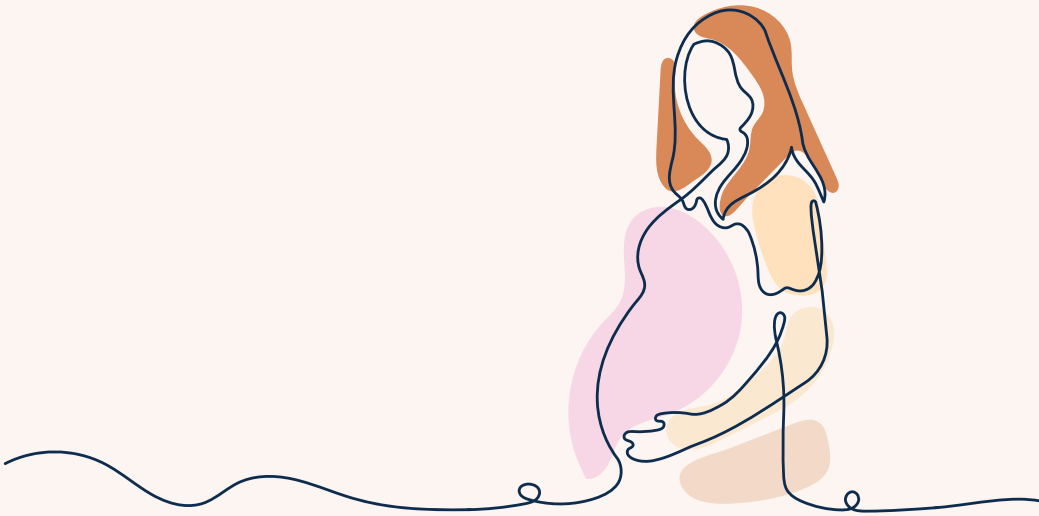
American Journal of Preventive Medicine 2022;62(4):473–482
(Published online November 18, 2021)

LABORATORY SCIENCE

Bin Zhou, Tran Thi Nhu Thao, Donata Hoffmann, Adriano Taddeo, Nadine Ebert, Fabien Labroussaa, Anne Pohlmann, Jacqueline King, Silvio Steiner, Jenna N. Kelly, Jasmine Portmann, Nico Joel Halwe, Lorenz Ulrich, Bettina Salome Trueb, Xiaoyu Fan, Bernd Hoffmann, Li Wang, Lisa Thomann, Xudong Lin, Hanspeter Stalder, Berta Pozzi, Simone de Brot, Nannan Jiang, Dan Cui, Jaber Hossain, Malania M. Wilson, Matthew W. Keller, Thomas J. Stark, John R. Barnes, Ronald Dijkman, Joerg Jores, Charaf Benarafa, David E. Wentworth, Volker Thiel, and Martin Beer

SARS-CoV-2 Spike D614G Change Enhances Replication and Transmission

Nature 2021;592(7852):122–127



PREVENTION AND CONTROL

Mary Beth F. Son, Nancy Murray, Kevin Friedman, Cameron C. Young, Margaret M. Newhams, Leora R. Feldstein, Lara L. Loftis, Keiko M. Tarquinio, Aalok R. Singh, Sabrina M. Heidemann, Vijaya L. Soma, Becky J. Riggs, Julie C. Fitzgerald, Michele Kong, Sule Doymaz, John S. Giuliano, Jr., Michael A. Keenaghan, Janet R. Hume, Charlotte V. Hobbs, Jennifer E. Schuster, Katharine N. Clouser, Mark W. Hall, Lincoln S. Smith, Steven M. Horwitz, Stephanie P. Schwartz, Katherine Irby, Tamara T. Bradford, Aline B. Maddux, Christopher J. Babbitt, Courtney M. Rowan, Gwenn E. McLaughlin, Phoebe H. Yager, Mia Maamari, Elizabeth H. Mack, Christopher L. Carroll, Vicki L. Montgomery, Natasha B. Halasa, Natalie Z. Cvijanovich, Bria M. Coates, Charles E. Rose, Jane W. Newburger, Manish M. Patel, Adrienne G. R. Randolph, and the Overcoming COVID-19 Investigators

Multisystem Inflammatory Syndrome in Children—Initial Therapy Outcomes

BMC Medicine 2020;18(1):19

LIFETIME SCIENTIFIC ACHIEVEMENT

Inger Damon, MD, PhD

Dr. Damon was recognized for her exceptional leadership in agencywide responses to outbreaks caused by some of the world's deadliest high-consequence pathogens.

2021

ASSESSMENT

Adam S. Vaughan, Linda Schieb, and Michele Casper

Historic and Recent Trends in County-level Coronary Heart Disease Death Rates by Race, Gender, and Age Group, United States, 1979–2017

PLOS One 2020;15(7):e0235839

DATA METHODS AND STUDY DESIGN

Andrew F. Auld, Katherine Fielding, Tefera Agizew, Alice Maida, Anikie Mathoma, Rosanna Boyd, Anand Date, Sherri L. Pals, George Bicego, Yuliang Liu, Ray W. Shiraishi, Peter Ehrenkranz, Christopher Serumola, Unami Mathebula, Heather Alexander, Salome Charalambous, Courtney Emerson, Goabaone Rankgoane-Pono, Pontsho Pono, Alyssa Finlay, James C. Shepherd, Charles Holmes, Tedd V. Ellerbrock, and Alison D. Grant

Risk Scores for Predicting Early Antiretroviral Therapy Mortality in SubSaharan Africa to Inform Who Needs Intensification of Care: A Derivation and External Validation Cohort Study

BMC Medicine 2020;18(1):311

HEALTH EQUITY SCIENCE

Xu Ji, Shanna Cox, Scott D. Grosse, Wanda D. Barfield, Brian S. Armour, Elizabeth A. Courtney-Long, and Rui Li

Association of Smoke-free Laws with Preterm or Low Birth Weight Deliveries—A Multistate Analysis Health Services

Research 2021;56(1):61–72

LABORATORY SCIENCE

Jennifer L. Konopka-Anstadt, Ray Campagnoli, Annelet Vincent, Jing Shaw, Ling Wei, Nhien T. Wynn, Shane E. Smithee, Erika Bujaki, Ming Te Yeh, Majid Laassri, Tatiana Zagorodnyaya, Amy J. Weiner, Konstantin Chumakov, Raul Andino, Andrew Macadam, Olen Kew, and Cara C. Burns

Development of a New Oral Poliovirus Vaccine for the Eradication End Game Using Codon Deoptimization

NPJ Vaccines 2020;5(1):26

PREVENTION AND CONTROL

Andrew F. Auld, Tefera Agizew, Anikie Mathoma, Rosanna Boyd, Anand Date, Sherri L. Pals, Christopher Serumola, Unami Mathebula, Heather Alexander, Tedd V. Ellerbrock, Goabaone Rankgoane-Pono, Pontsho Pono, James C. Shepherd, Katherine Fielding, Alison D. Grant, and Alyssa Finlay

Effect of Tuberculosis Screening and Retention Interventions on Early Antiretroviral Therapy Mortality in Botswana: A Stepped-wedge Cluster Randomized Trial

BMC Medicine 2020;18(1):19

LIFETIME SCIENTIFIC ACHIEVEMENT

Stuart Nichol, PhD

Dr. Nichol was recognized for his expertise in the study of high-consequence RNA viruses and his research and leadership in high-containment laboratory work.

2020

ASSESSMENT

Kathleen P. Hartnett, Aaron Kite-Powell, Megan T. Patel, Brittani L. Haag, Michael J. Sheppard, Taylor P. Dias, Brian A. King, Paul C. Melstrom, Matthew D. Ritchey, Zachary Stein, Nimi Idaikkadar, Alana M. Vivolo-Kantor, Dale A. Rose, Peter A. Briss, Jennifer E. Layden, Loren Rodgers, and Jennifer Adjemian

Syndromic Surveillance for E-Cigarette, or Vaping, Product Use-associated Lung Injury

The New England Journal of Medicine 2020;69(9):236–240

Lyna Z. Schieber, Gery P. Guy, Jr., Puja Seth, Randall Young, Christine L. Mattson, Christina A. Mikosz, and Richard A. Schieber

Trends and Patterns of Geographic Variation in Opioid Prescribing Practices by State, United States, 2006–2017

JAMA Network Open 2019;2(3):e190665

DATA METHODS AND STUDY DESIGN

David S. Campo, Vishal Nayak, Ganesh Srinivasamoorthy, and Yury Khudyakov

Entropy of Mitochondrial DNA Circulating in Blood is Associated with Hepatocellular Carcinoma

BMC Medical Genomics 2019;12(Suppl 4):74

LABORATORY SCIENCE

Patricia A. Jorquera, Vasiliy P. Mishin, Anton Chesnokov, Ha T. Nguyen, Brian Mann, Rebecca Garten, John Barnes, Erin Hodges, Juan De La Cruz, Xiyan Xu, Jackie Katz, David E. Wentworth, and Larisa V. Gubareva

Insights into the Antigenic Advancement of Influenza A(H3N2) Viruses, 2011–2018

Scientific Reports 2019;9(1):2676

PREVENTION AND CONTROL

Meng-Yu Chen, Charles E. Rose, Yan Ping Qi, Jennifer L. Williams, Lorraine F. Yeung, Robert J. Berry, Ling Hao, Michael J. Cannon, and Krista S. Crider

Defining the Plasma Folate Concentration Associated with the Red Blood Cell Folate Concentration Threshold for Optimal Neural Tube Defects Prevention: A Population-based, Randomized Trial of Folic Acid Supplementation

The American Journal of Clinical Nutrition 2019;109(5):1452–1461

LIFETIME SCIENTIFIC ACHIEVEMENT

Jim Pirkle, MD, PhD

Dr. Pirkle was recognized for improving the understanding of human exposure to harmful chemicals and helping to establish biomonitoring as an integral part of evidence-based decision making in public policy.

2019

ASSESSMENT

Samir K. Saha, Stephanie J. Schrag, Shams El Arifeen, Luke C. Mullany, Mohammad Shahidul Islam, Nong Shang, Shamim A. Qazi, Anita K. M. Zaidi, Zulfiqar A. Bhutta, Anuradha Bose, Pinaki Panigrahi, Sajid B. Soofi, Nicholas E. Connor, Dipak K. Mitra, Rita Isaac, Jonas M. Winchell, Melissa L. Arvay, Maksuda Islam, Yasir Shafiq, Imran Nisar, Benazir Baloch, Furqan Kabir, Murtaza Ali, Maureen H. Diaz, Radhanath Satpathy, Pritish Nanda, Bijaya K. Padhi, Sailajanandan Parida, Aneeta Hotwani, M. Hasanuzzaman, Sheraz Ahmed, Mohammad Belal Hossain, Shabina Ariff, Imran Ahmed, Syed Mamun Ibne Moin, Arif Mahmud, Jessica L. Waller, Iftekhar Rafiqullah, Mohammad A. Quaiyum, Nazma Begum, Veeraraghavan Balaji, Jasmin Halen, A. S. M. Nawshad Uddin Ahmed, Martin W. Weber, Davidson H. Hamer, Patricia L. Hibberd, Qazi Sadeq-Ur Rahman, Venkat Raghava Mogan, Tanvir Hossain, Lesley McGee, Shalini Anandan, Anran Liu, Kalpana Panigrahi, Asha Mary Abraham, and Abdullah H. Baqui

Causes and Incidence of Community-acquired Serious Infections Among Young Children in South Asia (ANISA): An Observational Cohort Study

The Lancet 2018;392(10142):145–159

DATA METHODS AND STUDY DESIGN

Diba Khana, Lauren M. Rossen, Holly Hedegaard, and Margaret Warner

A Bayesian Spatial and Temporal Modeling Approach to Mapping Geographic Variation in Mortality Rates for Subnational Areas with R-INLA

Journal of Data Science 2018;16(1):147–182

LABORATORY SCIENCE

Markus H. Kainulainen, Jessica R. Spengler, Stephen R. Welch, JoAnn D. Coleman-McCray, Jessica R. Harmon, John D. Klena, Stuart T. Nichol, César G. Albariño, and Christina F. Spiropoulou

Use of a Scalable Replicon-particle Vaccine to Protect Against Lethal Lassa Virus Infection in the Guinea Pig Model

The Journal of Infectious Diseases 2018;217(12):1957–1966

PREVENTION AND CONTROL

Khalequ Zaman Concepción F. Estívariz, Michelle Morales, Mohammad Yunus, Cynthia J. Snider, Howard E. Gary, Jr., William C. Weldon, M. Steven Oberste, Steven G. Wassilak, Mark A. Pallansch, and Abhijeet Anand

Immunogenicity of Type 2 Monovalent Oral and Inactivated Poliovirus Vaccines for Type 2 Poliovirus Outbreak Response: An Open-label, Randomised Controlled Trial

The Lancet Infectious Diseases 2018;18(6):657–665

LIFETIME SCIENTIFIC ACHIEVEMENT

Rima Khabbaz, MD

Dr. Khabbaz was recognized for her leadership at the forefront of public health efforts to prevent and control emerging infectious diseases.

2018

ASSESSMENT

A. Danielle Iuliano, Katherine M. Roguski, Howard H. Chang, David J. Muscatello, Rakhee Palekar, Stefano Tempia, Cheryl Cohen, Jon Michael Gran, Dena Schanzer, Benjamin J. Cowling, Peng Wu, Jan Kyncl, Li Wei Ang, Minah Park, Monika Redlberger-Fritz, Hongjie Yu, Laura Espenhain, Anand Krishnan, Gideon Emukule, Liselotte van Asten, Susana Pereira da Silva, Suchunya Aungkulanon, Udo Buchholz, Marc-Alain Widdowson, and Joseph S. Bresee, for the Global Seasonal Influenza-associated Mortality Collaborator Network

Estimates of Global Seasonal Influenza-associated Respiratory Mortality: A Modelling Study

The Lancet 2018;391:1285–1300

DATA METHODS AND STUDY DESIGN

Ellsworth M. Campbell, Hongwei Jia, Anupama Shankar, Debra Hanson, Wei Luo, Silvina Masciotra, S. Michele Owen, Alexandra M. Oster, Romeo R. Galang, Michael W. Spiller, Sara J. Blosser, Erika Chapman, Jeremy C. Roseberry, Jessica Gentry, Pamela Pontones, Joan Duwve, Paula Peyrani, Ron M. Kagan, Jeannette M. Whitcomb, Philip J. Peters, Walid Heneine, John T. Brooks, and William M. Switzer

Detailed Transmission Network Analysis of a Large Opiate-driven Outbreak of HIV Infection in the United States

The Journal of Infectious Diseases 2017;216(9):1053–1062

LABORATORY SCIENCE

Amrita Kumar, Jin Hyang Kim, Priya Ranjan, Maureen G. Metcalfe, Weiping Cao, Margarita Mishina, Shivaprakash Gangappa, Zhu Guo, Edward S. Boyden, Sherif Zaki, Ian York, Adolfo García-Sastre, Michael Shaw, and Suryaprakash Sambhara

Influenza Virus Exploits Tunneling Nanotubes for Cell-to-Cell Spread

Scientific Reports 2017; doi: 10.1038/srep40360

PREVENTION AND CONTROL

Rahi Abouk, Scott D. Grosse, Elizabeth C. Ailes, and Matthew E. Oster

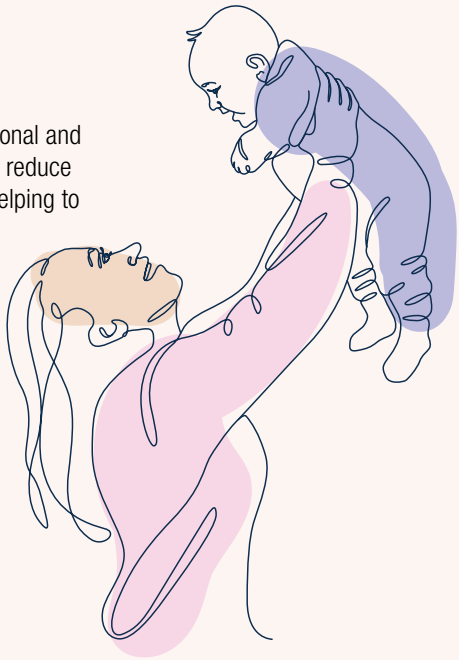
Association of US State Implementation of Newborn Screening Policies for Critical Congenital Heart Disease with Early Infant Cardiac Deaths

JAMA 2017;318(21):2111–2118

LIFETIME SCIENTIFIC ACHIEVEMENT

Steven L. Cochi, MD, MPH

Dr. Cochi was recognized for helping to shape national and international immunization policy and strategies to reduce the burden of vaccine-preventable diseases and helping to develop the Global Polio Eradication Initiative.



2017

ASSESSMENT

Katherine E. Fleming-Dutra, Adam L. Hersh, Daniel J. Shapiro, Monina Bartoces, Eva A. Enns, Thomas M. File, Jr., Jonathan A. Finkelstein, Jeffrey S. Gerber, David Y. Hyun, Jeffrey A. Linder, Ruth Lynfield, David J. Margolis, Larissa S. May, Daniel Merenstein, Joshua P. Metlay, Jason G. Newland, Jay F. Piccirillo, Rebecca M. Roberts, Guillermo V. Sanchez, Katie J. Suda, Ann Thomas, Teri Moser Woo, Rachel M. Zetts, and Lauri A. Hicks

Prevalence of Inappropriate Antibiotic Prescriptions Among US Ambulatory Care Visits,

JAMA 2016;315(17):1864–1873

DATA METHODS AND STUDY DESIGN

Samuel S. Shepard, Sarah Meno, Justin Bahl, Malania M. Wilson, John Barnes, and Elizabeth Neuhaus

Viral Deep Sequencing Needs an Adaptive Approach: IRMA, the Iterative Refinement Meta-assembler

BMC Genomics 2016;17:801

LABORATORY SCIENCE

Sabine M. G. van der Sanden, Weilin Wu, Naomi Dybdahl-Sissoko, William C. Weldon, Paula Brooks, Jason O'Donnell, Les P. Jones, Cedric Brown, S. Mark Tompkins, M. Steven Oberste, Jon Karpilow, and Ralph A. Tripp

Engineering Enhanced Vaccine Cell Lines to Eradicate Vaccine-preventable Diseases: The Polio End Game

Journal of Virology 2016;90(4):1694–1704

PREVENTION AND CONTROL

Philip J. Peters, Pamela Pontones, Karen W. Hoover, Monita R. Patel, Romeo R. Galang, Jessica Shields, Sara J. Blosser, Michael W. Spiller, Brittany Combs, William M. Switzer, Caitlin Conrad, Jessica Gentry, Yury Khudyakov, Dorothy Waterhouse, S. Michele Owen, Erika Chapman, Jeremy C. Roseberry, Veronica McCants, Paul J. Weidle, Dita Broz, Taraz Samandari, Jonathan Mermin, Jennifer Walthall, John T. Brooks, and Joan M. Duwve, for the Indiana HIV Outbreak Investigation Team

HIV Infection Linked to Injection Use of Oxymorphone in Indiana, 2014–2015

The New England Journal of Medicine 2016;375(3):229–2394

LIFETIME SCIENTIFIC ACHIEVEMENT

Patrick J. Lammie, PhD

Dr. Lammie was recognized for his wide-ranging research and work to control and eliminate neglected parasitic diseases, particularly lymphatic filiariasis.

2016

ASSESSMENT

Alexandra M. Oster, Joel O. Wertheim, Angela L. Hernandez, Marie Cheryl Bañez Ocfemia, Neeraja Saduvala, and H. Irene Hall

Using Molecular HIV Surveillance Data to Understand Transmission Between Subpopulations in the United States

Journal of Acquired Immune Deficiency Syndromes 2015;70:444–451

DATA METHODS AND STUDY DESIGN

Jacek Skarbinski, Eli Rosenberg, Gabriela Paz-Bailey, H. Irene Hall, Charles E. Rose, Abigail H. Viall, Jennifer L. Fagan, Amy Lansky, Jonathan H. Mermin

Human Immunodeficiency Virus Transmission at Each Step of the Care Continuum in the United States

JAMA Internal Medicine 2015;175(4):588–596

LABORATORY SCIENCE

David S. Campo, Guo-Liang Xia, Zoya Dimitrova, Yulin Lin, Joseph C. Forbi, Lilia Ganova-Raeva, Lili Punkova, Sumathi Ramachandran, Hong Thai, Pavel Skums, Seth Sims, Inna Rytsareva, Gilberto Vaughan, Ha-Jung Roh, Michael A. Purdy, Amanda Sue, and Yury Khudyakovs

Accurate Genetic Detection of Hepatitis C Virus Transmissions in Outbreak Settings

The Journal of Infectious Diseases 2015;213(6):957–965

PREVENTION AND CONTROL

Concepción F. Estívariz, Abhijeet Anand, Howard E. Gary Jr., Mahmudur Rahman, Jannatul Islam, Tajul I. Bari, Steven G.F. Wassilak, Susan Y. Chu, William C. Weldon, Mark A. Pallansch, James D. Heffelfinger, Stephen P. Luby, and Khalequ Zaman

Immunogenicity of Three Doses of Bivalent, Trivalent, or Type 1 Monovalent Oral Poliovirus Vaccines with a 2-Week Interval Between Doses in Bangladesh: An Open-label, Non-inferiority, Randomised, Controlled Trial

The Lancet Infectious Diseases 2015;15:898–904

LIFETIME SCIENTIFIC ACHIEVEMENT

Rear Admiral Kenneth G. Castro, MD

Dr. Castro was recognized for his leadership, expertise, and pioneering body of scientific work in HIV/AIDS and tuberculosis.

2015

ASSESSMENT

Shelley S. Magill, Jonathan R. Edwards, Wendy Bamberg, Zintars G. Beldavs, Ghinwa Dumyati, Marion A. Kainer, Ruth Lynfield, Meghan Maloney, Laura McAllister-Hollod, Joelle Nadle, Susan M. Ray, Deborah L. Thompson, Lucy E. Wilson, and Scott K. Fridkin, for the Emerging Infections Program Healthcare-Associated Infections and Antimicrobial Use Prevalence Survey Team

Multistate Point-prevalence Survey of Health Care-associated Infections

The New England Journal of Medicine 2014;370(13):1198–1208

DATA METHODS AND STUDY DESIGN

Krista S. Crider, Owen Devine, Ling Hao, Nicole F. Dowling, Song Li, Anne M. Molloy, Zhu Li, Jianghui Zhu, and Robert J. Berry

Population Red Blood Cell Folate Concentrations for Prevention of Neural Tube Defects: Bayesian Model

The BMJ (clinical research edition) 2014;349:g4554

LABORATORY SCIENCE

Hua Yang, Jessie C. Chang, Zhu Guo, Paul J. Carney, David A. Shore, Ruben O. Donis, Nancy J. Cox, Julie M. Villanueva, Alexander I. Klimov, and James Stevens

Structural Stability of Influenza A(H1N1)pdm09 Virus Hemagglutinins

Journal of Virology 2014;88(9):4828–4838

PREVENTION AND CONTROL

The RTS,S Clinical Trials Partnership

Efficacy and Safety of the RTS,S/AS01 Malaria Vaccine During 18 Months After Vaccination: A Phase 3 Randomized, Controlled Trial in Children and Young Infants at 11 African Sites

PLOS Medicine 2014;11(7):e1001685

LIFETIME SCIENTIFIC ACHIEVEMENT

Patricia M. Griffin, MD

Dr. Griffin was recognized for her expertise in foodborne and enteric infections and her contributions to the science of food safety.

2014

ASSESSMENT

Nadira K. Sultana, Samir K. Saha, Hassan M. Al-Emran, Joyanta K. Modak, M. A. Yushuf Sharker, Shams El-Arifeen, Adam L. Cohen, Abdullah H. Baqui, and Stephen P. Luby

Impact of Introduction of the *Haemophilus Influenzae* Type b Conjugate Vaccine into Childhood Immunization on Meningitis in Bangladeshi Infants

JAMA 2013;315(17):1864–1873

DATA METHODS AND STUDY DESIGN

Matthew W. Wheeler and A. John Bailer

An Empirical Comparison of Low-dose Extra polation from Points of Departure (PoD) Compared to Extrapolations Based upon Methods that Account for Model Uncertainty

Regulatory Toxicology and Pharmacology 2013;67:75–82

LABORATORY SCIENCE

James M. Smith, Rachna Rastogi, Ryan S. Teller, Priya Srinivasan, Pedro M. M. Mesquita, Umadevi Nagaraja, Janet M. McNicholl, R. Michael Hendry, Chuong T. Dinh, Amy Martin, Betsy C. Herold, and Patrick F. Kiser

Intravaginal Ring Eluting Tenofovir Disoproxil Fumarate Completely Protects Macaques from Multiple Vaginal Simian-HIV Challenges

Proceedings of the National Academy of Sciences of the United States of America 2013;110(40):16145–16150

PREVENTION AND CONTROL

Tim McAfee, Kevin C. Davis, Robert L. Alexander Jr., Terry F. Pechacek, and Rebecca Bunnell

Effect of the First Federally Funded US Antismoking National Media Campaign

The Lancet 2013;382(9909):2003–2011

LIFETIME SCIENTIFIC ACHIEVEMENT

Nancy J. Cox, PhD

Dr. Cox was recognized for her global leadership, expertise, mentorship, and scientific innovation in the epidemiology of influenza viruses and immunization.

2013

ASSESSMENT

Rachel M. Smith, Melissa K. Schaefer, Marion A. Kainer, Matthew Wise, Jennie Finks, Joan Duwve, Elizabeth Fontaine, Alvina Chu, Barbara Carothers, Amy Reilly, Jay Fiedler, Andrew D. Wiese, Christine Feaster, Lex Gibson, Stephanie Griese, Anne Purfield, Angela A. Cleveland, Kaitlin Benedict, Julie R. Harris, Mary E. Brandt, Dianna Blau, John Jernigan, J. Todd Weber, and Benjamin J. Park, for the Multistate Fungal Infection Outbreak Response Team

Fungal Infections Associated with Contaminated Methylprednisolone Injections—Preliminary Report

The New England Journal of Medicine 2012; doi: 10.1056/NEJMoa1213978

DATA METHODS AND STUDY DESIGN

Joseph Y. Abrams, John R. Copeland, Robert V. Tauxe, Kashmira A. Date, Ermias D. Belay, Rajal K. Mody, and Eric D. Mintz

Real-Time Modeling Used for Outbreak Management During a Cholera Epidemic, Haiti, 2010–2011

Epidemiology and Infection 2012; doi: 10.1017/S0950268812001793

LABORATORY SCIENCE

Yen T. Duong, Maofeng Qiu, Anindya K. De, Keisha Jackson, Trudy Dobbs, Andrea A. Kim, John N. Nkengasong, and Bharat S. Parekh

Detection of Recent HIV-1 Infection Using a New Infection Limiting-Antigen Avidity Assay: Potential for HIV-1 Incidence Estimates and Avidity Maturation Studies

PLOS ONE 2012;7(3):e33328

PREVENTION AND CONTROL

Yan T. Novak, Jean Ludovic Kambou, Fabien V. K. Diomandé, Tiga F. Tarbangdo, Rasmata Ouédraogo-Traoré, Lassana Sangaré, Clement Lingani, Stacey W Martin, Cynthia Hatcher, Leonard W. Mayer, F. Marc LaForce, Fenella Avokey, Mamoudou H. Djingarey, Nancy E. Messonnier, Sylvestre R. Tiendrébéogo, and Thomas A. Clark

Serogroup A Meningococcal Conjugate Vaccination in Burkina Faso: Analysis of National Surveillance Data

The Lancet Infectious Diseases 2012;12(1):757–764

LIFETIME SCIENTIFIC ACHIEVEMENT

Larry J. Anderson, MD

Dr. Anderson was recognized for his innovative research on respiratory syncytial virus and its disease burden in the United States.

2012

ASSESSMENT

Concepción F. Estívariz, Hamid Jafari, Roland W. Sutter, T. Jacob John, Vibhor Jain, Ashutosh Agarwal, Harish Verma, Mark A. Pallansch, Ajit P. Singh, Sherine Guirguis, Jitendra Awale, Anthony Burton, Sunil Bahl, Arani Chatterjee, and R. Bruce Aylward

Immunogenicity of Supplemental Doses of Poliovirus Vaccine for Children Aged 6–9 Months in Moradabad, India: A Community-based Randomized Controlled Trial

The Lancet Infectious Diseases 2012;12(2):128–135 (published online 2011)

DATA METHODS AND STUDY DESIGN

Alula Hadgu, Nandini Dendukuri, and Liangliang Wang

Evaluation of Screening Tests for Detecting *Chlamydia trachomatis* Bias Associated with the Patient-infected-status Algorithm Epidemiology

Epidemiology 2012;23(1):72–82 (published online 2011)

LABORATORY SCIENCE

Brian H. Bird, Louis H. Maartens, Shelley Campbell, Baltus J. Erasmus, Bobbie R. Erickson, Kimberly A. Dodd, Christina F. Spiropoulou, Deborah Cannon, Clifton P. Drew, Barbara Knust, Anita K. McElroy, Marina L. Khristova, César G. Albariño, and Stuart T. Nichol

Rift Valley Fever Virus Vaccine Lacking the NSs and NSm Genes Is Safe, Nonteratogenic, and Confers Protection from Virema, Pyrexia, and Abortion

Journal of Virology 2011;85(24):12901–1290949

PREVENTION AND CONTROL

Timothy R. Sterling, M. Elsa Villarino, Andrey S. Borisov, Nong Shang, Fred Gordin, Erin Bliven-Sizemore, Judith Hackman, Carol Dukes Hamilton, Dick Menzies, Amy Kerrigan, Stephen E. Weis, Marc Weiner, Diane Wing, Marcus B. Conde, Lorna Bozeman, C. Robert Horsburgh, and Richard E. Chaisson, for the TB Trials Consortium PREVENT TB Study Team

Three Months of Rifapentine and Isoniazid for Latent Tuberculosis Infection

The New England Journal of Medicine 2011;365(23):2155–2166

LIFETIME SCIENTIFIC ACHIEVEMENT

Henry Falk, MD, MPH

Dr. Falk was recognized for his expertise and global leadership in environmental health science and public health policy and practice.

2011

ASSESSMENT AND EPIDEMIOLOGY

Stacy M. Holzbauer, Aaron S. DeVries, James J. Sejvar, Christine H. Lees, Jennifer Adjemian, Jennifer H. McQuiston, Carlota Medus, Catherine A. Lexau, Julie R. Harris, Sergio E. Recuenco, Ermias D. Belay, James F. Howell, Bryan F. Buss, Mady Hornig, John D. Gibbins, Scott E. Brueck, Kirk E. Smith, Richard N. Danila, W. Ian Lipkin, Daniel H. Lachance, P. James B. Dyck, and Ruth Lynfield

Abattoir Workers Exposed to Porcine Brain

PLOS One 2010;5(3):e9782

LABORATORY AND METHODS

Robert D. Gilmore, Jr., Rebekah R. Howison, Gabrielle Dietrich, Toni G. Patton, Dawn R. Clifton, and James A. Carroll

The bba64 Gene of *Borrelia burgdorferi*, the Lyme Disease Agent, Is Critical for Mammalian Infection via Tick Bite Transmission

The Proceedings of the National Academy of Sciences of the United States of America 2010;107(16):7515–7520

PREVENTION AND CONTROL

Charles S. Chasela, Michael G. Hudgens, Denise J. Jamieson, Dumbani Kayira, Mina C. Hosseinipour, Athena P. Kourtis, Francis Martinson, Gerald Tegha, Rodney J. Knight, Yusuf I. Ahmed, Deborah D. Kamwendo, Irving F. Hoffman, Sascha R. Ellington, Zebrone Kacheche, Alice Soko, Jeffrey B. Wiener, Susan A. Fiscus, Peter Kazembe, Innocent A. Mofolo, Maggie Chigwenembe, Dorothy S. Sichali, and Charles M. van der Horst, for the Breastfeeding, Antiretroviral, and Nutrition Study Group

Maternal or Infant Antiretroviral Drugs to Reduce HIV-1 Transmission

The New England Journal of Medicine 2010;362(24):2271–2281

LIFETIME SCIENTIFIC ACHIEVEMENT

Kathleen Kreiss, MD

Dr. Kreiss was recognized as a world-renowned expert in occupational respiratory disease. She has improved workplace safety by encouraging the use of safer materials and better work practices and controls.

2010

ASSESSMENT AND EPIDEMIOLOGY

Fatimah S. Dawood, Seema Jain, Lyn Finelli, Michael W. Shaw, Stephen Lindstrom, Rebecca J. Garten, Larisa V. Gubareva, Xiyan Xu, Carolyn B. Bridges, and Timothy M. Uyeki

Emergence of a Novel Swine-origin Influenza A (H1N1) Virus in Humans

The New England Journal of Medicine 2009;360:2605–2615

LABORATORY AND METHODS

Joseph U. Igietseme, Qing He, Kahaliah Joseph, Francis O. Eko, Deborah Lyn, Godwin Ananaba, Angela Campbell, Claudiu Bandea, and Carolyn M. Black

Role of T Lymphocytes in the Pathogenesis of Chlamydia Disease

The Journal of Infectious Diseases 2009;200:926–934 51

PREVENTION AND CONTROL

Sandra L. Decker

Changes in Medicaid Physician Fees and Patterns of Ambulatory Care

Inquiry 2009;46(3)291–304

Manish Patel, Cristina Pedreira, Lucia Helena De Oliveira, Jacqueline Tate, Maribel Orozco, Juan Mercado, Alcides Gonzalez, Omar Alespin, Juan José Amador, Jazmina Umaña, Angel Balmaseda, Maria Celina Perez, Jon Gentsch, Tara Kerin, Jennifer Hull, Slavica Mijatovic, Jon Andrus, and Umesh Parashar

Association Between Pentavalent Rotavirus Vaccine and Severe Rotavirus Diarrhea Among Children in Nicaragua

JAMA 2009;301(21):2243–2251

LIFETIME SCIENTIFIC ACHIEVEMENT

Polly Marchbanks, PhD, MSN

Dr. Marchbanks was recognized for her global leadership and research, particularly in the area of contraception.

2009

ASSESSMENT AND EPIDEMIOLOGY

H. Irene Hall, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa M. Lee, John Karon, Ron Brookmeyer, Edward H. Kaplan, Matthew T. McKenna, and Robert S. Janssen, for the HIV Incidence Surveillance Group

Estimation of HIV Incidence in the United States

JAMA 2008;300:520–529

LABORATORY AND METHODS

Tracie L. Williams, Leah Luna, Zhu Guo, Nancy J. Cox, James L. Pirkle, Ruben O. Donis, and John R. Barr

Quantification of Influenza Virus Hemagglutinins in Complex Mixtures Using Isotope Dilution Tandem Mass Spectrometry

Vaccine 2008;26:2510–2520

PREVENTION AND CONTROL

Larissa Roux, Michael Pratt, Tammy O. Tengs, Michelle M. Yore, Teri L. Yanagawa, Jill Van Den Bos, Candace Rutt, Ross C. Brownson, Kenneth E. Powell, Gregory Heath, Harold W. Kohl III, Steven Teutsch, John Cawley, I-Min Lee, Linda West, and David M. Buchner

Cost Effectiveness of Community-based Physical Activity Interventions

American Journal of Preventive Medicine 2008;35:578–588

LIFETIME SCIENTIFIC ACHIEVEMENT

Stephen B. Thacker, MD, MSc

Dr. Thacker was recognized for his leadership and his work in fostering scientific communication and training of future leaders in public health. He has overseen the Epidemic Intelligence Service program since 1989, and under his direction, the first CDC plan for surveillance was completed in 1985.

2008

ASSESSMENT AND EPIDEMIOLOGY

Earl S. Ford, Umed A. Ajani, Janet B. Croft, Julia A. Critchley, Darwin R. Labarthe, Thomas E. Kottke, Wayne H. Giles, and Simon Capewell

Explaining the Decrease in US Deaths from Coronary Disease, 1980–2000

The New England Journal of Medicine 2007;356:2388–2398

LABORATORY AND METHODS

Terrence M. Tumpey, Christopher F. Basler, Patricia V. Aguilar, Hui Zeng, Alicia Solórzano, David E. Swayne, Nancy J. Cox, Jacqueline M. Katz, Jeffery K. Taubenberger, Peter Palese, and Adolfo García-Sastre

A Two-amino Acid Change in the Hemagglutinin of the 1918 Influenza Virus Abolishes Transmission

Science 2007;315:655–659

PREVENTION AND CONTROL

R. Louise Floyd, Mark Sobell, Mary M. Velasquez, Karen Ingersoll, Mary Nettleman, Linda Sobell, Patricia Dolan Mullen, Sherry Ceperich, Kirk von Sternberg, Burt Bolton, Bradley Skarpness, and Jyothi Nagaraja, for the Project CHOICES Efficacy Study Group

Preventing Alcohol-exposed Pregnancies: A Randomized Controlled Trial

American Journal of Preventive Medicine 2007;32:1–10

LIFETIME SCIENTIFIC ACHIEVEMENT

Vincent Castranova, PhD

Dr. Castranova was recognized for his leadership in laboratory-based occupational health research. His contributions to the understanding of the biology of lung cells have been translated into the practical study of lung diseases and development of prevention programs.

2007

ASSESSMENT AND EPIDEMIOLOGY

Wolfgang Hladik, Shelia C. Dollard, Jonathan Mermin, Ashley L. Fowlkes, Robert Downing, Minal M. Amin, Flora Banage, Esau Nzaro, Peter Kataaha, Timothy J. Dondero, Philip E. Pellett, and Eve M. Lackritz

Transmission of Human Herpesvirus 8 by Blood Transfusion

The New England Journal of Medicine 2006;355:1331–1338

LABORATORY AND METHODS

Mary A. Hoelscher, Sanjay Garg, Dinesh S. Bangari, Jessica A. Belser, Xiuhua Lu, Iain Stephenson, Rick A. Bright, Jacqueline M. Katz, Suresh K. Mittal, and Suryaprakash Sambhara

Development of Adenoviral-vector-based Pandemic Influenza Vaccine against Antigenically Distinct Human H5N1 Strains in Mice

The Lancet 2006;368:1495–1502

PREVENTION AND CONTROL

Cynthia G. Whitney, Tamar Pilishvili, Monica M. Farley, William Schaffner, Allen S. Craig, Ruth Lynfield, Ann-Christine Nyquist, Kenneth A. Gershman, Marietta Vazquez, Nancy M. Bennett, Arthur Reingold, Ann Thomas, Mary P. Glode, Elizabeth R. Zell, James H. Jorgensen, Bernard Beall, and Anne Schuchat

Effectiveness of Seven-valent Pneumococcal Conjugate Vaccine Against Invasive Pneumococcal Disease: A Matched Case-control Study

The Lancet 2006;368:1495–1502

LIFETIME SCIENTIFIC ACHIEVEMENT

Roger I. Glass, MD, PhD, MPH

Dr. Glass was recognized for his leadership and accomplishments in viral gastroenteritis. His work led to the recognition of rotavirus as a problem in the United States and to development of a rotavirus vaccine to be used worldwide.

2006

ASSESSMENT AND EPIDEMIOLOGY

Lee Warner, Maurizio Macaluso, Harland D. Austin, David K. Kleinbaum, Lynn Artz, Michael E. Fleenor, Ilene Brill, Daniel R. Newman, and Edward W. Hook III

Application of the Case-crossover Design to Reduce Unmeasured Confounding in Studies of Condom Effectiveness

American Journal of Epidemiology 2005;161:765–773

Katherine M. Flegal, Barry I. Graubard, David F. Williamson, and Mitchell H. Gai

Excess Deaths Associated With Underweight, Overweight, and Obesity

JAMA 20 05;293:1861–1867

LABORATORY AND METHODS

Terrence M. Tumpey, Christopher F. Basler, Patricia V. Aguilar, Hui Zeng, Alicia Solórzano, David E. Swayne, Nancy J. Cox, Jacqueline M. Katz, Jeffery K. Taubenberger, Peter Palese, and Adolfo García-Sastre

Characterization of the Reconstructed 1918 Spanish Influenza Pandemic Virus

Science 2005;310(5745):77–80

PREVENTION AND CONTROL

Stephen P. Luby, Mubina Agboatwalla, Daniel R. Feikin, John Painter, Ward Billhimer, Arshad Altaf, and Robert M. Hoekstra

Effect of Handwashing on Child Health: A Randomised Controlled Trial

The Lancet 2005;366:225–233

LIFETIME SCIENTIFIC ACHIEVEMENT

Robert V. Tauxe, MD, MPH

Dr. Tauxe was recognized for his leadership in the prevention and control of foodborne diseases in the United States and internationally. His work and that of his colleagues have resulted in dramatic changes in foodborne disease surveillance, outbreak detection, practices, and policies.

2005

ASSESSMENT AND EPIDEMIOLOGY

Barbara Lopes Cardozo, Oleg O. Bilukha, Carol A. Gotway Crawford, Irshad Shaikh, Mitchell I. Wolfe, Michael L. Gerber, and Mark Anderson

Mental Health, Social Functioning, and Disability in Postwar Afghanistan

JAMA 2004;292:575–584

LABORATORY AND METHODS

Justin M. Hettick, Michael L. Kashon, Janet P. Simpson, Paul D. Siegel, Gerald H. Mazurek, and David N. Weissman

Proteomic Profiling of Intact Mycobacteria by Matrix-assisted Laser Desorption/ Ionization Time-of-flight Mass Spectrometry

Analytical Chemistry 2004;76:5769–5776

PREVENTION AND CONTROL

Marc Bulterys, Denise J. Jamieson, Mary Jo O'Sullivan, Mardge H. Cohen, Robert Maupin, Steven Nesheim, Mayris P. Webber, Russell Van Dyke, Jeffrey Wiener, and Bernard M. Branson, for the Mother-Infant Rapid Intervention at Delivery (MIRIAD) Study Group

Rapid HIV-1 Testing During Labor: A Multicenter Study

JAMA 2004;292:219–223

OUTSTANDING SCIENTIFIC CONTRIBUTION TO PUBLIC HEALTH

William H. Hannon, Barbara W. Adams, and Robert F. Vogt

National Center for Environmental Health/Agency for Toxic Substances and Disease Registry

Newborn Screening Quality Assurance Program

LIFETIME SCIENTIFIC ACHIEVEMENT

James M. Hughes, MD

Dr. Hughes was recognized for his expertise in infectious diseases and bioterrorism and response. His leadership in addressing emerging and reemerging global threats has brought global prominence to CDC and improved public health infrastructures nationwide.

2004

ASSESSMENT AND EPIDEMIOLOGY

Jennita Reefhuis, Margaret A. Honein, Cynthia G. Whitney, Shadi Chamany, Eric A. Mann, Krista R. Biernath, Karen Broder, Susan Manning, Swati Avashia, Marcia Victor, Pamela Costa, Owen Devine, Ann Graham, and Coleen Boyle

Risk of Bacterial Meningitis in Children with Cochlear Implants

The New England Journal of Medicine 2003;349:435–445

LABORATORY AND METHODS

Thomas G. Ksiazek, Dean Erdman, Cynthia S. Goldsmith, Sherif R. Zaki, Teresa Peret, Shannon Emery, Suxiang Tong, Carlo Urbani, James A. Comer, Wilina Lim, Pierre E. Rollin, Scott F. Dowell, Ai-Ee Ling, Charles D. Humphrey, Wun-Ju Shieh, Jeannette Guarner, Christopher D. Paddock, Paul Rota, Barry Fields, Joseph DeRisi, Jyh-Yuan Yang, Nancy Cox, James M. Hughes, James W. LeDuc, William J. Bellini, Larry J. Anderson, and the SARS Working Group

A Novel Coronavirus Associated with Severe Acute Respiratory Syndrome

The New England Journal of Medicine 2003;348:1953–1966

PREVENTION AND CONTROL

Cynthia G. Whitney, Monica M. Farley, James Hadler, Lee H. Harrison, Nancy M. Bennett, Ruth Lynfield, Arthur Reingold, Paul R. Cieslak, Tamara Pilishvili, Delois Jackson, Richard R. Facklam, James H. Jorgensen, and Anne Schuchat, for the Active Bacterial Core Surveillance of the Emerging Infections Program Network

Decline in Invasive Pneumococcal Disease After the Introduction of Protein-polysaccharide Conjugate Vaccine

The New England Journal of Medicine 2003;348:1737–1746

LIFETIME SCIENTIFIC ACHIEVEMENT

Harold W. Jaffe, MD

Dr. Jaffe was recognized as a national and international leader in the disease investigation of HIV/AIDS, which has increased scientific knowledge about HIV/AIDS and improved national and international approaches to prevention and control.

Walter A. Orenstein, MD

Dr. Orenstein was recognized for his leadership in reducing the occurrence of vaccine-preventable diseases in children. His work has been critical to the development of national vaccine policy and global immunization strategies.

2003

ASSESSMENT AND EPIDEMIOLOGY

Polly A. Marchbanks, Jill A. McDonald, Hoyt G. Wilson, Suzanne G. Folger, Michele G. Mandel, Janet R. Daling, Leslie Bernstein, Kathleen E. Malone, Giske Ursin, Brian L. Strom, Sandra A. Norman, Linda K. Weiss, Phyllis Wingo, Michael S. Simon, Ronald T. Burkman, Jesse A. Berlin, and Robert Spirtas

Oral Contraceptives and the Risk of Breast Cancer

The New England Journal of Medicine 2002;346:2025–2032

LABORATORY AND METHODS

Bharat S. Parekh, M. Susan Kennedy, Trudy Dobbs, Chou-Pong Pau, Robert Byers, Timothy Green, Dale J. Hu, Suphak Vanichseni, Nancy L. Young, Kachit Choopanya, Timothy D. Mastro, and J. Steven McDougal

Quantitative Detection of Increasing HIV Type 1 Antibodies After Seroconversion: A Simple Assay for Detecting Recent HIV Infection and Estimating Incidence

AIDS Research and Human Retroviruses 2002;18:295–307

PREVENTION AND CONTROL

Robert E. Quick, Akiko C. Kimura, Angelica Thevos, Mathias Tembo, Isidore Shamputa, Lori Hutwagner, and Eric Mintz

Diarrhea Prevention Through Household-level Water Disinfection and Safe Storage in Zambia

The American Journal of Tropical Medicine and Hygiene 2002;66:584–589

OUTSTANDING SCIENTIFIC CONTRIBUTION TO PUBLIC HEALTH

Barbara Lopes Cardozo, Bradley A. Woodruff, Muireann Brennan, and Paul B. Spiegel

National Center for Environmental Health International Emergency and Refugee Health Branch

LIFETIME SCIENTIFIC ACHIEVEMENT

William R. Jarvis, MD

Dr. Jarvis was recognized as a leader in the study of nosocomial infections and other threats to the safety of patients and healthcare workers. His research has led to interventions to reduce these risks and to the development of prevention guidelines.

2002

ASSESSMENT AND EPIDEMIOLOGY

Trudy V. Murphy, Paul M. Gargiulio, Mehran S. Massoudi, David B. Nelson, Aisha O. Jumaan, Catherine A. Okoro, Lynn R. Zanardi, Sabeena Setia, Elizabeth Fair, Charles W. LeBaron, Melinda Wharton, John R. Livengood, and Benjamin Schwartz, for the Rotavirus Intussusception Inspection Team

Intussusception Among Infants Given an Oral Rotavirus Vaccine

The New England Journal of Medicine 2001;344:564–572

LABORATORY AND METHODS

Brent S. Davis, Gwong-Jen J. Chang, Bruce Cropp, John T. Roehrig, Denise A. Martin, Carl J. Mitchell, Richard Bowen, and Michel L. Bunning

West Nile Virus Recombinant DNA Vaccine Protects Mouse and Horse from Virus Challenge and Expresses in vitro a Noninfectious Recombinant Antigen that Can Be Used in Enzyme-linked Immunosorbent Assays

Journal of Virology 2001;75:4040–4047

PREVENTION AND CONTROL

Belinda E. Ostrowsky, William E. Trick, Annette H. Sohn, Stephen B. Quirk, Stacey Holt, Loretta A. Carson, Bertha C. Hill, Matthew J. Arduino, Matthew J. Kuehnert, and William R. Jarvis

Control of Vancomycin-resistant Enterococcus in Health Care Facilities in a Region

The New England Journal of Medicine 2001;344:1427–1433

OUTSTANDING SCIENTIFIC CONTRIBUTION TO PUBLIC HEALTH

Ronald M. Davis, Gary A. Giovino, Michael D. Erikson, and the Office on Smoking and Health

National Center for Chronic Disease Prevention and Health Promotion

LIFETIME SCIENTIFIC ACHIEVEMENT

Gerald R. Cooper, MD, PhD

Dr. Cooper was recognized for his leadership in improving laboratory measures of lipids that led to the establishment of the CDC Lipid Standardization Program.

2001

ASSESSMENT AND EPIDEMIOLOGY

Paul B. Spiegel and Peter Salama

War and Mortality in Kosovo, 1998–99: An Epidemiological Testimony

The Lancet 2000;335:2204–2209

LABORATORY AND METHODS

K.B. Chua, William J. Bellini, Paul A. Rota, Brian H. Harcourt, Azaibi Tamin, S.K. Lam, Thomas G. Ksiazek, Pierre E. Rollin, Sherif R. Zaki, Wun-Ju Shieh, Cynthia S. Goldsmith, Duane J. Gubler, John T. Roehrig, B. Eaton, A.R. Gould, Jim Olson, H. Field, P. Daniels, A.E. Ling, Clarence J. Peters, Larry J. Anderson, and Brian W.J. Mahy

Nipah Virus: A Recently Emergent Deadly Paramyxovirus

Science 2000;288:1432–1435

PREVENTION AND CONTROL

Carolyn Buxton Bridges, William W. Thompson, Martin I. Meltzer, Gordon R. Reeve, Walter J. Talamonti, Nancy J. Cox, Heather A. Lilac, Henrietta Hall, Alexander Klimov, and Keiji Fukuda

Effectiveness and Cost–benefit of Influenza Vaccination of Healthy Working Adults: A Randomized Controlled Trial

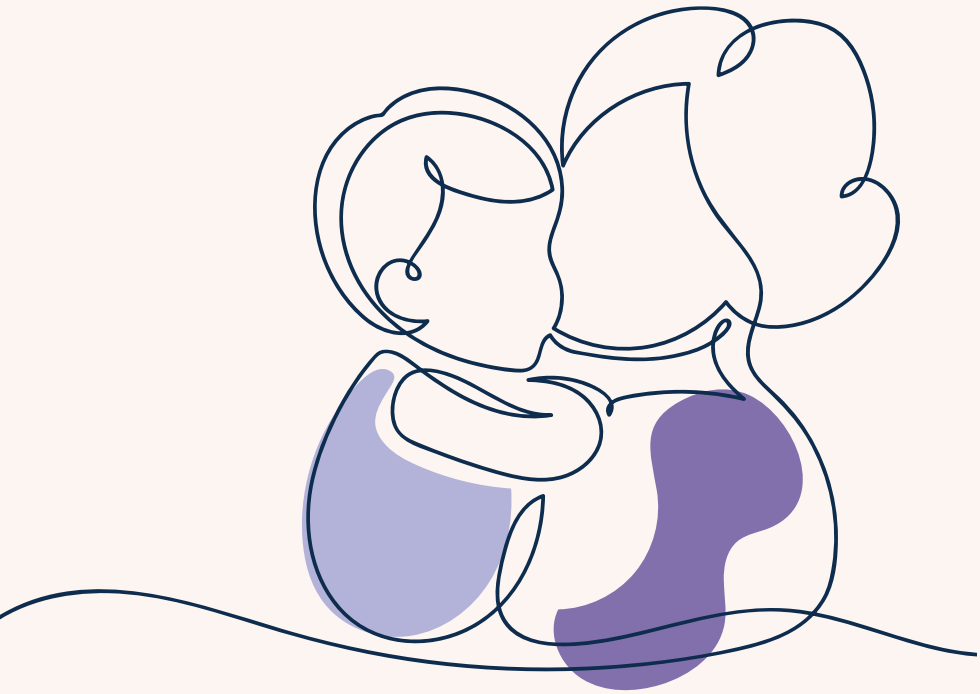
JAMA 2000;284:1655–1662

OUTSTANDING SCIENTIFIC CONTRIBUTION TO PUBLIC HEALTH

National Center for Chronic Disease Prevention and Health Promotion
Behavioral Risk Factor Surveillance System

LIFETIME SCIENTIFIC ACHIEVEMENT

Joseph Edward McDade, PhD
Dr. McDade was the first to identify the bacterium Legionella pneumophila as the cause of the well-known outbreak of Legionnaires' disease. In the 1980s, he identified the cause of a previously unknown tickborne disease, ehrlichiosis.



2000

ASSESSMENT AND EPIDEMIOLOGY

Nathan Shaffer, Rutt Chuachoowong, Philip A. Mock, Chaiporn Bhadrakom, Wimol Siriwasin, Nancy L. Young, Tawee Chotpitayasunondh, Sanay Chearskul, Anuvant Roongpisuthipong, Pratharn Chinayon, John Karon, Timothy D. Mastro, and R.J. Simonds

Short-course Zidovudine for Perinatal HIV-1 Transmission in Bangkok, Thailand: A Randomised Controlled Trial

The Lancet 1999;353:773–780

1999

Robert S. Janssen, Glen A. Satten, Susan L. Stramer, Bhupat D. Rawal, Thomas R. O'Brien, Barbara J. Weiblen, Frederick M. Hecht, Noreen Jack, Farley R. Cleghorn, James O. Kahn, Margaret A. Chesney, and Michael P. Busch

New Testing Strategy to Detect Early HIV-1 Infection for Use in Incidence Estimates and for Clinical and Prevention Purposes

JAMA 1998;280:42–48

1998

Denise M. Cardo, David H. Culver, Carol A. Ciesielski, Pamela U. Srivastava, Ruthanne Marcus, Dominique Abiteboul, Julia Heptonstall, Giuseppe Ippolito, Florence Lot, Penny S. McKibben, and David M. Bell, for the Centers for Disease Control and Prevention Needlestick Surveillance Group

A Case-control Study of HIV Seroconversion in Health Care Workers after Percutaneous Exposure

The New England Journal of Medicine 1997;337:1485–1490

1997

Jennifer S. Rota, Janet L. Heath, Paul A. Rota, Gail E. King, María L. Celma, Juan Carabaña, Rafael Fernandez-Muñoz, David Brown, Li Jin, and William J. Bellini

Molecular Epidemiology of Measles Virus: Identification of Pathways of Transmission and Implications for Measles Elimination

The Journal of Infectious Diseases 1996;173:32–37

Diana E. Schendel, Cynthia J. Berg, Marshalyn Yeargin-Allsopp, Coleen A. Boyle, and Pierre Decoufle

Prenatal Magnesium Sulfate Exposure and the Risk for Cerebral Palsy or Mental Retardation Among Very Low-birth-weight Children Aged 3 to 5 Years

JAMA 1996;276:1805–1810

1996

Peter M. Strebel, Nicolae Ion-Nedelcu, Andrew L. Baughman, Roland W. Sutter, and Stephen L. Cochi

Intramuscular Injections Within 30 Days of Immunization with Oral Poliovirus Vaccine—A Risk Factor for Vaccine-associated Paralytic Poliomyelitis

The New England Journal of Medicine 1995;332:500–506

1995

Robert D. Brewer, Peter D. Morris, Thomas B. Cole, Stephanie Watkins, Michael J. Patetta, and Carol Popkin

The Risk of Dying in Alcohol-related Automobile Crashes Among Habitual Drunk Drivers

The New England Journal of Medicine 1994;331:513–517

1994

Michael E. St. Louis, Munkolenkole Kamenga, Christopher Brown, Ann Marie Nelson, Tarande Manzila, Veronique Batter, Frieda Behets, Uwa Kabagabo, Robert W. Ryder, Margaret Oxtoby, Thomas C. Quinn, and William L. Heyward

Risk for Perinatal HIV-1 Transmission According to Maternal Immunologic, Virologic, and Placental Factors

JAMA 1993;269:2853–2859

1993

Brian R. Edlin, Jerome I. Tokars, Michael H. Grieco, Jack T. Crawford, Julie Williams, Emelia M. Sordillo, Kenneth R. Ong, James O. Kilburn, Samuel W. Dooley, Kenneth G. Castro, William R. Jarvis, and Scott D. Holmberg

An Outbreak of Multidrug-resistant Tuberculosis Among Hospitalized Patients with the Acquired Immunodeficiency Syndrome

The New England Journal of Medicine 1992;326:1514–1521

1992

Marta Gwinn, Marguerite Pappaioanou, J. Richard George, W. Harry Hannon, Shari C. Wasser, Martha A. Redus, Rodney Hoff, George F. Grady, Anne Willoughby, Antonia C. Novello, Lyle R. Petersen, Timothy J. Dondero, and James W. Curran

Prevalence of HIV Infection in Childbearing Women in the United States

JAMA 1991;265:1704–1708

1991

Edward A. Belongia, Craig W. Hedberg, Gerald J. Gleich, Karen E. White, Arthur N. Mayeno, David A. Loegering, Sandra L. Dunnette, Phyllis L. Pirie, Kristine L. MacDonald, and Michael T. Osterholm

An Investigation of the Cause of the Eosinophilia-myalgia Syndrome Associated with Tryptophan Use

The New England Journal of Medicine 1990;323:357–365

1990

Patricia M. Griffin, Robert V. Tauxe, Stephen C. Redd, Nancy D. Puhr, Nancy Hargrett-Bean, and Paul A. Blake

Emergence of Highly Trimethoprim-sulfamethoxazole–resistant Shigella in a Native American Population: An Epidemiologic Study

American Journal of Epidemiology 1989;129:1042–1051

1989

Chin-Yih Ou, Shirley Kwok, Sheila W. Mitchell, David H. Mack, John J. Sninsky, John W. Krebs, Paul Feorino, Donna Warfield, and Gerald Schochetman

DNA Amplification for Direct Detection of HIV-1 in DNA of Peripheral Blood Mononuclear Cells

Science 1988;239:295–297

1988

Rebeca Rico-Hesse, Mark A. Pallansch, Baldev K. Nottay, and Olen M. Kew

Geographic Distribution of Wild Poliovirus Type 1 Genotypes

Virology 1987;160:311–322

1987

J. Steven McDougal, M. Susan Kennedy, Julie M. Sligh, Sheila P. Cort, Alison C. Mawle, and Janet K. A. Nicholson

Binding of HTLV–III/LAV to T4+ T Cells by a Complex of the 100K Viral Protein and the T4 Molecule

Science 1986(4736);231:382–385

1986

Arthur L. Reingold, Claire V. Broome, Allen W. Hightower, Gloria W. Ajello, Gail A. Bolan, Catherine Adamsbaum, Ellen E. Jones, Catherine Phillips, Hilaire Tiendrebeogo, and Adamou Yada

Age-specific Differences in Duration of Clinical Protection After Vaccination with Meningococcal Polysaccharide A Vaccine

The Lancet 1985;2:114–118

PREVIOUS KEYNOTE SPEAKERS

Following is a list of colleagues who have made keynote speeches at the Charles C. Shepard Science Awards ceremony since since the ceremony was first held in 1986.

2023

Adam Grant, PhD, MS
University of Pennsylvania, Wharton School of Business

Fireside Chat with CDC Director Mandy Cohen, "Unleashing Hidden Potential"

2022

Kathleen Hall Jamieson, PhD
University of Pennsylvania, Annenberg School of Communication

"Communicating Science for Action in 2022 and Beyond"

2021

Robert D. Bullard, PhD, MA
Texas Southern University Barbara Jordan-Mickey Leland School of Public Affairs

"Climate Change as a Public Health Threat: Why Equity Matters"

2020

Michelle Ann Williams, SM, ScD
Harvard University T.H. Chan School of Public Health

"Racism as a Public Health Crisis"

2019

Jon D. Duke, MD, MS
Georgia Tech College of Computing

"Unlocking Big Data and Analytics for Public Health"

2018

Roberta Ness, MD, MPH
The University of Texas

"Innovation and Creativity in Modern Public Health"

2017

John Cacioppo, PhD
University of Chicago Center for Cognitive & Social Neuroscience

"Loneliness: Public Health Implications and Potential Mechanisms"

2016

Zulfiqar A. Bhutta, PhD, MBBS
The Hospital for Sick Children

"Global Child Survival: Challenges and Opportunities"

2015

Anthony S. Fauci, MD
National Institute of Allergy and Infectious Diseases
"Advances to Public Health Implementation"

2014

John E. Wennberg, MD, MPH
The Dartmouth Institute for Health Policy and Clinical Practice
"Unwarranted Variation in Health Care"

2013

No Keynote Speech

2012

James S. Marks, MD, MPH
Robert Wood Johnson Foundation Health Group
"Making Science and Health Matter"

2011

Brian Greenwood, MD, CBE
London School of Hygiene & Tropical Medicine, University of London
"Vaccines for Global Health"

2010

John Holdren, PhD
White House Office of Science and Technology Policy
"Science and Technology Policy for Ensuring the Public's Health"

2009

Paul Krugman, PhD
Princeton University
Columnist, *The New York Times*
"Health and the Economic Future"

2008

Neal Nathanson, MD
University of Pennsylvania School of Medicine
"AIDS Vaccine at the Crossroads"

2007

Michael Marmot, PhD, MPH
Institute for Society and Health, University College, London
"Health in an Unequal World"

2006

Donald M. Berwick, MD, MPP
Institute for Healthcare Improvement
"The 100,000 Lives Campaign: Lessons from a National Mobilization"

2005

Harvey V. Fineberg, MD, PhD
National Academy of Medicine
"Science, Policy, and Public Trust"

2004

Shiriki Kumanyika, PhD, MPH
University of Pennsylvania School of Medicine
"Obesity, Health Disparities, and Prevention Paradigms: Hard Questions and Hard Choices"

2003

Jo Ivey Boufford, MD
New York University School of Medicine
"Assuring the Public's Health in the 21st Century: A Research Agenda"

2002

Marc L. Miringoff, PhD
Fordham Institute for Innovation in Social Policy
"The Social Determinants of Health"

2001

Jeffrey D. Sachs, PhD
Harvard University
"Reinvigorating the Fight Against Disease in the Developing World"

2000

Lynn R. Goldman, MD, MPH, MS
Johns Hopkins University Bloomberg School of Public Health
"Health of the World"

1999

Steven N. Blair, PED
The Cooper Institute
Columnist, *The New York Times*
"Physical Inactivity as a Public Health Problem"

1998

Frederick P. Rivara, MD, MPH
Harborview Injury Prevention and Research Center
"Injury Control—The Uses of Science for Prevention"

1997

David R. Cox, MD, PhD
Stanford University School of Medicine
"The Human Genome Project and Human Disease"

1996

Walter E. Massey, PhD
Morehouse College
"Science—The (Ever-Expanding) Endless Frontier"

1995

Nancy S. Wexler, PhD
Columbia University
"Uncongenial Genealogies: Prediction and Protection in the Public Interest"

1994

Thomas J. Coates, PhD
University of California at San Francisco
"HIV Prevention Programs in Research: What Have We Accomplished, and Where Do We Need to Go?"

1993

W. French Anderson, MD
University of Southern California School of Medicine
"The Scientific, Ethical, and Regulatory Issues of Gene Therapy"

1992

Barry R. Bloom, PhD
Howard Hughes Medical Institute
"Revisiting Mycobacteria"

1991

Lawrence K. Altman, MD
The New York Times
"Science and the Media"

1990

Purnell W. Choppin, MD
Howard Hughes Medical Institute
"The Role of a Private Medical Research Organization in Biomedical Research and Education"

1989

Joseph L. Goldstein, MD
University of Texas Health Sciences Center
"Lipoprotein Receptors: A Genetic Defense Against and Atherosclerosis"

1988

David Baltimore, PhD
Hospital Whitehead Institute
Massachusetts Institute of Technology
"Genetics and Modern Disease"

1987

Frank Press, PhD
National Academy of Sciences
"DNA in Washington"

1986

James O. Mason, MD
Centers for Disease Control
"CDC, Science, and the Future"

COMMITTEE MEMBERS

of the Charles C. Shepard Science Awards

EXECUTIVE COMMITTEE

Althea Grant-Lenzy, PhD
Tony Richardson MPH, MSCJ, MS
Elise Beltrami, MD, MPH
Adam Langer, DVM, MPH, DACVPM
Ryan Wiegand, PhD

FULL COMMITTEE

Chair: Elise Beltrami, MD, MPH
Co-Chair: Adam Langer, DVM, MPH, DACVPM
Umed Ajani, MBBS, MPH
Joanne Andreadis, PhD
Laura Colman, PhD, MPH
Cynthia Ferre, MA
Chinaro Kennedy, DrPH, MPH
Matthew Hogben, PhD
L. Clifford McDonald, MD
Melissa C. Mercado-Crespo, PhD, MSc, MA
Katina Pappas-DeLuca, PhD, MA
Krista Proia, MPH
Lauren Rossen, PhD, MS
Sharon Saydah, PhD, MHS
Laura Schieve, PhD
Statistician: Ryan Wiegand, PhD

ASSESSMENT COMMITTEE

Chair: Umed Ajani, MBBS, MPH
Aziza Arifkhanova, PhD, MPA, MS
Terrika Barham, PhD, MPH
Sherry Farr, PhD, MSPH
Cheryl Fryar, MSPH
Kim Gehle, MD, MPH
Elizabeth Masterson, PhD, CPH, COHC
Ann Powers, PhD
Sharon Saydah, PhD, MHS
Adam Vaughan, PhD, MPH, MS
Mark Wooster, PhD, MS
Jennifer Wright, DVM, MPH
Kun Zhang, PhD
Statistician: Maria Aslam, PhD, MPH

DATA METHODS AND STUDY DESIGN SUBCOMMITTEE

Chair: Dana Haberling, MSPH
Shailen Banerjee, PhD
Cynthia Davis, PhD
Chris Edens, PhD
Jason Hsia, PhD
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