

Personal information

First name, Surname:	Mara Martin Alonso		
Date of birth:	10.10.1986	Sex:	Female
Nationality:	Spanish		
Researcher unique identifier(s) (ORCID, ResearcherID, etc.):	0000-0003-1624-3085		
URL for personal website:	www.linkedin.com/in/mara-martin-alonso-9471a6b7		

Education

Year	Faculty/department - University/institution - Country
2016 (dissertation defended)	PhD: "Role of the protease MT4-MMP in the arterial vasculature" (Cum Laude) Vascular Pathophysiology Area, Spanish National Centre for Cardiovascular Research (CNIC), Spain
2010	Master Degree in Molecular Biomedicine Molecular Biology and Biochemistry Department, Autonoma University of Madrid (UAM), Spain Master
2004-2009	Bachelor of Science in Biology Complutense University of Madrid (UCM). Spain

Positions - current and previous

Year	Job title – Employer - Country
2021	Principal Investigator Young Research Talent fellowship. Department of clinical and molecular medicine (IKOM), Centre of Molecular Inflammation Research (CEMIR), NTNU, Trondheim, Norway
2020	Researcher Department of clinical and molecular medicine (IKOM), Centre of Molecular Inflammation Research (CEMIR), NTNU, Trondheim, Norway
2018-2020	Marie Skłodowska-Curie Individual Fellow (MSCA-IF), Horizon 2020 Department of clinical and molecular medicine (IKOM), Centre of Molecular Inflammation Research (CEMIR), NTNU, Trondheim, Norway
2017-2018	Postdoctoral Fellow Department of clinical and molecular medicine (IKOM), Centre of Molecular Inflammation Research (CEMIR), NTNU, Trondheim, Norway
2016	Postdoctoral Researcher Vascular Pathophysiology Area, Spanish National Centre for Cardiovascular Research (CNIC), Spain
2010-2016	PhD Candidate Vascular Pathophysiology Area, Spanish National Centre for Cardiovascular Research (CNIC), Spain

Project management experience

Year	Project owner - Project - Role - Funder
2018-2020	"Identification of a Metalloproteinase-17-mediated cellular signalling circuit in intestinal regeneration and tumorigenesis", Marie Skłodowska-Curie Action Individual Fellowship (MSCA-IF)

Supervision of students

Master's students	Ph.D. students	University/institution - Country
1	0	Mentored and supervised a Master student performing technician work. Vascular Pathophysiology Area, Spanish National Centre for Cardiovascular Research (CNIC), Spain
2	1	Mentored and supervised a master's thesis which obtained "A" grade ("Matrix Metalloproteinase (MMP)17 Regulates Intestinal Regeneration after Irradiation" by Sigrid Hoel) and currently mentoring and supervising a Master student and co-supervising a PhD Student (second year of her PhD). Department of clinical and molecular medicine (IKOM), Centre of Molecular Inflammation Research (CEMIR), NTNU, Trondheim, Norway

Other relevant professional experiences

Year	Description - Role
2020-2021	Collaboration that resulted in a publication (Article #1, Cell Host & Microbe. 2021) with William Horsnell laboratory in South Africa related to vaginal epithelial response to infection. Division of Immunology/ Institute of Infectious Disease and Molecular Medicine. Faculty of Health Sciences. University of Cape Town, South Africa.
2019-2021	Active research collaboration with Pekka Katajisto laboratory in Finland about the extracellular matrix of the intestine. Institute of Biotechnology, University of Helsinki, Finland. (Currently under revision in Nat. Comm. 2021).
2019-2021	Active research collaboration with Maarten Altelaar laboratory on Mass spectrometry in intestinal samples. Biomolecular Mass Spectrometry and Proteomics Unit. Utrecht University, The Netherlands. (Currently under revision in Nat. Comm. 2021).
2017	Collaboration that resulted in a publication (2017, see published article #4) with Alicia G. Arroyo's laboratory on organoids experiments for paper revision on J Cell Sci. Vascular Pathophysiology Area, Spanish National Centre for Cardiovascular Research (CNIC), Spain.
2014-2015	Collaboration that resulted in a publication (2015, see published article #5) with Mercedes Salices laboratory about resistance vasculature. Pharmacology Department, Faculty of Medicine, Autonoma University of Madrid (UAM), Spain.
2014-2015	Collaboration that resulted in two publications (2015, see published article #5 and another not included in this CV) with Juan Miguel Redondo about models of vascular injury and lentiviral vectors. Vascular Pathophysiology Area, Spanish National Centre for Cardiovascular Research (CNIC), Spain.

Publication statistics

7 articles published in international peer-reviewed journals with impact factors from 4.4 to 15.9, 1 review article, 1 article currently under revision in Nature Communications and 3 manuscripts currently in BioRxiv from 2020.

Last published Journal Articles

1. **Intestinal-epithelial LSD1 controls goblet cell differentiation and effector responses required for gut immunity to bacterial and helminth infection.** Naveen Parmar; Kyle Burrows; Pia Vornewald; Håvard T. Lindholm; Rosalie T. Zwiggelaar; Alberto Díez-Sánchez; **Mara Martín-Alonso**; Madeleine Fossli; Bruce Vallance; John Arne Dahl; Colby Zaph; Menno Johannes Oudhoff. *PlosPathogens*. **2021** March31.
2. **Il4ra -independent vaginal eosinophil accumulation following helminth infection exacerbates epithelial ulcerative pathology following HSV-2 infection.** Alisha Chetty; Matthew G Darby; Pia M Vornewald; **Mara Martín-Alonso**; Anna Filz; Manuel Ritter; Henry J McSorley; Lindi Masson; Katherine Smith; Frank Brombacher; Matthew K O'Shea; Adam F Cunningham; Bernhard Ryffel; Menno J Oudhoff; Benjamin G Dewals; Laura E Layland; William Horsnell. *Cell Host and microbe*. **2021**. April, 21; 29(4)
3. **LSD1 represses a neonatal/reparative gene program in adult intestinal epithelium.** Rosalie Zwiggelaar*, Håvard Lindholm*, Madeleine Fossli, Marianne Pedersen, Yuki Ohta, Alberto Díez-Sánchez, **Mara Martín-Alonso**, Jenny Ostrop, Mami Matano, Naveen Parmar, Emilie Kvaløy, Roos Spanjers, Kamran Nazmi, Morten Rye, Finn Drabløs, Cheryl Arrowsmith, John Arne Dahl, Kim Jensen, Toshiro Sato, Menno J. Oudhoff. *Authors with equal contribution. *Sci Adv*. **2020** Sep 11;6(37).
4. **MT4-MMP deficiency increases patrolling monocyte recruitment to early lesions and accelerates atherosclerosis.** Cristina Clemente, Cristina Rius, Laura Alonso-Herranz, **Mara Martín-Alonso**, Ángela Pollán, Emilio Camafeita, Fernando Martínez, Rubén A. Mota, Vanessa Núñez, Cristina Rodríguez, Motoharu Seiki, José Martínez-González, Vicente Andrés, Mercedes Ricote & Arroyo AG. *Nat Commun* **2018** March 9, 910.
5. **E-cadherin cleavage by MT2-MMP regulates apical junctional signaling and epithelial homeostasis in the intestine.** Gómez-Escudero J,* Moreno V,* **Martín-Alonso M**, Feinberg T, Hernández de Riquer MV, Colmenar A, Calvo E, Camafeita E, Martínez F, Oudhoff MJ, Weiss SJ, and Arroyo AG. *J Cell Sci*. **2017** Dec 1;130(23):4013-4027. *Authors with equal contribution.

This work resulted in a **Cover picture of the issue**, taken by me, of an organoid knockdown for MT2-MMP (MMP15). <https://jcs.biologists.org/content/130/23.cover-expansion>
6. **Deficiency of MMP17/MT4-MMP proteolytic activity predisposes to aortic aneurysm in mice.** **Martín-Alonso M**, García-Redondo AB, Guo D, Camafeita E, Martínez F, Alfranca A, Méndez-Barbero N, Pollán Á, Sánchez-Camacho C, Denhardt DT, Seiki M, Vázquez J, Salaices M, Redondo JM, Milewicz D, Arroyo AG. *Circ Res*. **2015** Jul3;117(2):e13-26.

Articles under revision (and on BioRxiv doi: <https://doi.org/10.1101/2020.06.18.147769>)

1. **Smooth muscle-specific MMP17 (MT4-MMP) defines the intestinal ECM niche.** **Mara Martín-Alonso***, Håvard T. Lindholm[#], Sharif Iqbal[#], Pia Vornewald[#], Sigrid Hoel, Mirjam J. Damen, A.F.Maarten Altelaar, Pekka Katajisto, Alicia G. Arroyo, Menno J. Oudhoff*
[#]Authors with equal contribution. *Corresponding authors.

Prices and awards

2021-2025 **Young Talent Research Fellowship**

2018-2020 **Marie Skłodowska-Curie Action Individual Fellowship (MSCA-IF)** Department of clinical and molecular medicine (IKOM), Centre of Molecular Inflammation Research (CEMIR), NTNU, Trondheim, Norway

- 2013 **Travel Grant (Gordon's Research Conference)** (ISMB, International Society for Matrix Biology)
- 2009-2013 **FPI (Researcher's training) PhD Scholarship.** Spanish Science Ministry. Vascular Pathophysiology Area, Spanish National Centre for Cardiovascular Research (CNIC), Spain.
- 2011 **FPI short stay grant (Travel grant).** Spanish Science Ministry. Robert M. Berne Cardiovascular Research Center, Department of Molecular Physiology and Biological Physics, University of Virginia, Charlottesville (USA).
- 2008 **Cicerone program grant for students.** Vascular Pathophysiology Area, Spanish National Centre for Cardiovascular Research (CNIC), Spain.
- 2008-2009 **Collaboration Grant for students.** Department of Physiology, Medicine Faculty, Complutense University of Madrid (UCM). Spain.

Memberships of scientific societies

- 2017-2020 IBA. National Graduate School in Infection Biology and Antimicrobials.

Others

Plant-based **nutrition certificate from Cornell University** (2019), with specific academic background on diet influence in inflammation, vascular diseases and cancer.