CURRICULUM VITAE

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Education and Degrees

1994 Ph. D. Biology (Cum Laude). Complutense University of Madrid (Spain)
1985 M. S. Biology. Complutense University of Madrid (Spain)
1983 B. S. Biology. Complutense University of Madrid (Spain)

Research Experience

2015-present Associate Professor, Centro Nacional de Investigaciones Cardiovasculares, CNIC, Madrid, Spain
2010-2015 Assistant Professor, Centro Nacional de Investigaciones Cardiovasculares, CNIC, Madrid, Spain
2005-2010 Junior I Researcher, Centro Nacional de Investigaciones Cardiovasculares, CNIC, Madrid, Spain
2000-2005 Assistant Research Scientist, II, III, IV, Department of Cellular and Molecular Medicine, University of California, San Diego, CA, USA
1996-2000 Postdoctoral Fellow and Postgraduate Researcher, Department of Cellular and Molecular Medicine, University of California, San Diego, CA, USA (Laboratory of Chris Glass)
1995-1996 Postdoctoral Fellow, La Jolla Cancer Research Foundation, La Jolla, CA, USA (Laboratory of Manuel Perucho)
1995 Postdoctoral Fellow, California Institute for Biological Research, La Jolla, CA, USA (Laboratory of Manuel Perucho)
1992-1993 Graduate Student, Department of Biochemistry and Molecular Biology, University of Extremadura, Badajoz, Spain (Laboratory of Carlos Gutiérrez Merino)
1988-1994 Graduate Student, Dept. of Endocrinology, "Ramón y Cajal" Hospital, Madrid, Spain (Laboratory of José M. Sancho-Rof)

Honors and Awards

2009 Young Investigator Excellence Award (I3 Program), Spanish Ministry of Science and Innovation
2004-2009 "Ramón y Cajal" Program, Spanish Ministry of Education and Science
2005-2007 Marie Curie International Reintegration Grant, European Commision
1998-2000 American Heart Association, Western States Affiliate Postdoctoral Research Fellowship
1995-1996 Postdoctoral Fellowship from the Spanish Ministry of Education
1995 Extraordinary Doctoral Award, Complutense University of Madrid, Spain
1992-1994 Predoctoral Fellowship from Rich Foundation

1990-1991 Meeting Travel Awards from the Spanish National Institute of Health
1988-1991 Predoctoral Fellowship from the Spanish National Institute of Health

Professional Society Memberships

American Heart Association-Atherosclerosis, Thrombosis and Vascular Biology Council
European Macrophage & Dendritic Cell Society
Spanish Society for Biochemistry and Molecular Biology
Spanish Society of Immunology

Research Support

Ongoing Research Support:

2019-2021 Spanish Ministry of Science, Innovation and Universities (RTI2018-095928-B-I00). Role of the nuclear receptor RXR in the origin, differentiation and functions of tissue macrophages. PI: M. Ricote (€ 229,900 including indirect costs)

2018-2020 Spanish Ministry of Economy and Competitiveness (SAF2017-90604-REDT. Research network on nuclear receptors in cancer, metabolism and inflammation. PI: M. Ricote; Coordinator: M. Ricote (€ 19,000)

2018-2021 Comunidad de Madrid (B2017/BMD-3684). Mecanismos Moleculares y Comunicación Inter-tisular en la Resistencia a la Insulina. PI: Dr. M. Ricote. Coordinator: G. Medina. (€ 122.055; € 973,343.43 whole network)

Completed Research Support:

2017-2020 TV3 Marató Foundation. Control of systemic and tissue-specific obesity-induced insulin resistance by nuclear receptors. PI: M. Ricote; Coordinator: C. Caelles (€ 133,000; € 400,000 whole network)

2016-2018 Spanish Ministry of Economy and Competitiveness (SAF 2015-64287-R). Molecular control of hematopoietic stem cells by nuclear receptors. PI: M. Ricote (€ 205.700 including indirect costs)

2015-2017 Spanish Ministry of Economy and Competitiveness (SAF2015-71878-REDT). Network on Nuclear Receptors in Cancer, Metabolism and Inflammation. PI: M. Ricote; Coordinator: A.F. Valledor (€ 36,000)

2013-2017 CardioNext Initial Training Network. European Commission, 7th Frame Program (FP7-PEOPLE-2013-ITN) (PITN-GA-2013-608027). Next generation training in cardiovascular research and innovation. PI: M. Ricote; Coordinator: A.G. Arroyo (€ 368,948; € 2,736,019 whole network)

2013-2015 Spanish Ministry of Science and Innovation (SAF 2012-31483). Role of the nuclear receptor RXR in hematopoiesis: from stem cells to osteoclasts. PI: M. Ricote (€ 198,900)

2013-2015 TV3 Marató Foundation. Targeting inflammation to improve heart repair and regeneration. PI: A. G. Arroyo and M. Ricote; Coordinator: D. García-Dorado (€ 150,000; € 300,000 whole network)

2010-2012 Spanish Ministry of Science and Innovation (SAF 2009-07466). Role of the nuclear receptor RXR in inflammation: Pathophysiological implications. PI: M. Ricote (€ 181,500)

2009-2012 Genoma España Foundation. Molecular and cellular mechanisms in chronic inflammatory and autoimmune diseases (MEICA). PI: M. Ricote; Coordinator: F. Sánchez Madrid (€ 76,792; € 3,000,000 whole network)

2009-2011 TV3 Marato Foundation. Molecular mechanisms involved in LXR and RXR-mediated prevention of atherosclerosis. PI: M. Ricote; Coordinator: A. F. Valledor (€ 160,000; € 497,873 whole network)

2008-2011 CDTI (Programa CENIT-2008 1004). Caracterización de los mecanismos patogénicos de las calpaínas en enfermedades que suponen un incremento del riesgo cardiovascular (PRONAOS). PI: M. Ricote; coordinator: Puleva Biotech,S.A./Necocodex (€ 225,792; € 12,419,895 whole network)

2006-2009 Mutua Madrileña Foundation. Nuclear Receptors, inflammation and atherosclerosis. PI: M. Ricote (€ 60,000)

2007-2009 Spanish Ministry of Education and Science (SAF 2006-01010). Nuclear receptor signaling pathways in atherogenesis. PI: M. Ricote (€ 160,446)

2005-2007 Marie Curie International Reintegration Grant, European Commission Modulation of genetic programs of macrophages in atherogenesis. PI: M. Ricote (€ 80,000)

2001-2003 American Heart Association Western Affiliate, Beginning Grant-In-Aid. Novel roles of Retinoid X Receptor (RXR) in macrophage biology and atherosclerosis. PI: M. Ricote ($ 60,000)

Mentored Grants

Current:

Laura Martín, Postgraduate Program Fellowship (FPU2019-03941), Spanish Ministry of Science, Innovation and Universities, 2020-2024

Jorge Mínguez, Postgraduate Program Fellowship (FPI-PRE2019-087964), Spanish Ministry of Science and Innovation, 2020-2024

Jesús Porcuna, Postgraduate Program Fellowship (FPU17/01731), Spanish Ministry of Science, Innovation and Universities, 2018-2022

Ana Paredes, Postgraduate Program Fellowship (FPI-BES-2016-076632), Spanish Ministry of Science, Innovation and Universities, 2017-2021

Irene Calero, Research Assistants and laboratory Technicians, Comunidad de Madrid (CAM/ PEJ-2020-TL/BMD-17618), 2021-2023

Previous:

Carmen Contreras, Research Assistants and laboratory Technicians, Comunidad de Madrid (CAM/PEJ1807), 2019-2021

Eleftheria Papaioannou, Postdoctoral Program Fellowship **(**2019-T2/BMD-12930), Call for grants to attract Talent Researchers, 2020-2021, Comunidad de Madrid

Laura Alonso, Postgraduate Program Fellowship La Caixa, 2014-2018

Alicia Sánchez, Research Assistants and laboratory Technicians (CAM/PEJ16/MED/TL1889), Comunidad de Madrid, 2017-2019

Lorenzo Veschini, PhD, CNIC IPP-International Postdoctoral Programme FP7-PEOPLE-2012-COFUND, 2014-2015

Marta Cedenilla, Postgraduate Program Fellowship (FPU-2009-1036), Spanish Ministry of Science and Innovation, 2009-2013

Daniel Alameda, Postgraduate Program Fellowship (FPI-BES-2008-009161), Spanish Ministry of Science and Innovation, 2008-2012

Tamas Roszer, PhD, FP7-PEOPLE-2008-IEF-235677, 2009-2011 and European Foundation for the Study of Diabetes/ Lilly Research Fellowships, 2012-2013
Lucía Fuentes, PhD, "Juan de la Cierva" Postdoctoral Fellowship, Spanish Ministry of Science and Innovation, 2009-2012 and FP7-PEOPLE-2009-RG-252321, 2010-2012

Publications

Orcid: 0000-0002-8090-8902
Researcher ID: L-4615-2014

1. Porcuna J, Mínguez-Martínez J, **Ricote M.** The PPARα and PPARγ Epigenetic Landscape in Cancer and Immune and Metabolic Disorders. Int J Mol Sci. Sep 30;22(19):10573, 2021.
2. Paredes A, Santos-Clemente R, **Ricote M.** Untangling the Cooperative Role of Nuclear Receptors in Cardiovascular Physiology and Disease. Int J Mol Sci. Jul 21;22(15):7775, 2021.
3. Di Martino O, Ferris MA, Hadwiger G, Sarkar S, Vu A, Menéndez-Gutiérrez MP, **Ricote M**, Welch JS. RXRA DT448/9PP generates a dominant active variant capable of inducing maturation in acute myeloid leukemia cells. Haematologica. Jun 17, 2021.
4. Blanco-Domínguez R, Sánchez-Díaz R, de la Fuente H, Jiménez-Borreguero LJ, Matesanz Marín A, Relaño M, Jiménez-Alejandre R, Linillos-Pradillo B, Tsilingiri K, Martín Mariscal ML, Alonso-Herranz L, Moreno G, Martín-Asenjo R, García-Guimaraes MM, Bruno KA, Dauden E, González-Álvaro I, Villar Guimerans LM, Martínez-León A, Salvador-Garicano AM, Michelhaugh SA, Ibrahim NE, Januzzi JL, Kottwitz J, Iliceto S, Plebani M, Basson C, Baritussio A, Seguso M, Marcolongo R, **Ricote M**, Fairweather DL, Bueno H, Fernández-Friera L, Alfonso F, Caforio ALP, Pascual-Figal DA, Heidecker B, Lüscher TF, Das S, Fuster V, Ibáñez B, Sánchez-Madrid F, Martín P. A novel circulating microRNA for the detection of acute myocarditis. **N Engl J Med**, 384 (21):2014-2027, 2021.
5. Font-Díaz J, Jiménez-Panizo A, Caelles C, Vivanco MD, Pérez P, Aranda A, Estébanez-Perpiñá E, Castrillo A, **Ricote M**, Valledor AF. Nuclear receptors: Lipid and hormone sensors with essential roles in the control of cancer development. **Semin Cancer Biol.** 2021 Aug;73: 58-75, 2021.
6. Di Martino O, Niu H, Hadwiger G, Kuusanmaki H, Ferris MA, Vu A, Beales J, Wagner C, Menéndez-Gutiérrez MP, **Ricote M**, Heckman C, Welch JS. Endogenous and combination retinoids are active in myelomonocytic leukemias. **Haematologica.** Apr 1;106(4):1008-1021, 2021.
7. Alonso-Herranz L, Sahún-Español A, Gonzalo P, Gkontra P, Núñez V, Cedenilla M, Villalba-Orero M, Inserte J, Clemente C, García-Dorado D, Arroyo AG, **Ricote M.** Macrophages promote endothelial-to-mesenchymal transition via MT1MMP/TGFβ1 after myocardial infarction. **Elife.** Oct 16;9: e57920, 2020. This article has been highlighted in ***Nat Rev Cardiol*** 18, 5 (2021).
8. Porcuna J, Menéndez-Gutiérrez MP, **Ricote M**. Molecular control of tissue-resident macrophage identity by nuclear receptors. **Curr Opin Pharmacol**. May 8; 53: 27-34, 2020.
9. Casanova-Acebes M, Menéndez-Gutiérrez MP, Porcuna J, Álvarez-Errico D, Lavin Y, García A, Kobayashi S, Le Berichel J, Núñez V, Were F, Jiménez-Carretero D, Sánchez-Cabo F, Merad M, **Ricote M**. RXRs control serous macrophage neonatal expansion and identity and contribure to ovarian cancer progression. **Nat Commun**. Apr 3;11(1):1655, 2020.

10. Ting SM, Zhao X, Sun G, Obertas L, **Ricote M**, Aronowski J. Brain Cleanup as a Potential Target for Poststroke Recovery: The Role of RXR (Retinoic X Receptor) in Phagocytes. **Stroke**. Jan 9: STROKEAHA119027315, 2020.
11. Alonso-Herranz L, Porcuna J, **Ricote M.** Isolation and Purification of Tissue Resident Macrophages for the Analysis of Nuclear Receptor Activity. Methods Mol Biol. 1951:59-73, 2019.
12. Binek A, Rojo D, Godzien J, Rupérez FJ, Nuñez V, Jorge I, **Ricote M**, Vázquez J, Barbas C. Flow Cytometry Has a Significant Impact on the Cellular Metabolome. **J Proteome Res**. Jan 4; 18(1):169-181, 2019.
13. Walter W, Alonso-Herranz L, Trappetti V, Crespo I, Ibberson M, Cedenilla M, Karaszewska A, Núñez V, Xenarios I, Arroyo AG, Sánchez-Cabo F, **Ricote M.** Deciphering the Dynamic Transcriptional and Post-transcriptional Networks of Macrophages in the Healthy Heart and after Myocardial Injury. **Cell Rep.** Apr 10: 23 (2): 622-636, 2018.
14. Clemente C, Rius C, Alonso-Herranz L, Martín-Alonso M, Pollán Á, Camafeita E, Martínez F, Mota RA, Núñez V, Rodríguez C, Seiki M, Martínez-González J, Andrés V, **Ricote M**, Arroyo AG. MT4-MMP deficiency increases patrolling monocyte recruitment to early lesions and accelerates atherosclerosis. **Nat Commun.** Mar 2: 9(1):910, 2018.
15. Moore-Morris T, Cattaneo P, Guimarães-Camboa N, Bogomolovas J, Cedenilla M, Banerjee I, **Ricote M**, Kisseleva T, Zhang L, Gu Y, Dalton ND, Peterson KL, Chen J, Pucéat M, Evans SM. Infarct Fibroblasts Do Not Derive From Bone Marrow Lineages. **Circ Res.** Feb 16; 122 (4): 583-590, 2018.
16. Niu H, Fujiwara H, di Martino O, Hadwiger G, Frederick TE, Menéndez-Gutiérrez MP, **Ricote M**, Bowman GR, Welch JS. Endogenous retinoid X receptor ligands in mouse hematopoietic cells. **Sci Signal.** Oct 31;10 (503), 2017
17. A-Gonzalez N, Quintana JA, García-Silva S, Mazariegos M, González de la Aleja A, Nicolás-Ávila JA, Walter W, Adrover JM, Crainiciuc G, Kuchroo VK, Rothlin CV, Peinado H, Castrillo A, **Ricote M**, Hidalgo A. Phagocytosis imprints heterogeneity in tissue-resident macrophages. **J Exp Med.** May 1;214(5):1281-1296, 2017.
18. Menéndez-Gutiérrez MP, **Ricote M.** The multi-faceted role of retinoid X receptor in bone remodeling. **Cell Mol Life Sci**. 74 (12) 2135-2149, 2017.
19. Vivas Y, Díez-Hochleitner M, Izquierdo-Lahuerta A, Corrales P, Horrillo D, Velasco I, Martínez-García C, Campbell M, Sevillano J, **Ricote M**, Ros M, Ramos MP, Medina-Gomez G. Peroxisome proliferator activated receptor gamma 2 modulates late pregnancy homeostatic metabolic adaptations. **Mol Med**. 2016 Oct; 19; 22. doi: 10.2119/molmed.2015.00262.
20. Natrajan MS, de la Fuente AG, Crawford AH, Linehan E, Nuñez V, Johnson KR, Wu T, Fitzgerald DC, **Ricote M**, Bielekova B, Franklin RJ. Retinoid X receptor activation reverses age-related deficiencies in myelin debris phagocytosis and remyelination. **Brain** 138 (129) 3581-3597, 2015.
21. Walter W, Sánchez-Cabo F, **Ricote M.** GOplot: an R package for visually combining expression data with functional analysis. **Bioinformatics**. Sep 1;31(17):2912-4, 2015.
22. Menéndez-Gutiérrez, M.P., Rőszer, T., Fuentes, L., Núñez, V., Amelia Escolano A., Redondo, J.M., De Clerck, N., Metzger, D., Valledor, A.F., **Ricote, M.** Retinoid X receptors orchestrate osteoclast differentiation and postnatal bone remodel. **J. Clin. Invest.** Feb; 125 (2):809-823, 2015.
23. Ma, F., Liu, S.Y., Razani, B., Arora, N., Li, B., Kagechika, H., Tontonoz, P., Núñez, V., **Ricote, M.**, Cheng, G. Retinoid X receptor α attenuates host antiviral response by suppressing type I interferon. **Nat. Commun.** Nov 24; 5:5494, 2014.

24. Ballesteros, I., Cuartero, M.I., Pradillo, J.M., de la Parra, J., Pérez-Ruiz, A., Corbí, A., **Ricote, M.**, Hamilton, J.A., Sobrado, M., Vivancos, J., Nombela, F., Lizasoain, I., Moro, M.A. Rosiglitazone-induced CD36 up-regulation resolves inflammation by PPARγ and 5-LO-dependent pathways. **J. Leukoc. Biol.** Apr; 95(4):587-98, 2014.
25. Rőszer, T., Menéndez-Gutiérrez, M.P., Cedenilla, M., **Ricote M**. Retinoid X Receptors in macrophage biology. **Trends Endocrinol. Metab.** Sep; 24(9): 460-8, 2013.
26. Menéndez-Gutiérrez, M.P.**,** Rőszer, T., **Ricote, M.** Biology and therapeutic applications of peroxisome proliferator-activated receptors. **Curr. Top. Med. Chem.** Mar; 12(6): 548-84, 2012.
27. Prieur, X., MoK, C.Y.L., Velagapudi, V.R., Núñez, V., Fuentes, L., Montaner, D., Ishikawa, K., Camacho, A., Barbarroja, N., O'Rahilly, S., Sethi, J., Dopazo, J., Orešič, M., **Ricote, M.***, Vidal-Puig, A*. Differential lipid partitioning between adipocytes and tissue macrophages modulates macrophage lipotoxicity and M2/M1 polarisation in obese mice. **Diabetes** Mar; 60 (3): 797-809, 2011. *** Corresponding authors.**
28. Rőszer, T., Menéndez-Gutiérrez, P., Lefterova, M.I., Alameda, D., Nuñez, V., Lazar, M.A., Fischer, T., **Ricote, M.** Autoimmune kidney disease and impaired phagocytosis in mice with macrophage PPARγ- or RXRα-deficiency. **J. Immunol.** Jan 1; 186(1): 621-31, 2011.
29. Núñez, V., Alameda, D., Rico, D., Mota, R., Gonzalo, P., Cedenilla, M., Fischer, T., Boscá, L., Glass. C.K., Arroyo, A.G., **Ricote, M.** Retinoid X receptor {alpha} controls innate inflammatory responses through the up-regulation of chemokine expression. **Proc. Natl. Acad. Sci. U S A**., 107 (23): 10626-31, 2010.
30. Fuentes, L., Roszer, T., **Ricote, M.** Inflammatory mediators and insulin resistance in obesity: role of nuclear receptor signaling in macrophages. **Mediators Inflamm.** 2010: 219583, 2010.
31. Rőszer, T., **Ricote, M.** PPARs in the renal regulation of systemic blood pressure. **PPAR Research.** 2010: 698730, 2010.
32. Prieur, X., Roszer, T., **Ricote, M.** Lipotoxicity in macrophages: evidence from diseases associated with the metabolic syndrome. **Biochim. Biophys. Acta**, Mar; 1801(3):327-37, 2010.
33. Pascual, G., **Ricote, M.** and Hevener, A.L. Macrophage peroxisome proliferators activated receptor γ as a therapeutic target to combat Type 2 diabetes. **Expert Opin. Ther. Targets**, vol. 11 (11), 1-18, 2007.
34. Hevener, A.L, Olefsky, J.M., Reichart, D., Nguyen, M.T.A., Bandyopadyhay, G., Leung, H.-Y., Watt, M.J., Benner, C., Febraio, M.A., Nguyen, A.-K., Folian, B., Subramaniam, S., Gonzalez, F.J., Glass, C.K. and **Ricote M.** Macrophage specific disruption of PPARγ leads to skeletal muscle and hepatic insulin resistance and diminished TZD-action. **J. Clin. Invest**., vol. 117, No. 6, 1658-1669, 2007.
35. **Ricote, M.*** and Glass, C.K.* PPARs and Mechanisms of transrepression. **Biochim. Biophys. Acta**, 1771, 926-935, 2007. *** Corresponding authors.**
36. **Ricote M***., Snyder, C., Leung, H.-Y., Chen, K. and Glass, C.K. Normal hematopoesis after conditional targeting of RXRα in murine hematopoetic/progenitor cells. **J. Leuk. Biol.** 80 (4): 850-61, 2006. ***Corresponding author.**
37. Cunard, R., Eto, Y., Muljadi, J.T., Glass, C.K., Kelly, C.J. and **Ricote, M.** Repression of IFN-γ by PPARγ. **J. Immunol.** 172: 7530-7536, 2004.
38. Valledor, F.A. and **Ricote, M.** Nuclear receptor signaling in macrophages. **Biochem. Pharm.** 67 201-212, 2004.
39. **Ricote, M.** Valledor, F. A. and Glass, C.K. Decoding transcriptional programs regulated by PPARs and LXRs in the macrophage. **Arterioscler. Thromb. Vasc. Biol.**, 24: 230-239, 2004.

40. Welch, J.S.*****, **Ricote, M.***, Akiyama, T.E., Gonzalez, F.J. and Glass, C.K. PPARγ and PPARδ negatively regulate specific subsets of LPS and IFNγ target genes in macrophages. **Proc. Natl. Acad. Sci. USA**, vol 100, pp. 6712-6717, May 2003. ***These authors contributed equivalently to this work.**
41. **Ricote, M.** and Glass, C. K. The peroxisome proliferator-activated receptors (PPARs). **Wiley Encyclopedia of Molecular Medicine**. Vol.5, 2445-2450, 2002.
42. Cunard, R., DiCampli, D., Archer, D.C., Stevenson, J.L., **Ricote, M.,** Glass, C.K., Kelly, C.J. WY14,643, a PPARα ligand, has profound effects on immune responses in vivo. **J. Immunol.** 169: 6806-6812, December 2002.
43. Akiyama, T.E., Sakai, S., Lambert, G., Nicol, C. J., Matsusue K., Pimprale, S., Lee, Y.-H., **Ricote, M.**, Glass, C., Brewer H. B., Gonzalez, F. J. Conditional disruption of the PPARγ gene in mice results in lowered expression of ABCA1, ABCG1, and apoE in macrophages and reduced cholesterol efflux. **Mol. Cell Biol.**, vol. 22 (8), pp. 2607-2619, April 2002.
44. Cunard, R., **Ricote, M.**, DiCampli, D., Archer, D.C., Kahn, D.A., Glass, C.K., Kelly, C. J. Regulation of Cytokine Expression by Ligands of Peroxisome Proliferator Activated Receptors. **J. Immunol.**, 168 (6): 2795-2802, March 2002.
45. **Ricote, M.** and Glass, C.K. New roles of PPARs in cholesterol homeostasis. **Trends in Pharmacology Sciences**. Vol. 22 No. 9, September 2001.
46. **Ricote, M.***, Welch, J. S., Glass, C. K. Regulation of macrophage gene expression by the peroxisome proliferator activated receptor-γ. **Horm. Res.**, 54: 275-280, 2000. *** Corresponding author.**
47. Llopis, J., Westin, S., **Ricote, M.**, Wang, Z., Cho, C.Y., Kurokawa, R., Mullin, T-M., Rose, D.W., Rosenfeld, M.G., Tsien, R.Y. and Glass, C.K. Ligand- dependent interactions of coactivators SRC-1 and PBP with nuclear hormone receptors can be imaged in live cells and are required for transcription. **Proc. Natl. Acad. Sci. USA**, vol. 97, pp. 4363-4368, April 2000.
48. Straus, D.S., Pascual, G., Mei Li, Welch, J.S., **Ricote, M.**, Hsiang, C-H, Sengchanthalangsy, L.L., Ghosh, G., Glass, C.K. 15-deoxy-$\Delta^{12,14}$-Prostaglandin J_2 inhibits multiple steps in the NF-κB signaling pathway. **Proc. Natl. Acad. Sci. USA**, vol. 97, pp. 4844-4849, April 2000.
49. **Ricote, M.**, Huang, J. T., Welch, J. S., Glass, C.K. The peroxisome-activated receptor γ (PPARγ) as a regulator of monocyte/macrophage function. **J. Leuk. Biol.**, vol. 66, 733-739, November 1999.
50. Huang, J.T.*****, Welch, J. S.*****, **Ricote, M.***, Binder, C., Willson, T. M., Kelly, C., Witztum, J. L., Funk, C., Conrad, D., Glass, C. K. Interleukin-4-dependent production of PPARγ ligands in macrophages by 12/15-lipoxygenase. **Nature**, vol. 400, 378-382, July 1999. ***These authors contributed equivalently to this work.**
51. **Ricote, M.**, Huang, J. T., Fajas, L., Li, A.,Welch, J., Witztum, J., Auwerx, J., Palinski, W. and Glass, C.K. Expression of the peroxisome proliferator-activated receptor γ (PPARγ) in human atherosclerosis and regulation in macrophages by colony stimulating factors and oxidized LDL. **Proc. Natl. Acad. Sci. USA**, vol 95, pp.7614-7619, June 1998.
52. Lavinsky, R.M., Jepsen, K., Heinzel, T., Torchia, J., Mullen, T.-M., Schiff, R., Leon Del-Rio, A., **Ricote, M.**, Ngo, S., Gemsch, J., Hilsenbeck, S.G., Osborne, C.K., Glass, C.K., Rosenfeld, M. G.and Rose, D.W. Diverse signaling pathways modulate nuclear receptor recruitment of N-CoR and SMRT complexes. **Proc. Natl. Acad. Sci. USA**, vol. 95, pp. 2920-2925, March 1998.

53. **Ricote, M.**, Li, A.C., Willson, T.M., Kelly C.J. and Glass, C.K. The peroxisome proliferator-activated receptor-γ is a negative regulator of macrophage activation. **Nature**, vol. 391, 79-82, January 1998. **(Cited more than 2.900 times since publication)**
54. DiRenzo, J., Soderstrom, M., Kurokawa, R., Ogliastro, M-H., **Ricote, M.**, Ingrey, S., Horlein, A., Rosenfeld, M.G. and Glass, C.K. Peroxisome proliferator-activated receptors and retinoic acid receptors differentially control the interactions of retinoid X receptor heterodimers with ligands, coactivators and corepressors. **Mol. Cell Biol.** 17 (4): 2166-2176, 1997.
55. **Ricote, M.**, Geller, P., Perucho, M. Frequent alterations in gene expression in colon tumor cells of the microsatellite mutator phenotype. **Mutation Research**, 374:153-167, 1997.
56. **Ricote, M.**, García-Martín, E., Sancho, J., Gutiérrez-Merino, C. Modulation of calcium fluxes across synaptosomal plasma membrane by the hypothalamic hypophysary inhibitory Factor. **Hypertension**, vol. 29, No.6, 1337-43, 1997.
57. **Ricote, M.**, J. Welsh and M. McClelland. RNA fingerprinting by arbitrarily primed PCR. In: Biomedical Lab Manuals Series. Micheli and Bova (eds.). The Springer Lab Manuals, pp: 283-293, 1996.
58. **Ricote, M.**, García-Martín, E., Sancho, J., Gutiérrez-Merino, C. Effect of the Hypothalamic Hypophysary Inhibitory Factor on the Ca^{2+}-ATPase of Sarcoplasmic Reticulum. **BBA-Bionergetics**, 1232 (3), 217-224, 1995.
59. Rodriguez-Barbero, A., Montero, A., **Ricote, M.**, Sancho, J. and López-Novoa,J.M. Effect of hypothalamic, hypophysary inhibitory factor (HHIF) on rat mesangial cell activation. **Hypertension**, vol. 26, no. 6, 905-911, 1995.
60. **Ricote, M.**, García-Martín, E.,Sancho, J. and Gutiérrez-Merino, C. Modulation of the Ca^{2+}-pump by the hypothalamic hypophysary inhibitory factor. **Hypertension**, vol 25, No. 3, 365-371, 1995.
61. **Ricote, M.**, García-Martín, E., Gutiérrez-Merino, C., Sancho, J. Modulation of the Ca^{2+}/Mg^{2+} -ATPase activity of synaptosomal plasma membrane vesicles by the hypohalamic hypophysary Na^{+}/K^{+}-ATPase inhibitory factor (HHIF). In: The Sodium Pump - Structure, Mechanism, Hormonal Control and its Role in Disease- E. Bamberg and W. Schoner (eds.). Darmstadt: Steinkopff; New York: Springer, pp: 783-786, 1994.
62. Montero, A. Rodriguez-Barbero, A., **Ricote, M.**, Sancho, J. and Lopez-Novoa, J.M., Effect of ouabain and hypothalamic,hypophysary inhibitory factor (HHIF) on rat mesangial cell proliferation. **J. Cardiovasc. Pharmacol.**, vol.22 (Suppl.2) S35-S37, 1993.
63. Sancho, J.M., García-Martín,E., García-Robles, R., Santirso, R., Villa, E., Gutiérrez-Merino, C., and **Ricote ,M.** Properties of the purified hypothalamic pituitary Na/K ATPase inhibitor. **J. Cardiovasc. Pharmacol.**, vol.22 (Suppl.2), S32-S34, 1993.
64. Montero, A., Rodriguez-Barbero, A., **Ricote, M.**, Sancho, J. and López-Novoa, J.M. Effect of hypothalamic,hypophysary inhibitory factor (HHIF) on rat mesangial cell proliferation. In: Diuretics Vol. 4, Chemistry Pharmacological and Clinical Application.J.B. Pusshett and A. Greenberg (eds.). Elsevier Science Ed., Amsterdam, pp: 711-714, 1993.
65. Illescas M., **Ricote M.**,Méndez E., G-Robles R. and Sancho J. Complete purification of a (Na^{+}/K^{+})ATPase inhibitor from bovine hypothalamus and hypophysis. **FEBS Letters**, 261, no. 2, 436-440, 1990.
66. Illescas M., **Ricote M.**, Méndez E., García-Robles R. and Sancho J.M. Partial purification of a sodium pump inhibitor from bovine adenohypophisis, its comparison

with the natriuretic factor isolated from hypothalamus. **Clin. Exp. Hypertension,** A10 (suppl.1), 301-307, 1988.

67. Illescas M., **Ricote M.**, Méndez E. and Sancho J. Ouabain-like (Na^+/K^+)ATPase inhibitor isolated from bovine hypothalamus. **Biochem. (Life Sci. Adv.),** 7:149-153, 1988.

Invited lectures and meetings (since 2000)

IIB-Alberto Sols, Spain, April 2021
Centro Nacional de Biotecnología, March 2021
Nuclear Receptors and Cancer meeting, NurCaMeIn/CIBERONC, Madrid, Spain, December, 2019
Diabetes and Obesity in Renal Disease, Madrid, Spain, November 2019
9th French Nuclear Receptors Meeting, Lille, France, September 2019
FEBS Advanced Courses. Epigenomics, Nuclear Receptors and Disease, Spetses, Greece, August 2019
University of Lausanne, Switzerland, June 2019
UCL, UK, May 2019
Idibell, UB Bellvitge, Barcelona, Spain, December 14, 2018
Catalan Society of Immunology, Barcelona, Spain, April 2017
Nuclear receptors - from molecules to humans, EMBO Conference, Corsica, France, August 2015
Mechanism of Insulin resistance (MOIR), Second Symposium, Madrid, Spain, June 2104
Simposio Receptores Nucleares, Instituto de Investigaciones Biomédicas, Madrid, Spain, October 2014
Nuclear Receptor Research Network, Utrecht, The Netherlands, November 2013
Diabedesis 5º Congreso, Madrid, Spain, October 2013
Keystone Symposium: Nuclear Receptors and Friends: Roles in Energy Homeostasis and Metabolic Dysfunction, Alpbach, Austria, April 2013
Madrid Meeting on Dendritic cells and Macrophages, Madrid, Spain, May 2012
Symposium on Nuclear Hormone Receptors: meet the family, Barcelona, Spain, September 2011
Neuroinflammation, From molecular to clinic, 2nd Venusberg Meeting, Bonn, Germany, March 2011
XIX Farmadrid, Madrid, Spain, July 2010
Cholesterol: metabolism, actions and disorders, Ramón Areces Foundation. Madrid, Spain, April 2009
Centro de Investigaciones Biológicas, Madrid, Spain, March 2009
Primer Encuentro Sobre Investigación Traslacional CNIC, Madrid, Spain, November 2008
Meeting of the Spanish Society for Biochemistry and Molecular Biology, Bilbao, Spain, September 2008
Institute of Metabolic Science, Addenbrooke´s Hospital, Cambridge, UK, February 2008
Department of Neurology, Molecular Neurology Unit, University of Müenster, Müenster, Germany, June 2007
Instituto de Biomedicina de Valencia, Valencia, Spain, June 2007
Research Center for Molecular Medicine, University of Debrecen, Debrecen, Hungary, May 2007
Centro Nacional de Biotecnología, DIO, Madrid, Spain, February 2007
Institut de Recerca Biomedica, Parque Científico de Barcelona, Spain, July 2006

Kennedy Institute of Rheumatology, Faculty of Medicine, Imperial College London, UK, June 2006
Keystone Symposia, Nuclear Receptors: Orphan Brothers, Banff, Alberta, Canada, March 2006
Facultad de Medicina, UCLM, Albacete, Spain, September, September 2005
3rd International Symposium on PPARs Efficacy and Safety from Basic Science to Clinical Applications, Monte Carlo, Monaco, March 2005
CIMA, Pamplona, Spain, March 2005
12th International Congress of Endocrinology, Lisbon, Portugal, August 2004
Department of Pulmonary & Critical Care Medicine, Cleveland Clinic Foundation, Cleveland, USA, June 2004
The 2004 Deuel Conference on Lipids, Borrego Springs, California, USA, March 2004
Department of Pharmacology, Weill Medical College of Cornell University, New York, USA, June 2003
Laboratory of Molecular Biology, NIDDK, Bethesda, MD, USA, May 2003
Boyer Center for Molecular Medicine, Yale University, School of Medicine, New Haven, Connecticut, USA, March 2003
Keystone Symposia, Nuclear Receptor Superfamily, Snowbird, Utah, USA, April 2002.
Department of Pharmacology and Toxicology, Dartmouth Medical School, Hanover, NH, USA, November 2002
Department of Cellular and Molecular Pharmacology, University of California, San Francisco, CA, USA, April 2002
Keystone Symposia, Nuclear Receptors 2000, Steamboat Spring, Colorado, USA, September 2000
3rd Teupitzer Colloquium, Teupitzer, Germany, September 2000

International Conferences Organized

Nuclear Receptors and Cancer meeting, NurCaMeIn/CIBERONC, Madrid, Spain, 3-4 December, 2019

XL SEBBM Congress+FEBS3 Symposium. Gene Regulation and Cell Signaling: Nuclear receptors and their co-regulators: implications in cancer, metabolism and inflammation. Barcelona, 23-26 October, 2017

Scientific Committee, 31st European Macrophage and DC Society meeting in Madrid, Spain, 21-23 September, 2017

CNIC Conference, Energy homeostasis and metabolic disease, Madrid, Spain, 7-8 November, 2014

CardioNext kick-off meeting (Initial Training Network-Innovative Doctorate Programme), Madrid, Spain, 17-18 February, 2014

Organizing scientific committee, XIII International Symposium on Ischemic Heart Disease, Valencia, Spain, April 2008

Peer Review Activities

Journal Peer-Review:

Cell Report, Circulation, Diabetes, Embo J, Embo Reports, FEBS Letter, J Immunol, J Exp Med, Kidney International, Mol Cell Biol, Nature Medicine, Nucleic Acids Res, PLoS Biology, PNAS, Thrombosis Research, etc.

Grant Review Activities:
Vice-Chair and expert, European Commission, FP7-PEOPLE, Horizon 2020-PEOPLE, Horizon-MSCA-2021, 2009-present
Expert at the Spanish Ministry of Science and Innovation, and the Health Research Fund, member of the Study of Biomedicine Section of ANEP (Spanish National Agency for Evaluation and Prospective) and commissioner of the State Investigation Agency (AEI), 2005- present
Evaluator for the Ibero-American Program of Science and Technology for Development (CYTED), 2009-present
Member of Biomedicine and Health Science Study Section of the of the Regional Ministry of Health, Xunta de Galicia, 2007-2009
Evaluator for the Fondation pour la Recherche Médicale (FRM), France, 2019-present
Evaluator the Austrian Science Fund (FWF), Austria, 2020-present

Teaching activities

Doctoral thesis supervised:
Ongoing: Epigenomic control of macrophages in inflammatory diseases. Laura Martín, Universidad Complutense de Madrid. Estimated defense date: November 2024.

Ongoing: Transcriptional control of embryo-derived tissue resident macrophages in homeostasis and disease. Jorge Mínguez, Universidad Autónoma de Madrid, Facultad de Ciencias. Estimated defense date: September 2024.

Ongoing: Role of Retinoid X Receptors in macrophage identity and function. Jesús Porcuna, Universidad Autónoma de Madrid, Facultad de Ciencias. Estimated defense date: April 2022.

Ongoing: Regulatory role of Retinoid X Receptors in cardiac homeostasis and disease. Ana Paredes, Universidad Autónoma de Madrid, Facultad de Ciencias. Estimated defense date: April 2021.

Novel mechanisms underlying macrophage contribution to cardiac injury after myocardial infarction. Laura Alonso-Herranz, Universidad Autónoma de Madrid, Facultad de Medicina. November 29, 2019. Qualification: Sobresaliente Cum Laude. Mención Internacional.

Deciphering the transcriptional network of the distinct heart cell types after myocardial infarction. Wencke Walter, Universidad Autónoma de Madrid, Facultad de Ciencias, March 29, 2017. Qualification: Sobresaliente Cum Laude.

Role of macrophages in cardiac homeostasis and repair following myocardial infarction. Marta Cedenilla, Universidad Autónoma de Madrid, Facultad de Ciencias, September 19, 2014. Qualification: Sobresaliente Cum Laude. Mención Internacional.

Regulación transcripcional de la inflamación en macrófagos por el Receptor X de Retinoides. Daniel Alameda, Universidad Autónoma de Madrid, Facultad de Ciencias, June 25, 2014. Qualification: Sobresaliente Cum Laude.

Aproximación genómica al estudio de la función del Receptor X de Retinoides (RXR) en la biología del macrófago. Papel de RXR en la regulación de quimioquinas. Daniel Rico Rodríguez, Universidad Complutense de Madrid, Facultad de Biología, April 18, 2007. Qualification: Sobresaliente Cum laude.

Thesis Committees:
Laura Higuera González, UPF, Barcelona, Spain, October 2021
Khanh Bao Trang, Université de Lausanne, Switzerland, June 2019
Roser Guiteras Villa, Universidad de Barcelona, Spain, December 2018
Limei Wang, Universität Wien, Vienna, June 2016
Mónica Pascual, Universidad de Barcelona, Spain, November 2013
Teresa Zotes, Universidad Autónoma de Madrid, Spain, March 2013
Lidia A. Daimiel, Universidad Autónoma de Madrid, Spain, July 2010
Enara Aguirre, Universidad Complutense de Madrid, Spain, July 2009
José Vicente Pérez, Universidad Rey Juan Carlos, Madrid, Spain, May 2009
Julieta Díaz, Departamento de Farmacología, Universidad de Barcelona, Spain, March 2007
Ruth Sánchez, Universidad Autónoma de Madrid, Spain, February 2007

Lectures and Courses:

2020-2021	Master in Biomedical Research, Universitat Pompeu Fabra, Barcelona, Spain
2019	FEBS Advanced Courses. Epigenomics, Nuclear Receptors and Disease**,** Spetses, Greece
2015	FEBS Advanced Courses. Nuclear Receptor Signaling in Physiology and Disease**,** Spetses, Greece
2014	Nutritional Genomics and Personalized Nutrition course, IMDEA Institute, Madrid, Spain
2010-2011	Cardiovascular Disease Master Module, Universidad Autónoma de Madrid-CNIC
2009-present	INVESMIR and ResCNIC Program, for medical professionals, during their specialization period as resident internship, CNIC, Madrid, Spain.
2006-2007	ACERCATE Program, for senior high school students, CNIC, Madrid, Spain
2006-present	CICERONE Program, for advanced undergraduate students of biomedicine related university degree, CNIC, Madrid, Spain
1986-1987	High School Biology Course Instructor

Trainees

Predoctoral Students:
Laura Martín (2020-present)
Jorge Mínguez (2020-present)
Jesús Porcuna (2017-present)
Ana Paredes (2017-present)
Laura Alonso-Herranz (2014-2019), currently Postdoc at Aarhus University, Denmark.
Wencke Walter (2013-2016), currently Scientist at Munich Leukemia Laboratory GmbH, Germany.

Marta Cedenilla (2009-2014), currently Scientific Advisor at Merck Sharp & Dohme, Spain.
Daniel Alameda (2007-2014), currently Research Associate, IBIMA, Málaga, Spain.
Daniel Rico (2005-2007), currently Group Leader at Newcastle University, UK.

Postdoctoral Fellows:
M Piedad Menéndez, PhD (2009-present)
Eleftheria Papaionnau. PhD (2019-2020), currently Postdoc at IIB-Alberto Sols, Madrid, Spain.
Damiana Alvarez-Errico, PhD (2017-2018), currently Head of Genomics Unit at Josep Carreras Leukaemia Research Institute.
Lorenzo Veschini, PhD (2014-2015), currently Lecturer at King´s College London, UK.
Tamás Rőszer, PhD (2009-2014), currently Group leader at University of Ulm, Germany.
Lucía Fuentes, PhD (2009-2012), currently Teacher at the University Camilo José Cela, Madrid, Spain.
Mónica Tous, PhD (2007), currently Researcher at University Rovira i Virgili, Tarragona, Spain.

Master Students:
Rocio Santos Clemente (2020-2021), UCM, Master CNIC Acciona
José Manuel Gómez (2019-2020), UPM
Ana García (2018-2019), UAM, Master CNIC Grant Award
Inés Romero (2017-2018), UAM, Master CNIC Grant Award
Nayane Pastoriza (2017-2018), UAM, Master Fellowship Fundación Carolina-BBVA-CNIC
Jesús Porcuna (2016-2017), UAM, Master CNIC Grant Award
Ana Paredes (2015-2016), UAM, Master CNIC Grant Award
Jose Juan Aparicio (2014-2015), UAM, Ramón Areces Foundation-UAM Master Grant Award
Laura Alonso (2013-2014), UAM, Master CNIC Grant Award
Marta Cedenilla (2008-2009), UAM, Master CNIC Grant Award

Summer Students (CNIC Cicerone Program):
Mónica Uceda González, 2021
Empar Baltasar, 2019
Juan Luis Onieva, 2018
Ana García, 2017, 2018
Rubén Gómez, 2017
Guadalupe González, 2016
Ana Paredes, 2016
Iván Reyes, 2015
Jose Juan Aparicio, 2013, 2014
Laura Alonso, 2012, 2013
M. Isabel Cano, 2011
Bijay Dhungel, 2010
Barbara Mojsa, 2009
Marta Cedenilla, 2008
Daniel Alameda, 2007
Elena Izquierdo, 2006

Visiting Students:
Xavier Prieur, 2008. British Council Researcher Exchange Program 2008-2009
Pramodini Partharasathy, 2020-2021. Erasmus Program, Master Program Integrated Immunology, Friedrich-Alexander University Erlangen-Nürnberg, Germany

Resident Interns (CNIC Invesmir Program):
Iván Núñez, 2010

Resident Interns (CNIC Res@cnic -SECProgram):
Daniel Morena, 2020
Miguel Cayetano Amores, 2019
Adrián Jerónimo Baza, 2018
David Grande, 2017
Ana Isabel Molina, 2016

Undergraduate Students:
Guadalupe González, 2016-2017
Ho-Yin Leung, 2003-2005
Delia Siu, 2002
Hyon Jung Lee, 2001
Audrey Briscoe, 2000

Technicians:
Beatriz Gumiel, 2018
Andrea Michelline Rodríguez, 2017
Alicia Sánchez, 2016
Claudia Escudero, 2015
Juan José Cepeda, 2012
Andrés González, 2011
Marta Pablos, 2010

Outreach Activities

Liceo Francés de Madrid (LFM) Forum of the professions; February 2018, 2019.
LFM Higher Education Fair, November 2018, 2019.
LFM Girls of the move, March 2018.
7ª NUMAD (United Nations Madrid), LFM, "What are the constraints necessary to genetic modification of the human gene pool?" February 2018.
International Day of Women and Girls in Science, 2017. https://www.youtube.com/watch?v=3dbVIlB0YsA
Between women scientists: why a career in research, why to engage in science and technology studies? for high school women students. High School "Isabel la Católica", Madrid, Spain, February 20, 2015.