

Special Issue on
Immunology and Malaria: Challenges and Opportunities

CALL FOR PAPERS

Poverty and disease are stuck in an ongoing, vicious relationship. Many diseases that primarily affect the poor serve to also deepen poverty and worsen conditions. Poor hygiene, ignorance in health-related education, nonavailability of safe drinking water, inadequate nutrition, and indoor pollution are factors exacerbated by poverty.

In the poverty stricken regions of the world, many people suffer from infectious diseases. Such diseases often have particularly serious consequences and remain the most common cause of death in these regions. The best-known examples are HIV/AIDS, malaria, and tuberculosis.

Malaria is a serious and sometimes fatal disease caused by a parasite that commonly infects a certain type of mosquito which feeds on humans. Malaria is a deadly infectious disease that affects one to two billion people and kills up to one million children yearly. Malaria disease increases the risk of contracting HIV. These parasitic diseases affect the body's immune response to HIV, making people more susceptible to contracting the disease once exposed.

Immune responses to pathogens are not only important for protection from disease but also play a major role in pathology and chronicity of infection. The transmission and survival of such diseases depend on their ability to escape or subvert innate and adaptive immune responses of the host. One of the greatest challenges in immunology and malaria is finding strategies that favor protection against diseases of malaria by preventing chronic and recurrent infections, immune evasion, and immunopathology.

Plasmodium parasites have evolved mechanisms to downmodulate protective immune responses against ongoing and even future infections. Consequently, antimalaria immunity develops only gradually over many years of repeated and multiple infections in endemic areas. The identification of immune correlates of protection among the abundant nonprotective host responses remains a research priority. Understanding the molecular and immunological mechanisms of the crosstalk between the parasite and the host is a prerequisite for the rational discovery and development of a safe, affordable, and protective antimalaria vaccine.

The possibility of resistance must be anticipated; therefore, a long-term strategy requires more studies on new drugs, diagnostic materials, and vaccines. All these issues basically call for more research efforts in immunology and malaria with the ultimate aim of understanding the mechanisms of immunity to malaria.

The editors will consider papers that focus on timely collaborative and multidisciplinary research in immunology and malaria. This issue provides rapid publication of original papers and reviews embracing this collaborative spirit.

Potential topics include but are not limited to the following:

- ▶ Immune responses to malaria.
- ▶ Antigenic variation and diversity in malaria
- ▶ Immunopathology of malaria
- ▶ Evasion and modulation of host's immune responses by malaria
- ▶ Immunological methods for the diagnosis of malaria
- ▶ Current approaches to vaccination against malaria

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jtm/imco/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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Submission Deadline

Friday, 29 March 2019

Publication Date

August 2019