

During my undergraduate studies I was introduced to the malaria parasite and its complex life cycle. My PhD project contributed to the understanding of host cell remodeling and cellular trafficking during *Plasmodium* infection of rodent and human red blood cells. As a post-doctoral fellow I focus my interest on the mosquito stages of the parasite, and my research is aimed at understanding the mechanism of oocyst rupture. I am currently a post-doctoral researcher at IMBB-FORTH in Crete, Greece and my work is funded by an award from Stavros Niarchos Foundation.

Short CV

CURRENT POSITION

02/2018 - present

Researcher at Institute of Molecular Biology and Biotechnology IMBB-FORTH. **Greece**

PREVIOUS POSITIONS

10/2016 – 10/2017. **Post doc.** Institute of Biosciences- Department of Physiology, University of San Paolo – **Brazil**

06/2013 – 05/2015. **Post doc.** IMBB- Foundation for Research and Technology, Hellas, **Greece.**

03-11/2012. **Post doc.** Institute of Biosciences- Dept of Fisiology, University of San Paolo – **Brazil**

07/2010 – 02/2012. **Post doc.** Dept. of Infectious diseases. Istituto Superiore di Sanità, Rome, **Italy.**

PUBLICATIONS

14. Siden-Kiamos I, Pace T, Klonizakis A, Nardini M, Garcia RSC, **Currà C***. **2018.** Identification of *Plasmodium berghei* Oocyst Rupture Protein 2 (ORP2) domains involved in sporozoite egress from the oocyst. **International Journal for Parasitology**, ACCEPTED *Corresponding author

13. Pereira PHS, **Currà C**, Garcia C. **2018.** Ubiquitin proteasome system as a potential drug target for malaria. **Curr Top Med Chem.** doi: 10.2174/1568026618666180427145308

12. Fratini F, Raggi C, Sferra G, Birago C, Sansone A, Grasso F, **Currà C**, Olivieri A, Pace T, Mochi S, Picci L, Ferreri C, Di Biase A, Pizzi E, Ponzi M. **2017.** An integrated approach to explore composition and dynamics of cholesterol-rich membrane microdomains in sexual stages of malaria parasite. **Molecular Cellular Proteomics.** 16(10):1801-1814.

11. **Currà C**, McMillan PJ, Spanos L, Mollard V, Deligianni E, McFadden G, Tilley L, Siden-Kiamos I. **2017.** Structured illumination microscopy reveals actin I localization in discreet foci in *Plasmodium berghei* gametocytes. **Experimental parasitology.** 181:82-87.

10. Moraes SM, Budu A, Singh KM, Borges-Pereira L, Levano-Garcia J, **Currà C**, Picci L, Pace T, Ponzi M, Pozzan T, Garcia CR. **2017.** Plasmodium falciparum GPCR-like receptor SR25 mediates extracellular K⁺ sensing coupled to Ca²⁺ signaling and stress survival. **Scientific reports.** 7(1):9545.

9. **Currà C**, Gessmann R, Pace T, Picci L, Garcia CR, Peruzzi G, Varamogiani-Mamatsi V, Spanos L, Garcia CR, Spaccapelo R, Ponzi M, Siden-Kiamos I. **2016.** Release of *Plasmodium* sporozoites requires proteins with histone fold dimerization domains. **Nature Communications**, 7:13846.

8. Olivieri A, Bertuccini L, Deligianni E, Franke-Fayard B, **Currà C**, Siden-Kiamos I, Hanssen E, Grasso F, Superti F, Pace T, Fratini F, Janse CJ, Ponzi M. **2015.** Distinct properties of the egress-related osmiophilic bodies in male and female gametocytes of the rodent malaria parasite *Plasmodium berghei*. **Cell Microbiol** 17(3):355-68.

7. Xam XY, Birago C, Fratini F, Di Girolamo F, Raggi C, Sargiacomo M, Bachi A, Berry L, Fall G, **Currà C**, Pizzi E, Breton CB, Ponzi M. **2013.** Proteomic analysis of detergent-resistant membrane microdomains in trophozoite blood stage of the human malaria parasite *Plasmodium falciparum*. **Mol Cell Proteomics** 12:3948-61.

6. **Currà C**, di Luca M, Picci L, Silva Gomes dos Santos C, Siden-Kiamos I, Pace T, Ponzi M. **2013.** The ETRAMP family

member SEP2 is expressed throughout *Plasmodium berghei* life cycle and is released during sporozoite gliding motility. **PlosONE**, 8:e67238.

5. Ronca R, Kotsyfakis M, Lombardo F, Rizzo C, **Currà C**, Ponzi M, Fiorentino G, Ribeiro JM, Arcà B. **2012**. The Anopheles gambiae cE5, a tight- and fast-binding thrombin inhibitor with post- transcriptionally regulated salivary-restriction expression. **Insect Biochem Mol Biol** 42:610-20.

4. **Currà C**, Pace T, Picci L, Bertuccini L, Ponzi M. **2012**. Erythrocyte remodeling in *Plasmodium berghei* infection: the contribution of SEP family members. **Traffic**. 13: 388-99

3. Lalle M, **Currà C**, Ciccarone F, Pace T, Cecchetti S, Fantozzi L, Ay B, Braun-Breton C and Ponzi M. **2011**. Dematin, a component of erythrocyte membrane-skeleton, is internalized by the malaria parasite and associates with *Plasmodium* 14-3-3. **J Biol Chem**. 286:1227-36.

2. Ponzi M, Sidén-Kiamos I, Bertuccini L, **Currà C**, Kroeze H, Camarda G, Pace T, Franke-Fayard B, Laurentino EC, Louis C, Waters AP, Janse CJ, Alano P. **2009**. Egress of Plasmodium berghei gametes from their host erythrocyte is mediated by the MDV-1/PEG3 protein. **Cell Microbiol**. 11:1272-88.

1. Lombardo F, Ronca R, Rizzo C, Mestres-Simòn M, Lanfrancotti A, **Currà C**, Fiorentino G, Bourgouin C, Ribeiro JM, Petrarca V, Ponzi M, Coluzzi M, Arcà B. **2009**. The Anopheles gambiae salivary protein gSG6: an anopheline-specific protein with a blood-feeding role. **Insect Biochem Mol Biol**. 39:457-66.