

Special Issue

Intracellular Trafficking and Organelle Biogenesis in Apicomplexan Parasites

Message from the Guest Editor

The phylum Apicomplexa comprises more than 5000 single-celled parasites of clinical and economic importance, including *Plasmodium falciparum*, the agents of malaria, and *Toxoplasma gondii*, the cause of toxoplasmosis. These obligate **intracellular parasites** possess a highly complex **endomembrane system** to build morphologically distinct organelles that are essential for invasion and hijacking multiple biological functions of the hosts. The accurate targeting of proteins and lipids to their final destination is a crucial process in all living cells and apicomplexan parasites as well. Due to the complexity of the internal organization of these parasites, a wide panoply of trafficking factors are required for the correct sorting of proteins and lipids towards their various organelles. However, these parasites contain only a core set of these trafficking factors. In addition, recent insight suggests trafficking of proteins and other materials into *T. gondii* and *P. falciparum* via unusual and novel pathways. In this Special Issue, reviews will report on different trafficking machineries and mechanisms which are involved in the biogenesis of parasite-specific organelles.

Guest Editor

Dr. Stanislas Tomavo

Institute for Integrative Biology of the Cell (I2BC), CNRS-CEA, Université Paris-Saclay, 91190 Paris, France

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
life@mdpi.com

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Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona
Institute of Science and Technology, 08028 Barcelona, Spain

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