

Curriculum Vitae – Helena Soares

Current positions	Head of the Laboratory of Immunobiology and Pathogenesis Invited Assistant Professor at NOVA Medical School
Date from	July 2015
Location	Chronic Diseases Research Centre (CEDOC), NOVA Medical School, Lisbon, Portugal

PREVIOUS POSTS HELD

- 2014-15 Invited Scientist, Instituto Gulbenkian de Ciência, Lisboa, Portugal
- 2011-14 Research Associate Alcover Lab, Institut Pasteur, Paris, France
- 2008-10 Postdoctoral Fellow Alcover Lab, Institut Pasteur, Paris, France
- 2007-08 Postdoctoral Associate Steinman Lab, Rockefeller University, NYC, USA
- 2002-06 Visiting Graduate Steinman Lab, Rockefeller University, NYC, USA

QUALIFICATIONS

- 2006 Ph.D. in Biomedicine, Rockefeller University, NYC, USA
- 2002 Ph.D. course work, Instituto Gulbenkian de Ciência, Oeiras, Portugal
- 2001 Pharm.D., Faculdade de Farmácia, University of Coimbra, Portugal

Additional Training: EMBO Laboratory Management Course for post-docs; Grant Writing Intensive Course.

AWARDS AND HONORS

- 2015-19 Investigador FCT research contract, Portuguese Foundation for Science and Technology
- 2013-14 French AIDS Research Foundation (ANRS) postdoctoral fellowship
- 2011-13 French AIDS Association (Sidaction) postdoctoral fellowship
- 2008-10 European Molecular Biology Organization (EMBO) postdoctoral fellowship- 15% success rate

Previous Awards: 2002-06 Portuguese Foundation for Science and Technology (FCT) PhD scholarship; 2001-02 Calouste Gulbenkian Foundation and Portuguese Foundation for Science and Technology (FCT), 1-year conjoint PhD stipend; 2001 Portuguese National Pharmaceutical Association (ANF), best Pharmaceutical Sciences Graduate Award; 2001 Portuguese Pharmaceutical Speciality College, best Pharmaceutical Sciences Graduate Award; 1997-00 Portuguese Ministry of Science and Higher Education, best Pharmaceutical Sciences student Award (three consecutive years)

PATENTS:

“Methods of Characterizing E-syt2 Inhibitors, E-syt2 inhibitors, and methods of use”

Messali N, **Soares H** and Weil R

Business Development and Industrial Partnerships Department patent request DI2014-25; United States application number

15/554,424 filed on March 4th 2016. **This patent request attests that novel therapeutic targets are still be identified in T cell signaling, which be used to develop immunotherapies.**

ACTIVE GRANTS

Grant	Period	Value
PTDC/MEC-REU/29520/2017 “Reprogramming inflammatory-follicular T cells (Tfh): from the clinic to precision immunotherapies”, FCT (Portuguese Science and Technology Foundation) Research Grant PI: Helena Soares , Co-PI: Jaime Branco (classified in the top 3% of all projects)	2018-2021	239,975.11€
“Impact of HIV-1 Genetic Diversity on Immunodeficiency”, Gilead Génese Research Grant. PI: Nuno Osório, Co-PI: Helena Soares	2018-2020	35,500€
“Development of Novel AZT Derivatives Based on Triazoles”, NOVASaúde Research Grant. PI: Ana Petronilho, Co-PI: Helena Soares	2017-2018	12,000€
“HIV-1 Replication in Follicular Sanctuaries”, Gilead Génese Research Grant. PI: H. Soares	2017-2019	32,200€
“Defining the 3D-topography of signaling territories in CD4 T cell function and in HIV-induced immunodeficiency”, FCT Investigator Starting Grant. PI: H. Soares	2014-2019	5-year renewable work contract

INACTIVE GRANTS

- 2013-15 “HIV-1 subversion of T cell life and death signals at the immunological synapse and in an endosomal signaling compartment”, ANRS (French AIDS Research Foundation). PI: **H. Soares**, Co-I: A. Alcover
- 2017-18 “Bridging Innate and Adaptive Immunity through JAK signaling”, Pfizer sponsored Sociedade Portuguesa de Reumatologia Research Grant. PI: Fernando Pimentel-Santos, Co-PI: **Helena Soares** (5000€ to H Soares)
- 2016-17 “Rewired T Cells: New therapeutic opportunities for Rheumatoid Arthritis”, iNOVA4Health Research Grant. PI: **H. Soares**, CoP-I: J. Branco (59,000€ to H Soares)

PUBLICATIONS (Lab members in *italics*, *Corresponding author)

- 1-Ferro T, Crespo HJ, Gonçalves M, **Soares H**, Ferreira JA, Springer S, Videira PA. MHC class I stability is modulated by cell surface sialylation in human dendritic cells. *Under Revision*. 2018
- 2-Silva JG, Martins NP, Henriques R, **Soares H***. HIV-1 Nef Impairs the Formation of Calcium Membrane Territories Controlling the Signaling Nanoarchitecture at the Immunological Synapse. *J. Immunol*. 2016. 197: 4042-4052 **Highlighted in J Immunol November 15, 2016, 197 (10) 3749-3750.**
- 3-**Soares H***. HIV-1 intersection with CD4 T cell vesicle exocytosis: intercellular communication goes viral. *Frontiers in Immunology*. 2014. 5:454
- 4-**Soares H**, Lasserre R, Alcover A. Orchestrating cytoskeleton and intracellular vesicle traffic to build functional immunological synapses. *Immunological Reviews*. 2013. 256(1): 118-13
- 5-**Soares H***, Henriques R, Ventimiglia L, Alonso MA, Zimmer C, Thoulouze MI, Alcover A. A regulated vesicle fusion cascade generates signaling nanoterritories that control T-cell activation at the immunological synapse. *Journal of Experimental Medicine*. 2013. 210(11): 2415-33. (Selected for 1000Prime as being of special significance in its field; highlighted on Journal of Cell Biology and on Journal of General Physiology)
- 6-Herbert S, **Soares H**, Zimmer C, Henriques R. Single-molecule super-resolution microscopy: deeper and faster. *Microscopy and Microanalysis*. 2012. 18(6): 1419-29
- 7-**Soares H**, Waechter H, Glaichenhaus N, Mougneau E, Yagita H, Mizenina O, Dudziak D, Nussenzweig MC, Steinman RM. A subset of Dendritic cells induces CD4⁺ T cells to produce IFN- γ by an IL-12-independent but CD70-dependent mechanism in vivo. *J. Exp. Med*. 2007. 204 (5): 1095-1106
- 8-Trumppheller C, Finke JS, Lopez CB, Moran TM, Moltedo B, **Soares H**, Huang Y, Schlesinger SJ, Park CG, Nussenzweig MC, Granelli-Piperno A, Steinman RM. Intensified and protective CD4⁺ T cell immunity in mice with anti-dendritic cell HIV gag fusion antibody vaccine. *J. Exp. Med*. 2006. 203 (3): 607-617
- 9-Bonifaz LC, Bonnyay DP, Charalambous A, Darguste DI, Fujii S, **Soares H**, Brimmes MK, Moltedo B, Moran TM, Steinman RM. In vivo targeting of antigens to maturing dendritic cells via DEC-205 receptor improves T cell vaccination. *J. Exp. Med*. 2004. 199(6): 815-824
- 10-Andrade LCR, Paixão JA, de Almeida MJM, Martins RML, **Soares HIM**, Moreno MJSM, Sá e Melo ML, Campos Neves AS. 16 α , 17 α -Epoxy-20-oxopregn-5-ene-3 β , 21-diyl diacetate. 2003. *Acta Crystallogr. (E)* E59: 299-301
- 11-Andrade LCR, Paixão JA, de Almeida MJM, Martins RML, **Soares HIM**, Moreno MJSM, Sá e Melo ML, Campos Neves AS. 16 α -Hydroxi-20-oxopregn-5-en-3 β -yl acetate. 2001. *Acta Crystallogr. (E)* E57: 571-57
- 12-Andrade LCR, Paixão JA, de Almeida MJM, Martins RML, **Soares HIM**, Morais GJR, Moreno MJSM, Sá e Melo ML, Campos Neves AS. 16 α ,17 β -Epoxi-20-oxopregn-5-en-3 β -yl acetate. 2001. *Acta Crystallogr. (C)* C57: 587-589

INVITED AND SELECTED COMMUNICATIONS IN THE LAST 5 YEARS

- 2017 **Invited Talk** at the SINAL 2017- 8th Meeting on Signal Transduction, 1-2 June, Lisbon, Portugal, entitled "T cell signaling in autoimmunity"
- 2017 **Invited Talk** at the iNOVA at iNOVA4Health Inflammation Symposium, 17 March, Lisbon, Portugal entitled "T cells in health and in inflammation"
- 2015 **Invited Talk** at the Super-Resolution in Infection and Immunity Symposium, 21 October, Oeiras, Portugal entitled "HIV-1 alters the nano-architecture of TCR signaling"
- 2014 **Selected Talk** at the XL Meeting of Sociedade Portuguesa de Imunologia (SPI), September, Lisbon, Portugal entitled . HIV-1 alters the nano-architecture of TCR signaling
- 2014 **Selected Talk** at the EMBO Conference on Lymphocyte Signalling, 17-21 May, Bertinoro, Italy entitled "Regulated vesicle fusion generates signaling nanoterritories that control T cell activation at the immunological synapse"
- 2013 **Selected Talk** at 14th IUMB Conference, 17 November, Marrakech, Morocco entitled "HIV-1 Nef modulates TCR signalling nanoterritories- oral communication"
- 2013 **Guest Talk** at Universidade do Algarve, 18 December, Faro, Portugal entitled "Spatial Regulation of Lymphocyte Activation: in Health and upon HIV-1 infection"

INVITED TO PRIZE JURIES, SCIENTIFIC EVALUATION PANELS, CONFERENCE ORGANIZATION, INTERNATIONAL GRADUATE COURSES

- 2016-... Evaluation Panel: *Pfizer Clinical Research Awards*
- 2016-... Evaluation Panel: *Pfizer Basic Research Awards*
- 2014-17 Member of the pre-selection committee, Graduate Program Science for the Development, Cape Verde
- 2016 Evaluation Panel: Grants application in *Faculdade Medicina Universidade de Coimbra*, Coimbra, Portugal.
- 2015 Co-organizer of the Super-Resolution in Infection and Immunity Symposium, Oeiras, Portugal
- 2014-17 *Immune Chronic Diseases Course* Graduate Program Science for the Development, Cape Verde
- 2010 Co-organizer of the 4th *Gulbenkian Alumini Meetings: Alternative Careers For Scientists*, Oeiras, Portugal

INVITED MEMBER OF PHD AND MSc COMMITTEES & EXAMINATIONS

- 2018 Tiago Ferro, PhD Thesis Committee, supervised by Paula Videira, FCT, Portugal
- 2018 José Graça, PhD Thesis Committee, supervised by Nuno Martins Silva and Ramiro de Almeida, U Minho and U Coimbra

INVITED EVALUATOR IN EXTERNAL PHD AND MSc THESIS DEFENSES

- 2019 PhD Thesis Committee, supervised by Ricardo Silvestre, ICVS, Portugal
- 2018 Tiago Ferro, PhD Thesis Committee, supervised by Paula Videira, FCT, Portugal
- 2017 Carlota Pascoal, MSc Thesis Examination, supervised by Paula Videira, FCT, Portugal
- 2017 Joana Perdigão, Thesis Examination, supervised by Maria João Amorim, IGC, Portugal

INSTITUTIONAL RESPONSABILITIES

- 2018-... Organizer of the Institutional Journal Club in Immunology
- 2018-... Faculty Member, NBR MSc Program in Biomedical Research, NOVA Medical School, Portugal
- 2017-... Member of Infections and Chronic Diseases Interventions Strategies at NOVA University
- 2017-... Faculty Member, PhD Program in BioEngineering Cell Therapies and Regenerative Medicine, IST, IMM & NMS, Portugal
- 2017-... Faculty Member "Molecular Mechanisms of Disease" course for medical (MD) students, NOVA Medical School, Portugal
- 2017-... Faculty Member "Tissue, Cells and Molecules" course for medical (MD) students, NOVA Medical School, Portugal
- 2016-... Faculty Member "Innovative Immunotherapies" course for medical (MD) students, NOVA Medical School, Portugal
- 2015-16 Co-organizer of the seminar series of Chronic Diseases Research Centre

SELECTED GRADUATE TEACHING (RECENT 5-YEARS)

- 2018-... Invited Lecturer, Integrative Biomedicine, PhD program in Biomedicine, Aveiro, Portugal
- 2018-... Invited Lecturer, *Translational Medicine Course*, PhD Program in BioEngineering Cell Therapies and Regenerative Medicine, NMS, Portugal
- 2017-... Invited Lecturer, *From Cells to Organisms Course*, Gulbenkian PhD Program, Oeiras, Portugal
- 2017-... Invited Lecturer, *Immunology Course*, Graduate Program in Areas of Basic and Applied Biology (GABA), Porto, Portugal
- 2017-... Invited Lecturer, *Chronic and Degenerative Diseases Course*, PhD Program on Mechanisms of Disease and Regenerative Medicine (ProRegM), Lisbon, Portugal
- 2017-... Invited Lecturer, Integrative Biomedicine, PhD program in Biomedicine, NMS, Portugal
- 2016-... Invited Lecturer, *Stem Cell Biology Course*, PhD Program in BioEngineering Cell Therapies and Regenerative Medicine
- 2016 Invited Lecturer, *Research Methodologies and Techniques Course*, Doctoral Program in Health Sciences and Inter-University Doctoral Programme in Ageing and Chronic Disease (PhDOC) co-jointly, Coimbra, Portugal
- 2015 Invited Lecturer, *Cell Biology Course*, Gulbenkian PhD Program, Oeiras, Portugal
- 2015 Invited Lecturer, *Immunobiology/Host Microbe Interaction Course*, Gulbenkian PhD Program, Oeiras, Portugal
- 2014-17 Invited Lecturer, *Immune Chronic Diseases Course*, Graduate Program Science for Development, Cape Verde
- 2014 Invited Lecturer, *Immunology Course* Graduate Program Science for Development, Cape Verde

PRIMARY SUPERVISION

Period	Name	Details
2017-	Sofia Cerqueira	Post-Doc Fellow (FCT Fellowship)
2017-	Juliana Gonçalves	PhD candidate (FCT Fellowship, ProRegM Graduate Program)
2017-	Daniela Silva	PhD Student (FCT Fellowship, PhDoc Graduate Program)
2017-	Cruz Sebastião	PhD Student (FCT Fellowship, PGCD Graduate Program)
2017-	Ana Pereira	PhD Student (FCT Fellowship, PhDoc Graduate Program)
2018-	Ana Tomé	Master Student
2018-	Inês Pais	Master Student

PAST SUPERVISION EXPERIENCE

- 2016-18 Supervision of Master Student and Research Fellow Rute Gonçalves (CEDOC, Lisboa, Portugal)
- 2016-17 Supervision of Master Student Daniela Silva (CEDOC, Lisboa, Portugal)
- 2016-17 Supervision of Master Student Ana Raquel Sousa (CEDOC, Lisboa, Portugal)
- 2016-17 Supervision of Post-doctoral associate Rita Torrão (CEDOC, Lisboa, Portugal)
- 2015 Supervision of Research Trainee Joana Silva (Instituto Gulbenkian de Ciencia, Oeiras, Portugal)
- 2010-14 Mentoring of Graduate Student Nassima Messali (Institut Pasteur, Paris, France)
- 2004-07 Supervision of Research Assistant HaeNa Waechter (Rockefeller University, NY, USA)

SCIENCE OUTREACH ACTIVITIES

- 2017-... Participant in discussion groups sharing translational medical research projects with clinicians from Lisbon hospitals
- 2011-... Member of the scientific committee of [Science for All](#), a web platform aimed at increasing scientific literacy of high school students