Curriculum Vitae

Cláudia de Bethencourt Rodrigues Sá e Cunha

Position at present	*Laboratory*	*Field of Study*
Post-doctoral fellow Instituto de Medicina Molecular, Lisbon, PT	Dr. Miguel Prudêncio	Host-parasite Interactions *Model: Plasmodium*

A. Education

Institution and Location	*P.I.*	*Degree*	*Year (s)*	*Field of Study*	*Thesis title*
University of Bristol, UK	Prof. M. Virji	**PhD** (with *Distinction)*	2003-2007	Host-bacteria interactions *Model: Neisseria*	"Functional analysis of the meningococcal Opc protein"
University of London/ Westminster, UK	Dr. Marty Parry/Dr. Ty Pitt	**MSc** (with *Merit*)	2003	Biomedical Sciences	"The effect of Panton- Valentine Leucocidin on polymorphonuclear cells"
University of Glamorgan, UK	-	**BSc** (*First Class with Honours*)	2002	Microbiology and Genetics	"The use of Ribosomal RNA analysis in the classification of water mites"

B. Other Research Training.

May –September 2009- **Visiting researcher** to the laboratory of Prof. Kai Matuschewski to learn how to use the Yeast-Two hybrid technique to study protein-protein interactions 27th-30th April 2009- Attended the Advanced course on Yeast-Two hybrid system, Universidade de Aveiro, PT.

October 2003-2005- Advanced (post-graduate) courses on Biosciences, University of Bristol, UK.

January to August 2003 – **Master Thesis reseach work performed** in Clinical Microbiology at the Health Protection Agency, London, UK. Laboratory of Dr Ty Pitt.

September 2002 to April 2003 - **Rotation Placement** in Clinical Microbiology at the Health Protection Agency, London, UK. Laboratories: *Streptococcus*, *Staphylococcus aureus*, enterical pathogens, Gram negattive, virology and STDs. Supervisor: Dr Ty Pitt.

June to September 2002- **Placement** in Molecular Biology and Genetics, at the Molecular Genetics Laboratory, Roslin Institute, Edinburgh, UK. Supervisors: Dr John Williams e Prof. Ian Wilmut.

June to September 2000- **Placement** in General Microbiology at the Laboratório de Biotecnologia e Química Pura, Lisbon, PT. Supervisor: Prof. Doutora Maria Teresa Colaço.

C. Teaching Activity/Training.

October 2010-Present- **Co-supervisor** of Dr. Patrícia Meireles, PhD student at the Malária Unit, IMM, PT.

February 2004-September 2007- **Teaching Assistant**, Department of Molecular and Cellular Medicine, University of Bristol, UK. Modules lectured: "Microbes and Diseases", "Introduction to Microbiology" and "Infection and Immunity".

January 2004- March 2007- **Co-supervisor** of graduate students performing their degree placement at the Lab of Prof. Mumtaz Virji, University of Bristol, UK.

January 2004- Attended the course on "Teaching at the graduate school level", Educational Department, University of Bristol, UK.

D. Peer-reviewed publications.

- Guirgis BS, **Sa e Cunha C**, Gomes I, Cavadas M, Silva I, Doria G, Blatch GL, Baptista PV, Pereira E, Azzazy HM, Mota MM, Prudêncio M, Franco R. (2012) "Gold nanoparticle-based fluorescence immunoassay for malaria antigen detection", ***Anal. Bioanal. Chem.***, 402, 1019-1027

- Sa e Cunha C, Griffiths NJ, Virji M. (2010) Neisseria meningitidis Opc invasin binds to the sulphated tyrosines of activated vitronectin to attach to and invade human brain endothelial cells.. **PLoS Pathog**.,20;6(5)

- Sa e Cunha C, Griffiths NJ, Murillo I, Virji M**.** (2009) *Neisseria meningitidis* Opc invasin binds to the cytoskeletal protein a-actinin. **Cellular Microbiology 11**(3), 389–405.

D1: Posters aceppted at National or International Conferences.

- Britta Nyboer*, **Cláudia Sá e Cunha***, Kirsten Heiss, Maria M. Mota, Miguel Prudêncio, Ann-Kristin Mueller, "Malaria intrahepatic niche: Deciphering the host-parasite interactive network during pré-erythrocytic development". **Poster** presented at the Parasitology Meeting, Heidelberg, Germany- ***Winner of Best Poster award*** **equal contributions*

- Gislain G. Cabal, **Cáudia Sá e Cunha**, Ana M.S. Almeida, Cecília M.P. Rodrigues, Maria M. Mota and Miguel Prudêncio, "Hepatocyte nuclear receptors and Plasmodium liver infection: from biology to anti-malarial prophylactic intervention", **Poster** presented at the EMBO Nuclear Receptors Conference, 16-20 September 2011, Barcelona, Spain- ***Winner of Best Poster award***

- Miguel Cavadas, Inês Gomes, Bassem S. S. Guirgis, **Cláudia Sá e Cunha**, Hassan Azzazy, Eulália Pereira, Maria Mota, Miguel Prudêncio, Ricardo Franco, "Malaria nanodiagnostics: antibody-gold nanoparticle conjugates for malária antigen detection in clinical samples", **Poster** presented at the Nanoweek 2011, 31 January – 4 February 2011, Dublin, Ireland

- Ricardo Franco, Inês Gomes, Bassem Shenouda, **Cláudia Sá e Cunha**, Hassan Azzazy, Maria M. Mota, Miguel Prudêncio, "Malaria diagnostics based on antibody-funciotalized gold nanoparticles and Plasmodium falciparum Hsp70", **Poster** presented at the Trends in Nanotechnology 2010, 6-10 September 2010, Braga, Portugal

- Shenouda B., Gomes I., **Sá e Cunha C**., Azzazy H., Mota M., Prudêncio M., Franco R. *Plasmodium falciparum* hsp70 antibody-gold nanoparticle conjugates: towards malaria nanodiagnostics. **Poster** presented at the ESF International Conference on Nanotheranostics, Ayia Napa, Chipre, 27-30 Abril, 2010.

- Shenouda B., Gomes I., **Sá e Cunha C**., Azzazy H., Mota M., Prudêncio M., Franco R. Malaria nanodiagnostics using plasmodium falciparum hsp70 antibody-gold nanoparticle conjugates. **Poster** presented at the NanoSpain 2010, Malaga, Spain, 23-26 Março, 2010.

- Sá e Cunha *et al.* Alpha-actinin is an intracellular target for the Opc invasin of *Neisseria meningidis*. **Poster** presented at the 16ª International Pathogenic Neisseria Meeting, Rotterdam, Setembro 2008.

- Sá e Cunha *et al.* Opc invasin of *Neisseria meningidis* requires activated/multimeric form of vitronectin for interaction with human brain microvascular endothelial cells. **Poster** presented at the 16ª International Pathogenic Neisseria Meeting, Rotterdam, Setembro 2008.

- Sá e Cunha *et al.* Integrin directed outcomes of Opc-mediated serum-dependent interactions of Neisseria *Neisseria meningidis* at brain and dermal vascular endothelial interfaces. **Poster** presented at the 16ª International Pathogenic Neisseria Meeting, Rotterdam, Setembro 2008.

- Sá e Cunha *et al.* Molecular interactions of the meningococcal Opc protein further explored- identification of α-actinin as an Opc binding protein. **Poster** presented at the 15ª International Pathogenic Neisseria Meeting, Cairns, Australia, Setembro 2006.

- Sá e Cunha *et al.* Adhesion of *Neisseria meningitidis* to primary human nasopharyngeal cells: a new model for bacteria-host interactions? **Poster** presented at the 15ª International Pathogenic Neisseria Meeting, Cairns, Australia, Setembro 2006.

- Sá e Cunha *et al.* "Mechanisms of Opc-mediated cellular interactions with human endothelial cells". **Poster** presented at the Society for General Microbiology Conference- "Mechanisms of bacterial adhesion and invasion", Trinity College, Dublin, Irlanda, Maio 2006.

- Sá e Cunha *et al.* "Interactions of *Neisseria meningitidis* with endothelial cells : the roles of Vitronectin, Fibronectin and other molecules". **Poster** presented at the 14ª International Pathogenic Neisseria Meeting, Chicago, Estados Unidos da América., Setembro 2004.

E. Oral presentations and Scientific Conferences.

During Post-doctoral fellowship- Regular seminars attended or given at the Parasitology Meeting, Instituto de Medicina Molecular, PT

During PhD degree- Regular seminars attended or given at Bristol Microbiology Forum, University of Bristol, UK

September 2006 - 15ª International Pathogenic Neisseria Meeting, Cairns, Australia

May 2006- Society for General Microbiology Conference- "Mechanisms of bacterial adhesion and invasion", Trinity College, Dublin, Irland

Outubro 2004, 2005 e 2006: Annual Graduate Symposium, University of Bristol, UK.

Setembro 2004: 14ª International Pathogenic Neisseria Meeting, Chicago, USA

F. Languages Skills.

Language	Reading	Writing	Conversation
Portuguese	Native	Native	Native
English	Excellent	Excellent	Excellent
Spanish (Castellano)	Elementary	Elementary	Elementary

G. Additional Comments and Other interests.

Main characteristis of my personality: very organised, responsible and persistent. I like a good challenge. I am also used to work alone or as part of a team.

Other interests include travelling to countries different than the one I live in. Having lived in different countries has taught me how the different things are experienced by different cultures.

My favourite sports are skiing and water-related sports.

H. References.

Dr. Miguel Prudêncio. Instituto Medicina Molecular, Avenida Prof. Egas Moniz 1649-028 Lisboa Portugal. mprudencio@fm.ul.pt

Professora Mumtaz Virji. Department of Cellular and Molecular Medicine, University Walk, University of Bristol, Bristol, BS8 1TD, UK. m.virji@bristol.ac.uk.