

# In Vaccine Design, Looks Do Matter

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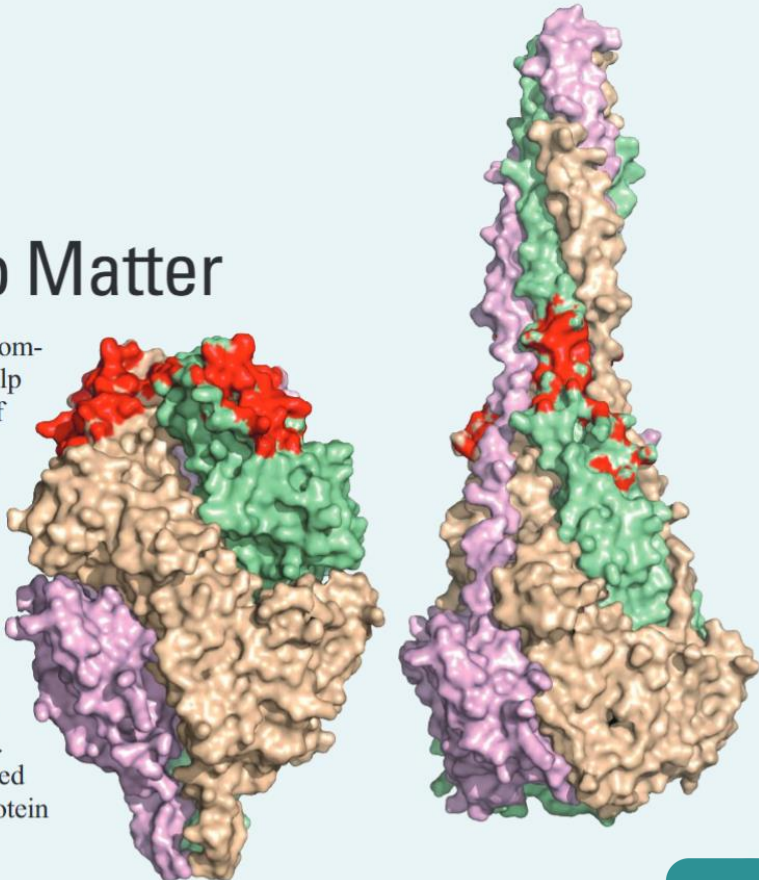
2013  
Runners-Up

## In Vaccine Design, Looks Do Matter

For decades, researchers have hoped that structural biology—the near-atom-level study of the molecules that make up living organisms—would help them design better vaccines. This year, they finally found convincing proof that the approach can deliver big-time payoffs.

Respiratory syncytial virus (RSV) hospitalizes millions of infants each year with pneumonia and other lung diseases, and it has defied many a vaccine developer. For children at high risk of developing severe RSV disease—which worldwide kills 160,000 kids each year—a monoclonal antibody on the market, palivizumab, can cut the risk of hospitalization in half. But palivizumab must be used repeatedly and costs nearly \$1000 a dose, placing it far out of reach of many.

Antibodies that have 10- to 100-fold more potency than palivizumab recently have been isolated, and in May, a research team at the U.S. National Institute of Allergy and Infectious Diseases (NIAID) reported that it had crystallized one of them in action. The antibody binds to a protein



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<https://vacunasaep.org/profesionales/noticias/vrs-avances-prevencion>, noviembre de 2022

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