

CURRICULUM VITAE
MARCELINO José Maria



Personal data

Portuguese nationality

Married with two children (8 and 11 years old)

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Education

- Doctor degree in Biomedical Sciences by Medical School of Lisbon, Universidade de Lisboa. Thesis: Humoral response in HIV-2 infection: Impact on diagnosis, prevention and viral evolution. Grade-highest honours, Summa Cum Laude (2011).
- Biology degree by University of Azores, Azores (1998).

Professional experience

- Auxiliary Researcher at Medical Microbiology Unit, Institute of Hygiene and Tropical Medicine, Universidade NOVA de Lisboa, Portugal. (02.10.2014 to present).
- Director of Medical Microbiology Unit, Institute of Hygiene and Tropical Medicine, Universidade NOVA de Lisboa, Portugal. (03.20.2015 to 01.03.2016).
- Technician Researcher at Medical Microbiology Unit, Institute of Hygiene and Tropical Medicine, Lisbon, Universidade NOVA de Lisboa, Portugal (01.01.2009 to 01.31.2014).
- Technician Researcher at Unit of Proteins and Monoclonal Antibodies Technology at INETI, Lisbon, Portugal (1999 to 2008).
- Invited Research in Unit of Retroviruses and Associated Infectious Diseases, Faculty Pharmacy of Lisbon, Lisbon, Portugal (1999 to 2012).
- Invited PhD student at Department of Immunology and Vaccinology, Swedish Institute for Infectious Disease Control, Solna, Sweden, under supervision of Charlotta Nilsson, Ph.D. (Oct 01 to Dec 31 in 2004, 2005 and 2006 years).
- Invited Researcher at Microbiology and Tumour and Biology Center, Karolinska Institute, under supervision of Professor, Ewa Björling (Feb to March 2002).
- Undergraduate stage in Dep. of Biotechnology, INETI, Lisbon, Portugal (1997 to 1998).

Teaching

- Invited Professor in the Doctoral Program - **Human Genetic and Infectious Disease** at the IHMT (www.ihmt.unl.pt). The lecture will focus on immunoenzymatic methods for diagnosis of infectious diseases.
- Invited Professor of Microbiology in School of Health Sciences Egas Moniz, Monte de Caparica, Portugal (Sep 2002 to March 2003).
- Invited Professor of Pharmaceutical Biotechnology in School of Health Public Ribeiro Sanches, Lisbon, Portugal (Sep 2006 to March 2007).

Supervision

PhD student (ongoing)

- Rute Marcelino (FCT Grant: SFRH/BD/99507/2014) (204-2018) - PhD Thesis in Genetic Human and Infectious Diseases (IHMT/UNL). "Memory B cells: a new approach to define new epitopes in the neutralization of hepatitis C virus" (Supervisor). Ongoing

Master Students

- Patricia Borges (2017-2018). MSc in Biomedical Sciences Thesis (IHMT/UNL) - "Characterization of the binding and neutralizing antibody response in plasma of HIV-1-infected Portuguese patients against gp120 polypeptides from primary HIV-1 isolates circulating in Angola" (Supervisor). Ongoing
- Débora Almeida (2015-2016). MSc in Medical Microbiology Thesis (IHMT/UNL) - "Role of C2-C3 envelope region in the development of neutralizing antibodies against HIV-2" (Supervisor, IHMT/UNL). Completed.

Undergraduate students

- Paloma Gonçalves (2018). Degree in Biochemistry of Faculdade de Ciências e Tecnologia of NOVA University – Thesis: "Characterization of the anti-HIV-1 antibody response in the plasma of HIV-1 infected individuals from Mozambique". (Supervisor). Ongoing
- Patricia Borges (2016). Degree in Biotechnology of Escola Superior de Tecnologia do Barreiro/ Instituto Politécnico de Setúbal – Thesis: "Characterization of recombinant polypeptides of the C2V3C3 region of various HIV-1 subtypes". (Supervisor). Completed
- Sofia Silva (2003). Degree in Biologia Microbiana e Genética da Faculdade de Ciências de Lisboa – Thesis: "Produção de anticorpos monoclonais contra a glicoproteína de superfície do invólucro do VIH-2 ALI. (Co-Supervisor). Completed.

Research Fellow

- Joana Winton MSc (2012-2013) – Research Fellow in Project (PTDC/SAU-FAR/115290/2009), Funded by Portuguese Foundation for Science and Technology. "Development and pre-clinical evaluation of a new HIV-1 vaccine concept".

Courses

- IX Course on Laboratory Animal Science, organized by CIISA/ Faculdade de Medicina Veterinária, Universidade Técnica de Lisboa, in collaboration with the Department of Laboratory Animal Science, Utrecht University, from April 26th through May 7th, 2010.

Awards and Scholarships

- Awarded with two 2nd prizes from Janssen-Cilag, Portugal (2013 and 2014) for the best scientific abstract in HIV/AIDS field in Portugal.
- Awarded with the Pfizer Prize 2012 in Clinic Research with the work: "Resistance to antibody neutralization in HIV-2 infection occurs in late stage disease and is associated with X4 tropism", Lisboa, Portugal.
- Awarded with the 1st prize from Janssen-Cilag, Portugal (2010) for the best scientific abstract in HIV/AIDS field in Portugal.
- Awarded with the Global HIV Vaccine Enterprise Scholarship to participate and present an oral communication in AIDS Vaccine 2010 Conference, Atlanta, USA.
- Awarded with the Keystone Symposia Scholarship to participate and present a poster in Keystone Symposium on HIV Vaccines Progress and Prospects, Banff, Alberta, Canada. 2008.
- National Commission of Fight against AIDS Grant to participate and present a poster in 3rd IAS Conference on HIV Pathogenesis and Treatment, Rio de Janeiro, Brazil. 2005
- Ph.D. Scholarship from Fundação para a Ciência e Tecnologia, Portugal (SFRH/BD/13892/2003).
- Luso-American Development Foundation Grant to participate and present a poster in Keystone Symposia on HIV-1 Protection and Control by Vaccination, Keystone, Colorado, USA. 2002

Responsibilities for journals

- Invited reviewer for AIDS Research and Human Retroviruses (2012)
- Invited reviewer for PLOS One (2013)

Conferences

- Chair of Scientific Committee "**The Global Health and Tropical Medicine Meeting: HIV Challenges**, July 10, 2015 at Instituto de Higiene e Medicina Tropical, Lisboa, Portugal.

Oral presentation by invitation

- Marcelino JM. **HIV is there a hope for a vaccine?** Speaker at HIV and Hepatitis Course organized by Institute of Public Health, University of Porto, June 17-19, 2015, Porto, Portugal.
- Marcelino JM. **Escape from neutralization is a frequent event in HIV-2 infection and is strongly associated with X4 tropism.** AIDS Vaccine 2010 Conference; 28 Sep to 01 October, 2010, Atlanta, Georgia, USA.

Projects of Research and Development

- Consortium VIH DUAVAX: A combination of two gp41 peptides for a new prophylactic vaccine both neutralizing HIV-1 and inhibiting CD4 depletion". Principal Investigator of Workpackage 3 "Evaluation and clinical impact of the presence of anti-X614A and/or anti-EC26-2A4 Abs in the plasma of HIV-1 patients" (HIVERA 0001/2013) – European Research Projects on AIDS/HIV (2014-2016).
- Implementação do teste de pesquisa da mutação de resistência Q80K do Vírus da Hepatite C. Project: VHC-QK 030202/2014 Funded by Janssen-Cilag, Lda, Portugal (2014). (Coordinator).
- Development and pre-clinical evaluation of a new HIV-1 vaccine concept (PTDC/SAU-FAR/115290/2009), Funded by Portuguese Foundation for Science and Technology (2011-2014). Principal Investigator at Partner Institution.
- Neutralization profiles of sera from Human Immunodeficiency Virus type 2 (HIV-2)-infected individuals: relationship to HIV-2 viral load and to the genetic and phenotypic diversity of virus quasispecies POCTI/ESP/48045/2002 Funded by Portuguese Foundation for Science and Technology (2003-2007) Researcher.
- Production and characterization of monoclonal antibodies against envelope glycoproteins of Human Immunodeficiency Virus type 2, (CRIA 4626) - Funded by National Commission of fight against AIDS (1998-2002), Researcher.

Publications

- Rocha C, Duarte J, Borrego P, Calado R, **Marcelino JM**, Tendeiro R, Valadas E, Sousa AE, Taveira N. Potency of HIV-2-specific antibodies increase in direct association with loss of memory B cell. *AIDS*. 2017 Nov. 13;31(17):2431-243. **IF = 5.080**
- Abecasis A, Sónia D, and **Marcelino JM**. 2015. A contribuição do Instituto de Higiene e Medicina Tropical para o conhecimento da infeção pelo vírus da imunodeficiência Humana. *Anais do Instituto de Higiene e medicina tropical*. Vol. 13: 37-45. <http://www.ihmt.unl.pt/Biblioteca/Anais2014/files/assets/basic-html/page1.html>
- Rocha C, Calado R, Borrego P, **Marcelino JM**, Bártole I, Rosado L, Cavaco Silva P, Gomes P, Família C, Quintas A, Skar H, Leitner T, Barroso H and Taveira N. Neutralizing antibody response and virus evolution in early HIV-2 infection. *Retrovirology*. 2013 Oct 24;10(1):110. **IF = 5.660**
- Borrego P, Calado R, **Marcelino JM**, Pereira P, Quinta A, Barroso H and Taveira N. An ancestral HIV-2/SIV peptide with potent HIV-1 and HIV-2 fusion inhibitor activity. *AIDS*. 2013 Jan 16. **IF = 6.407**
- **Marcelino JM**, Borrego P, Nilsson C, Família C, Barroso H, Maltez F, Doroana M, Antunes F, Quintas A and Taveira N. Resistance to antibody neutralization in HIV-2 infection occurs in late stage disease and is associated with X4 tropism. *AIDS*. 2012 Nov 28;26(18):2275-2284. **IF = 6.407**

- Tendeiro R, Fernandes S, Foxall RB, **Marcelino JM**, Taveira N, Soares RS, Baptista AP, Cavaleiro R, Gomes P, Victorino RM, Sousa AE. Memory B-cell depletion is a feature of HIV-2 infection even in the absence of detectable viremia. *AIDS*. 2012 Aug 24;26 (13):1607-1617. **IF = 6.407**
- Borrego P, Calado R, **Marcelino JM**, Bártolo I, Rocha C, Cavaco-Silva P, Doroana M, Antunes F, Maltez F, Caixas U, Barroso H, Taveira N. Baseline susceptibility of primary HIV-2 to entry inhibitors. *Antivir Ther*. 2012;17 (3):565-70. **IF = 3.160**
- Barroso H, Borrego P, Bártolo I, **Marcelino JM**, Família C, Quintas A and Taveira N. Evolutionary and structural features of the C2, V3 and C3 envelope regions underlying the differences in HIV-1 and HIV-2 biology and infection. *PLoS One*. 2011 Jan 20;6 (1):e14548. **IF = 4.092**
- **Marcelino JM**, Borrego P, Barroso H, Quintas A, Novo C and Taveira N. Potent and broadly reactive HIV-2 neutralizing antibodies elicited by a Vaccinia vector-prime C2V3C3-boost vaccination strategy. *J Virol*. 2010 Dec; 84 (23): 12429-12436. **IF = 5.189**
- Skar H, Borrego P, Wallstrom TC, Mild M, **Marcelino JM**, Barroso H, Taveira N, Leitner T, Albert J. HIV-2 genetic evolution in patients with advanced disease is faster than in matched HIV-1. *J Virol*. 2010 Jul; 84(14): 7412-5. **IF = 5.189**
- **Marcelino JM**, Nilsson C, Barroso H, Gomes P, Borrego P, Maltez F, Rosado L, Doroana M, Antunes F, Taveira N. Envelope-specific antibody response in HIV-2 infection: C2V3C3-specific IgG response is associated with disease progression. *AIDS*. 2008 Nov 12; 22(17): 2257-65. **IF = 5.460**
- Borrego P, **Marcelino JM**, Rocha C, Doroana M, Antunes F, Maltez F, Gomes P, Novo C, Barroso H, Taveira N. The role of the humoral immune response in the molecular evolution of the envelope C2, V3 and C3 regions in chronically HIV-2 infected patients. *Retrovirology*. 2008 Sep 8; 5:78. **IF = 4.042**
- **Marcelino JM**, Barroso H, Gonçalves F, Silva SM, Novo C, Gomes P, Camacho R, Taveira N. Use of a new dual-antigen enzyme-linked immunosorbent assay to detect and characterize the human antibody response to the human immunodeficiency virus type 2 envelope gp125 and gp36 glycoproteins. *J Clin Microbiol*. 2006 Feb; 44(2): 607-11. **IF = 3.445**
- **Marcelino JM**, Novo C, Pereira JM, Picotez F, Clemente A, Taveira N. Production and Characterization of a Mouse Monoclonal Antibody against the Gag p26 Protein of Human Immunodeficiency Virus Type 2: Identification of a New Antigenic Epitope. *AIDS Res and Hum Retroviruses*. 2001, 17:1279-1283. **IF = 2.520**

Abstracts presented at national and international conferences

- **José Marcelino**, Cheila Rocha, Pedro Borrego, Helena Barroso and Nuno Taveira. Characterization of mouse monoclonal antibody with potent neutralizing activity against HIV-2 primary isolates. Poster S3-2042 presented at the Keystone Symposia "Immunological Mechanisms of Vaccination". Ottawa, Canada, 2012.

- **José Marcelino**, Manuela Doroana, Fernando Maltez, Lino Rosado, Helena Barroso, Perpétua Gomes, Charlotta Nilsson and Nuno Taveira. Evolution of the binding antibody response against the envelope gp36 and gp125 glycoproteins in HIV-2 infection. Keystone Symposia “HIV Vaccines: Progress and Prospects”, March 2008, Banff, Alberta, Canada. Abstract X7-239. Poster.
- **José Marcelino**, Manuela Doroana, Fernando Maltez, Lino Rosado, Perpétua Gomes, Charlotta Nilsson e Nuno Taveira. Resposta humoral contra as glicoproteínas do invólucro gp125 e gp36 em doentes infetados por VIH-2: impacto da terapêutica antirretroviral. VIII Congresso Nacional de Doenças Infeciosas e 6º Congresso Nacional Sobre Sida, 2008, Porto, Portugal. Abstract P1.52. Poster.
- **José Marcelino**, Helena Barroso, Fátima Gonçalves, Sofia Marques Silva, Carlos Novo, Perpétua Gomes, Ricardo Camacho and Nuno Taveira. A sensitive and specific ELISA assay for the detection of the antibody response to the HIV-2 envelope glycoproteins in single and dual HIV infections. 3rd IAS Conference on “HIV Pathogenesis and Treatment”, 2005, Rio de Janeiro, Brazil. Poster.
- **José Marcelino**, Rute Antunes, Helena Barroso, Maria Helena Lourenço, Lino Rosado, Carlos Novo and Nuno Taveira. The role of neutralizing antibodies in the disease evolution of children infected by HIV-2 transmitting mother. Keystone Symposia “HIV Vaccine Development: Progress and Prospects”, March, 2004, Whistler, British Columbia, Canada. Abstract X8-305. Poster.
- **José Marcelino**, Sofia Silva, Helena Barroso, Carlos Novo and Nuno Taveira. Murine Monoclonal Antibodies against Envelope of HIV-2 Primary isolate from Guinea- Bissau. 1º Congresso da Sociedade Portuguesa de Ciências Farmacêuticas, June, 2003, Lisbon, Portugal. Abstract O-15. Oral.
- **José Marcelino**, Helena Barroso, Carlos Novo, Rute Antunes, Paula Matoso, Charlotta Nilsson, Ewa Björling and Nuno Taveira. Neutralizing immune response in mice immunised with envelope glycoproteins from the primary isolate HIV-2ALI. Keystone Symposia “HIV-1 Vaccine Development: Immunological and Biological Challenges”, March 2003, Banff, Alberta, Canada. Abstract X1-430. Poster.
- **José Marcelino**, Helena Barroso, José Moniz-Pereira, Carlos Novo and Nuno Taveira. Immunogenicity of the envelope glycoproteins of the primary isolate HIV-2ALI. Keystone Symposia “HIV-1 Protection and Control by Vaccination”, February, 2002, Keystone, Colorado, USA. Abstract X8-310. Poster.

Co-authorship of abstracts presented at national and international conferences

- Rita Calado, Joana Duarte, Pedro Borrego, **José Marcelino**, Joana Wilson, Inês Bártole, Francisco Martin, Sofia Almeida, Helena Barroso, Luís Graça and Nuno Taveira. A prime-boost immunization strategy with Vaccinia virus expressing novel HIV-1 gp120 glycoproteins from non-B subtypes induces tier 2 cross-clade neutralizing antibodies.

Poster X2-2058 presented at the Keystone Symposia “HIV Vaccines”. Keystone, Colorado, USA, 2017.

- Nuno Taveira, Andreia Martins, Marta Calado, Pedro Borrego, **José Marcelino** and José Pereira. Determinants of coreceptor use, tropism and susceptibility to antibody neutralization in the V3 region of HIV-2. Poster X4-4019 presented at the Keystone Symposia “HIV Vaccines”. Keystone, Colorado, USA, 2016.
- Rute Marcelino, Joaquim Cabanas, Fátima Gonçalves, A. Carvalho, Inês Costa, Isabel Diogo, José Marcelino, and Perpétua Gomes. Characterization of NS3 region and frequency of resistance mutations against Simeprevir of HCV genotype 1a and 1b in Portuguese infected patients. Abstract nº: 177 presented at ESCV. Lisboa, Portugal, 2016.
- Calado R, Taveira N, Clemente S, Bártolo I, Wilton J, **Marcelino JM**, Borrego P, Diniz A, and Duarte J. Envelope C2-V3-C3-specific antibodies correlate with neutralization activity in plasma from HIV-1 infected patients from Angola. Poster presented at Keystone Symposia “HIV Vaccines”, March 2015, Banff, Alberta, Canada. Abstract X5-1022.
- Cheila Rocha, **José Marcelino**, Pedro Borrego, Rita Calado, Rita Tendeiro, Russel B Foxall, Emília Valadas, Ana E Sousa and Nuno Taveira. Potent and broadly neutralizing antibodies are produced in chronic HIV-2 patients despite evidence of marked memory B cell depletion. Poster X2-3001 presented at the Keystone Symposia “HIV Vaccines”. Keystone, Colorado, USA, 2013.
- Cheila Rocha, Pedro Borrego, Rita Calado, Helena Skar, **José Marcelino**, Inês Bártolo, Thomas Leitner, Helena Barroso and Nuno Taveira. Evolution of the autologous neutralizing antibody response in early HIV-2 infection. Poster X5-316 presented at the Keystone Symposia “HIV Vaccines”. Keystone, Colorado, USA, 2012.
- Pedro Borrego, Helena Barroso, Inês Bártolo, **José Marcelino**, Carlos Família, Alexandre Quintas and Nuno Taveira. Evolutionary and structural features of the C2, V3 and C3 envelope regions underlying the differences in HIV-1 and HIV-2 biology and infection. Poster X7-115 presented at Keystone Symposia, “HIV Evolution, Genomics and Pathogenesis”, Whistler, Canada, 2011.
- Pedro Borrego, Rita Calado, **José Marcelino**, Cheila Rocha, Inês Bártolo, Patrícia Cavaco-Silva, Helena Barroso and Nuno Taveira. Susceptibility of HIV-2 primary isolates to fusion and entry inhibitors. Poster X8-420 presented at Keystone Symposia “Protection from HIV: Targeted Intervention Strategies”, Whistler, Canada, 2011.
- Pedro Borrego, Rita Calado, **José Marcelino**, Inês Bártolo, Patrícia Cavaco Silva, Alexandre Quintas, Helena Barroso and Nuno Taveira. Design and evaluation of a new HIV-1 and HIV-2 fusion inhibitor peptide. Poster X8-115 presented at Keystone Symposia “Protection from HIV: Targeted Intervention Strategies”, Whistler, Canada, 2011.
- Nuno Taveira, Pedro Borrego, Helena Barroso, Carlos Novo and **José Marcelino**. Potent and broad spectrum anti-HIV-2 neutralizing antibodies induced by C2V3C3-directed vaccination. Poster X5-422 presented at Keystone Symposia “HIV Vaccines”, Banff, Alberta, Canada, 2010.

- Helena Skar, Pedro Borrego, **José Marcelino**, Karin Wilbe, Annette Alaeus, Cheila Rocha, Helena Barroso, Nuno Taveira, Thomas Leitner, Jan Albert. The rate of HIV-2 evolution. Oral presentation 42 presented at 15th International HIV Dynamics & Evolution, Santa Fe, New Mexico, USA, 2008.
- Pedro Borrego, **José Marcelino**, Cheila Rocha, Manuela Doroana, Francisco Antunes, Fernando Maltez, Helena Barroso, Nuno Taveira. Interplay between the immune response to the envelope glycoproteins and viral evolution in chronic HIV-2 infection. Poster X7-115 presented at Keystone Symposia “HIV Vaccines: Progress and Prospects”, Banff, Alberta, Canada, 2008.
- Cheila Rocha, Helena Barroso, **José Marcelino**, Inês Bártolo, Lino Rosado, Nuno Taveira. Molecular and phenotypic evolution of HIV-2 in two children infected by mother-to-child transmission. Poster X8-324 presented at Keystone Symposia “HIV Pathogenesis”, Banff, Alberta, Canada, 2008.
- Pedro Borrego, **José Marcelino**, Cheila Rocha, Manuela Doroana, Fernando Maltês, Helena Barroso, Nuno Taveira. Intra-patient molecular evolution of the env gene in HIV-2 infection. Poster P24 presented at XIII International Bioinformatics Workshop on Virus Evolution and Molecular Epidemiology, Lisbon, Portugal, 2007.
- Cheila Rocha, Helena Barroso, Inês Bártolo, **José Marcelino**, Lino Rosado and Nuno Taveira. Genetic evolution of the HIV-2 *env* in a patient with fast disease progression. Poster X5-343 presented at Keystone Symposia “HIV Pathogenesis”, Keystone, Colorado, USA, 2006.
- Cheila Rocha, **José Marcelino**, Helena Barroso, Nuno Taveira. Evolução do invólucro do VIH-2 numa infecção em progressão. Poster A41 presented at V Congresso Nacional sobre SIDA, Figueira da Foz, Portugal, 2004.
- Nuno Taveira, Helena Barroso, **José Marcelino**, Carlos Novo and José Moniz-Pereira. Design, production and evaluation of new envelope derived HIV-2 antigens and immunogens. Oral presentation Ws64 presented at seventh European Conference on Experimental AIDS Research, Genoa, Italy, 2002.

Patents

- Taveira N; De Sousa Barroso MH; **Marcelino JM** (2007). New recombinant gp36 protein comprises an ectopic polypeptide linked to a gp36 polypeptide or peptide fragment, useful as vaccines for detecting or diagnosing HIV-2 in a subject. International Patent Number (s): WO2007141650-A2; WO2007141650-A3.
- Taveira N; De Sousa Barroso MH; **Marcelino JM** (2007). New HIV-2 peptide, (e.g. gp36 glycoprotein or C2-C3 envelope protein), useful for diagnosing, detecting, treating or preventing an HIV-2 infection. International Patent Number(s): WO2007084021-A2; WO2007084021-A3

Lisbon, february 26th, 2018

José Marcelino