

How FluGen's COVID-19 vaccine might work

Madison-based FluGen and its founders, UW-Madison scientists Yoshihiro Kawaoka and Gabriele Neumann, are adapting the company's experimental flu vaccine to develop a vaccine against the new coronavirus. Also involved is Bharat Biotech of India.

1. Modify existing flu vaccine

Researchers insert gene sequences from the new coronavirus into an experimental flu vaccine called M2SR.

2. Trigger immune response

Delivered into the body by a nasal spray, the new vaccine uses M2SR to trigger an immune response including antibodies to the coronavirus and also possibly to the flu.

3. Hinder reproduction

M2SR is self-limiting, meaning the altered flu virus carrying the coronavirus genes can reproduce in cells only once, generating immune response without an infection.

