Dr. Penny M. Heaton is the Chief Executive Officer of the Bill & Melinda Gates Medical Research Institute (Gates MRI), a non-profit biotechnology organization that applies translational science to combat diseases that disproportionately impact the poor in low- and middle-income countries.

Dr. Heaton leads the institute’s work to capitalize on new strategies and partnerships to optimize therapeutics, vaccines and monoclonal antibody candidates, accelerate progress from the lab to the clinic and develop them through proof of concept in target populations. The mission of the Gates MRI is to advance or develop products that will help eradicate malaria, accelerate the end of the tuberculosis epidemic, prevent diarrheal deaths from occurring in children and improve maternal and neonatal health outcomes.

Prior to this role, Dr. Heaton served as Director of the Bill & Melinda Gates Foundation’s Vaccine Development and Surveillance team, which provided strategic and technical support to the foundation’s vaccine development programs against several diseases including HIV, TB, malaria, pneumonia, enteric diseases, and polio. She has more than 15 years of experience leading vaccine clinical research and development for companies including Novartis, Merck and Novavax.

Dr. Heaton began her career at the U.S. Centers for Disease Control and Prevention conducting diarrheal disease surveillance and investigating outbreaks of foodborne and diarrheal diseases, influencing her life-long passion for vaccine development. Notably, Dr. Heaton co-developed RotaTeq® during her time at Merck & Co., Inc., a rotavirus vaccine which has been licensed in more than 100 countries and universally recommended by the World Health Organization for infants worldwide.

A graduate of the University of Louisville School of Medicine in Kentucky, Dr. Heaton is board-certified in Pediatrics and Pediatric Infectious Diseases. She is a member of the Pediatric Infectious Diseases Society and a fellow of the American Academy of Pediatrics.