



Reema DEB RAY CHOUDHURI

Home Country
India

Degree
Post-Doctorate
in Healthcare Sciences

Expertise
Molecular Biology
of Enteric Pathogens

Research Focus
Development of a
Potential Drug for Cholera

Host University
National Institutes of Health,
United States

Fellowship Awarded
2012

Reema Deb Ray Choudhuri was born and brought up in Kolkata, West Bengal, India and is the eldest of two sisters. Her parent's strong scientific background and constant encouragement inspired Reema in her educational life. Presently married, her husband is a great supporter and has been helping her balance her personal and professional life.

Reema attended the University of Calcutta, India, where she received a Bachelor of Science with distinction followed by a Master of Science, both in Microbiology. She received a Scholarship from Government of India for her Bachelors result and a Certificate of Merit for her MSc performance. Reema worked as a lecturer in an Undergraduate College of University of Calcutta, India. She then gained a PhD for her research work at the National Institute of Cholera and Enteric Diseases, Kolkata, India, where she investigated the molecular characterization of the diarrheal pathogen *E. coli*. A large number of people are affected by diarrheal diseases in India, this was a key reason for Reema's choice of research topic.

In her post-doctoral studies, Reema has joined the National Institutes of Health, United States and is exploring the molecular characterization and mechanism of infection of different diarrheal pathogens, with the aim of developing potential drugs and vaccines for these infectious enteric micro-organisms. She focuses on structure-function analysis of a potential drug target of the enteric pathogen *Vibrio cholerae*. Due to the rapidly increasing multi-drug resistant strains of this micro-organism, it is important to develop pathogen-specific drugs targeting their virulence mechanisms.

After completion of her studies, Reema plans to join the Indian Institute of Science Education and Research, Kolkata, India as an Assistant Professor. She wants to set up her own state-of-art research laboratory in its department of Microbiology and Biotechnology, establish a research group there and guide graduate students and stimulate student interest in her field.