

National Institutes of Health Update

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National Institutes of Health

March 2023



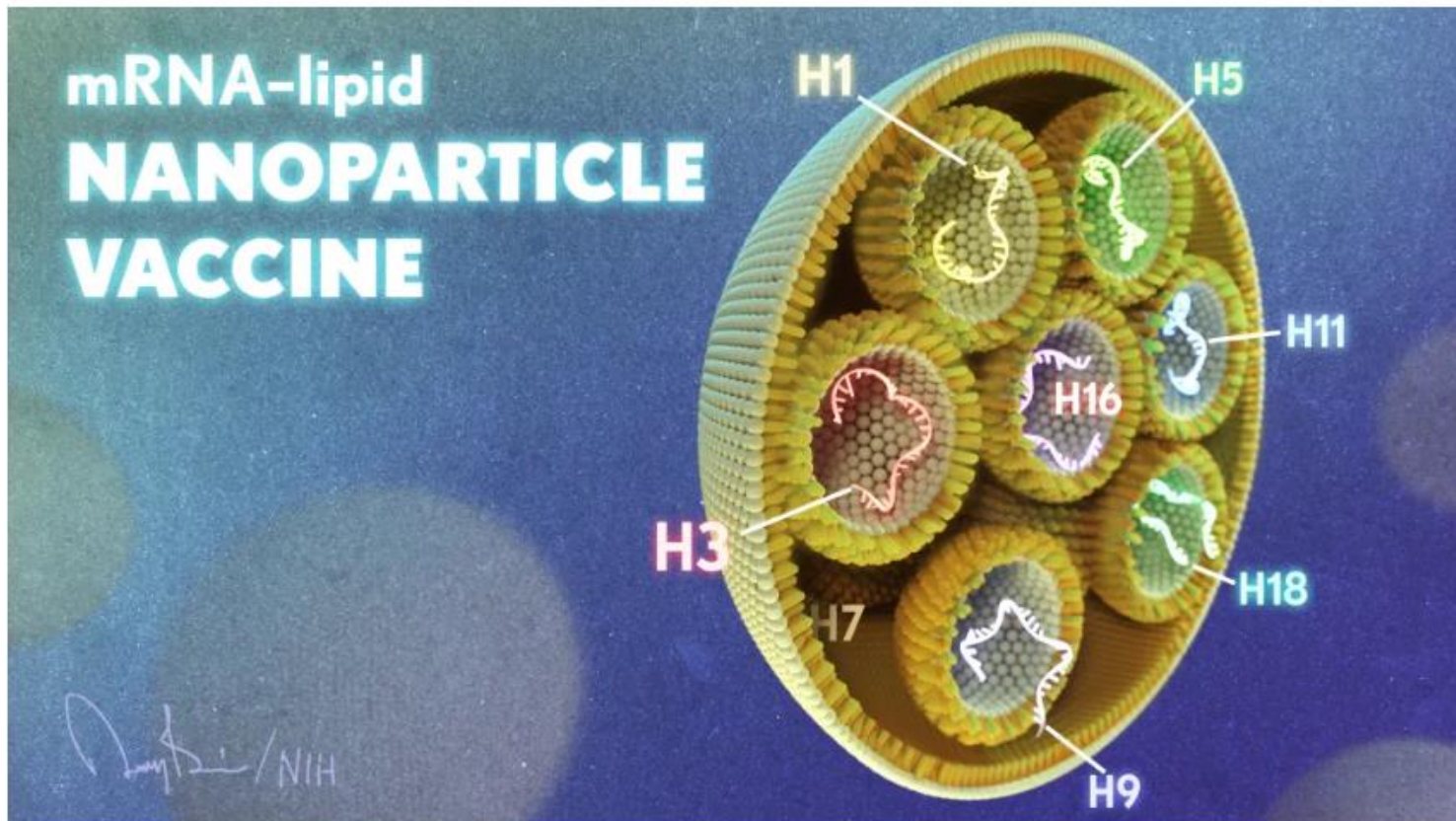
National Institute of
Allergy and
Infectious Diseases

Influenza Update

NIH Director's Blog

Experimental mRNA Vaccine May Protect Against All 20 Influenza Virus Subtypes

Posted on December 6th, 2022 by Lawrence Tabak, D.D.S., Ph.D.



A Multicenter, Controlled Human Infection Study of Influenza A(H1N1)pdm09 in Healthy Adults

Justin R Ortiz, David I Bernstein, Daniel F Hoft, Christopher W Woods, Micah T McClain, Sharon E Frey, Rebecca C Brady, Christopher Bryant, Ashley Wegel, Robert W Frenck, Jr, Emmanuel B Walter, Getahun Abate, Sarah R Williams, Robert L Atmar, Wendy A Keitel, Nadine Rouphael, Mathew J Memoli, Mamodikoe K Makhene, Paul C Roberts, Kathleen M Neuzil

- Controlled human infection models (CHIMs) of influenza virus are used to advance understanding of infection natural history, clinical characteristics, and immune responses.
- CHIMs are central to NIAID's strategic plan to develop universal influenza vaccines.
- This trial advanced NIAID goals to expand the capacity for conducting influenza virus CHIMs.

JR Ortiz, *et al.* A Multicenter, Controlled Human Infection Study of Influenza A(H1N1)pdm09 in Healthy Adults. *The Journal of Infectious Diseases* (2023 January)

Ebola Update



U.S. Department of Health and Human Services

NIH News
National Institutes of Health

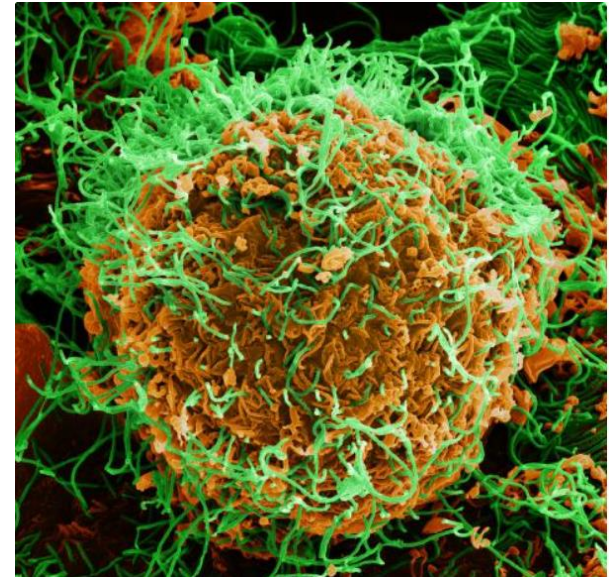
**National Institute of Allergy and
Infectious Diseases (NIAID)**

<http://www.niaid.nih.gov>

December 14, 2022

Ebola Vaccine Regimens Safe, Immunogenic in Adults and Children

*NIAID Participated in International
PREVAC Consortium*



PREVAC Study Team. Randomized Trial of Vaccines for Zaire Ebola Virus Disease. *New England Journal of Medicine* (2022 December)

HIV/AIDS Update

HIV Vaccine Research



National Institute of Allergy and
Infectious Diseases (NIAID)

<http://www.niaid.nih.gov>

January 18, 2023

Experimental HIV Vaccine Regimen Safe but Ineffective, NIH Study Finds

- Phase 3 “Mosaico” clinical trial began in 2019.
- Involved 3,900 volunteers ages 18 to 60 years in Europe, North America and South America.
- Based on the Data and Safety Monitoring Board’s recommendation, the study will be discontinued.



COVID-19 Update

Researching COVID to Enhance Recovery



NEWS RELEASES

Thursday, February 16, 2023

NIH RECOVER research identifies potential long COVID disparities

NIH-supported studies show variations in symptoms and diagnostic experiences among different racial and ethnic groups.

ER Pfaff, *et al.* Coding long COVID: Characterizing a new disease through an ICD-10 lens. *BMC Med* (2023 February)

D Khullar, *et al.* Racial and ethnic disparities in the incidence of post-acute sequelae of SARS-CoV-2 infection among hospitalized and non-hospitalized patients in New York City: An EHR-based cohort study from the RECOVER program. *J Gen Intern Med* (2023 February)

Research on Multisystem Inflammatory Syndrome in Children (MIS-C)



National Heart, Lung, and Blood Institute (NHLBI)

<https://www.nhlbi.nih.gov/>

January 3, 2023

COVID-19 vaccine for children after MIS-C appears safe

NIH-supported study finds no serious complications following rare immune condition.

MD Elias, *et al.* Examination of Adverse Reactions After COVID-19 Vaccination Among Patients With a History of Multisystem Inflammatory Syndrome in Children. *JAMA Network Open* (2023 January)



Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)

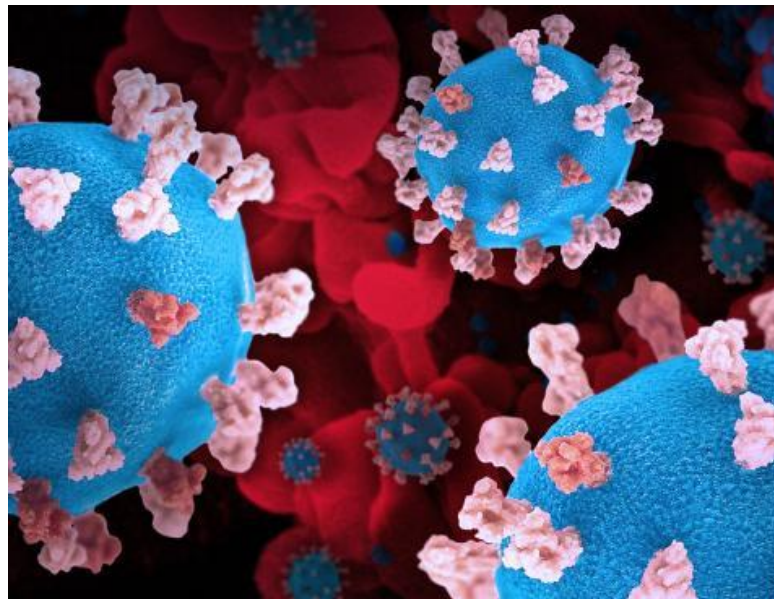
<https://www.nichd.nih.gov/>

January 9, 2023

NIH funds eight studies to advance rapid diagnosis of COVID-19-related inflammatory syndrome in children

NIH Trial to Evaluate Shionogi Antiviral in Adults Hospitalized with COVID-19

*Trial Protocol May Be Adapted to Evaluate
Additional Therapeutics*



medRxiv

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Cold
Spring
Harbor
Laboratory

BMJ Yale

Posted February 02, 2023

Immunogenicity of the BA.1 and BA.4/5 Bivalent Boosts: A Brief Report of Preliminary Results from the COVAIL Randomized Clinical Trial

Angela R Branche, Nadine Rouphael, Cecilia Losada, Lindsey R Baden,  Evan J Anderson, Anne F Luetkemeyer, David J Diemert, Patricia L Winokur, Rachel M Presti, Angelica C Kottkamp, Ann R Falsey, Sharon E Frey, Richard Rupp, Martín Bäcker, Richard M Novak, Emmanuel B Walter, Lisa A Jackson, Susan J Little, Lilly C Immergluck, Siham M Mahgoub, Jennifer A. Whitaker, Tara M. Babu, Paul A. Goepfert, Dahlene N. Fusco, Robert L Atmar, Christine M Posavad, Antonia Netzl, Derek J Smith, Kalyani Telu, Jinjian Mu, Mat Matkowski, Mamodikoe Makhene, Sonja Crandon, David C Montefiori, Paul C Roberts, John H Beigel

doi: <https://doi.org/10.1101/2023.01.31.23285306>

Perspective

**Rethinking next-generation vaccines for coronaviruses,
influenzaviruses, and other respiratory viruses**

David M. Morens, Jeffery K. Taubenberger, and Anthony S. Fauci

January 11, 2023

NIAID's Design & Development of a Pan- β coronavirus Vaccines Program

- \$62.4 million in funding to 7 academic institutions.



Thank you