# CURRICULUM VITAE

## 1. Personal Details

**Name** Gabriela Santo–Gomes
**Nationality** Portuguese
**Filiation** Global Health and Tropical Medicine (GHTM), Instituto de Higiene e Medicina Tropical (IHMT), Universidade Nova de Lisboa (UNL).
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## 2. Academic degrees

**2010** Academic Portuguese Title Agregação (a public examination required to further apply for a position of full professor) in Biomedical Sciences, UNL.
**1996** PhD in Microbiology, Faculdade de Ciências, Universidade de Lisboa, Lisbon, Portugal
**1987** Five-year degree in Biological Sciences**,** Faculdade de Ciências, Universidade de Lisboa, Lisbon, Portugal

## 3. Previous and professional activities

**2015– Present** Researcher at the Vector Born Diseases and Pathogens Group, Global Health and Tropical Medicine Research Center (GHTM), IHMT-UNL
**2005 – 2007** Member of the COST B22 Action Management Committee, Drug development for parasitic diseases (Working Group on Tropical Diseases)
**1998 – Present** Assistant Professor, Research and Teaching Unit of Medical Parasitology, IHMT-UNL
**1997** Invited Assistant, Medical Parasitology, IHMT-UNL
**1996 - 2014** Researcher at the Center of Malaria and Other Tropical Diseases (CMDT), IHMT-UNL

## 4. Research activity

The research activity is focused in two main lines: (i) investigation of host-parasite interactions and (ii) development of control strategies for parasite diseases. We aim to investigate the immune response of the host to parasites by characterizing innate immunity and cell mediated immune response during *Leishmania* spp. infection, develop new prophylatic tools for leishmaniases and evaluate the antileishmanial potential of new compounds.

## 5. Funded projects (2007-Present)

- RedVLP - Red Iberoamericana para el desarrollo en base a micromecenazgo de vacunas contra enfermedades infecciosas con tecnología en plataforma VLP (Cyted ref 216RT0506)
- Anti-*Leishmania* and anti-*Trypanosome* potential of oleanolic and ursolic acids (FAPESP, 2013/16297-2)
- Provoquemos-lhes a queda: Estudo genómico, proteómico e imuno-histológico da involução do cimento de fixação de carraças (PTDC/CVT-EPI/3460/2012)
- Regulatory immune response in dogs with leishmaniosis at various clinical stages and undergoing different therapeutic protocols (PTDC/CVT/118566/2010)
- Consequences of the interaction of neutrophils and *Leishmania infantum* in the establishment of canine leishmaniasis (PTDC/CVT/113121/2009)
- A challenge for the treatment of parasitic diseases: rational design of trifluralin derivatives and appropriate nanoformulations (PTDC/CVT/098290/2009)

- Immunoprophylatics and mechanisms of leishmaniases control (Leishvacina) (CYTED 207RT0308, *Programa iberoamericano de ciencia y tecnologia para el desarrollo*)

## 6. Publications (2007 - Present)

- Pereira M, Valério-Bolas A, Santos-Mateus D, Alexandre-Pires G, Santos M, Rodrigues A, Rocha H, Santos A, Martins C, Tomas A, Passero F, da Fonseca IP, **Santos-Gomes G**. 2017. Canine neutrophils activate effector mechanisms in response to *Leishmania infantum*. Veterinary Parasitology 248: 10-20.
- Rodrigues A, Santos-Mateus D, Alexandre-Pires G, Valério-Bolas A, Rafael-Fernandes M, Pereira MA, Ligeiro D, de Jesus J, Alves-Azevedo R, Lopes-Ventura S, Santos M, Tomás AM, Pereira da Fonseca I, **Santos-Gomes G**.2017. *Leishmania infantum* exerts immunomodulation in canine Kupffer cells reverted by meglumine antimoniate. Comparative Immunological and Microbiological Infective Diseases 55:42-52.
- Gomes J, Santos M, Amaro A, Pereira da Fonseca I, **Santos-Gomes G,** Inácio J. 2017. A field evaluation of an isothermal DNA amplification assay for the detection of *Theileria annulata* infection in cattle. Molecular and Cellular Probes 31:61-64
- Jesus JA, Fragoso TN, Yamamoto ES. Laurenti MD, Lago JHG, Silva MS, **Santos-Gomes G**, Passero LFD. 2016. Therapeutic effect of ursolic acid in experimental visceral leishmaniasis International Journal for Parasitology: Drugs and Drug Resistance 7: 1-11
- Rodrigues A, Claro M, Alexandre-Pires G, Santos-Mateus D, Martins C, Valério-Bolas A, Rafael-Fernandes M, Pereira MA, Pereira da Fonseca I, Tomás AM, **Santos-Gomes G.** 2017. *Leishmania infantum* antigens modulate memory cell subsets of liver resident T lymphocyte. Immunobiology 222:409-422.
- Gomes J, Salgueiro P, Inácio J, Amaro A, Pinto J, Tait A, Shiels B, Pereira da Fonseca I, **Santos-Gomes G,** Weir W. 2016. Population diversity of *Theileria annulata* in Portugal. Infection, Genetics and Evolution 42:14-19.
- Basso MA, Marques C, Santos M, Duarte A, Pissarra H, Carreira LM, Gomes L, Valério-Bolas A, Tavares L, **Santos-Gomes G,** Pereira Fonseca I. 2016. A successful treatment of feline leishmaniosis using an association of allopurinol and N-methyl-glucamine antimoniate. Journal of Feline Medicine and Surgery Open Reports 2: 1 –7
- Santos-Mateus D, Passero F, Rodrigues A, Valério-Bolas A, Silva-Pedrosa R, Pereira M, Laurenti MD, **Santos-Gomes G.** 2016. The battle between *Leishmania* and the host immune system at a glance. International Trends in Immunity 4: 28-34.
- Yamamoto ES, Campos BL, Jesus JA, Laurenti MD, Ribeiro SP, Kallás EG, Rafael-Fernandes M, **Santos-Gomes G,** Silva MS, Sessa DP, Lago JH, Levy D, Passero LF. 2015. The effect of ursolic acid on *Leishmania (Leishmania) amazonensis* is related to programmed cell death and presents therapeutic potential in experimental cutaneous leishmaniasis. PLoS One 10:e0144946.
- Carvalheiro M, Alexandra Esteves M, Santos-Mateus D, Lopes RM, Armanda Rodrigues M, Eleutério CV, Scoulica E, **Santos-Gomes G,** Cruz ME. 2015. Hemisynthetic trifluralin analogues incorporated in liposomes for the treatment of leishmanial infections. European Journal of Pharmaceutics and Biopharmaceutics 93: 346-352.
- Marques CS, Passero LFD, Vale-Gato I, Rodrigues A, Rodrigues OR, Martins C, Correia I, Tomás AM, Alexandre-Pires G, Ferronha MH, **Santos-Gomes GM**. 2015. New insights into neutrophil and *Leishmania infantum in vitro* immune interactions. CIMID 40: 19-29.
- Ferrolho J, Domingues N, Domingos A, **Santos-Gomes G**. 2015. The role of regulatory $CD4^+CD25^+$ T cell subset in host homeostasis during protozoan infection: An overview. International Trends in Immunity 3: 6-16.

- Passero LF, Laurenti MD, **Santos-Gomes G**, Campos BL, Sartorelli P, Lago JH. 2014. Plants used in traditional medicine: extracts and secondary metabolites exhibiting antileishmanial activity. Current Clinical Pharmacology 9:187-204.
- **Santos-Gomes GM**, Rodrigues A, Teixeira F, Carreira J, Alexandre-Pires G, Carvalho S, Santos-Mateus D, Tomás AM. 2014. Immunization with the *Leishmania infantum* recombinant cyclophilin protein 1 confers partial protection to subsequent parasite infection and generates specific memory T cells. *Vaccine* 32:1247-1253.
- Armada A, Gazarini M, Gonçalves LM, Antunes S, Custódio A, Rodrigues A, Almeida AJ, Silveira H, do Rosário VE, **Santos-Gomes G,** Domingos A. 2013. Generation of an antibody that recognizes *Plasmodium chabaudi* cysteine protease (chabaupain-1) in both sexual and asexual parasite life cycle and evaluation of chabaupain-1 vaccine potential. Experimental Parasitology 135:166-174.
- Gomes J, Soares R, Santos M, **Santos-Gomes G,** Botelho A, Amaro A, Inácio J. 2013. Detection of *Theileria* and *Babesia* infections amongst asymptomatic cattle in Portugal. Ticks and Tick-Borne Diseases 4: 148-151.
- Diaz S, Pereira da Fonseca I, Rodrigues A**,** Martins C**,** Cartaxeiro C, Silva MJ, Villa de Brito T**,** Alexandre-Pires G, **Santos-Gomes G.** 2012. Canine leishmaniosis. Modulation of macrophage/lymphocyte interactions by *L. infantum.* Veterinary Parasitology 89:137-144.
- Passero LFD, Marques C, Vale-Gato I, Corbett CEP, Laurenti MD, **Santos-Gomes G.** 2012. Analysis of the protective potential of antigens released by *Leishmania (Viannia) shawi* promastigotes. Archives of Dermatological Research 304: 47-55.
- Barbosa MA, Alexandre-Pires G, Soares-Clemente M, Marques C, Rodrigues OR, De Brito TV, Da Fonseca IP, Alves LC, **Santos-Gomes GM**. 2011. Cytokine gene expression in the tissues of dogs infected by *Leishmania infantum*. Journal of Comparative Pathology, 145: 336-344.
- The Working Group on Research Priorities for Development of Leishmaniasis Vaccines (Ali N, Brodskyn C, Campos-Neto A, Carvalho E M, Chang KP, Fernandes AP, Fujiwara R, Gazzinelli R, Goto H, Grimaldi G, Kaye P, Kedzierski L, Khamesipour A, Maia C, McMaster WR, Mendonça S, Nakhasi HL, Piazza F, Quinnell R, Reis AB, **Santos-Gomes G**, Shaw J, Valenzuela J, Walden P, Werneck G) and CH Nery Costa, N Peters, S R Maruyama, E Cardoso de Brito Jr., Santos IKM. 2011. Vaccines for the leishmaniases: proposals for a research agenda. PLoS Neglected Tropical Diseases 5: e943.
- Alexandre-Pires G, Villa de Brito MT, Algueró C, Martins C, Roos Rodrigues O, Pereira da Fonseca I, **Santos-Gomes G.** 2010. Canine leishmaniosis. Immunophenotypic profile of leukocytes in different compartments of symptomatic, asymptomatic and treated dogs. Veterinary Immunology and Immunopathology, 137: 275–283.
- Passero LFD, Marques C, Vale-Gato I, Corbett CEP, Laurenti MD, **Santos-Gomes G.** 2010. Histopathology, humoral and cellular immune response in the murine model of *Leishmania (Viannia) shawi*. Parasitology International, 59: 159-165
- Hassan DA, Marques C, **Santos-Gomes GM**, Do Rosario VE, Mohamed HS, Elhussein AM, Ibrahim ME, Abdulhadi NH. 2009. Differential expression of cytokine genes among sickle-cell-trait (HbAS) and normal (HbAA) children infected with *Plasmodium falciparum.* Annals of Tropical Medicine and Parasitology 103, 283–295.
- Rodrigues OR, Marques C, Soares-Clemente M, Ferronha MH, **Santos-Gomes GM.** 2009. Identification of regulatory T cells during experimental *Leishmania infantum* infection. Immunobiology, 214: 101-111

- Marques C, Carvalheiro M, Pereira MA, Jorge J, Cruz MEM, **Santos-Gomes GM.** 2008. Efficacy of the liposome trifluralin in the treatment of experimental canine leishmaniosis. The Veterinary Journal, 178, 133-137.
- Rosa R, Marques C, Roos Rodrigues O, **Santos-Gomes GM**. 2007. Immunization with *Leishmania infantum* released proteins confers partial protection against parasite infection with a predominant Th1 specific immune response. Vaccine 25, 4525-4532.
- Baptista-Fernandes T, Marques C, Roos Rodrigues O, **Santos-Gomes GM.** 2007. Intra-specific variability of virulence in *Leishmania infantum* zymodeme MON-1 strains. Comparative Immunology, Microbiology and Infectious Diseases 30, 41-53.

## 7. Student supervision

- PhD students - 12
- MSc students - 21
- Graduation students - 7

## 8. Teaching

8.1. Coordinator of the following curricular units:

- Parasite immunology (MSc in Medical Parasitology, IHMT-UNL)
- Immunology (MSc in Biomedical Sciences, IHMT-UNL)
- Scientific writing (MSc in Biomedical Sciences, IHMT-UNL)
- Clinical pathology and immunology of tropical infectious diseases (MSc in Tropical Health, IHMT-UNL)
- Innate and acquired immunity (PhD in Biomedical Sciences, IHMT-UNL)
- Scientific comunication (PhD in human genetics and infeccious diseases, IHMT-UNL)

8.2. Co-organization of the course Advances in Molecular and Cellular Biology, RENORBIO PhD programme (Teresina, PI, Brazil) (2008, 2009, 2010, 2012)

8.3. Member of the Scientific Committee of Biomedical Sciences MSc (IHMT-UNL)

8.4. Member of the Scientific Committee of Biomedical Sciences PhD ( IHMT-UNL)

## 9. Scientific evaluation

9.1. Reviewer of manuscripts for several scientific journals of veterinary, parasitology and of immunology

9.2. Evaluator of the Portuguese Foundation for Science and Technology (FCT)

9.3. Evaluator of the Academy of Sciences of the Czech Republic

9.4. Evaluator of CNPq (Brazil)

31st January, 2018