



Dale and Betty Bumpers  
**VACCINE RESEARCH CENTER**  
National Institute of Allergy and Infectious Diseases  
National Institutes of Health  
Department of Health and Human Services



National Institute of  
Allergy and  
Infectious Diseases

# **VRC- AFRIGEN RESEARCH COLLABORATION**

**Jason Gall, PhD**

**Director, Vaccine Production Program Lab & Strategic Planning**

**July 8, 2022**



# Vaccine Research Center (VRC, NIAID)



- Founded: HIV Vaccine
- Ebola/Marburg
- Influenza
- Respiratory Syncytial Virus
- Chikungunya virus
- Equine encephalitis viruses
- SARS-CoV2, MERS-CoV, SARS
- Tuberculosis
- Malaria
- West Nile virus, Zika

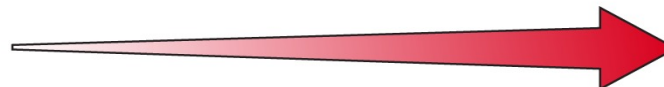


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Basic Research



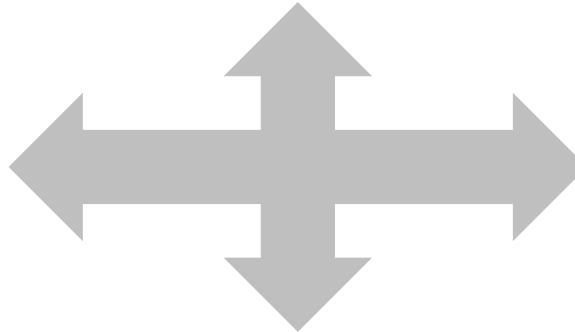
Clinical Trials

# VRC Organization

Leadership, Basic Research, Office of Regulatory Science – NIH Campus



Clinical Trials  
Program,  
NIH Campus



Vaccine Production  
Program (VPP)  
Process/Analytical  
Development

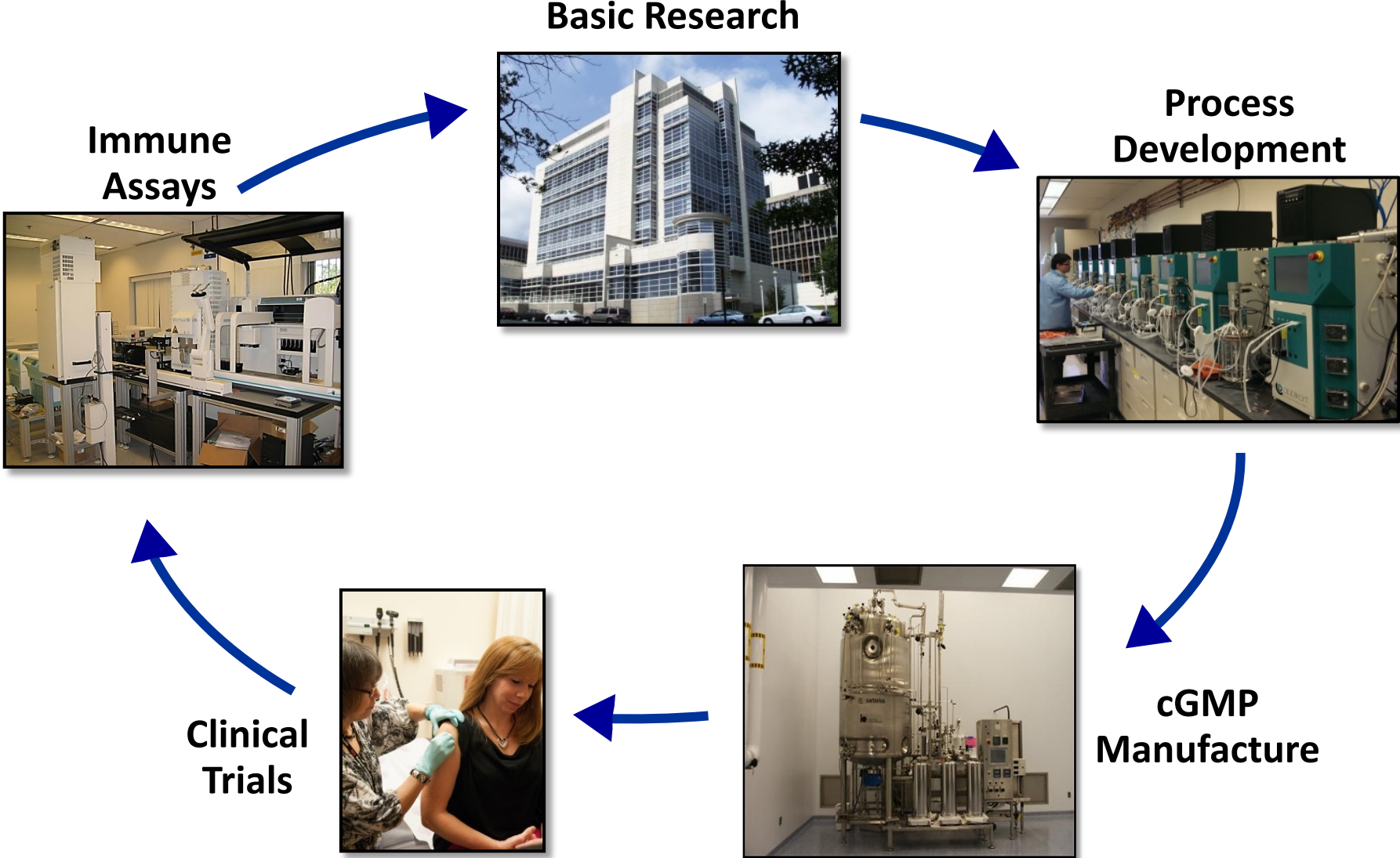
Vaccine Immunology  
Program (VIP)  
Clinical Assays

Gaithersburg, MD



Vaccine Clinical Materials Program – Frederick, MD

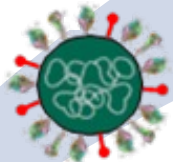
# VRC: Discovery, Development, & Clinical Evaluation



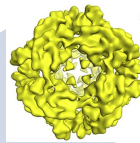


# VRC Investigational Product Capabilities

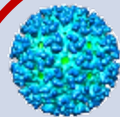
## Commercially Licensed Platforms



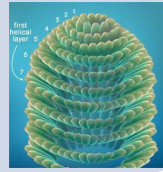
Inactivated or Attenuated Viruses  
(Polio, Salk; Polio, Sabin)



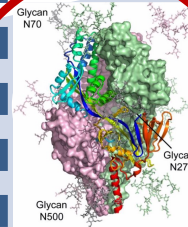
Recombinant Proteins (HBV)



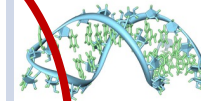
Recombinant Virus Like Particles (HPV)



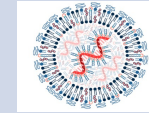
Viral Vectors (VSV-Ebo)



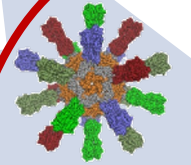
Designer Proteins (RSV)



Genetic DNA (WNV)

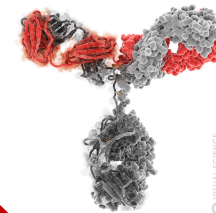


Genetic RNA (SARS-CoV-2)

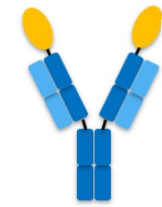
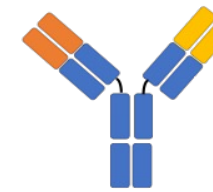


Protein Nanoparticles

## CHO Cell Production of Antibodies



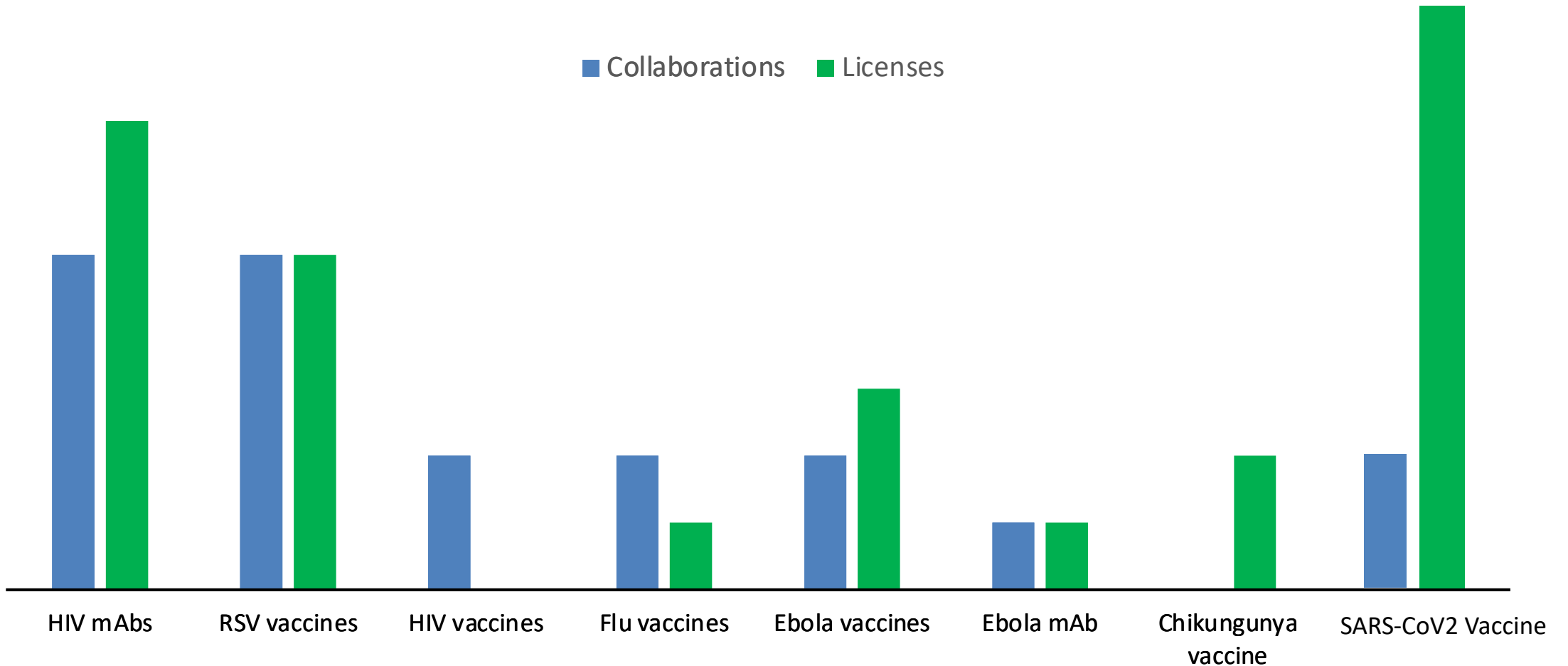
Monoclonal



Multi-specific

# Industry Partnerships

- Research collaborations increase out-licensing activity



# **In Conclusion**

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- **VRC has long history of research collaborations**
- **Collaborating with industry partners early in the research process improves product-related outcomes**
  - **Significant rise in commercial development licenses**
  - **Four US FDA approved products with VRC technology**
- **Afrigen is the VRC's first South African industry partner**