# COVID-19 and Innate Immunity Case Study

**Problem:** GVN's Dr. Robert Gallo and Dr. Konstantin Chumakov <u>proposed</u> that live attenuated vaccines, such as those for tuberculosis, measles, and polio, may induce protective innate immunity that mitigate other infectious diseases, triggering the human body's natural emergency response to infections including COVID-19 and future pandemic threats. There was a worldwide and national crisis, and an urgent need to communicate this idea and garner visibility and, in turn, funding. The thought-leadership initiative grew to include <u>other members</u> of the GVN.

Media Strategy: The GVN designed and implemented an urgent media and advocacy campaign. We organized an exclusive in April 2020 with Amanpour & Company for an <a href="interview">interview</a> with Walter Isaacson, which resulted in millions of media impressions and subsequent syndications. Drs. Gallo and Chumakov published a perspective in Science in June 2020. This traction led to an enormous amount of worldwide and national media interest in outlets such as <a href="Associated Press">Associated Press</a>, The New York Times, The Washington Post, Wall Street Journal, C-SPAN, USA Today, CNN, The New York Times, Rolling Stone, MedPage Today, The New Yorker, the Proceedings of the National Academy of Sciences, and notable media in other countries including China, Russia, Italy, Israel, etc.

**Government Affairs:** Concurrent to the media plan, the GVN organized meetings with government officials to educate them on the unique idea and advocate for funding. The media attention and interest from others on this idea also helped educate government officials to prioritize discussing and researching the idea of innate immunity for pandemic preparedness.

**Catalyzing Scientists:** The GVN organized multiple task force meetings with scientists from around the world to initiate discussions, ideas, and studies such as in the Middle East. The GVN coorganized an <u>international symposium</u> on innate immunity, moderated by David Evans, known as The Edge from U2, which helped move the ideas forward and stimulate studies in academia and in government funding.



### Can existing live vaccines prevent COVID-19?

Live vaccines can prevent unrelated infections and may temporarily protect against COVID-19

KONSTANTIN CHUMAKOV, CHRISTINE S. BENN, PETER AABY, SHYAMASUNDARAN KOTTILIL, AND ROBERT GALLO Authors Info & Affiliations

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#### **Abstract**

Prophylactic vaccination is the most effective intervention to protect against infectious diseases. The commonly accepted paradigm is that immunization with both attenuated virus (live but with substantially reduced virulence) and inactivated (killed virus particles) vaccines induces adaptive and generally long-term and specific immunity in the form of neutralizing antibodies and/or activating pathogen-specific cellular immune responses. However, an increasing body of evidence suggests that live attenuated vaccines can also induce broader protection against unrelated nathagens likely by inducing interferon and other innate immu-





INSIDE OUT

CURRENT ISSUE





### Could an old vaccine be a godsend for new coronavirus?

Using the oral polio vaccine could prevent or reduce the spread of COVID-19 to immunized individuals.

Dr. Konstantin Chumakov and Dr. Robert Gallo Opinion Contributors Published 3:15 a.m. ET April 21, 2020 | Updated 10:11 a.m. ET April 21, 2020















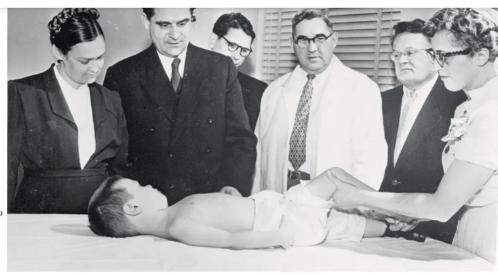
### An existing polio vaccine could help protect against coronavirus, top experts say



# The New Hork Times

# Decades-Old Soviet Studies Hint at Coronavirus Strategy

A married pair of virologists in Moscow tested a vaccine on their own children in the 1950s. Now, a side effect they found is sparking new hope for a defense against the coronavirus.

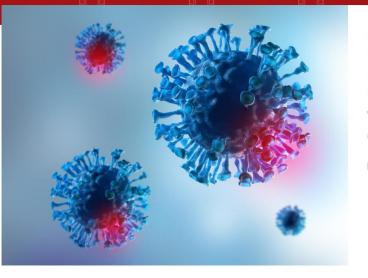


Russian polio experts, including Dr. Marina Voroshilova and Dr. Mikhail Chumakov, left, watching a therapist exercise the legs of a 3-year-old boy at the Kenny Institute in Minneapolis. Bettmann Archive



By Andrew E. Kramer

Published June 24, 2020 Updated June 25, 2020



There is an urgent need to better understand the role of innate immunity in relation to the current COVID-19 pandemic, as well as to future pandemics.

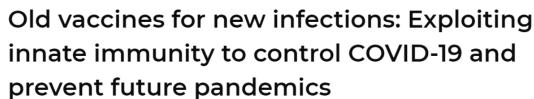
#### International Symposium on Innate Immunity and COVID-19

O Friday, December 11, 2020 | 8:00 AM 12:30 AM

➡ Virtual Event

Dial-In Information
Zoom meeting information will be share





Edited by Peter Palese, Icahn School of Medicine at Mount Sinai, New York, NY, and approved March 17, 2021 (received for review January 29, 2021)

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Meeting Report | Published: 22 October 2021

PERSPECTIVE | BIOLOGICAL SCIENCES

### NIAID workshop on secondary vaccine effects

Secondary Vaccine Effects Workshop Planning Committee

Nature Immunology 22, 1363–1366 (2021) | Cite this article

5807 Accesses | 4 Citations | 55 Altmetric | Metrics

On 27–29 July 2021, the National Institute of Allergy and Infectious Diseases (NIAID) hosted a virtual workshop on the topic of secondary vaccine effects to discuss existing evidence, potential immunological mechanisms and associated public health implications.

# **JAMA** Network<sup>-</sup>

**Original Investigation | Infectious Diseases** 

November 24, 2021

## COVID-19 Infection Among Women in Iran Exposed vs Unexposed to Children Who Received Attenuated Poliovirus Used in Oral Polio Vaccine

Farrokh Habibzadeh, MD<sup>1,2</sup>; Mohammad M. Sajadi, MD<sup>3,4</sup>; Konstantin Chumakov, PhD<sup>5</sup>; et al

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