

MAURY STRAUSS DISTINGUISHED PUBLIC LECTURE

Presented by the Fralin Biomedical Research Institute at VTC



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How Vaccines Train the Immune System in Ways No One Expected

Unknown to most people, vaccines were never tested for their effects on *overall health* before being introduced; everybody was so certain that vaccines only affect the target infection that it did not seem necessary. Dr. Benn's population-based studies in one of the world's poorest countries, Guinea-Bissau, have revealed that this assumption was too simplistic. It has become clear that vaccines do not only protect against the target infection; they also affect the susceptibility to other infections. These effects have been called the "non-specific effects" of vaccines. Immunological studies have now provided a biological mechanism by showing that vaccines modulate the *innate* immune system. The findings challenge our understanding of vaccines and the immune system. The implications are far-reaching: hundreds of thousands of lives could be saved every year in low-income countries and morbidity and health expenditure could be reduced significantly in high-income countries, by taking non-specific effects of vaccines into account when designing vaccination programs.

THURSDAY, APRIL 15, 2021 at 5:30 p.m.

This virtual lecture will be webcast live at fbri.vtc.vt.edu/live-webcast. Attendees can also register through our website to access a Zoom link for this presentation.



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