

# Novartis Vaccines Institute for Global Health



## Developing Effective and Affordable Vaccines for Neglected Infectious Diseases of Impoverished Communities

Infectious diseases impose a major health burden in the developing world. The World Health Organization's most recent evaluation of the Global Burden of Disease estimated that in 2004 there were 13.8 million deaths in the world from infectious diseases. Nearly half of these were of children aged between 1 month and 5 years. Ninety-nine percent of these deaths in children were in low and middle-income countries.

A major bottleneck in the path to new vaccines is the expertise and facilities needed to turn a laboratory concept into an effective, practical vaccine that can be manufactured. The Novartis Vaccines Institute for Global Health (NVGH) with its access to the facilities and expertise of Novartis Vaccines was created to discover vaccines for combating infectious diseases that have been traditionally neglected by the pharmaceutical industry.

### Our Operating Model

NVGH is part of the Novartis Institutes for BioMedical Research whose drug discovery priorities are determined by patient need and sound science. NVGH's priority is to develop vaccines for neglected diseases aimed at impoverished communities regardless of where in the world they exist. Although the primary population for our vaccines is in the developing world, we take measures to ensure

that our vaccines will be available globally at an affordable cost to all who will benefit.

We take vaccines through process and clinical development to proof-of-concept clinical trials in humans. An integral part of this process is to design into the vaccine a low manufacturing and distribution cost.

### Our Funding

NVGH receives its "base" funding from Novartis for its core staff, infrastructure costs, exploratory studies, and early development work. Once a project reaches the full development stage, additional funding from external sources brings the project through the optimization and scale-up stage, clinical product manufacture, and early phase clinical trials.

### NVGH and Novartis Vaccines & Diagnostics (NV&D)

NVGH is co-located in Siena, Italy, with the major research and development campus of NV&D, the commercial vaccines division of Novartis. NVGH benefits from the long-standing industrial vaccine experience of NV&D. This allows NVGH to apply the efficiency of state-of-the-art technologies and industrial expertise in the design, development, and manufacture of vaccines and associated analytical programs. NVGH also benefits from NV&D experience in planning and conducting clinical trials, and interaction with regulatory agencies.