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## CV DAVID SANCHO, Ph.D.

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Centro Nacional de Investigaciones Cardiovasculares, Carlos III (CNIC)  
Melchor Fernández Almagro, 3, 28029, Madrid,  
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<http://www.cnic.es/en/inflamacion/inmunobiologia/index.php>

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### CURRENT POSITIONS

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*Dec 2021* **Full Professor I and Group Leader**, Immunobiology laboratory, Novel mechanisms of atherosclerosis program, CNIC.

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### EDUCATION

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*Nov 2003* **Ph.D. degree in Sciences**

Thesis: "Role of CD69 in immune and inflammatory response"  
Grade: Sobresaliente "cum laude" by unanimity, highest honours  
Advisor: Dr. Francisco Sánchez-Madrid. Department of Molecular Biology, Madrid Autonomous University.  
Awards: - Extraordinary Prize to doctoral thesis by Madrid Autonomous University  
- Prize to best doctoral thesis (2003-2004) by the Centre of Molecular Biology "Severo Ochoa", Madrid Autonomous University.  
- "Ramón Areces" prize from the National Royal Academy of Doctors to the best doctoral thesis.

*May 2000* **Clinical Specialization in Immunology.**

Spanish Health and Education Ministries. Immunology Service, La Princesa Hospital, Madrid.

*July 1995* **BSc degree**

School of Biology. Murcia University (GPA 4/4).  
Awards: - Extraordinary Prize by Murcia University.  
- First National Prize in Biology to the best academic performance at the National level during the complete degree, Spanish Education Ministry (1995).

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### PREVIOUS POSITIONS

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*Oct 2020-Oct2023*

**President of Biomedicine Area**, State Agency for Research, Ministry of Science and Innovation.

*Oct 2016-Dec 2021*

**Associate Professor and Group Leader**, Immunobiology laboratory, Myocardial Pathophysiology Area, CNIC.

*Aug 2017-Sep2020*

**Coordinator Immunity, Infection and New Therapies**, subarea of the Biomedicine Area, State Agency for Research, Ministry of Science and Innovation.

Sept 2010-Sep2016

**Assistant Professor and Group Leader**, Immunobiology laboratory, Myocardial Pathophysiology Area, CNIC.

Sep 2015-Jun2017

**Honorary Professor** at Biochemistry Department of Universidad Autónoma de Madrid.

Sept 2009-Aug 2010

**Junior I Group Leader** at the CNIC, Spanish National Centre for Cardiovascular Research. Ranked 1<sup>st</sup> in the Biomedicine group of the International “Ramón y Cajal Programme” by the Spanish Ministry of Science and Innovation.

Sept 2004 – Aug 2009

Post-doctoral fellow at London Research Institute, Cancer Research UK, London, UK. Line of research: Characterisation of a new C-type lectin.

Advisor: Dr. Caetano Reis e Sousa.

Funding during this period from: 1) Long-term Fellowship from European Molecular Biology Organization (EMBO) (ALTF 336-2004); 2) Marie Curie Intra-European Contract within the 6<sup>th</sup> European Community Framework Programme (MEIF-CT-2005-009205); 3) Cancer Research UK Fellowship and Extension Contract.

Nov 2001 – Aug 2004

Research fellowship from the Instituto de Salud Carlos III (Spanish Health Ministry, fellowship for research training for both PhD students and post-docs).

Advisor: Dr. Francisco Sánchez-Madrid.

Line of research: *In vivo* function of CD69.

May 2000 – Oct 2001

“Severo Ochoa” predoctoral fellowship from Ferrer Foundation for Biomedical Research.

Advisor: Dr. Francisco Sánchez-Madrid

Line of research: cellular compartmentalization and functional role of the protein tyrosine kinase Pyk2 during specific immune interactions.

Apr 1996 – Apr 2000

Post-graduate clinical training grant from the Spanish Ministry of Health. Specialization in Immunology via B.I.R. (Internship). Servicio de Inmunología, Hospital de la Princesa.

Advisor: Dr. Francisco Sánchez-Madrid.

Line of research: analysis of the expression and function of the early activation antigen CD69.

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## CONTRACTS AND FELLOWSHIPS

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Sept 2004 – Aug 2009

Cancer Research UK Fellowship, London, UK.

June 2006 – May 2008

Marie Curie Intra-European Contract within the 6<sup>th</sup> European

Community Framework Programme (MEIF-CT-2005-009205).

*Sept 2004 – May 2006*

Long-term Fellowship from European Molecular Biology Organization (EMBO) (ALTF 336-2004).

*Nov 2001 – Aug 2004*

Research PhD fellowship from the Instituto de Salud Carlos III (BEFI).

*May 2000 – Oct 2001*

“Severo Ochoa” predoctoral fellowship from Ferrer Foundation for Biomedical Research.

*Apr 1996 – Apr 2000*

Post-graduate clinical training grant from the Spanish Ministry of Health. Specialization in Immunology via B.I.R. (Internship). Servicio de Inmunología, Hospital de la Princesa.

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## GRANT SUPPORT AS PRINCIPAL INVESTIGATOR

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### ACTIVE

1. Title: the crosstalk of microbiota and trained immunity for the development of trained immunity-based immunotherapies. Participant Inst: Inmunotek S.L (coordinator) and CNIC (partner). David Sancho is PI at CNIC: Funding Inst. **Ministerio de Ciencia e Innovación. Agencia Estatal de Investigación. CPP2021-008310.** From 01/11/2022-31/10/2025. Total amount for the consortium (two groups): 723,616€. Total amount for DS group: 328,315€.
2. Title: Immunomodulatory strategies in vascular remodeling: new diagnostic and therapeutic perspectives (INMUNOVAR-CM). Participant Inst: CNIC, FJD, UCM. Consortium coordinator: Almudena Ramiro. David Sancho is PI at CNIC. Funding Inst.: **Comunidad de Madrid.** From: 01/01/2023 To: 31/12/2026 Total Amount for consortium (5 groups): 824,000€. Total amount for DS group: aprox. 200K€
3. Title: Molecular Regulation of macrophage and dendritic cell function. Participant Institution: Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III. PI: David Sancho. Funding Institution: **Ministerio de Ciencia e Innovación. Agencia Estatal de Investigación. PID2019-108157RB.** From: 01/06/2020 To: 31/11/2023 Total Amount: 435,600€ + 1 pre-doctoral fellowship.
4. Title: Functional characterisation of mitochondrial metabolic adaptations to innate sensing in dendritic cell subsets. **H2020-ERC-2016-CONSOLIDATOR GRANT 725091-MITOMAD.** Participant Institution: Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III. PI: David Sancho Madrid. Funding Institution: European Commission, H2020. From: 01/12/2017 To: 30/11/2022 Total Amount: 1,995,000€

### FINISHED

1. Title: Inmunidad Tumoral e Inmunoterapia del Cáncer (IMMUNOTHERCAN-CM); Ref: B2017/BMD-3733. Participant Institution: Consortium with node in the Fundación

Centro Nacional de Investigaciones Cardiovasculares Carlos III. PI of the IMMUNOBIOL group at CNIC: David Sancho Madrid. Funding Institution: Ayudas para la realización de Programas de Actividades de I+D entre Grupos de Investigación de la Comunidad de Madrid en Tecnologías y en Biomedicina, cofinanciado con Fondos Estructurales. **Comunidad de Madrid**. From: 01/01/2018 To: 31/12/2021 Total Amount for consortium (9 groups): 952.472,28€

2. Title: MV130 polybacterial preparation as a booster for SARS-CoV-2 vaccination. Participant Institution: Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III. PI: David Sancho. Funding Institution: Banco Santander, Fondo Solidario Juntos. From: 14/05/2020 To: 13/05/2021 Total Amount: 99,500€

3. Title: Brain-gut cross-talk in stroke: targeting gut barrier dysfunction and immune responses to improve stroke outcome (Exp: 130/C/2017). Participant Institution: Collaborative project with the Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III. PI CNIC node: David Sancho Madrid. Funding Institution: Ayudas a la investigación en ictus y lesiones medulares y cerebrales traumáticas. Fundación **La Marató de TV3**. From: 2018 To: 2021. Total Amount for CNIC node: 86.250 €

4. Title: "PROCROP-Professional cross-priming for ovary and prostate cancer". H2020 personalising Health and Care (**635122-PROCROP H2020**). Coordinator: Ignacio Melero (CIMA, Pamplona). Consortium with 7 international Institutions as partners. *PI CNIC node: David Sancho*. Funding Institution: EU Framework Programme for Research and Innovation H2020 Date: 01/09/2015 to 28/02/2021. Funding CNIC node: 655.000€.

5. Title: Caracterización Funcional de la Regulación de la Inmunidad Innata y Adaptativa por las Células Dendríticas. Participant Institution: Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III. PI: David Sancho Madrid. Funding Institution: Ministerio de Economía, Industria y Competitividad. SAF2016-79040-R. From: 01/12/2016 To: 30/11/2019 Total Amount: 290,000€ + 1 pre-doctoral fellowship.

6. Title: Immunotherapy by targeting dendritic cells with nanoparticles. Participant Institution: Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III. PI: David Sancho Madrid. Funding Institution: **Fondation Acteria**. From: 2017 To: 2019 Total amount: 150,000€

7. Title: "Efectos funcionales de la detección de infección y muerte celular por células mieloides". *PI: David Sancho*. Funding Institution: Ministry of Economy and Competitivity : **SAF2013-42920-R**. Participant Institution: CNIC. Date: 2014- December 2016. Funding: 278,300 € + 1 predoctoral fellowship.

8. Title: Red de inmunoterapia del Cáncer (REINCA). Funding Institution: Ministerio de economía y Competitividad. **SAF 2014-53563-REDT**. Consortium with 10 participant institutions coordinated by J. J. Lasarte (CIMA, Pamplona). CNIC is partner and *David Sancho is PI at CNIC node*. Date: 2014 – 2016. Funding: 32.000€

9. Title: Immune functions of myeloid Syk-coupled C-type lectin receptors sensing necrosis. *PI: David Sancho*. Funding Institution: European Research Commission. **ERC-2010 StG 260414** Starting Grant. Participant Institution: CNIC. Date: 12/2010-08/2016. Funding: 1,297,671.98 €.

10. Title: Immune functions of myeloid Syk-coupled C-type lectin receptors sensing necrosis. *PI: David Sancho*. Funding Institution: Ministry of Science and Innovation. **SAF2010-15120**. Participant Institution: CNIC. Date: 01/01/2011- 31/12/2013. Funding: 193,600 € + 1 predoctoral fellowship.

11. Title: Contribución del subgrupo de células dendríticas CD8+ y de la quinasa Syk al desarrollo de respuestas adaptativas durante procesos patológicos que generan necrosis in vivo. *PI: David Sancho*. Funding Institution: MICINN. Programa Ramón y Cajal. **RyC 2009-04235**. Participant Institution: CNIC. Date: 15/11/2009 - 14/11/2014. Funding: 192,480 €

### **FUNDING FOR LAB PERSONNEL. FELLOWSHIPS AND CONTRACTS**

- 2022-12. Juan de la Cierva postdoc contract to Iñaki Robles (2 years)
- 2022-09. Juan de la Cierva postdoc contract to Verónica Miguel (2 years)
- 2021-12. FPU fellowship Miguel Galán (4 years)
- 2021-11. EU/MSCA-IF Postdoc Research Fellowship to Dieke van Dinther (2 years)
- 2021-09. FPI PhD fellowship Diego Mañanes (4 years)
- 2021-07. EU/MSCA-IF Postdoc Research Fellowship to Gillian Dunphy (2 years)
- 2020-09. "La Caixa" Postdoctoral Junior Leader to Stefanie Wculek (3 years)
- 2020-01. EMBO long-term fellowship to Dieke van Dinther (2 years)
- 2019-10. FPU2018 PhD fellowship to Irene Adán (4 years)
- 2019-07. EMBO long-term fellowship to Gillian Dunphy (2 years)
- 2019-03. Juan de la Cierva-F postdoc contract to Stefanie Wculek (2 years)
- 2018-07. FPI PhD fellowship to Elena Priego (4 years)
- 2018-01. Caixa PhD fellowship to Ignacio Heras (4 years)
- 2017-10. FPU PhD fellowship to Sofía C. Khouili (4 years)
- 2017-08. AECC postdoc contract to Carlos del Fresno (4 years)
- 2016-07- EMBO Long Term Fellowship to Stefanie K. Wculek (2 years)
- 2016-01- FPI PhD fellowship to Paula Saz (4 years)
- 2015-05- FPI PhD fellowship to Paola Brandi (4 years)
- 2014-11- Caixa PhD fellowship to Francisco J. Cueto (4 years)
- 2014-09- RESPIRE2 postdoc contract to Laura Conejero (2 years)
- 2014-09- CNIC master fellowship to Paula Saz (1 year).
- 2013-10- Caixa PhD fellowship to Neris Michel Enamorado (4 years).
- 2013-09- CNIC master fellowship to Francisco J. Cueto (1 year)
- 2012-11 - Juan de la Cierva postdoc contract to Johan Garaude (3 years).
- 2012-09 - CNIC master fellowship to Neris Michel Enamorado (1 year)
- 2012-04 - EMBO short term fellowship to Johan Garaude (3 months).
- 2012-01 - FPU PhD fellowship to María Martínez López (4 years).
- 2011-09 - CNIC master fellowship to Jaime Fernández Barrera (1 year)
- 2011-09 - FPI PhD fellowship to Helena M. Izquierdo (4 years).

### **PUBLICATIONS IN PEER-REVIEWED INTERNATIONAL JOURNALS**

Researcher	WoS Researcher ID	<a href="http://www.researcherid.com/rid/D-3433-2009">http://www.researcherid.com/rid/D-3433-2009</a>
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codes	ORCID code	<a href="http://orcid.org/0000-0003-2890-3984">http://orcid.org/0000-0003-2890-3984</a>
	Scopus identifier	<a href="https://orcid.org/0000-0003-2890-3984">7004139218</a>

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

**Bibliometric report** Data obtained from Clarivate's Web of Science, Journal Citation Reports and Essential Science Indicators (September 2023)

SCIENTIFIC CAREER			
		Articles and reviews in WOS	Articles and reviews in WOS as main author [1]
<i>Production</i>	Articles and reviews in IF journals	118	45
<i>IF related data</i>	% Art & Rev in Q1 journals	81%	78%
	% Art & Rev in D1 journals	56%	58%
	% Art & Rev in TOP3 journals	24%	22%
<i>Citations related data</i>	Citations per publications in the period	10534	5012
	Mean citations per document published in the period	89.27	111.38
	Highly Cited Paper	3%	4%
<i>h-index</i>	h-index	54	

[1] Those in which David Sancho appears as first, last or corresponding author.

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

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

49: Wculek SK, Heras-Murillo I, Mastrangelo A, Mañanes D, Galán M, Miguel V, Curtabbi A, Barbas C, Chandel NS, Enríquez JA, Lamas S, **Sancho D.** Oxidative phosphorylation selectively orchestrates tissue macrophage homeostasis. *Immunity*. 2023 Mar 14;56(3):516-530.e9. doi: 10.1016/j.immuni.2023.01.011. Epub 2023 Feb 3. PMID: 36738738. *IF:* 32.4

48: Wculek SK, Dunphy G, Heras-Murillo I, Mastrangelo A, **Sancho D.** Metabolism of tissue macrophages in homeostasis and pathology. *Cell Mol Immunol*. 2022 Mar;19(3):384-408. doi: 10.1038/s41423-021-00791-9. Epub 2021 Dec 7. PMID: 34876704. *IF:* 24.1

47: Brandi P, Conejero L, Cueto FJ, Martínez-Cano S, Dunphy G, Gómez MJ, Relaño C, Saz-Leal P, Enamorado M, Quintas A, Dopazo A, Amores-Iniesta J, Del Fresno C, Nistal-Villán E, Ardaín C, Nieto A, Casanovas M, Subiza JL, **Sancho D.** Trained immunity induction by the inactivated mucosal vaccine MV130 protects against

- experimental viral respiratory infections. *Cell Rep.* 2022 Jan 4;38(1):110184. doi: 10.1016/j.celrep.2021.110184. PMID: 34986349. *IF:* 8.8
- 46: Hernández-García E, Cueto FJ, Cook ECL, Redondo-Urzaínqui A, Charro-Zanca S, Robles-Vera I, Conde-Garrosa R, Nikolić I, Sabio G, **Sancho D**, Iborra S. Conventional type 1 dendritic cells protect against age-related adipose tissue dysfunction and obesity. *Cell Mol Immunol.* 2022 Feb;19(2):260-275. doi: 10.1038/s41423-021-00812-7. Epub 2022 Jan 4. PMID: 34983945. *IF:* 24.1
- 45: Del Fresno C, García-Arriaza J, Martínez-Cano S, Heras-Murillo I, Jarit-Cabanillas A, Amores-Iniesta J, Brandi P, Dunphy G, Suay-Corredera C, Pricolo MR, Vicente N, López-Perrote A, Cabezudo S, González-Corpas A, Llorca O, Alegre-Cebollada J, Garaigorta U, Gastaminza P, Esteban M, **Sancho D**. The Bacterial Mucosal Immunotherapy MV130 Protects Against SARS-CoV-2 Infection and Improves COVID-19 Vaccines Immunogenicity. *Front Immunol.* 2021 Nov 18;12:748103. doi: 10.3389/fimmu.2021.748103. PMID: 34867974. *IF:* 8.787
- 44: Cueto FJ, Del Fresno C, Brandi P, Combes AJ, Hernández-García E, Sánchez-Paulete AR, Enamorado M, Bromley CP, Gomez MJ, Conde-Garrosa R, Mañes S, Zelenay S, Melero I, Iborra S, Krummel MF, **Sancho D**<sup>§</sup>. DNGR-1 limits Flt3L-mediated antitumor immunity by restraining tumor-infiltrating type I conventional dendritic cells. *J Immunother Cancer.* 2021 May;9(5):e002054. doi: 10.1136/jitc-2020-002054. PMID: 33980589; PMCID: PMC8118081. *IF:* 13.751
- 43: Cueto FJ, **Sancho D**<sup>§</sup>. The Flt3L/Flt3 Axis in Dendritic Cell Biology and Cancer Immunotherapy. *Cancers* (Basel). 2021 Mar 26;13(7):1525. doi: 10.3390/cancers13071525. PMID: 33810248; PMCID: PMC8037622. *IF:* 6.639
- 42: Del Fresno C, **Sancho D**<sup>§</sup>. Myeloid cells in sensing of tissue damage. *Curr Opin Immunol.* 2021 Feb;68:34-40. doi: 10.1016/j.coi.2020.08.006. Epub 2020 Oct 7. PMID: 33035713; PMCID: PMC7538386. *IF:* 7.486
- 41: Acín-Pérez R \*, Iborra S \*, Martí-Mateos Y, Cook ECL, Conde-Garrosa R, Petcherski A, Muñoz MDM, Martínez de Mena R, Krishnan KC, Jiménez C, Bolaños JP, Laakso M, Lulis AJ, Shirihai OS, **Sancho D**<sup>§</sup> \*, Enríquez JA<sup>§</sup> \*. Fgr kinase is required for proinflammatory macrophage activation during diet-induced obesity. *Nat Metab.* 2020 Sep;2(9):974-988. doi: 10.1038/s42255-020-00273-8. Epub 2020 Sep 17. PMID: 32943786.
- 40: Cueto FJ, Del Fresno C, **Sancho D**<sup>§</sup>. DNGR-1, a Dendritic Cell-Specific Sensor of Tissue Damage That Dually Modulates Immunity and Inflammation. *Front Immunol.* 2020 Feb 7;10:3146. doi: 10.3389/fimmu.2019.03146. PMID: 32117205; PMCID: PMC7018937. *IF:* 5.085
- 39: Del Fresno C, Cueto FJ, **Sancho D**<sup>§</sup>. Sensing Tissue Damage by Myeloid C-Type Lectin Receptors. *Curr Top Microbiol Immunol.* 2020 Jan 24. doi: 10.1007/82\_2019\_194. Epub ahead of print. PMID: 31974758. *IF:* 3.095
- 38: Del Fresno C, **Sancho D**<sup>§</sup>. Clec2d Joins the Cell Death Sensor Ranks. *Immunity.* 2020 Jan 14;52(1):6-8. doi: 10.1016/j.immuni.2019.12.015. PMID: 31951550. Editorial (not included in bibliometric report) *IF:* 22.553
- 37: Del Fresno C, Cueto FJ, **Sancho D**<sup>§</sup>. A Proposal for Nomenclature in Myeloid C-Type Lectin Receptors. *Front Immunol.* 2019 Sep 6;10:2098. doi: 10.3389/fimmu.2019.02098. PMID: 31555291; PMCID: PMC6743258. *IF:* 5.085
- 36: Wculek SK, **Sancho D**<sup>§</sup>. LKB1 restrains dendritic cell function. *Cell Res.* 2019;29(6):429-31. Epub 2019/04/27. doi: 10.1038/s41422-019-0169-0. PubMed PMID: 31024168. Editorial (not included in bibliometric report) *IF:*20.507

- 35: Wculek SK, Cueto FJ, Mujal AM, Melero I, Krummel MF, **Sancho D<sup>§</sup>**. Dendritic cells in cancer immunology and immunotherapy. *Nat Rev Immunol*. 2020 Jan;20(1):7-24. doi: 10.1038/s41577-019-0210-z. Epub 2019 Aug 29. PMID: 31467405. *IF: 40.358*
- 34: Del Fresno C, **Sancho D<sup>§</sup>**. cDC1s: New Orchestrators of Tissue Innate Immunity. *Trends Immunol*. 2019 Jul;40(7):559-561. doi: 10.1016/j.it.2019.05.002. Epub 2019 May 24. PMID: 31133464. Comment (not included in bibliometric report) *IF: 13.422*
- 33: Wculek SK, Khouili SC, Priego E, Heras-Murillo I, **Sancho D<sup>§</sup>**. Metabolic Control of Dendritic Cell Functions: Digesting Information. *Front Immunol*. 2019 Apr 25;10:775. doi: 10.3389/fimmu.2019.00775. PMID: 31073300; PMCID: PMC6496459. *IF: 5.085*
- 32: Wculek SK, Amores-Iniesta J, Conde-Garrosa R, Khouili SC, Melero I, **Sancho D<sup>§</sup>**. Effective cancer immunotherapy by natural mouse conventional type-1 dendritic cells bearing dead tumor antigen. *J Immunother Cancer*. 2019 Apr 8;7(1):100. doi: 10.1186/s40425-019-0565-5. PMID: 30961656; PMCID: PMC6454603. *IF: 9.913*
- 31: Martínez-López M\*, Iborra S\* <sup>§</sup>, Conde-Garrosa R, Mastrangelo A, Danne C, Mann ER, Reid DM, Gaboriau-Routhiau V, Chaparro M, Lorenzo MP, Minnerup L, Saz-Leal P, Slack E, Kemp B, Gisbert JP, Dzionek A, Robinson MJ, Rupérez FJ, Cerf-Bensussan N, Brown GD, Bernardo D, LeibundGut-Landmann S, **Sancho D<sup>§</sup>**. Microbiota Sensing by Mincle-Syk Axis in Dendritic Cells Regulates Interleukin-17 and -22 Production and Promotes Intestinal Barrier Integrity. *Immunity*. 2019 Feb 19;50(2):446-461.e9. doi: 10.1016/j.immuni.2018.12.020. Epub 2019 Jan 29. PMID: 30709742; PMCID: PMC6382412. *IF: 22.553*
- 30: Saz-Leal P, Del Fresno C, Brandi P, Martínez-Cano S, Dungan OM, Chisholm JD, Kerr WG, **Sancho D<sup>§</sup>**. Targeting SHIP-1 in Myeloid Cells Enhances Trained Immunity and Boosts Response to Infection. *Cell Rep*. 2018 Oct 30;25(5):1118-1126. doi: 10.1016/j.celrep.2018.09.092. PMID: 30380404; PMCID: PMC6226423. *12; IF: 7.815*
- 29: Del Fresno C<sup>§</sup>, Saz-Leal P, Enamorado M, Wculek SK, Martínez-Cano S, Blanco-Menéndez N, Schulz O, Gallizioli M, Miró-Mur F, Cano E, Planas A, **Sancho D<sup>§</sup>**. DNGR-1 in dendritic cells limits tissue damage by dampening neutrophil recruitment. *Science*. 2018 Oct 19;362(6412):351-356. doi: 10.1126/science.aan8423. PMID: 30337411. *IF: 41.037*
- 28: Izquierdo HM, Brandi P, Gómez MJ, Conde-Garrosa R, Priego E, Enamorado M, Martínez-Cano S, Sánchez I, Conejero L, Jimenez-Carretero D, Martín-Puig S, Williams M, **Sancho D<sup>§</sup>**. Von Hippel-Lindau Protein Is Required for Optimal Alveolar Macrophage Terminal Differentiation, Self-Renewal, and Function. *Cell Rep*. 2018 Aug 14;24(7):1738-1746. doi: 10.1016/j.celrep.2018.07.034. PMID: 30110631; PMCID: PMC6113928. *IF: 7.815*
- 27: Enamorado M, Khouili SC, Iborra S, **Sancho D<sup>§</sup>**. Genealogy, Dendritic Cell Priming, and Differentiation of Tissue-Resident Memory CD8<sup>+</sup> T Cells. *Front Immunol*. 2018 Jul 31;9:1751. doi: 10.3389/fimmu.2018.01751. PMID:30108585; PMCID: PMC6079237. *IF: 4.716*
- 26: Martínez-López M, Soto M, Iborra S, **Sancho D<sup>§</sup>**. Leishmania Hijacks Myeloid Cells for Immune Escape. *Front Microbiol*. 2018 May 7;9:883. doi: 10.3389/fmicb.2018.00883. PMID: 29867798; PMCID: PMC5949370. *IF: 4.259*
- 17: Del Fresno C, Iborra S, Saz-Leal P, Martínez-López M, **Sancho D<sup>§</sup>**. Flexible Signaling of Myeloid C-Type Lectin Receptors in Immunity and Inflammation. *Front Immunol*. 2018 Apr 26;9:804. doi: 10.3389/fimmu.2018.00804. PMID: 29755458; PMCID: PMC5932189. *IF: 4.716*



- 25: Enamorado M, Iborra S, Priego E, Cueto FJ, Quintana JA, Martínez-Cano S, Mejías-Pérez E, Esteban M, Melero I, Hidalgo A, **Sancho D<sup>§</sup>**. Enhanced anti-tumour immunity requires the interplay between resident and circulating memory CD8+ T cells. *Nat Commun*. 2017 Jul 17;8:16073. doi: 10.1038/ncomms16073. PMID: 28714465; PMCID: PMC5520051. *IF: 12.353*
- 24: Conejero L<sup>§</sup>, Khouili SC, Martínez-Cano S, Izquierdo HM, Brandi P, **Sancho D<sup>§</sup>**. Lung CD103+ dendritic cells restrain allergic airway inflammation through IL-12 production. *JCI Insight*. 2017 May 18;2(10):e90420. doi: 10.1172/jci.insight.90420. PMID: 28515363; PMCID: PMC5436540. *IF: 6.014*
- 23: **Sancho D<sup>§</sup>**, Enamorado M, Garaude J<sup>§</sup>. Innate Immune Function of Mitochondrial Metabolism. *Front Immunol*. 2017 May 8;8:527. doi: 10.3389/fimmu.2017.00527. PMID: 28533780; PMCID: PMC5420559. *IF: 5.511*
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27.- 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. IF:27.59.

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22.- 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. IF: 3.79.

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- 10.- Rodríguez-Fernández JL, Sánchez-Martín L, de Frutos CA, **Sancho D**, Robinson M, Sánchez-Madrid F, Cabañas C. LFA-1 integrin and the microtubular cytoskeleton are involved in the Ca(2)(+)-mediated regulation of the activity of the tyrosine kinase PYK2 in T cells. *J Leukoc Biol.* 2002 Mar;71(3):520-30. *IF: 4.51*
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- 8.- 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. 86:5008-16. *IF: 5.44*
- 7.- 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. *IF: 8.97.*
- 6.- Ortiz AM, García-Vicuña R, **Sancho D**, Laffon A, Sánchez-Madrid F, González-Alvaro I. Cyclosporin A inhibits CD69 expression induced on synovial fluid and peripheral blood lymphocytes by interleukin 15. *J Rheumatol.* 2000 Oct;27(10):2329-38. *IF: 2.87*
- 5.- Vicente-Manzanares M, Rey M, Jones DR, **Sancho D**, Mellado M, Rodríguez-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. *IF: 7.14*
- 4.- Nieto M, Rodríguez-Fernández JL, Navarro F, **Sancho D**, Frade JM, Mellado M, Martínez-A C, Cabañas C, Sánchez-Madrid F. Signaling through CD43 induces natural killer cell activation, chemokine release, and PYK-2 activation. *Blood.* 1999 Oct 15;94(8):2767-77. *IF: 8.37*
- 3.- del Pozo MA, Nieto M, Serrador JM, **Sancho D**, Vicente-Manzanares M, Martínez C, Sánchez-Madrid F. The two poles of the lymphocyte: specialized cell compartments for migration and recruitment. *Cell Adhes Commun.* 1998;6(2-3):125-33. Review. *IF: 1.46*
- 2.- Nieto M, Frade JM, **Sancho D**, Mellado M, Martínez-A C, Sánchez-Madrid F. Polarization of chemokine receptors to the leading edge during lymphocyte chemotaxis. *J Exp Med.* 1997;186(1):153-8. *IF: 14.38*
- 1.- Hernández-Caselles T, Martínez-Esparza M, **Sancho D**, Rubio G, Aparicio P. Interleukin-7 rescues human activated T lymphocytes from apoptosis induced by glucocorticosteroids and regulates bcl-2 and CD25 expression. *Hum Immunol.* 1995 Jul;43(3):181-9. *IF: 2.96*

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## ACTIVE PATENTS

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1. Title: Antagonists of the imidazoline-1 receptor for use in the prevention and/or treatment of an autoinflammatory or autoimmune disease. Inventors: **Sancho D**, Mastrangelo A, Robles I, Ibañez B, Fuster V, Mañanes D. Holder entity: CNIC. Priority number: EP23382650.2. Priority country: EU. Date: 26/06/2023.

2. Title: Enhanced trained immunity in myeloid cells by SHIP-1 inhibition. Inventors: **Sancho D**, Saz-Leal P, Del Fresno C, Kerr WG, Chisholm JD. Holder entity CNIC, Syracuse University and SUNY Upstate University. Priority number: EP18382404.4. Priority country: EU. Date: 06/06/2018.
3. Title: Immune modulation via C-type lectin. Inventors (in order of contribution): **Sancho D**, Reis e Sousa C, Joffre OP, Rogers N, Schulz O, Pennington D. Holder Entity: Cancer Research UK. Company licensing: Cancer Research technology limited. PCT/GB2008/002504 Filed on 21/07/2008. Publication n°: WO/2009/013484 (29/01/2009)
4. Title: Use of compounds that regulate HDAC6 tubulin deacetylase activity. Inventors (in order of contribution): Serrador J, Cabrero JR, **Sancho D**, Mittelbrunn M, Urzainqui A, Sanchez-Madrid F. PCT/ES2005/000019. Filed on 17/01/2005. Publication n°: WO/2005/078081 (25/08/2005).

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### **RESEARCH COLLABORATION AGREEMENTS WITH COMPANIES**

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1. Research Cooperation Agreement with Medimmune (Cambridge). PI: David Sancho. Participant Institution: CNIC. Date 2011-2018. Funding: 263,254.71€.
2. Collaboration with Miltenyi Biotec (Bergisch Gladbach, Germany) in the context of the European Consortium PROCROP (2016-2021).
3. Research cooperation agreement with Inmunotek (Madrid). PI: David Sancho. Participant Institution: CNIC. 2018-2019. 19,150€
5. Research cooperation agreement with Inmunotek (Madrid). PI: David Sancho. Participant Institution: CNIC. 2019-2021. 41,600€
6. Title: Evaluating the protection of bacterial preparations in viral infection and improvement of the immunogenicity of vaccines. PI: David Sancho. Participant Inst: Inmunotek S.L. (Madrid, Spain) and Centro Nacional de Investigaciones Cardiovasculares. Funding Company: Inmunotek S.L. Type of Inst.: Business Entity. Duration: Jul2022-Jul2024. Total amount: 99,673€.
7. Title: Generation of bispecific antibodies targeting T cells and DCs to increase their interaction. PI: David Sancho. Participant Inst: Adendra Therapeutics (London, UK) and Centro Nacional de Investigaciones Cardiovasculares. Funding Company: Adendra Therapeutics Type of Inst.: Business Entity. Duration: Dec2022-Jun2023. Total amount: 134,811€.
8. Title: Targeting conventional dendritic cells (cDCs) as a new therapeutic approach after myocardial infarction. PI: David Sancho. Participant Inst: Adendra Therapeutics (London, UK) and Centro Nacional de Investigaciones Cardiovasculares. Funding Company: Adendra Therapeutics. Inst.: Business Entity. Duration: Aug2022-Jun2023. Total amount: 76,681€.

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### **DOCTORAL THESES SUPERVISED AND TRAINING OF PERSONNEL**

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#### **DOCTORAL THESES DIRECTED**

1. Ignacio Heras Murillo. Department: Biomedicine and Biotechnology. Universidad

- de Alcalá. Title: Targeting dendritic cells for immunotherapy: cancer vaccines and metabolic modulation. Date 14/07/2023. Grade: Sobresaliente cum laude.
2. Elena Priego Saiz. Department: Biochemistry UAM. Title: Mitochondrial complex I regulates antigen cross-presentation in dendritic cells. Date: 21/04/2023. Grade: Sobresaliente cum laude.
  3. Francisco Javier Cueto Rodríguez. Department: Biochemistry UAM. Title: DNGR-1 Acts as a cDC1-specific Checkpoint during Flt3L-based Cancer Immunotherapy. Date: 14/07/2020. Grade: Sobresaliente cum laude.
  4. Paola Brandi. Department: Biochemistry UAM. Title: Una vacuna polibacteriana a través de mucosas protege contra infecciones virales respiratorias e índice inmunidad entrenada. Date: 08/07/2020. Grade: Sobresaliente cum laude.
  5. María Martínez-López. Department: Biochemistry UAM. Title: The myeloid C-type lectin receptor Mincle is a multifunctional sensor in immunity and homeostasis. Date: 22/02/2019. Grade: Sobresaliente cum laude with European mention.
  6. Paula Saz-Leal. Department: Biochemistry UAM. Title: Role of SHIP-1 phosphatase in trained immunity modulation. Date: 14/12/2018. Grade: Sobresaliente cum laude.
  7. Helena M. Izquierdo Fernández. Department: Biochemistry UAM. Title: Role of hypoxia inducible factors in alveolar macrophage physiology. Date: 18/07/2018. Grade: Sobresaliente cum laude with European mention.
  8. Neris Michel Enamorado Escalona. Department: Biochemistry UAM. Title: La colaboración entre los linfocitos T CD8+ de memoria residente y circulante mejora la inmunidad antitumoral. Date: 20/09/2017. Grade: Sobresaliente cum laude.
  9. Noelia Blanco Menéndez. Department: Biochemistry UAM. Title: La fosfatasa SHIP-1 se asocia al hemITAM de Dectin-1 y modula respuestas funcionales frente a Candida albicans en células dendríticas. Date: 14/11/2014. Grade: Sobresaliente cum laude.

### ***ONGOING SUPERVISION OF DOCTORAL THESES***

1. Sofía Chayeb Khouili. Estimated defence date: Nov 2023.
2. Irene Adán. Estimated defence date: 2024.
3. Aitor Jarit. Estimated defence date 2024
4. Diego Mañanes. Estimated defence date 2025
5. Miguel Galán. Estimated defence date 2025

### ***TRAINING OF RESEARCH PERSONNEL***

#### **Undergraduate students**

Adrián Belinchón (summer 2023)  
 Stephanie L. Rothstein (summer 2023)  
 Nauzet Deniz (summer 2022)  
 Marcos Luis Femenía Muiña (summer 2022)  
 Miguel Galán (summer 2021)  
 Carlos Relaño (summer 2021)  
 Irene Adán (summer 2019)  
 Aitor Jarit (summer 2018)  
 Juan Francisco Rodríguez-Vidal (summer 2018 and 2019)  
 Andrés París (summer 2017)

Miguel Ángel Jiménez-Muñoz (Summer 2017)  
Andrea de la Fuente (summer 2016)  
Elena Priego (summer 2015 & 2016)  
Sofía Chayeb (summer 2014 & 2015)  
Jesús Lavado (summer 2014)  
Paula Saz (summer 2013 & 2014)  
Carlos Martí (summer 2013)  
Inmaculada Martos Folgado (summer 2012)  
Francisco J. Cueto Rodríguez (summer 2012)  
Inmaculada Hernández-Delso (summer 2011)  
Jaime Fernández Barrera (summer 2011)  
María Martínez López (summer 2010)  
Helena M. Izquierdo Fernández (summer 2010)

### **Master Students**

Marcos Luis Femenía Muiña (2023-2024)  
Pablo Munné (2023-2024)  
Nauzet Deniz (2022-2023)  
Gonzalo Sáenz (2021-2022)  
Álvaro Blanes (2020-2021)  
Aitor Jarit (2018-2019)  
Elena Priego (2017-2018)  
Sofía Chayeb (2015-2016)  
Paula Saz (2014-2015)  
Francisco Javier Cueto Rodríguez (2013-2014)  
Neris Michel Enamorado Escalona (2012-2013)  
Jaime Fernández Barrera (2011-2012)  
María Martínez López (2010-2011)  
Helena M. Izquierdo Fernández (2010-2011)

### **PhD Students**

Miguel Galán: 2021  
Diego Mañanes: 2021  
Aitor Jarit: 2020  
Irene Adán: 2019  
Ignacio Heras: 2018 (PhD 2023)  
Elena Priego: 2017 (PhD 2023)  
Sofía Chayeb: 2017  
Brandi, Paola: 2016 (PhD 2020). Postdoc in international lab.  
Cueto Rodríguez, Francisco Javier: 2016 (PhD 2020). Postdoc in national lab  
Saz Leal, Paula: 2015 (PhD 2018) Medical liason in pharma company.  
Enamorado Escalona, Neris Michel : 2013-2018. Postdoc in international lab and now independent PI in Mount Sinai School of Medicine.  
Martínez López, María: 2012-2019. Postdoc in international lab.  
Izquierdo Fernández, Helena María: 2011-2018. Postdoc in international lab  
Noelia Blanco Menéndez (2010-01/2014-11). Postdoc in national lab.

### **Laboratory Technician**

Manuel Rodrigo Tapias (2021.10-now)  
Carmen Contreras Puente (2016.01/2016.06)  
Roberto Moreno Vellisca (2015.01/2015.06)  
David Peco Campillo (2014-01/2014-06)  
Sarai Martínez Cano (2013-01- now)  
Ruth Conde Garrosa (2012-2018)  
Marta Pérez Serrano (2011-01/2011-06)

### **Postdoctoral Researchers**

Dr. Iñaki Robles (2020)

Dr. Dieke van Dinther (2019)

Dr. Gillian Dunphy (2019)

Dr. Annalaura Mastrangelo (2017)

Dr. Stefanie K. Wculek (2016). PI in IRB Barcelona, awarded ERC StG.

Dr. Noelia Blanco Menéndez (2014-11/2015.11) Postdoc in Instituto de Investigación biomédica (INIBIC) - Hospital Universitario de A Coruña

Dr. Laura Conejero (2013-2017) Medical liason in pharma Company.

Dr. Carlos del Fresno (2013-2019). PI in IDIPAZ, Madrid.

Dr. Johan Garaude (2012.11/2016.06) PI in INSERM, France.

Dr. Salvador Iborra (2011-2018) PI in Universidad Complutense, Madrid.  
2023:Scientific director Inmunotek S.L.

Dr. Gonzalo de la Rosa (2011.01/2012.08) Postdoc in national lab.

### **MASTER THESES DIRECTED**

Nauzet Deniz. Title: Characterization of the adaptive immune response induced by SDHa-deficient dendritic cells. Jun 2023. UAM, Madrid.

Gonzalo Sáenz. Title: Effect of the b-glucan in the development of dendritic cells in vitro and their application in vivo. Jun 2022. UAM, Madrid.

Álvaro Blanes. Title: "Method development and validation for LC-MS targeted metabolomics: application to the MICROBIOTA-PESA cohort" Jun 2021. UAM, Madrid.

Aitor Jarit. Title: "new mechanisms on trained immunity" Jun 2019. UAM, Madrid.

Elena Priego. Title: "Analysis of Complex I in dendritic cells" Jun 2018. UAM, Madrid.

Sofía Chayeb. Title: "Batf3-dependent dendritic cells are dispensable for tolerance to house dust mite" Jun 2016. UAM, Madrid.

Paula Saz. Title: Involvement of the C-type lectin receptor DNGR-1 in immunity to *Candida albicans*. Defence date: Jun 2015. UAM, Madrid.

Francisco Javier Cueto Rodríguez. Title: Mincle regulates VACV infection. Defence date: Jun 2014. UAM, Madrid.

Michel Enamorado Escalona. Title: Myeloid cell metabolism impacts on antigen presentation. Defence date: Jun 2013. UAM, Madrid.

Jaime Fernández Barrera. Title: New functions for the necrosis receptor Clec9a. Defence date: Jun 2012. UCM, Madrid.

Helena M. Izquierdo. Title: Sensing necrosis couples to NFAT activation in dendritic cells. Defence date: June 2011. UAM, Madrid.

María Martínez López. Title: Screening for Syk-coupled receptors in myeloid cells involved in necrosis recognition. Defence date: June 2011. UAM, Madrid.

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### **OTHER PROFESSIONAL ACTIVITIES**

#### **SCIENCE MANAGEMENT AT THE SPANISH STATE AGENCY FOR RESEARCH**

09/2020-

Appointed Chair for Biomedicine Area in the Spanish State Agency of Research, responsible for coordinating a team of 35 scientific collaborators of different Biomedicine subareas overseeing around 6,000 research projects and human resources applications per year.

08/2017-09/2020

Appointed Chair for Immunity, Infection and new therapies (IIT) subarea within Biomedicine Area in the Spanish State Agency of Research, responsible for coordinating a team of 4 scientific collaborators of the subarea of IIT, overseeing around 1,200 research projects and human resources applications per year.

These collaborations imply chairing several project evaluation committees per year for projects and human resources (Juan de la Cierva formación, Juan de la Cierva incorporación, Ramón y Cajal) and organizing the evaluation and tracking of financed projects and human resources.

## **PARTICIPATION IN PEER REVIEW ACTIVITIES**

### **2.2.1 International Grant Reviewer:**

ERC Starting Grant

ERC Consolidator Grant

ERC Advanced Grant

French ANR (Agence Nationale de la Recherche).

Wellcome Trust

Worldwide Cancer Research

Uruguayan ANII (Agencia Nacional de Investigación e Innovación)

Portuguese FCT (Fundação para a Ciência e a Tecnologia).

### **2.2.2. National Grant Reviewer:**

As Chair in the State Agency for Research I have been president of an average 4 project and HHRR evaluation panels per year (from 2017 onwards).

Member of the Evaluation Committee for Juan de la Cierva Program

Member of the Committee for Evaluation of the Ramón y Cajal Program

FIS (Fondo de Investigaciones Sanitarias, Health Ministry), expert reviewer

ANEP (Agencia Nacional de Evaluación y Prospectiva), Programa Plan Nacional I+D, Biomedicine Area, expert reviewer

Evaluator of national and international fellowships "La Caixa"

Mobility program for Researchers

Evaluator of "Programas de La Caixa: Doctorado en España"

### **2.2.3. Editor and reviewer in scientific journals**

- Executive Editor for *Inmunología*, Official Scientific Journal of the Spanish Society for Immunology (2013-2017). This magazine was an international journal run by Elsevier at the time I was Editor (ISSN: 0213-9626).
- Academic Editor *Frontiers in Immunology*, 2020 IF: 7.561; Ranking Immunology 24/162 Q1/D2.
- Editorial Board member *Cancers*, 2020 IF: 6.639; Ranking Oncology 51/242 Q1/D3.
- Ad hoc reviewer for scientific journals including: Cell, Science, Nature, Immunity, Nature Immunology, Science Immunology, Cardiovascular Research, Journal of the American College of Cardiology, The Journal of Experimental Medicine, The Journal of Clinical Investigation, Nature Metabolism, Nature Cancer, Cell Reports, Science Signaling, Science

Translational Medicine, EMBO Reports, Nature Cancer, eLIFE, Nature Reviews Immunology, Frontiers in Immunology, Plos Pathogens, Cell Research, Cancer Research, Clinical Cancer Research, The Journal for Immunotherapy of Cancer, The Journal of Immunology, European Journal of Immunology, iScience, Journal of Biological Chemistry, Trends in Cancer, Trends in Immunology, Glycoconjugate Journal, Vaccine, Expert Reviews on Vaccines, Immunology Letters, Febs Open Bio.

**PhD Evaluator** in >40 PhD **Thesis Committees**, and **tutor** for >20 PhD students.

**Active Participation at CNIC organization**, since 2009:

- Member of the Innovation committee (2023-)
- Member of the Scientific Activities committee (2020-2023)
- Member of the Transgenesis working group (2020-)
- **Coordinator of Myocardial Pathophysiology Area (2017-2020)**
- Active participation in the Committee Advisory Group of CNIC (2017-2020)
- President of the Biosecurity committee (2015-2017)
- Member of the Animal House committee (2015-2017)
- President of the Viral Vectors working group (2013-2014)
- President of the Cellomics working group (2014-2015)
- Member of the Ethical Committee for Animal Welfare (2009-2012)
- Member of the Biosecurity Committee (2010)
- Member of the Cell Culture subcommittee (2011)
- Member of the Library subcommittee (2010-2012)

**Scientific Meetings Organization**

- Organizer of Immunometabolism Symposium at Spanish National Immunology meeting (Alicante, 2016): Attendance >500 people
- Organizer of CNIC Inflammation and Immunity day International symposium (2014 & 2016) Attendance: More than 150 people
- Symposia within the 40th (2017) Spanish immunology meetings (>400 att.).
- 31st European Macrophage and Dendritic Cell Society meeting. Madrid, September 2017. International meeting (>220 att.).
- “CNIC inflammation and immunity day” 2018 at CNIC, Madrid. International symposium (>100 att.).
- “CNIC inflammation and immunity day” 2022 at CNIC, Madrid. International symposium (>150 att.).
- Organizer of International Symposium on dendritic cells (Barcelona, October 2024, expected >300 att.).
- Organizer of CNIC conference in cardioimmunology (Madrid, November 2024, expected >150 att.).
- Organizer of European phagocyte meeting (Madrid, March 2025, expected >150 att.).

**TEACHING**

- **Honorary Professor** at Departamento de Bioquímica, UAM. 2015-17.
- Participation as lecturer in the BMM9, Cardiovascular diseases module of the Master’s degree in Molecular Biomedicine from Universidad Autónoma de Madrid (since 2010).
- Participation as lecturer in the Immunology Master from Universidad Complutense de Madrid (since 2011).
- Participation as lecturer in the Cellular Biology Master from Universidad de Murcia (2012).
- Master’s Thesis María Martínez López (Master’s degree in Molecular Biomedicine,

- UAM, 2011).
- Master's Thesis Helena M. Izquierdo (Master's degree in Molecular Biomedicine, UAM, 2011).
- Master's Thesis Jaime Fernández Barrera (Master's degree in Immunology, UCM, 2012).
- Master's Thesis Neris Michel Enamorado (Master's degree in Molecular Biomedicine, UAM, 2013).
- Master's Thesis Francisco J. Cueto Rodríguez (Master's degree in Molecular Biomedicine, UAM, 2014).
- Master Thesis Paula Saz
- Master Thesis Sofía Chayeb

### **Animal Handling**

- 2010 Course on Category C for experimental design and project applications involving animal procedures and category B for animal handling. Organized by CNIO and Animalaria, Madrid, Spain.
- 2004 **Personal Licence Holder** PIL70/19244 to carry out procedures in living animals. Issued by the Home Office, United Kingdom.

### **MEMBERSHIP OF SCIENTIFIC SOCIETIES**

- Since 1996 Spanish Society for Immunology (SEI).
- 2014 - 2018 Elected member of the Directive Board of Spanish Society for Immunology.
- Since 2014 Member of the European Macrophage and DC Society

### **ACADEMIC HONORS and AWARDS**

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- 2023 Award "Carmen y Severo Ochoa" for research in Molecular Biology, Fundación Carmen y Severo Ochoa.
- 2017 "Constantes y Vitales" Prize to best young Biomedical Researcher, Atres media.
- 2016 ERC Consolidator Grant award, European Research Council.
- 2010 ERC starting Grant Award. European Research Council.
- 2010 Hardiman-Redon Prize. Awarded for best Cancer Research UK, London Research Institute publication in 2009.
- 2009 Ranked 1<sup>st</sup> (Biomedicine) in "Ramón y Cajal" Programme for international recruitment of Group Leaders. Spanish Ministry of Science and Innovation.
- 2005 "Ramón Areces" prize for best doctoral thesis. Royal National Academy of Doctors.
- 2004 Prize for best doctoral thesis. Severo Ochoa Molecular Biology Centre, Madrid Autonomous University (2004).
- 2004 Pfizer Foundation Basic Research Prize for the article Sancho et al. J. Clin. Invest. 2003. 112: 872-82.
- 2004 Extraordinary Prize for Ph.D thesis. Madrid Autonomous University.
- 1996 Ranked 1<sup>st</sup> in National Exam for access to specialist clinical training for Biologists. Spanish Ministry of Health.
- 1995 First National Prize for University Graduation. Spanish Ministry of Education.
- 1995 Extraordinary Prize for University Graduation. University of Murcia. Spain.



## LECTURES IN INTERNATIONAL SCIENTIFIC EVENTS

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- "Cellular and metabolic bases of organ fibrosis" (Baeza, 9-11/10/2023).
- Immunomicrotopo international symposium (Erlangen, 28-30, 2023).
- T cell study group EFIS (online, 4/4/2023).
- Scottish Immunology Group network meeting (Perth, 8/2/2023).
- A-WISH international symposium (Alicante, 15-16/12/2022).
- European Society Medical Oncology (ESMO) meeting (Geneva, 7-9/12/22).
- "French Society for Immunology meeting" (Nice, 22-25/11/22)
- "Translational research in cancer immunotherapy" (Madrid, 29-30/09/22)
- Immunometabolism meeting (BSI, Sao Paulo, 20-24/09/22)
- ImmunoMetNet conference (Amsterdam, 11/05/22)
- Keystone conference on myeloid cells (6-9/3/2022, Banff, Canada)
- European Congress of Immunology (1-4/9/2021, virtual format)
- Vanderbilt Immunometabolism 2020 symposia (8/5/2020, virtual format)
- Norwegian Society for Immunology Annual meeting (Oslo, 29/11/2019)
- Irish Society for Immunology Annual meeting (Dublin, 19-20/10/2019)
- 33rd Meeting of the European Macrophage and Dendritic cell Society (EMDS) (Marseille, 12-14/9/2019)
- Swiss Society for Allergology and Immunology Annual meeting (Lugano, 4-6/9/2019)
- Portuguese Society for Immunology Annual meeting (Coimbra, 15-17/5/2019)
- Stony Brook University international symposium in inflammation (New York, 29/4/2019)
- Skin Trm in homeostasis, infection and disease (NIH, Rockville, MD, 22-23/4/2019)
- EMBO workshop on Pathogen immunity and signaling (Oxford, 1-4/4/2019)
- European Congress of Immunology (Amsterdam, 1-5/9/2018)
- Cell symposium in translational immunometabolism (Basel, 23-26/6/2018)
- International DC conference (Aachen, 9-14/6/2018)
- Microbes, Immunity and metabolism international conference (Paris, 15-17/11/2017)
- Development of tissue and pathogen-specific cellular innate immunity (Freiburg, 27-29/9/2017)
- 5<sup>th</sup> Focus Immunology Basel Symposium, Basel, Switzerland (8/2017).
- 4th multiple sclerosis meeting, Madrid, 9-10/6/2017.
- Invited speaker Meeting IMMUNOTHERCAM, Madrid. (3-4 Dec 2015)
- Selected speaker at European Congress of Immunology. Vienna (6-9 September 2015)
- Invited speaker ZIBI summer symposium, Berlin. (29-30 June, 2015)
- Invited speaker at New Frontiers in Immunology symposium (Murcia, 8th May, 2015)
- Invited speaker at 28th International Conference of of the EMDS, Viena (2-4, Oct 2014)
- Selected speaker at International symposium of dendritic cell, Tours (14-19, Sept 2014)
- Invited speaker at EMDS 2013 conference, Erlangen (10-12, Oct 2013)
- Invited speaker at Dendritic Cells MACS Day 2013 Symposium, Madrid (4, Jul 2013)
- Selected speaker at Keystone meeting in the Innate Immune response in the pathogenesis of infectious disease (10-15, May 2013)
- Invited speaker at Advances in Vaccine Development, Pamplona (25-26, Oct 2012).
- Invited speaker and Chair: European Congress of Immunology, Glasgow (5-8, Sep 2012).
- Annual European Academy of Tumor Immunology meeting, Paris. (31 May-1 Jun 2012).
- Invited speaker at Madrid meeting on DCs and Macrophages, Madrid. (28-29, May 2012).
- Keystone meeting on Innate Immunity: Sensing the microbes and damage signals.

- Keystone, CO (3-8, Mar 2012).
- Keynote Lecture at the London Research Institute Retreat, Oxford (Apr 2010).
- Invited speaker at International meeting from the Rheumatic Diseases and Inflammation Network, Madrid (Dec 2009).
- Invited speaker at the International Symposium "Critical Frontiers between Immunity and Gene Therapy", Pamplona (Oct 2009).
- Invited speaker at Meeting on Dendritic Cells and Macrophages, Madrid (Sep 2009).
- Invited speaker at Keystone symposium in dendritic cells, Alberta, Canada (29 March - 3 April 2009). Awarded with scholarship.
- Invited speaker First Immunotherapy meeting, Institut Curie (Paris, 17-18 October 2008). Awarded with scholarship.
- J. March Foundation Workshop on "Stimulatory and Inhibitory receptors of the innate immune system" (Madrid, 19-21 January 2004).
- Invited speaker at: EFIS 15th European immunology congress (Rhodes, Greece; 8-12 June 2003).
- J. March Foundation Workshop on Molecular and Genetic basis of autoimmune diseases: SLE and RA (Lisbon, 7-9 April 2003).
- J. March Foundation Workshop on Regulation and Functional Insights in cellular polarity (Madrid, 3-5 June 2002).
- J. March Foundation Workshop on Molecular Basis of Human Congenital Lymphocyte Disorders (Madrid, 3-5 December 2001).
- Leukocyte Typing VII, Harrogate, U.K, June 2000.
- European Network of Immunology Institutes (ENII) Conference. Molecular regulation of lymphocyte behavior. Ile Les Embiez, France. May 17-21 2000.
- Keystone Symposia on Joint Regulation of signaling pathways by Integrins and growth factors. March 25-31, 2000. Breckenridge, Colorado, USA.
- Invited speaker: Fundación Barceló Workshop: Selection of immune repertoire in autoimmune diseases. Palma de Mallorca. 24-26 May, 1999.
- Institute Pasteur Euroconferences: Chemokines and their receptors: from basic research to therapeutic intervention. 1999.

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### **SEMINARS IN INSTITUTES AS INVITED SPEAKER**

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- IATA, Valencia (September 2023)
- CNB, Madrid (June 2023)
- CBM, Madrid (June 2023)
- Research Cancer Center in Salamanca (March 2023)
- Humanitas University, Milan (Feb 2023)
- CIB, Madrid (Feb 2022)
- University of Cambridge (December 2021)
- CRTI, Nantes (february 2021)
- IPBS, Toulouse (october 2019)
- El Escorial, Madrid (July 2019)
- CNIO, Madrid (June 2019)
- CIC Biomagune, San Sebastián (March 2019)
- La Paz Hospital, Madrid (March 2019)
- University of Manchester (March 2019)
- Ramón y Cajal Hospital, Madrid (March 2019)
- IPBLN, Granada (Feb 2019)
- UIMP, Santander (Aug 2018)
- IMIB, Murcia (April 2018)
- CIML, Marseille (March 2018)
- University of Laussane (Jan 2018)
- Boehringer Ingelheim, Vienna (July 2017)
- Miltenyi day, Barcelona (July 2017)

- Karolinska Institute, Stockholm (June 2017)
- in Sclerosis Multiple network, Madrid (June 2017)
- IDIBAPS, Barcelona (Jan 2017)
- National Biotechnology Center, Madrid (June 2016).
- Universidad Autónoma de Madrid (Feb 2016)
- Majadahonda, Centro Nacional de Microbiología (Apr 2015)
- Clinical University of Erlangen (Jan 2015)
- Hospital Vall d'Hebron, Barcelona (Mar 2015)
- Catalan Society for Immunology. Barcelona (Feb 2013).
- Immunology Department, Universidad Complutense de Madrid (Dic 2012).
- La Princesa Hospital, Madrid (May 2012).
- Institute of Microbiology (ETH), Zürich (Apr 2012).
- Cellular Biology Department, Universidad de Murcia (Mar 2012).
- Centro de Biología Molecular (C.S.I.C.), Madrid (Feb 2012).
- Immunology Department, Universidad Complutense de Madrid (Dic 2011).
- Instituto de Biología y Genética Molecular (C.S.I.C.), Valladolid (Nov 2011).
- Medimmune, Cambridge (Apr 2010).
- Centro de Investigaciones Biológicas (C.S.I.C.), Madrid (Nov 2009).
- Institute of Child Health, London (Oct 2009).

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### **LECTURES IN NATIONAL SCIENTIFIC EVENTS**

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- Spanish Society for Immunology Annual meeting (Seville, 30/5-1/6/2019)
- Spanish Society for Immunology, Annual meeting. Zaragoza 25-27/5/2017.
- Invited speaker at Spanish National Immunology meeting. Alicante, 2016.
- Invited speaker at 2<sup>nd</sup> Scientific meeting of Immunotherapy Group, Zaragoza, 2015.
- Invited speaker at Spanish National Immunology Meeting, San Sebastián, 2010.
- Invited speaker at XVII Workshop “Advances in Molecular Biology by young researchers abroad”, CNB, UAM, Madrid, 2008.
- Invited speaker at XVI Workshop “Advances in Molecular Biology by young researchers abroad”, CNB, UAM, Madrid, 2007.
- Selected speaker at XXIX Spanish Immunology Meeting, Cádiz, 2003.
- Selected speaker at XXVIII Spanish Immunology Meeting, Valladolid, 2002.
- Selected speaker at XXVI Spanish Immunology Meeting, Seville, 2000.
- Selected speaker at XXV Spanish Immunology Meeting, Torremolinos, 1999.
- Selected speaker at XXIV Spanish Immunology Meeting, Murcia, 1998.
- Selected speaker at XXIII Spanish Immunology Meeting, Barcelona, 1997.

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### **OUTREACHING ACTIVITIES**

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I believe that outreaching is also an important aspect to impact society. I have developed outreaching activities under the following responsibilities:

- Editorial Committee of Inmunología (2017-present). I contribute to the research section “author’s view” where the latest papers in Immunology are explained to the general public.
- Active participation in “semana de la Ciencia” with some simple experiments adapted to kids both in surrounding primary schools and at CNIC.
- Participation in the agreement of CNIC with the nearby secondary school “Príncipe Felipe” in a program to foster scientific vocations, explaining to high school students about the power of immunotherapy to treat a breadth of diseases, including cardiovascular diseases.