



MINISTERIO DE CIENCIA E INNOVACIÓN



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Plan de Recuperación, Transformación y Resiliencia



AGENCIA ESTATAL DE INVESTIGACIÓN

CURRICULUM VITAE (CVA)
IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION		CV date	12/01/2024
First name	Fernando		
Family name	Rodríguez Artalejo		
Gender	Male	Birth date (dd/mm/yyyy)	
ID number			
e-mail	fernando.artalejo@uam.es	URL Web:	https://portalcientifico.uam.es/es/ipublic/researcher/259343
Open Researcher and Contributor ID (ORCID) (*)	0000-0001-9317-5755		

(*) Mandatory

A.1. Current position

Position	Professor of Preventive Medicine and Public health		
Initial date	01/03/2000		
Institution	Universidad Autónoma de Madrid		
Department/Center	Dept. Preventive Medicine and Public Health/School of Medicine		
Country	Spain	Phone	+34618623640
Key words			

A.2. Previous positions (research activity interruptions, see call)

Period	Position/Institution/Country/Interruption cause
1995-2000	Professor of Preventive Medicine and Public Health. University of the Basque Country
1991-1995	Associate Professor of Professor of Preventive Medicine and Public Health. University of the Basque Country
1990-1991	Assistant professor. Dept. Health Policy and Management. Bloomberg School of Public Health. The Johns Hopkins University. Baltimore/ USA
1988-1989	Deputy Director Health Planning, Ministry of health/Spain
1986-1988	Chief Service of Epidemiologic Analysis. Ministry of health/Spain
1984-1986	MIR (Preventive Medicine and Public Health). La Paz Hospital/ Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD (in Medicine)	Universidad Autónoma de Madrid/Spain	1986
MD (licenciado en Medicina y cirugía)	Universidad Autónoma de Madrid/Spain	1983

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Fernando Rodríguez Artalejo, MD, PhD, is Professor and Chairman of the Department of Preventive Medicine and Public Health at the Universidad Autónoma de Madrid, where he coordinates the Group of Cardiovascular and Nutritional Epidemiology of Aging (GCNEA). He also directs the same research group in the CIBER of Epidemiology and Public health (CIBERESP) and in the IMDEA-Food in Madrid. Up to January 2024, he has published 702 articles in scientific journals included in PUBMEB (165 in D1 journals y 355 in Q1 journals) with 40,407 citations from other authors (WOS h index=82). He has been awarded 5 “sexenios de investigación” and 1 “sexenio de transferencia. He has supervised 60 PhD Dissertations (9 in the last 5 years, and 2 additional dissertations that will likely be defended next year).



Most of his supervised doctoral students have followed a successful professional career either in Academia (in Spain and abroad) or in the Public Health Administration.

His main research interest is the study of the natural history of cardiovascular disease (CVD), frailty, and disability in older adults, as well as its determinants, including behavioral, biological and *omic* factors. Indeed, **Dr Rodríguez Artalejo has been one of the pioneers in the study of the magnitude and distribution of CVD Spain, and its immediate risk factors** (obesity, cholesterolemia, blood pressure) and his work has illuminated most of the programs to control this disease in our country in the last thirty years. Subsequently (about 15 years ago), he developed an interest in the prevention of **frailty, and disability in older adults, as well as promotion of healthy aging. He is leading in Europe the use of systems epidemiology** to integrate information from environmental factors, lifestyle, psychosocial factors, biomarker and genetic variables to disentangle its role in the development of functional limitations in older adults. Therefore, **his research has allowed drafting a very complete picture of the main determinants of healthy ageing, which has served to identify interventions with potential to improve health at the old age. To conduct his research, Dr. Rodríguez Artalejo has successfully established and followed three population-based cohort of older adults in Spain (UAM cohort, Seniors-ENRICA-1 and Seniors ENRICA-2 cohorts)**, which have yielded over 200 manuscripts published in top quality journals in the last 10 years. He is using these three research infrastructures to collaborate and compete with the best groups in the world in this field, including researchers in Harvard University, Columbia University, UCL in London, Oxford University and the Karolinska Institute. Access to the data form these three cohort is free for the research community upon request.

Part C. RELEVANT MERITS

C1. Teaching

Detailed information on the teaching activities of Dr. Rodríguez Artalejo at the graduate and master level can be found here: <https://portalcientifico.uam.es/es/ipublic/researcher/259343>

As regards, the Master in Epidemiology, he teaches the subjects matters of “Método epidemiológico” (code 33335), “Elaboración de proyectos de investigación y publicaciones científicas en C.C. de la Salud” (code 33341), “Revisiones sistemáticas de la literatura en Ciencias de la Salud y Meta-análisis” (code 33340) and “Investigación en epidemiología y prevención de las principales enfermedades cardiovasculares y el cáncer” (code 33345).

C.2. Publications

Following there is a selection of 10 representative publications over my research trajectory:

1. Ortolá R, García-Esquinas E, Sotos-Prieto M, Struijk EA, Caballero FF, Lopez-Garcia E, **Rodríguez-Artalejo F**. Mediterranean Diet and Changes in Frequency, Severity, and Localization of Pain in Older Adults: The Seniors-ENRICA Cohorts. **J Gerontol A Biol Sci Med Sci**. 2022 Jan 7;77(1):122-130. **Citations: 17**.
2. Sotos-Prieto M, Ortolá R, Ruiz-Canela M, Garcia-Esquinas E, Martínez-Gómez D, Lopez-Garcia E, Martínez-González MÁ, **Rodríguez-Artalejo F**. Association between the Mediterranean lifestyle, metabolic syndrome and mortality: a whole-country cohort in Spain. **Cardiovasc Diabetol**. 2021 Jan 5;20(1):5. **Citations: 46**
3. García-Esquinas E, Ortolá R, Gine-Vázquez I, Carnicero JA, Mañas A, Lara E, Alvarez-Bustos A, Vicente-Rodriguez G, Sotos-Prieto M, Olaya B, Garcia-Garcia FJ, Gusi N, Banegas JR, Rodríguez-Gómez I, Struijk EA, Martínez-Gómez D, Lana A, Haro JM, Ayuso-Mateos JL, Rodríguez-Mañas L, Ara I, Miret M, **Rodríguez-Artalejo F**. Changes in Health Behaviors, Mental and Physical Health among Older Adults under Severe Lockdown Restrictions during the COVID-19 Pandemic in Spain. **Int J Environ Res Public Health**. 2021 Jul 1;18(13):7067. **Citations:75**
4. Ortolá R, García-Esquinas E, López-García E, León-Muñoz LM, Banegas JR, Rodríguez-Artalejo F. Alcohol consumption and all-cause mortality in older adults in Spain: an analysis accounting for the main methodological issues. **Addiction**. 2019 Jan;114(1):59-68. **Citations: 59**



5. Lopez-Garcia E, Hagan KA, Fung TT, Hu FB, **Rodríguez-Artalejo F**. Mediterranean diet and risk of frailty syndrome among women with type 2 diabetes **Am J Clin Nutr** 2018; 107 (5): 763-771. **Citations: 55**
6. Rodríguez-Pascual C, Paredes-Galán E, Ferrero-Martínez AI, Gonzalez-Guerrero JL, Hornillos-Calvo M, Menendez-Colino R, Torres-Torres I, Vilches-Moraga A, Galán MC, Suarez-García F, Olcoz-Chiva MT, **Rodríguez-Artalejo F**. The frailty syndrome is associated with adverse health outcomes in very old patients with stable heart failure: A prospective study in six Spanish hospitals. *Int J Cardiol*. 2017 Jun 1;236:296-303. **Citations: 91**
7. García-Esquinas E, Rahi B, Peres K, Colpo M, Dartigues JF, Bandinelli S, Fearnt C, **Rodríguez-Artalejo F**. Consumption of fruit and vegetables and risk of frailty: a dose-response analysis of 3 prospective cohorts of community-dwelling older adults. **Am J Clin Nutr**. 2016 Jul;104(1):132-42. **Citations: 129**
8. García-Esquinas E, Graciani A, Guallar-Castillón P, López-García E, Rodríguez-Mañás L, **Rodríguez-Artalejo F**. Diabetes and risk of frailty and its potential mechanisms: a prospective cohort study of older adults. **J Am Med Dir Assoc**. 2015 Sep 1;16(9):748-54. **Citations: 171**
9. Gutiérrez-Fisac JL, Guallar-Castillón P, León-Muñoz LM, Graciani A, Banegas JR, **Rodríguez-Artalejo F**. Prevalence of general and abdominal obesity in the adult population of Spain, 2008-2010: the ENRICA study. **Obes Rev**. 2012 Apr;13(4):388-92. **Citations: 646**
10. Banegas JR, López-García E, Dallongeville J, Guallar E, Halcox JP, Borghi C, Massó-González EL, Jiménez FJ, Perk J, Steg PG, De Backer G, **Rodríguez-Artalejo F**. Achievement of treatment goals for primary prevention of cardiovascular disease in clinical practice across Europe: the EURIKA study. **Eur Heart J**. 2011 Sep;32(17):2143-52. **Citations: 545**

C.2. Research projects

Following there is a selection of the projects of which I have been PI during the last years. These projects focus on the assessment of the effect of lifestyle, particularly diet and physical activity, and their mediators (mostly classical cardiovascular risk factors and omic variables) on the occurrence of frailty, functional decline and several geriatric syndromes in older adults.

1. Development of a sarcopenia prediction model by integrating genome analysis, microbiome and other biochemical biomarkers. Expte. CPP2022-009718. Funder: Proyectos de colaboración público-privada, del Programa Estatal para Impulsar la Investigación Científico-Técnica y su Transferencia, del Plan Estatal de Investigación Científica, Técnica y de Innovación 2021-2023-MICIN. Dates: 01/12/2023-30/11/2026. PI: Fernando Rodríguez Artalejo. UAM. Amount: 183.790 €.
2. Predicción de la disfunción motora en las extremidades inferiores por análisis del genoma y el microbioma. Expte.: PMPTA22/00107. Funder: ISCIII-CDTI. Dates: 01/01/2023-31/12/2025. PI: Fernando Rodríguez Artalejo. UAM. Amount: 242.000 €.
3. Dietary patterns and physical activity in the PREvention of MALnutrition in older adults: the mediating role of inflammation and altered metabolism (PREV-MAL project). PI22/01111. Funder: Instituto de Salud Carlos III. PI: Fernando Rodríguez Artalejo. UAM. Dates: 01/01/2023-31/12/2025. Amount: 317.020 €.
4. Genome and microbiome for early detection, diagnosis, and monitoring of frailty (FRAILTECH). Expte: PLEC2022-009352. Funder: Proyectos Líneas Estratégicas Colaboración 2022. Ministerio de Ciencia e Innovación. PI: Fernando Rodríguez Artalejo. UAM. Dates: 01/11/2022-31/10/2025. Amount: 347.690 €.
5. Papel de la disfunción MITOcondrial en la relación entre multimorbilidad crónica y deterioro FUNCional en ancianos. El Proyecto MITOFUN. Funder: Fundación Francisco Soria Melguizo. PI: Fernando Rodríguez Artalejo. Dates: 01/01/2021-31/12/2022. Amount: 120.000 €.
6. Dietary patterns and chronic low back pain in older adults: the role of chronic inflammation, physical morbidity and mental health. PI19/319. Funder: Instituto de Salud Carlos III. PI: Fernando Rodríguez Artalejo. UAM. Dates: 01/01/2020-31/12/2022. Amount: 148.830 €.
7. SALivAry bioMarkers of mediterranean Diet associated with long-tERm protection against type 2 diabetes mellitus (Salamander project), ERA-HDL 564. PI: Fernando Rodríguez Artalejo. UAM. Dates: 01/11/2016-31/12/2020. Amount: 100.000 €.
8. El impacto de los patrones alimentarios y el sedentarismo en la acumulación de déficits de salud y la resiliencia física en las personas mayores. PI16/00609. Funder: Instituto de Salud Carlos III. PI: Fernando Rodríguez Artalejo. UAM. Dates: 01/01/2017-31/12/2019. Amount: 159.115 €.

9. Ageing Trajectories of Health: Longitudinal Opportunities and Synergies (ATHLOS). Expediente H2020-PHC-2014. Proposal Nº: 635316-2. Funder: Europea Union. H2020. PI: Fernando Rodríguez Artalejo. UAM. Dates: 01/05/2015-30/04/2019. Amount 200.000 €
10. Utility of omic-based biomarkers in characterizing older individuals at risk for frailty, its progression to disability and general consequences to health and well-being -The FRAILOMIC Initiative. FP7-HEALTH-2012 (Proposal No: 305483-2). Funder: European Union. PI: Fernando Rodríguez Artalejo. UAM. Dates: 01/01/2013-31/12/2017. Amount: 540.000 €.

C.4. Contracts, technological or transfer merits

Dr. Rodríguez Artalejo's research has contributed to **support national strategies to control poor diet and obesity in Spain** (NAOS strategy by the Ministry of Health and the Ministry of Consumer Affairs; available at: https://www.aesan.gob.es/AECOSAN/web/nutricion/seccion/estrategia_naos.htm) as well as **cardiovascular disease** (Estrategia en Salud Cardiovascular del Sistema Nacional de Salud (ESCAV); available at: https://www.sanidad.gob.es/organizacion/sns/planCalidadSNS/pdf/ESCAV_Pendiente_de_NIPO.pdf), and **prevention and management of frailty** (Ministerio de Sanidad. Actualización del documento de consenso sobre prevención de la fragilidad en la persona mayor 2022. Madrid; 2022; available at: https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/EnvejecimientoSaludable_Fragilidad/docs/ActualizacionDoc_FragilidadyCaidas_personamayor.pdf).

Of note is that Dr. Rodríguez Artalejo has conducted the **evaluation of the National Food Reformulation Plan in Spain** in collaborations with the Spanish Agency for Food Safety and Nutrition (AESAN); this Plan is one of the most ambitious of its type in the world, and we have shown that all objectives of the Plan were met (Eur J Clin Nutr. 2023 Oct 24. doi: 10.1038/s41430-023-01357-w).

Indeed, the documents formulating these strategies include numerous references to our work. Also, we have produced research showing that food consumption with a better Nutri-Score rating, a front of pack labelling system, is associated with a lower risk chronic kidney disease (Clin Nutr. 2022 Jul;41(7):1541-1548) and of mortality (Am J Clin Nutr. 2021 May 8;113(5):1301-1311) in the Spanish population. Thus, **our research is part of the scientific evidence supporting the implementation of Nutri-Score in Spain.**

Dr. Fernando Rodríguez Artalejo coordinates the area of prevention in the Estrategia en Salud Cardiovascular del Sistema Nacional de Salud, and serves as member of the European Scientific Committee of Nutri-Score. Also, Dr. Rodríguez Artalejo has served as:

1. Member of the Executive Board of the National Infrastructure for Personalized and Precision Medicine. Ministry of Science. 2021-Current.
2. Member of the Spanish Council of Drug Addictions and other Dependencies. Ministry of Health. 2016-Present
3. President of the National Observatory for the Study of Obesity and Nutrition (Ministry of Consumers Affairs). 2019-2023.
4. Member of the Panel for Strategic Evaluation of research projects on Healthy Ageing. Swedish Research Council. Stockholm, 2018.
5. Member of the Scientific Committee of the National Biobank of Spain. Ministry of Science. 2018-Current
6. Chairman of the Scientific Committee of EU Advantage Joint Action on Prevention of Frailty. 2017. Brussels. European Commission.
7. Member of the European Advisory Committee on Health Research, World Health Organization, Copenhagen. 2012-2017.

Finally, while conducting his research activity, Dr. Rodríguez Artalejo has shown an important commitment to his country by collaborating in the management of major health crises. **He led or was a member of the scientific committees that managed at the highest level the crises caused by the Prestige oil spill, the Ebola virus, the excess mortality in the Algeciras field and the Huelva industrial cluster, and he is one of the four authors of the report commissioned by the Spanish Government**



on the evaluation of the performance of the National Health System during the COVID-19 pandemic
(https://www.sanidad.gob.es/areas/alertasEmergenciasSanitarias/alertasActuales/nCov/documentos/EVALUACION_DEL_DESEMPEÑO_DEL_SNS_ESPAÑOL_FRENTE_A_LA_PANDEMIA_DE_COVID-19.pdf).