

NYBCe RESEARCHER PROFILE



CHERYL LOBO, PhD

Head, Laboratory of Blood-Borne Parasites

BACKGROUND

Degree Institutions

- St. Xavier's College, University of Bombay - BSc
- University of Baroda - MSc

Doctoral Training

- Tata Institute of Fundamental Research - PhD

Postdoctoral Institutions

- Johns Hopkins Medical Institute

AREAS OF RESEARCH

- Biology of Host-Parasite Interactions
- Malaria and Babesiosis
- Hemoglobinopathies and Infection

KEY NON-EXPIRED AWARDED PATENTS

- US 7704508 - Babesia Subtilisin

KEY PUBLICATIONS



CONTACT

To contact the lab, email Dr. Lobo at CLobo@nybc.org or the Office of Sponsored Programs at researchadmin@nybc.org.

To learn more about NYBCe patents and licensing, visit our webpage: nybce.org/patents.

NYBCe LAB DESCRIPTION

The Laboratory of Blood-Borne Parasites studies the mechanisms of invasion, intracellular development, multiplication and egress in three intra-erythrocytic parasites: *Plasmodium falciparum*, *Babesia divergens* and *Babesia microti*, using in vitro culture systems and rodent models of disease. The lab's goal is to elucidate pathogen biology to inform diagnostics, therapeutics and pathogen inactivation platforms to halt transmission via blood transfusion.

KEY CONTRIBUTIONS

- Understanding the biology of *P. falciparum* gametocytes
- Understanding pathways of erythrocyte invasion in malaria
- Identification of PfRH5 and identifying key role in protection
- Mechanisms of erythrocytic invasion, propagation and population control of babesia divergens
- Babesia and Sickle Cell Disease - developing models to study parasite biology in SCD and understanding mechanisms of resistance to parasite infection in SCD
- Metabolic profiling and modulation of host RBC upon parasite infection

INDUSTRY & ACADEMIC PARTNER COLLABORATIONS

- Luna Inc: Project Collaborator
- Leidos: Project Co-Investigator
- AABB Transfusion Transmitted Diseases: Committee Member
- AABB Annual Meeting Abstract Review: Committee Member
- ASH Annual Meeting Abstract Review: Committee Member

COLLABORATIONS OF INTEREST

- Companies or academics working on blood-borne parasites, particularly those focused on host-pathogen interactions.
- Dr. Lobo's lab can conduct a myriad of partnerships or services to further in the development of interventions to detect and reduce transmission of these pathogens.

