Title: GALMALARIA
Supervisors: Miguel P. Soares and Susana Ramos
IGC Group: Inflammation
E-mail contact: mpsoares@igc.gulbenkian.pt

Abstract: GALMALARIA is a translational study in collaboration with the Bill and Melinda Gates Foundation designed to assess the relative efficiency of targeting α-gal glycans to be included in future malaria vaccines, with a focus on expanding the pre-clinical data on the effects of the α-gal Abs in preventing malaria transmission. The study consists of calibrating the protective effect of α-gal-specific Ab against well-established protective Abs, recognizing Plasmodium falciparum circumsporozoite protein (PfCSP). The primary outcomes of this study are to determine: i) anti-infection benefit of targeting α-gal over PfCSP antigens alone or in combination and ii) transmission-blocking activity of targeting α-gal. Intermediate outputs include: i) define functionally the α-gal glycans targeted by α-gal-specific Ab, ii) compare the anti-infection effect of Ab targeting distinct α-gal glycans and iii) compare Plasmodium gametocyte killing and transmission-blocking effects of Ab targeting α-gal glycans.

References: