



3 Information Groups by Area



3.4 Large System Pathologies Area

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**COMPOSITION**

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Patricia Laosa Zafra. Investigadora Postdoctoral. Hospital Universitario de Getafe

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STRATEGIC OBJECTIVE

This research area, has been developed along the last 25 years by our group, with outstanding contributions to several aspects of the field, ranging from basic science (endothelial function, role of lab and image biomarkers, magnetoencephalography, musculoskeletal function...) to clinical and epidemiological research, raising data that have allowed to promote technological devices (platform to detect, treat and monitor functional decline in an non-obtrusive way) and leading to the creation of a technological SME (MG Biomed).

RESEARCH ACTIVITY**● Doctoral theses**

Álvarez Bustos A. Factores asociados a la disminución de la función física en adultos mayores[dissertation]. Madrid: UAM; 2022(14/12/2022).

Directors: Rodríguez Mañas L, Alonso Bouzón C.

● Publications

- Rodríguez-Mañas L, Rodríguez-Sánchez I. COVID-19 in older people: Lessons to learn. *Rev Esp Geriatr Gerontol.* 2022; 57(6): 289-90. Article. Not Indexed
- Baztan Cortes JJ, Rodríguez-Mañas L. Effectiveness and efficiency of acute geriatric units: A classic topic revisited. *Rev Esp Geriatr Gerontol.*

2022; 57(4): 230-5. Article

- Formiga F, Rodríguez-Mañas L. Type 2 diabetes mellitus in elderly or frail individuals. *Topics to be considerer.* *Rev Clin Esp.* 2022; 222(8): 506. Letter. IF: 2.9; Q2
- Casado-Díaz A, La Torre M, Priego-Capote F, Verdu-Soriano J, Lazaro-Martínez JL, Rodríguez-Mañas L, Pérez MB, Túnez I. EHO-85: A multi-

functional amorphous hydrogel for wound healing containing olea europaea leaf extract: effects on wound microenvironment and preclinical evaluation. *J Clin Med.* 2022; 11(5): 1229. Article. IF: 3.9; Q2

- Verdu-Soriano J, de Cristina-Espinar M, Luna-Morales S, Dios-Guerra C, Caballero-Villarraso J, Moreno-Moreno P, Casado-Díaz A, Berenguer-

**RESEARCH LINES**

- Endothelial dysfunction associated with aging, diabetes and obesity.
- Clinical aspects of frailty.
- New Technologies Applied to Frailty, functional decline and Healthy Aging.



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- Pérez M, Guler-Caamano I, Laosa-Zafra O, Rodríguez-Mañas L, Lázaro-Martínez JL. Superiority of a novel multifunctional amorphous hydrogel containing *olea europaea* leaf extract (eho-85) for the treatment of skin ulcers: a randomized, active-controlled clinical trial. *J Clin Med.* 2022; 11(5): 1260. Article. IF: 3.9; Q2
- Pérez-Sáez MJ, Redondo-Pachón D, Arias-Cabralles CE, Faura A, Bach A, Buxeda A, Burballa C, Junyent E, Crespo M, Marco E, Rodríguez-Mañas L, Pascual J. Outcomes of frail patients while waiting for kidney transplantation: differences between physical frailty phenotype and FRAIL scale. *J Clin Med.* 2022; 11(3): 672. Article. IF: 3.9; Q2
 - Álvarez-Bustos A, Rodríguez-Sánchez B, Carnicer-Carreño JA, Sepúlveda-Loyola W, García-García FJ, Rodríguez-Mañas L. Healthcare cost expenditures associated to frailty and sarcopenia. *Bmc Geriatr.* 2022; 22(1): 747. Article. IF: 4.1; Q1
 - Pérez-Sáez MJ, Arias-Cabralles CE, Redondo-Pachón D, Burballa C, Buxeda A, Bach A, Faura A, Junyent E, Marco E, Rodríguez-Mañas L, Crespo M, Pascual J. Increased mortality after kidney transplantation in mildly frail recipients. *Clin Kidney J.* 2022; 15(11): 2089-96. Article. IF: 4.6; Q1
 - El Assar M, Álvarez-Bustos A, Sosa P, Angulo J, Rodríguez-Mañas L. Effect of physical activity/exercise on oxidative stress and inflammation in muscle and vascular aging. *Int J Mol Sci.* 2022; 23(15): 8713. Review. IF: 5.6; Q1
 - El Assar M, García-Rojo E, Sevilleja-Ortiz A, Sánchez-Ferrer A, Fernández A, García-Gómez B, Romero-Otero J, Rodríguez-Mañas L, Angulo J. Functional role of STIM-1 and orai1 in human microvascular aging. *Cells.* 2022; 11(22): 3675. Article. IF: 6; Q2
 - Mañas A, Cruz BD, Ekelund U, Reyna JL, Gomez IR, Carreno JAC, Mañas LR, García FJG, Ara I. Response to McAvoy and Tudor-Locke on their commentary on our manuscript: Association of accelerometer-derived step volume and intensity with hospitalizations and mortality in older adults: A prospective cohort study. *J Sport Health Sci.* 2022; 11(6): 639-40. Letter. IF: 11.7; D1
 - Davies B, Walter S, Rodríguez-Laso A, Carreno JAC, García-García FJ, Álvarez-Bustos A, Rodríguez-Mañas L. Differential association of frailty and sarcopenia with mortality and disability: insight supporting clinical subtypes of frailty. *J Am Med Dir Assoc.* 2022; 23(10): 1712-6. Article. IF: 7.6; D1

- Mañas A, Cruz BD, Ekelund U, Reyna JL, Gómez IR, Carreno JAC, Mañas LR, García FJG, Ara I. Association of accelerometer-derived step volume and intensity with hospitalizations and mortality in older adults: A prospective cohort study. *J Sport Health Sci.* 2022; 11(5): 578-85. Article. IF: 11.7; D1
- Álvarez-Bustos A, Carnicer-Carreño JA, Davies B, García-García FJ, Rodríguez-Artalejo F, Rodríguez-Mañas L, Alonso-Bouzón C. Role of sarcopenia in the frailty transitions in older adults: a population-based cohort study. *J Cachexia Sarcopeni.* 2022; 13(5): 2352-60. Article. IF: 8.9; D1
- Rodríguez-Sánchez I, Rodríguez-Mañas L, Laosa O. Long COVID-19 the need for an interdisciplinary approach. *Clin Geriatr Med.* 2022; 38(3): 533-44. Article. IF: 3.3; Q3
- Sánchez-Sánchez JL, Carnicer-Carreño JA, García-García FJ, Álvarez-Bustos A, Rodríguez-Sánchez B, Rodríguez-Mañas L. Physical performance measures in frailty screening: diagnostic and prognostic accuracy in the Toledo Study of Healthy Ageing. *Maturitas.* 2022; 165: 18-25. Article. IF: 4.9; Q1
- Bernabei R, Landi F, Calvani R, Cesari M, Del Signore S, Anker SD, Bejui R, Bordes P, Cherubini A, Cruz-Jentoft AJ, Di Bari M, Friede T, Ayestaran CG, Goyeau H, Jonsson PV, Kashiwa M, Lattanzio F, Maggio M, Mariotti L, Miller RR, Rodríguez-Mañas L, Röller-Wirnsberger R, Ryznarova I, Scholpp J, Schols AMWJ, Sieber CC, Sinclair AJ, Skalska A, Strandberg T, Tchalla A, Topinkova E, Tosato M, Vellas B, von Haehling S, Pahor M, Roubenoff R, Marzetti E. Multicomponent intervention to prevent mobility disability in frail older adults: randomised controlled trial (SPRINTT project). *Brit Med J.* 2022; 377: e068788. Article. IF: 14.093; D1
- Rodríguez-Gómez I, Sánchez-Martín C, García-García FJ, García-Esquinas E, Miret M, Jiménez-Pavón D, Guadalupe-Grau A, Mañas A, Carnicer JA, Casajus JA, Ayuso-Mateos JL, Rodríguez-Artalejo F, Rodríguez-Mañas L, Ara I. Frailty in kidney transplant candidates: a comparison between physical frailty phenotype and FRAIL scales. *J Nephrol.* 2022; 35(7): 1841-9. Article. IF: 3.4; Q2
- Sevilleja-Ortiz A, El Assar M, García-Gómez B, La Fuente JM, Alonso-Isa M, Romero-Otero J, Martínez-Salamanca JI, Fernández A, Rodríguez-Mañas L, Angulo J. STIM/Orai Inhibition as a stra-

- tegy for alleviating diabetic erectile dysfunction through modulation of rat and human penile tissue contractility and in vivo potentiation of erectile responses. *J Sex Med.* 2022; 19(12): 1733-49. Article. IF: 3.5; Q2

Research projects

Rodríguez Mañas L. Scaling-up of and evidence-based intervention programme in older people with Diabetes and Frailty in LatinAmerica (DIABFRAIL LATAM). EU. 2019-2022.

Management centre: HUG

Rodríguez Mañas L. SYNergies for Cohorts in Health: integrating the ROle of all Stakeholders (SYNCHROS). EU. 2019-2022.

Management centre: HUG

Rodríguez Mañas L. Dual effects of insulin resistance on frailty status, disability and death: proof of concept and risk models building project (PI20/00977). ISCIII. 2021-2023.

Management centre: HUG

Rodríguez Mañas L. ActiveUP: Dimensión Científica y clínica PID2019-108408RB-C22. Agencia Estatal de Investigación. Retos de la Sociedad 2019. 2020-2023.

Management centre: HUG

Rodríguez Mañas L. Asistente virtual para la prevención del delirium en personas mayores hospitalizadas (ADELA). Fundación Mapfre. 2022-2022.

Management centre: HUG

Rodríguez Mañas L. Papel de la disfunción mitocondrial en la relación entre multimorbilidad crónica y deterioro funcional en ancianos (MITOFUN). Fundación Francisco Soria Melguizo. 2021-2022.

Management centre: HUG