Special Issue

Nutrient Uptake and Trafficking in *Plasmodium* Species

Message from the Guest Editor

This Special Issue will explore the mechanisms of nutrient uptake and trafficking in Plasmodium species. Plasmodium species take up nutrients and ions through the host erythrocyte membrane, across the parasitophorous vacuole (PV) for traffic and delivery to the parasite for intracellular growth. In addition to the nutrient channels formed, it is unclear if the Maurer's clefts and other parasite-derived tubular membranes formed in the erythrocyte cytosol participate in nutrient uptake and transport. Proteins of the high molecular weight rhoptry protein complex (RhopH) are reported to participate in nutrient uptake and merozoite invasion. However, other parasite proteins may associate with RhopH proteins to facilitate channel formation and nutrient transport. Studies investigating nutrient uptake and transport with the use of bioinformatics approaches including proteomics, transcriptomics, and other -omics methodologies may shed light on protein-protein and protein-lipid interactions and identify proteins required for channel formation, nutrient uptake, nutrient traffic, and nutrient processing for the developing intracellular parasite.

Guest Editor

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The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics. *Pathogens* is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

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