

SHORT CURRICULUM VITAE

NAME David Sancho Madrid	POSITION TITLE Assistant Professor
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EDUCATION & TRAINING

END MONTH/YEAR	DEGREE	INSTITUTION AND LOCATION	TRAINING MENTOR	SCIENTIFIC DISCIPLINE
Aug 2009	Post-doctoral Fellow	LRI, CRUK, London, UK	C. Reis e Sousa	Immunology
Aug 2004	Post-doctoral Fellow	La Princesa Hospital, Madrid	F.Sánchez-Madrid	Immunology
Nov 2003	Ph.D. degree	UAM, Madrid	F.Sánchez-Madrid	Immunology
May 2000	Clinical Specialization in Immunology (BIR)	La Princesa Hospital, Madrid	F.Sánchez-Madrid	Immunology
Jul 1995	BSc degree	School of Biology. Murcia		

PROFESSIONAL POSITIONS:

START MONTH/YEAR	END MONTH/YEAR	POSITION TITLE	PROGRAM	INSTITUTION AND LOCATION
09/2010	To date	Assistant Professor	Metabolism	CNIC, Madrid, Spain

PREVIOUS CONTRACTS AND FELLOWSHIPS

- 11/2009 – 08/2010 Ramón y Cajal fellow, CNIC, Spain (Ranked 1st, Biomedicine).
 09/2004 – 08/2009 Cancer Research UK postdoctoral Fellowship, London, UK
 06/2006 – 05/2008 Marie Curie IEF within the 6th EC Framework Programme (MEIF-CT-2005-009205)
 09/2004 – 05/2006 Long-term Fellowship from EMBO (ALTF 336-2004)
 11/2001 – 08/2004 Research fellowship from the Instituto de Salud Carlos III (BEFI)
 05/2000 – 10/2001 “Severo Ochoa” predoctoral fellowship from Ferrer Foundation
 04/1996 – 04/2000 Clinical Specialization in Immunology via B.I.R. (Internship, Ranked 1st at Selection)

SIGNIFICANT PROFESSIONAL ACTIVITIES

- Executive Editor for *Inmunología*, Official Scientific Journal of the Spanish Society for Immunology (since 2013).
- Elected member of the Directive Board of Spanish Society for Immunology (since 2014).
- Member of the Board of the Spanish Immunotherapy Group (since 2014).
- Co-organizer in 2 national and 3 international meetings over 100 attendants.
- Lecturer at Master's degree in several Spanish Universities. Honorary Professor for Universidad Autónoma de Madrid.
- Supervision of 4 postdoctoral researchers, 7 PhD students, 7 master students and 3 technicians since 2011.
- One doctoral thesis directed (Defended Nov 2014, Noelia Blanco-Menéndez, maximum score).
- Reviewer for Scientific Journals (including Immunity, J. Exp. Med., Sci. Signal., Cancer Res., PLOS Pathog., J. Immunol., Eur. J. Immunol., J. Biol. Chem., Clin. Cancer Res., J. Leuk. Biol.).
- Grant reviewer for National and International Research Agencies.

ACADEMIC HONORS, AWARDS and FELLOWSHIPS

- 2010 ERC starting Grant Award. European Research Council
 2010 Hardiman-Redon Prize. Cancer Research UK, London Research Institute
 2005 “Ramón Areces” prize for best doctoral thesis. Royal National Academy of Doctors
 2004 Prize for best doctoral thesis. Molecular Biology Centre, Madrid Autonomous University
 2004 Pfizer Foundation Basic Research Prize for the article Sancho et al. J. Clin. Invest. 2003.
 2004 Extraordinary Prize for Ph.D thesis. Madrid Autonomous University.
 1995 First National Prize for University Graduation. Spanish Ministry of Education.

INDICATORS OF SCIENTIFIC PRODUCTION (ISI-WoK, Journal of Citations Reports)

Total publications: 62, 52 in 1st quartile, Q1; 31 in 1st decile, D1. **Primary research:** 52 (46 Q1, 25 D1). **Cumulative IF:** 587.43; **IF/article:** 9.47; **Total citations:** 3629.

Total publications as main author (1st author or senior/corresponding): 20 (19 Q1, 12 D1); **Primary research:** 14 (14 Q1, 8 D1); **Cumulative IF:** 244; **IF/article:** 12.2; **Total citations as main author:** 1322.

h-index: 35; **h-index excluding reviews:** 30.

SELECTED PEER-REVIEWED PUBLICATIONS

Keys: [§]: corresponding author. *: Equal contribution. NC: Citations IF: Impact Factor in publication year (ISI-JCR)

IN PRESS manuscript as last & corresponding author

Iborra S*[§], Martínez-López M*, Cueto FJ, Conde-Garrosa R, Del Fresno C, Izquierdo HM, Abram CL, Mori D, Campos-Martín Y, Reguera RM, Kemp B, Yamasaki S, Robinson MJ, Soto M, Lowell CA **Sancho D[§]**. Leishmania uses Mincle to target an inhibitory ITAM pathway in dendritic cells that dampens adaptive immunity to infection. **Immunity (in press)**, DOI 10.1016/j.jimmuni.2016.09.012. **IF:** 24.082

PUBLICATIONS AS MAIN AUTHOR: (First or last & corresponding author)

21. Iborra S[§], Martínez-López M, Khouili SC, Enamorado M, Cueto FJ, Conde-Garrosa R, del Fresno C, **Sancho D[§]**. Optimal generation of tissue-resident but not circulating memory T cells during viral infection requires crosspriming by DNLR-1+ dendritic cells. **Immunity** 2016, DOI: 10.1016/j.jimmuni.2016.08.019. **IF:** 24.082
20. Garaude J*[§], Acín-Pérez R*, Martínez-Cano S, Enamorado M, Ugolini M, Nistal-Villán E, Hervás-Stubbs S, Pelegrín P, Sander LE, Enríquez JA[§], **Sancho D[§]**. Mitochondrial respiratory-chain adaptations in macrophages contribute to antibacterial host defense. **Nat. Immunol.** 2016, 17(9):1037-45. **IF:** 20.004.
19. Sanchez-Paulete AR, Cueto FJ, Martinez-Lopez M, Labiano S, Morales-Kastresana A, Rodriguez-Ruiz ME, Jure-Kunkel M, Azpilikueta A, Aznar MA, Quetglas JI, **Sancho D*[§]**, Melero I*[§]. Cancer immunotherapy with immunomodulatory anti-CD137 and anti-PD-1 monoclonal Abs requires Batf3-dependent DCs. **Cancer Discov.** 2016 6(1):71-9. NC: 3. **IF:** 19.45.
18. Blanco-Menéndez N, Del Fresno C, Fernandes S, Calvo E, Conde-Garrosa R, Kerr WG, **Sancho D[§]**. SHIP-1 Couples to the Dectin-1 hemITAM and Selectively Modulates Reactive Oxygen Species Production in Dendritic Cells in Response to Candida albicans. **J. Immunol.** 2015 Nov 1;195(9):4466-78. **IF:** 5.362
17. **Sancho D**, Villar LM, Regueiro JR, de Andres B. Spanish Immunology on the move. **Eur J Immunol.** 2015. 45:1580-3. **IF:** 4.03
16. Martinez-Lopez M, Iborra S, Conde-Garrosa R, **Sancho D[§]**. Batf3-dependent CD103 dendritic cells are major producers of IL-12 that drive local Th1 immunity against L. major infection in mice. **Eur J Immunol.** 2015. 45:119-29. NC: 5. **IF:** 4.03.
15. Iborra S, **Sancho D[§]**. Signaling versatility following self and non-self sensing by myeloid C-type lectin receptors. **Immunobiology**. 2015. 220:175-84. NC: 3. **IF:** 3.04.
14. **Sancho D[§]**, Reis E Sousa C[§]. Sensing of cell death by myeloid C-type lectin receptors. **Curr Opin Immunol.** 2013 25: 46-52. NC: 22. **IF:** 8.77.
13. Iborra S, Izquierdo HM, Martínez-López M, Blanco-Menéndez N, Reis e Sousa C, **Sancho D[§]**. The DC receptor DNLR-1 mediates cross-priming of CTLs during vaccinia virus infection in mice. **J Clin Invest.** 2012 May 1;122(5):1628-43. NC: 41. **IF:** 12.81.
12. **Sancho D[§]**, Reis e Sousa C[§]. Signaling by myeloid C-type lectin receptors in immunity and homeostasis. **Annu Rev Immunol.** 2012; 30:491-529. NC: 130. **IF:** 36.55
11. **Sancho D***, Joffre OP*, Keller AM, Rogers NC, Martínez D, Hernanz P, Rosewell I, Reis e Sousa C. Identification of a DC receptor that couples sensing of necrosis to immunity. **Nature**. 2009 Apr 16;458(7240):899-903. NC: 282. **IF:** 34.48
10. **Sancho D**, Mourão-Sá D, Joffre OP, Schulz O, Rogers NC, Pennington DJ, Carlyle JR, Reis e Sousa C. Tumor therapy in mice via antigen targeting to a novel, DC-restricted C-type lectin. **J Clin Invest.** 2008.118(6):2098-110. NC: 226. **IF:** 16.55.

9. **Sancho D***, Gómez M*, Martínez G, Lamana A, Esplugues E, Lauzurica P, Martínez-A C, Sánchez-Madrid F. CD69 targeting differentially affects the course of collagen-induced arthritis. *J Leukoc Biol.* 2006;80(6):1233-41. NC: 11. IF: 4.57
8. Martín-Cófreces NB*, **Sancho D***, Fernández E, Vicente-Manzanares M, Gordón-Alonso M, Montoya MC, Michel F, Acuto O, Alarcón B, Sánchez-Madrid F. Role of Fyn in the rearrangement of tubulin cytoskeleton induced through TCR. *J Immunol.* 2006 Apr 1;176(7):4201-7. NC: 37. IF: 6.29
7. **Sancho D**, Gómez M, Sánchez-Madrid F. CD69 is an immunoregulatory molecule induced following activation. *Trends Immunol.* 2005 Mar;26(3):136-40. NC: 228. IF: 10.17
6. **Sancho D**, Gómez M, Viedma F, Esplugues E, Gordón-Alonso M, García-López MA, de la Fuente H, Martínez-A C, Lauzurica P, Sánchez-Madrid F. CD69 downregulates autoimmune reactivity through active transforming growth factor-beta production in collagen-induced arthritis. *J Clin Invest.* 2003 Sep;112(6):872-82. NC: 101. IF: 14.30
5. **Sancho D**, Vicente-Manzanares M, Mittelbrunn M, Montoya MC, Gordón-Alonso M, Serrador JM, Sánchez-Madrid F. Regulation of microtubule-organizing center orientation and actomyosin cytoskeleton rearrangement during immune interactions. *Immunol Rev.* 2002 Nov;189:84-97. NC: 49. IF: 7.40
4. **Sancho D**, Montoya MC, Monjas A, Gordón-Alonso M, Katagiri T, Gil D, Tejedor R, Alarcón B, Sánchez-Madrid F. TCR engagement induces proline-rich tyrosine kinase-2 (Pyk2) translocation to the T cell-APC interface independently of Pyk2 activity and in an ITAM-mediated fashion. *J Immunol.* 2002 Jul 1;169(1):292-300. NC: 35. IF: 7.01
3. **Sancho D**, Santis AG, Alonso-Lebrero JL, Viedma F, Tejedor R, Sánchez-Madrid F. Functional analysis of ligand-binding and signal transduction domains of CD69 and CD23 C-type lectin leukocyte receptors. *J Immunol.* 2000 Oct 1;165(7):3868-75. NC: 31. IF: 6.83
2. **Sancho D***, Nieto M*, Llano M, Rodríguez-Fernández JL, Tejedor R, Avraham S, Cabañas C, López-Botet M, Sánchez-Madrid F. The tyrosine kinase PYK-2/RAFTK regulates natural killer (NK) cell cytotoxic response, and is translocated and activated upon specific target cell recognition and killing. *J Cell Biol.* 2000 Dec;149(6):1249-62. NC: 51. IF: 13.95
1. **Sancho D**, Yáñez-Mó M, Tejedor R, Sánchez-Madrid F. Activation of peripheral blood T cells by interaction and migration through endothelium: role of lymphocyte function antigen-1/intercellular adhesion molecule-1 and interleukin-15. *Blood.* 1999 Feb 1;93(3):886-96. NC: 54. IF: 8.78

COLLABORATIONS as Assistant Professor: (Since Sep 2010)

12. Núñez-Andrade N, Iborra S, Trullo A, Moreno-Gonzalo O, Calvo E, Catalán E, Menasche G, **Sancho D**, Vázquez J, Yao TP, Martín-Cófreces NB, Sánchez-Madrid F. HDAC6 regulates the dynamics of lytic granules in cytotoxic T lymphocytes. *J Cell Sci.* 2016;129(7):1305-11. IF: 5.43.
11. Quintana E, Fernandez A, Velasco P, de Andres B, Liste I, **Sancho D**, Gaspar ML, Cano E. DNGR-1 dendritic cells are located in meningeal membrane and choroid plexus of the noninjured brain. *Glia.* 2015. 63:2231-48. NC: 1. IF: 6.03
10. Sreeramkumar V, Hons M, Punzon C, Stein JV, **Sancho D**, Fresno M, Cuesta N. Efficient T cell priming and activation requires signalling through prostaglandin E2 (EP) receptors. *Immunol Cell Biol.* 2016. 94(1):39-51. IF: 4.14
9. Hanč P, Fujii T, Iborra S, Yamada Y, Huotari J, Schulz O, Ahrens S, Kjær S, Way M, **Sancho D**, Namba K, Reis e Sousa C. Structure of the Complex of F-Actin and DNGR-1, a C-Type Lectin Receptor Involved in Dendritic Cell Cross-Presentation of Dead Cell-Associated Antigens. *Immunity.* 2015 May 19;42(5):839-49. NC: 2. IF: 21.56
8. Dominguez-Soto A, de Las Casas-Engel M, Bragado R, Medina-Echeverz J, Aragoneses-Fenoll L, Martin-Gayo E, van Rooijen N, Berraondo P, Toribio ML, Moro MA, Cuartero I, Castrillo A, **Sancho D**, Sanchez C, Bruhns P, Sanchez-Ramon S, Corbi AL. Intravenous Immunoglobulin Promotes Antitumor Responses by Modulating Macrophage Polarization. *J Immunol.* 2014. 193:5181-9. NC: 3. IF: 4.92
7. Escolano A, Martínez-Martínez S, Alfranca A, Urso K, Izquierdo HM, Delgado M, Martín F, Sabio G, **Sancho D**, Gómez-Del Arco P, Redondo JM. Specific calcineurin targeting in macrophages confers resistance to inflammation via MKP-1 and p38. *EMBO J.* 2014. NC: 6. IF: 10.43
6. del Fresno C, Soulard D, Roth S, Blazek K, Udalova I, **Sancho D**, Ruland J, Ardavín C. Interferon-β production via Dectin-1-Syk-IRF5 signaling in dendritic cells is crucial for immunity to *C. albicans*. *Immunity.* 2013 Jun 27;38(6):1176-86. NC: 39. IF: 19.79.
5. Zelenay S, Keller AM, Whitney PG, Schraml BU, Deddouche S, Rogers NC, Schulz O, **Sancho D**, Reis e Sousa C. The dendritic cell receptor DNGR-1 controls endocytic handling of necrotic cell antigens to favor cross-priming of CTLs in virus-infected mice. *J Clin Invest.* 2012. 122(5):1615-27. NC: 70. IF: 12.

4. Ahrens S, Zelenay S, **Sancho D**, Hanč P, Kjær S, Feest C, Fletcher G, Durkin C, Postigo A, Skehel M, Batista F, Thompson B, Way M, Reis e Sousa C, Schulz O. F-actin is an evolutionarily conserved damage-associated molecular pattern recognized by DNGR-1, a receptor for dead cells. *Immunity*. 2012 Apr 20;36(4):635-45. NC: 102. IF: 19.
3. Poulin LF, Reyal Y, Uronen-Hansson H, Schraml BU, **Sancho D**, Murphy KM, Häkansson UK, Moita LF, Agace WW, Bonnet D, Reis e Sousa C. DNGR-1 is a specific and universal marker of mouse and human Batf3-dependent dendritic cells in lymphoid and nonlymphoid tissues. *Blood*. 2012 Jun 21;119(25):6052-62. NC: 73. IF: 9.06
2. Mourão-Sá D, Robinson MJ, Zelenay S, **Sancho D**, Chakravarty P, Larsen R, Plantinga M, Van Rooijen N, Soares MP, Lambrecht B, Reis e Sousa C. CLEC-2 signaling via Syk in myeloid cells can regulate inflammatory responses. *Eur J Immunol*. 2011; 41(10):3040-53. NC: 36. IF: 4.97.
1. Nuñez-Andrade N, Lamana A, **Sancho D**, Gisbert JP, Gonzalez-Amaro R, Sanchez-Madrid F, Urzainqui A. P-selectin glycoprotein ligand-1 modulates immune inflammatory responses in the enteric lamina propria. *J Pathol*. 2011; 224(2):212-21. NC: 5. IF: 6.31.

PREVIOUS SELECTED COLLABORATIONS

- Poulin LF, Salio M, Griessinger E, Anjos-Afonso F, Craciun L, Chen JL, Keller AM, Joffre O, Zelenay S, Nye E, Le Moine A, Faure F, Donckier V, **Sancho D**, Cerundolo V, Bonnet D, Reis e Sousa C. Characterization of human DNGR-1+ BDCA3+ leukocytes as putative equivalents of mouse CD8alpha+ dendritic cells. *J Exp Med*. 2010; 207(6):1261-71. NC: 318. IF: 14.77.
- Joffre OP, **Sancho D**, Zelenay S, Keller AM, Reis e Sousa C. Efficient and versatile manipulation of the peripheral CD4+ T-cell compartment by antigen targeting to DNGR-1/CLEC9A. *Eur J Immunol*. 2010 May;40(5):1255-65. NC: 55. IF: 4.94.
- Robinson MJ, **Sancho D**, Slack EC, LeibundGut-Landmann S, Reis e Sousa C. Myeloid C-type lectins in innate immunity. *Nat Immunol*. 2006 Dec;7(12):1258-65. NC: 288. IF: 27.59.
- Serrador JM, Cabrero JR, **Sancho D**, Mittelbrunn M, Urzainqui A, Sánchez-Madrid F. HDAC6 deacetylase activity links the tubulin cytoskeleton with immune synapse organization. *Immunity*. 2004;20(4):417-28. NC: 105. IF: 15.44
- Castro C, Campistol JM, **Sancho D**, Sánchez-Madrid F, Casals E, Andrés V. Rapamycin attenuates atherosclerosis induced by dietary cholesterol in apolipoprotein-deficient mice through a p27 Kip1 -independent pathway. *Atherosclerosis*. 2004;172(1):31-8. NC: 55. IF: 3.79.
- Díez-Juan A, Pérez P, Aracil M, **Sancho D**, Bernad A, Sánchez-Madrid F, Andrés V. Selective inactivation of p27(Kip1) in hematopoietic progenitor cells increases neointimal macrophage proliferation and accelerates atherosclerosis. *Blood*. 2004;103(1):158-61. NC: 38. IF: 9.78.
- Vicente-Manzanares M, Rey M, Pérez-Martínez M, Yáñez-Mó M, **Sancho D**, Cabrero JR, Barreiro O, de la Fuente H, Itoh K, Sánchez-Madrid F. The RhoA effector mDia is induced during T cell activation and regulates actin polymerization and cell migration in T lymphocytes. *J Immunol*. 2003;171(2):1023-34. NC: 33. IF: 6.70
- Esplugues E, **Sancho D**, Vega-Ramos J, Martínez C, Syrbe U, Hamann A, Engel P, Sánchez-Madrid F, Lauzurica P. Enhanced antitumor immunity in mice deficient in CD69. *J Exp Med*. 2003 May 5;197(9):1093-106. NC: 94. IF: 15.30
- Mittelbrunn M, Yáñez-Mó M, **Sancho D**, Ursu A, Sánchez-Madrid F. Cutting edge: dynamic redistribution of tetraspanin CD81 at the central zone of the immune synapse in both T lymphocytes and APC. *J Immunol*. 2002 Dec 15;169(12):6691-5. NC: 82. IF: 7.01
- Montoya MC, **Sancho D**, Bonello G, Collette Y, Langlet C, He HT, Aparicio P, Alcover A, Olive D, Sánchez-Madrid F. Role of ICAM-3 in the initial interaction of T lymphocytes and APCs. *Nat Immunol*. 2002 Feb;3(2):159-68. Epub 2002. NC: 97. IF: 27.86
- Millán J, Montoya MC, **Sancho D**, Sánchez-Madrid F, Alonso MA. Lipid rafts mediate biosynthetic transport to the T lymphocyte uropod subdomain and are necessary for uropod integrity and function. *Blood*. 2002 Feb 1;99(3):978-84. NC: 60. IF: 9.63
- García-López MA, **Sancho D**, Sánchez-Madrid F, Marazuela M. Thyrocytes from autoimmune thyroid disorders produce the chemokines IP-10 and Mig and attract CXCR3+ lymphocytes. *J Clin Endocrinol Metab*. 2001 Oct;86(10):5008-16. NC: 96. IF: 5.44
- Lauzurica P, **Sancho D**, Torres M, Albella B, Marazuela M, Merino T, Bueren JA, Martínez-A C, Sánchez-Madrid F. Phenotypic and functional characteristics of hematopoietic cell lineages in CD69-deficient mice. *Blood*. 2000 Apr 1;95(7):2312-20. NC: 57. IF: 8.97.
- Vicente-Manzanares M, Rey M, Jones DR, **Sancho D**, Mellado M, Rodriguez-Frade JM, del Pozo MA, Yáñez-Mó M, de Ana AM, Martínez-A C, Mérida I, Sánchez-Madrid F. Involvement of phosphatidylinositol 3-kinase in stromal cell-derived factor-1a-induced lymphocyte polarization and chemotaxis. *J Immunol*. 1999;163(7):4001-12. NC: 116. IF: 7.14
- Nieto M, Frade JM, **Sancho D**, Mellado M, Martinez-A C, Sánchez-Madrid F. Polarization of chemokine receptors to the leading edge during lymphocyte chemotaxis. *J Exp Med*. 1997;186(1):153-8. NC: 156. IF: 14.38

ACTIVE GRANTS

1. Title: Professional cross-priming for ovary and prostate cancer. PROCROP. Coordinator: Ignacio Melero. PI at CNIC node: David Sancho. Funding Agency: European Commission, H2020. Award period: 09/2015 – 08/2020
2. Title: Spanish Cancer Immunotherapy Network (REINCA). PI: Juan José Lasarte Sagastibelza. PI at CNIC node: David Sancho. Funding Agency: Spanish Ministry of Economy. Award period: 2014- 2016
3. Title: "Efectos funcionales de la detección de infección y muerte celular por células mieloides". SAF2013-42920-R. PI: David Sancho. Funding Agency: Spanish Ministry of Economy. Award period: 01/2013 – 12/2016
4. Title: "Immune Functions of myeloid Syk-coupled C-type lectin receptors sensing necrosis". ERC-StG260414. PI: David Sancho. Funding Agency: European Research Commission. Award period: 12/2010 – 08/2016