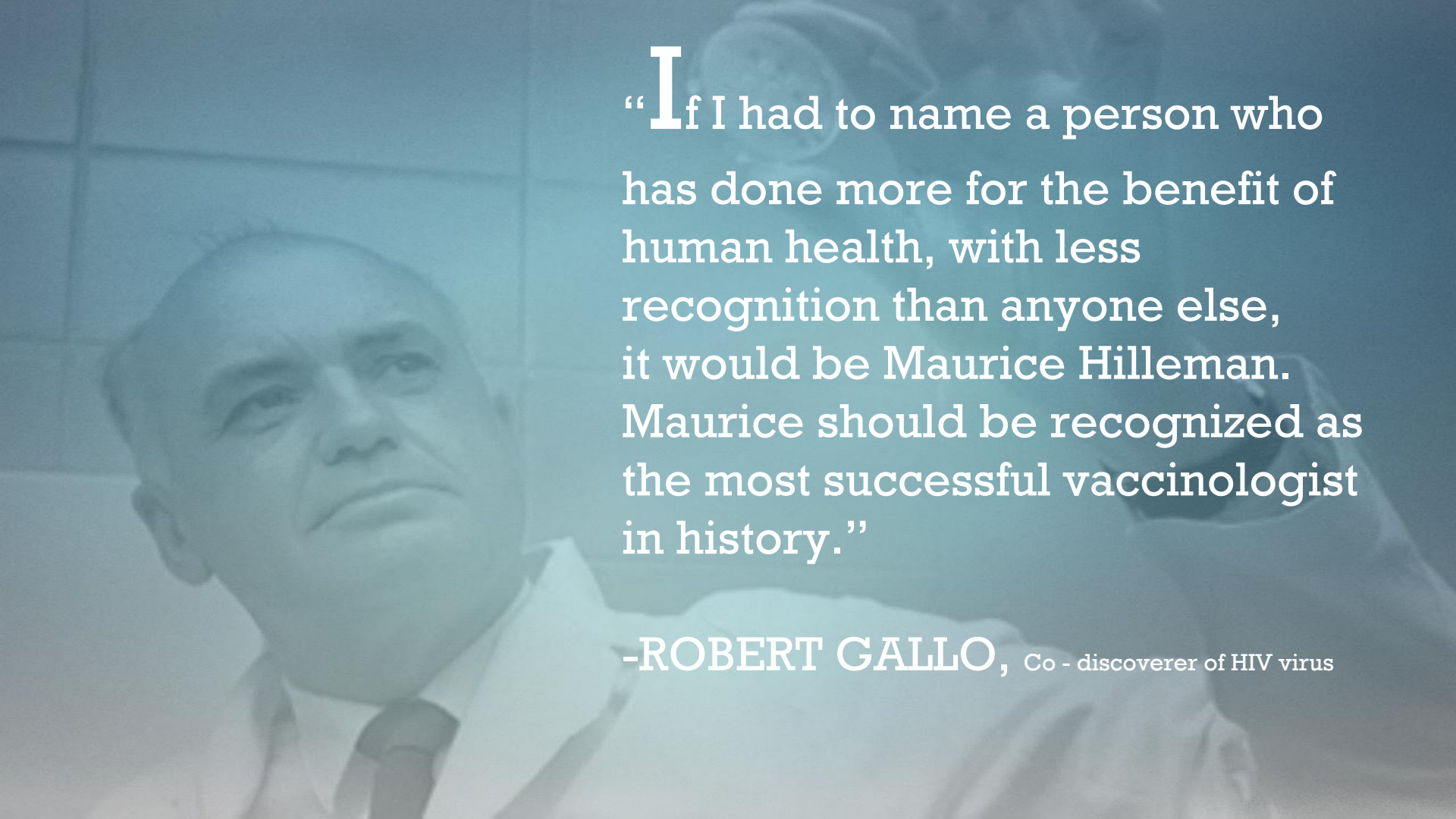




MSD • Wellcome Trust  
**Hilleman Laboratories**  
*Developing vaccines for global health*

**Hilleman  
Laboratories**



**I**f I had to name a person who has done more for the benefit of human health, with less recognition than anyone else, it would be Maurice Hilleman. Maurice should be recognized as the most successful vaccinologist in history.”

**-ROBERT GALLO**, Co - discoverer of HIV virus

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## OUR MISSION

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Creating new vaccines in areas of unmet need as well as adapting existing vaccines for more effective delivery in low-income nations



# ORGANIZATIONAL STRUCTURE





# Merck & Wellcome Trust Joint-Venture



**wellcome**trust

WELLCOME TRUST, UK  
Famous for its contribution to  
Biomedical Research

**Dr. Gerd Zettlmeissl**  
Chairman

**Prof. Gagandeep Kang**  
Director (Wellcome Trust)

**Stephen Caddick, PhD**  
Director (Wellcome Trust)



**MSD**  
*BeWell*

MSD (Merck) -  
A renowned global  
vaccine development  
corporation.

**Dr. Julie Gerberding**  
Director (Merck)

**Mr. Sanat Chattopadhyay**  
Director (Merck)

**Mr. Michael T Nally**  
Director (Merck)



MSD - Wellcome Trust  
**Hilleman Laboratories**  
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MSD – Wellcome Trust,  
Hilleman Laboratories  
Independent Organization



## Current Projects



### Heat Stable Rotavirus Vaccine

☒ Hilleman Laboratories has begun to work on the development of a thermostable oral rotavirus vaccine to allow for greater temperature consistency and less reliance on exact storage timing and refrigeration.

### Optimized Cholera Vaccine

☒ Hilleman Laboratories in collaboration with Gotovax AB (a University of Gothenburg spin-off biopharmaceutical company) aims to deliver a high impact Oral Cholera vaccine at a significantly more affordable price than the ones currently available in the market.

### ETEC Vaccine

☒ Our ETEC vaccine project involves generation of genetically modified vaccine strains that contain highly expressed immunogenic antigens selected using in-silico reverse vaccinology approaches together with publically available whole genome sequence data.



## Current Projects (CONT.)



### Shigella Vaccine

Our Shigella vaccine is a collaboration with National Institute of Cholera and Enteric Diseases, Kolkata (NICED) and the Indian Council of Medical Research (ICMR). Hilleman Labs and NICED will develop vaccines against the infection and establish proof-of-concept in the clinic. Our partner, ICMR, brings a wealth of expertise in clinical research and development of vaccines. Together, we will accelerate development of our novel Shigella vaccine.

### Low-cost Meningococcal Conjugate Vaccine

Hilleman Labs uses a two-pronged strategy to develop low-cost vaccine for prevention of invasive meningococcal disease - conventional methods to develop conjugate vaccines covering A,C,Y,W & X serogroups, and a novel method using synthetic organic chemistry to create short oligosaccharides. Our method has the potential to significantly reduce costs and create new IP, allowing developing country manufacturers undertake more conjugate vaccine development projects.

# OUR MODEL FOR SUCCESS

## Innovative Ideas

**Innovative Ideas**  
Ideas are pre-selected based upon global impact, feasibility of the problem, competitive landscape for development purposes.

## R & D

**R & D**  
Innovations are converted into powerful vaccines through the process of translational Research and Development.

## MFG & Sales

**Manufacturing & Sales**  
Our vision as a non-profit company allows us to build partnerships with vaccine manufacturers who assemble our products and sell them.

## Income

**Sustainability**  
Funding for our business model is primarily obtained through Innovative Financing and Product Sales. To date our focus has been on vaccines and infectious diseases.



# Hilleman Lab's Unique Approach



## What makes Hilleman Laboratories different?

- ☒ Hilleman Laboratories has designed vaccines which directly meets the needs of the developing world.
- ☒ These vaccines can be orally administered, are affordable for poor communities, and are also heat-stable up to 45° C.

# Progression



**2012**

MSD & Wellcome Trust open R&D facility in Jamia Hamdard University, New Delhi, INDIA



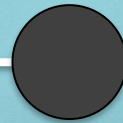
**Early 2014**

Announced collaboration with Gotovax AB-Sweden in order to develop a high impact Cholera vaccine.



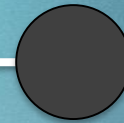
**Late 2014**

Hilleman Labs signs MoU with Bangladesh based icddr-b in order to fast track clinical trials



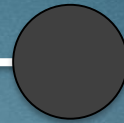
**2015**

Preclinical success of Meningococcal & HiB vaccines indicates predictive results. New vaccines are cost effective & meet needs of developing countries.



**2016**

Rotavirus and Cholera vaccines proceed into Stage II of clinical trials. Novel ETEC vaccine initiated



**Present**

Hilleman Labs announces collaboration with Kolkata based NICED to develop and commercialize a vaccine against Shigella.

# Sustainability



☒ Hilleman Laboratories develops its vaccines through grants and project based funding.

☒ Vaccine Research & Development, is making substantial progress through partnerships, and sustainable development.



# Vision



*To be recognized as the Center of Excellence for early-stage development of vaccines by bringing together the scientific prowess of global partners and funders to benefit the world's poorest.*

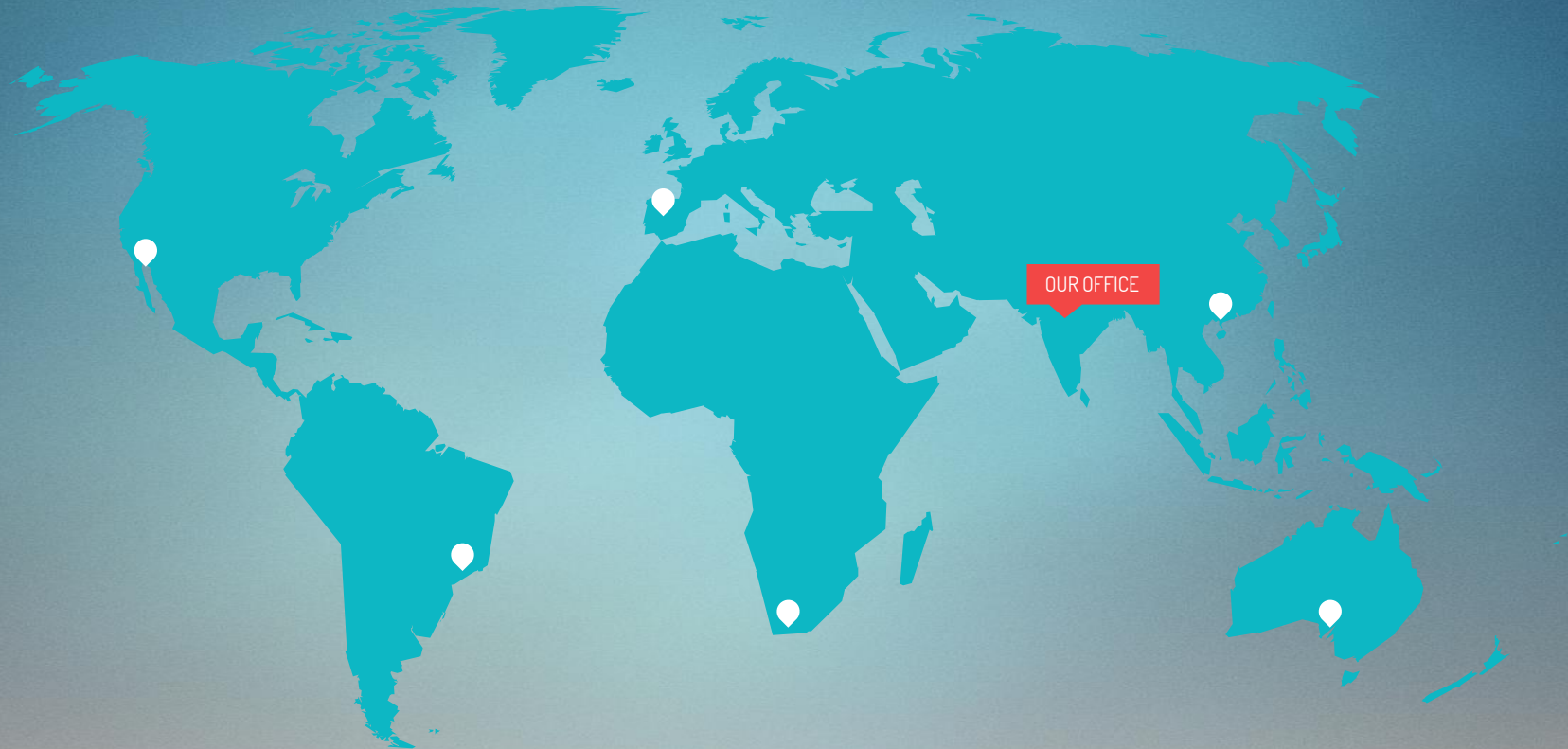


*Forge Relationships strengthening public private partnerships in order to manufacture and commercialize vaccines at affordable cost.*



*Continue development of vaccines for various diseases affecting developing countries. Initiate registration stage for Rotavirus & Cholera vaccines.*

# Our Partners



# CONNECT





**THANK YOU**