

# CURRICULUM VITAE

**NAME:** Miguel Prudêncio; DoB: 27/12/1970.

**POSITION:** Group Leader, Instituto de Medicina Molecular João Lobo Antunes;  
Invited Associate Professor, Faculdade de Medicina da Universidade de Lisboa

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## Personal Statement

The combat against infectious diseases that exert a particularly heavy burden in the poorest regions of the globe constitutes not only a major scientific challenge but also a moral and societal imperative. My motivation for malaria research arises from a will to understand the complexity of the *Plasmodium* parasite, combined with a strong desire to contribute to its eradication. My research approaches fundamental questions pertaining to the biology and immunology of *Plasmodium* infection from a translational perspective, utilizing scientific excellence to deliver a combination of new knowledge and novel antimalarial tools.

## Positions and Employment

2023-present Habilitation, Faculty of Medicine, University of Lisbon, PT  
2019-present Invited Associate Professor, Faculty of Medicine, University of Lisbon, PT  
2013-present Group Leader, Instituto de Medicina Molecular, Lisboa, PT  
2008-2013 Staff Scientist/Principal Investigator, Instituto de Medicina Molecular, Lisboa, PT  
2005-2008 Post-doctoral Researcher, Instituto de Medicina Molecular, Lisboa, PT  
2004-2005 Post-doctoral Researcher, Instituto Gulbenkian de Ciência, Oeiras, PT  
2000-2004 Post-doctoral Researcher, Leiden University, NL  
1996-2000 PhD, University of East Anglia, UK

## Honors and Awards

2023 - Universidade de Lisboa / CGD Award, Health Sciences  
2020 – Pfizer / SCML Award for Clinical Research  
2019 – Paul Harris Award, Rotary Foundation  
2018 - Stimulus of Scientific Employment Individual Support, FCT  
2014 - EVERIS Entrepreneurs Award, Grand Finalist  
2013 - National BES Innovation Contest, Grand Prize  
2013 - Building Global Innovators, Honorary Mention, Health Track  
2013 - Investigador FCT, FCT  
2008 – Ciência 2007, FCT  
2008 - Amélia da Silva de Mello Award for Health Sciences  
2007 - CESPU International Research Award  
2004 - Marie Curie Reintegration Grant  
2001 - Marie Curie Fellowship

## Membership of Scientific Societies

Invited member of the Lisbon Academy of Sciences

## Publications (selection)

D. Moita, H. Nunes-Cabaço, C. Rôla, B. Franke-Fayard, C.J. Janse, A.M. Mendes, **M. Prudêncio** (2023), "Variable long-term protection by radiation-, chemo-, and genetically-attenuated Plasmodium berghei sporozoite vaccines", *Vaccine*, 41, 7618-7625

D. Moita, C. Rôla, H. Nunes-Cabaço, G. Nogueira, T.G. Maia, A.S. Othman, B. Franke-Fayard, C.J. Janse, A.M. Mendes, **M. Prudêncio** (2023), "The effect of dosage on the protective efficacy of whole-sporozoite formulations for immunization against malaria", *NPJ Vaccines*, 182, 1-12

D. Moita, T.G. Maia, M. Duarte, C.M. Andrade, I.S. Albuquerque, A. Dwivedi, J.C. Silva, L. González-Céron, C.J. Janse, A.M. Mendes, **M. Prudêncio** (2022) "A genetically modified Plasmodium berghei parasite as a surrogate for whole-sporozoite vaccination against P. vivax malaria", *NPJ Vaccines*, 7, 163, 1-9

H. Nunes-Cabaço, D. Moita, **M. Prudêncio** (2022) "Five decades of clinical assessment of whole-sporozoite malaria vaccines", *Front. Immunol.*, 13, 977472

H. Nunes-Cabaço, D. Moita, C. Rôla, A.M. Mendes, **M. Prudêncio** (2022) "Impact of dietary protein restriction on the immunogenicity and efficacy of whole-sporozoite malaria vaccination", *Front. Immunol.*, 13, 869757

D. Fontinha, F. Arez, I.R. Gal, G. Nogueira, D. Moita, T.H.H. Baeurle, C. Brito, T. Spangenberg, P.M. Alves, **M. Prudêncio** (2022) "Pre-erythrocytic activity of M5717 in monotherapy and combination in preclinical Plasmodium infection models", *ACS Inf. Dis.*, 8, 721-727

D. Moita, H. Nunes-Cabaço, A.M. Mendes, **M. Prudêncio** (2021) "A guide to investigating immune responses elicited by whole-sporozoite pre-erythrocytic vaccines against malaria", *FEBS J.*, doi:10.1111/febs.16016

P. Meireles, D. Brás, D. Fontinha, A.F. Chora, K. Serre, A.M. Mendes, **M. Prudêncio** (2020) "Elimination of Hepatic Rodent Plasmodium Parasites by Amino Acid Supplementation", *iScience*, 23, 101781. Recommended by Faculty Opinions

**M. Prudêncio** (2020) "In fairness to mosquitoes", *Trends Parasitol.*, 36, 876-877

**M. Prudêncio**, J.C. Costa (2020) "Research funding after COVID-19", *Nature Microbiol.*, 5, 986

I.J. Reuling, A.M. Mendes, G.M. de Jong GM, A. Fabra-García, H. Nunes-Cabaço, G.J. van Gemert, W. Graumans, L.E. Coffeng, S.J. de Vlas, A.S.P. Yang, C.K. Lee, Y. Wu, A.J. Birkett, C.F. Ockenhouse, R. Koelewijn, J.J. van Hellemond, P.J.J. van Genderen, R.W. Sauerwein, **M. Prudêncio** (2020) "Safety and efficacy of a genetically modified rodent malaria parasite against Plasmodium falciparum malaria: an open-label randomized phase 1/2a trial", *Science Transl. Med.*, 12, eaay2578. Issue cover.

M. Sanches-Vaz, A. Temporão, R. Luis, H. Nunes-Cabaço, A.M. Mendes, S. Goellner, T. Carvalho, L.M. Figueiredo, **M. Prudêncio** (2019) "Trypanosoma brucei infection protects mice against malaria", *PLoS Pathogens*, 15, e1008145

R. Azevedo, A.M. Mendes, **M. Prudêncio** (2019) "Inhibition of Plasmodium sporogonic stages by ivermectin and other avermectins", *Parasites & Vectors*, 12, 594

F. Arez, S. Rebelo, D. Fontinha, D. Simão, T.R. Martins, M. Machado, C. Fischli, C. Oeuvray, L. Badolo, M. J. T. Carrondo, M. Rottmann, T. Spangenberg, C. Brito, B. Greco, **M. Prudêncio**, P.M. Alves (2019) "Flexible 3D cell-based platforms for the discovery and profiling of novel drugs targeting Plasmodium hepatic infection", *ACS Infect. Dis.*, 5, 1831-1842

A.M. Mendes, I.J. Reuling, C.M. Andrade, T.D. Otto, M. Machado, F. Teixeira, J. Pissarra, N. Gonçalves-Rosa, D. Bonaparte, J. Sinfrônio, M. Sanders, C.J. Janse, S.M. Khan, C.I. Newbold, M. Berriman, C. Lee, Y. Wu, C.F. Ockenhouse, R.W. Sauerwein, **M. Prudêncio** (2018) "Pre-Clinical Evaluation of a P. berghei-Based Whole-Sporozoite Malaria Vaccine Candidate", *NPJ Vaccines*, 3, 54

A.M. Mendes, M. Machado, N. Gonçalves-Rosa, I.J. Reuling, L. Foquet, C. Marques, A.M. Salman, A.S.P. Yang, K.A. Moser, A. Dwivedi, C.C. Hermsen, B. Jiménez-Díaz, S. Viera, J.M. Santos, I. Albuquerque, S.N. Bhatia, J. Bial, I. Angulo-Barturen, J.C. Silva, G. Leroux-Roels, C.J. Janse, S.M. Khan, M.M. Mota, R.W. Sauerwein, **M. Prudêncio** (2018) "A Plasmodium berghei Sporozoite-Based Vaccination Platform Against Human Malaria", *NPJ Vaccines*, 3, 33

Citations: >7000; h-index: 44; i10-index: 115

**Complete List of Published Work (> 150 publications):** <https://miguelprudencio.com/research-outputs/publications/>

## Invited Lectures (selection)

Gordon Research Conferences  
International PfSPZ Consortium Meetings  
Malaria Vaccines for the World Meetings  
BioMalPar: Biology and Pathology of the Malaria Parasite  
British Society for Parasitology Meeting  
European Respiratory Society Congress  
NIH/NIAID Meetings on Whole Sporozoite Vaccination against Malaria

## Project Grants (selection from last 5 years)

European Commission – Horizon Europe, 2024-2028  
**“OptiViVax - Optimising a High Efficacy *Plasmodium vivax* Malaria Vaccine”**  
Merck KGaA, 2024-2028  
**“Induction of Long-lasting Premunition against Malaria”**  
“la Caixa” Banking Foundation Health Research, 2021-2024  
**“Whole-organism vaccines against *P. falciparum* and *P. vivax* malaria with enhanced efficacy and scope”**  
Fundação para a Ciência e Tecnologia, Portugal, 2023-2024  
**“Ivermectin hybrids – insecticidal and multistage antiplasmodial drugs for malaria control”**  
GSK Tres Cantos Open Lab Foundation, 2021-2023  
**“Generation, characterization and *in vivo* evaluation of a novel live malaria vaccine”**  
Fundação para a Ciência e Tecnologia, Portugal, 2018-2022  
**“Enabling strategies for enhanced whole-sporozoite malaria vaccines”**

## Patents

**"Genetically modified rodent *Plasmodium* parasites as platforms for a whole-organism malaria vaccine"** (Inventor and co-Holder of Intellectual Property rights). Granted worldwide 2017  
**"Infected Cell Cultures"** (Inventor), European Patent Office EP 17 160 277.4. Filed 2017  
**"Novel spiro-lactam compounds, process and uses thereof"** (Inventor), WO/2018/207165. Granted USA 2023

## Institutional Activities

### Biosafety Level 3 (BSL3) Laboratory

Head of BSL3 facility from 2010 to 2016  
Design of Standard Operating Procedures and training of facility users  
Integration of IMM in the Portuguese Network of Biosafety Laboratories

### COVID-19

Establishment of the IMM's SARS-CoV-2 Diagnostics Task Force  
Design of Standard Operating Procedures and training of Task Force researchers  
Institutional initiatives for the general public (webinars, videoclips, online materials, etc.)  
>500 media appearances delivering evidence-based information about COVID-19 vaccination

## Additional Information

[www.miguelprudencio.com](http://www.miguelprudencio.com)

<https://imm.medicina.ulisboa.pt/investigacion/laboratorios/miguel-prudencio-lab/#intro>