

Part A. PERSONAL INFORMATION		CV date	15-01-2021
First and Family name	Carmen Patino Alonso		
Social Security, Passport, ID number	76110857Q	1970	
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0001-8232-6685	
	SCOPUS Author ID (*)	36100345700	
	WoS Researcher ID (*)	I-4608-2014	

(*) *Optional*

(**) *Mandatory*

A.1. Current position

Name of University/Institution	University of Salamanca		
Department	Statistics		
Address and Country	Faculty of Medicine. Campus Miguel de Unamuno. Street Alfonso X El Sabio s/n, 37007 Salamanca (Spain)		
Phone number	923 294400	E-mail	carpatino@usal.es
Current position	Associate Professor (Statistics and Operative Research Area)	From	2019
Key words	Multivariate Analysis, Applied Statistics, Data Analysis		

A.2. Education

PhD, Licensed, Graduate	University	Year
Applied Multivariate Statistics	University of Salamanca	2008
Master's degree in Advanced Multivariate Data Analysis	University of Salamanca	2013
A degree in business and economics	University of Salamanca	1995

A.3. General indicators of quality of scientific production (see instructions)

Research sexenios number: 2

No. doctoral theses directed (last 10 years) 8

Master Thesis Supervision 16

Total cites 2566 (Scholar)

Cites last 5 years 1533

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Part B. CV SUMMARY (max. 3500 characters, including spaces)

Carmen Patino-Alonso is BSc in Economics and Business and the official master's degree in Advanced Multivariate Data Analysis (Master Awards) at the University of Salamanca. She holds a PhD in Applied Multivariate Statistics. She holds a position as Associate Professor at the University of Salamanca (Department of Statistics, Statistics and Operative Research Area).

She was director of the technical Unit for Quality Assessment of the University of Salamanca (2020-2021). She has also served as coordinator of postgraduate degrees at the university of Salamanca (2018-2020). She has been visiting researcher at the Instituto Superior de Economia e Gestão da Universidade de Lisboa (CEGE/ISEG) Lisbon (Portugal). Her research focuses on multivariate statistics and related techniques. She has published academic peer-reviewed articles in several top journals ranked with a high impact factor in the Journal Citation Report. She has presented at many international conferences and seminars.



Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

Articles

- 1** Vega Hernández, MC, Patino-Alonso, C. Comparing COSTATIS and Generalized Procrustes Analysis with Multi-Way Public Education Expenditure Data. 2021. *Mathematics*. 9 – 15: 1816.
- 2** Molina, J.L., Patino Alonso, C., Zazo. S. 2021. Hybrid causal multivariate linear modelling (H_CMLM) method for the analysis of temporal rivers runoff. *Journal of Hydrology*. 599, pp. 126501
- 3** Patino-Alonso, M.C. (AC), Gómez Sánchez, M., Gómez Sánchez, L, Gómez-Marcos, M.A. (1/9).2020. Multivariate analysis of influence of vitamin intake on vascular function parameters by sex in the general Spanish population: EVA Study. *Nutrients*. 12(3): 643
- 4** Molina, J.L., Zazo, S., Martín-Casado, A.M., Patino-Alonso, M.C. 2020. Rivers' Temporal Sustainability through the Evaluation of Predictive Runoff Methods. *Sustainability*. 12(5): 1720
- 5** Maderuelo Fernandez J.A. (AC), Garcia Garcia A., Chamoso P., García-Ortiz, L. (6/10). 2020. Automatic image analyser to assess retinal vessel calibre (ALTAIR). A new tool to evaluate the thickness, area and length of the vessels of the retina. *International Journal of Medical Informatics*. 136: 104090
- 6** Muriel-Fernández J., Patino-Alonso M.C., López-Valverde N., López-Millán J.M., Juánes Méndez J.A., Sánchez-Ledesma M.J. 2019. Results of the Use of a Simulator for Training in Anesthesia and Regional Analgesia Guided by Ultrasound. *Journal of Medical Systems*. 43 (4): 79
- 5** Wanden-Berghe C, Patino-Alonso M.C., Galindo-Villardón P, Sanz-Valero J. 2019. Complications Associated with Enteral Nutrition: CAFANE Study. *Nutrients*. 11 (9)
- 7** Carrasco, G., Molina, J.L., Patino-Alonso M.C., Del Castillo M., Vicente-Galindo M.P., Galindo Villardón, M.P. 2019. *Journal of Hydrology*. 577. UNSP 123993
- 8** Vega Hernández, M.C., Patino-Alonso, M.C., Galindo Villardón, M.P. 2018. Multivariate characterization of university students using the ICT for learning. *Computers & Education*. 121: 124-130
- 9** Patino-Alonso, M.C., Recio-Rodríguez, J.I., Magdalena-Belio, J.F., Giné-Garriga, M., Martínez-Vizcaino, V., Fernández-Alonso, C., Soledad Arietaleanizbeaskoa, M., Gómez-Marcos, M.A., García-Ortiz, L. 2015. Título: Clustering of lifestyles and association with cardiovascular risk factors in adults: the EVIDENT study. *British Journal of Nutrition*. 13: 114(6): 943-51
- 10** Maderuelo-Fernández, J.A., Recio-Rodríguez, J.I., Patino-Alonso, M.C., Pérez-Arechaederra, D., Rodríguez-Sánchez, E., Gómez-Marcos, M.A., García-Ortiz, L. 2015. Effectiveness of Interventions applicable to primary health care settings to promote Mediterranean diet or healthy eating adherence in adults: a systematic review. *Preventive Medicine*. 76 (Suppl.) S39-S55



BOOKS

M^a Carmen Patino-Alonso, Purificación Galindo Villardón, Purificación Vicente Galindo.(2011). "Mujer con Empleo Irregular. Análisis Multivariante" pp: 350.Editorial Académica Española, LAP LAMBERT Academic Publishing GmbH&Co. KG. ISBN: 978-3-8454-9562-0

CHAPTERS IN BOOKS

Jose-Luis Molina, Santiago Zazo, Ana-María Martín-Casado, María-Carmen Patino-Alonso. (2020). Rivers' Temporal Sustainability through the Evaluation of Predictive Runoff Methods. In Jose-Luis Molina (eds), "*Sustainability in the Development of Water Systems Management*" (pp 171-191). Basel: Sustainability (ISBN: 978-3-03943-203-5).

C.2. Research projects

1 Reference: PI19/01140. Title: Cohorte DESVELA. Análisis del papel de las aptitudes personales como DEterminantes de la incidencia de morbilidad, eStilos de vida, calidad de Vida, uso de sErvicios y mortalidad. IP: Jose Angel Maderuelo Fernandez. Entity: *Health Institute Carlos III*. Date: 01/01/2020-31/12/2022. Amount: 28.565,68. Type of participation: collaborator researcher.

2 Reference: GRS 1986/B/19. Efectividad del uso de tecnologías de la información y comunicación en el incremento de la actividad física y mejora de la sintomatología en mujeres con fibromialgia. Desarrollo de la herramienta y fase I. IP: Natalia Sánchez Agudero. Entity: Regional Health Management of the Ministry of Health of Castilla y León. Date: 01/01/2020-31/12/2020. Amount: 11340. Type of participation: collaborator researcher.

3 Reference: GRS 1821/B/18. Hematopoyesis clonal y riesgo de arterioesclerosis subclínica e incremento de la rigidez arterial. Estudio EVA 2. IP: Manuel A Gómez Marcos. Entity: Regional Health Management of the Ministry of Health of Castilla y León. Date: 01/01/2019-31/12/2019. Amount: 20000. Type of participation: collaborator researcher.

4 Reference: PI16/00101. Efectividad del uso de tecnologías de la información y comunicación en el incremento de actividad física y pérdida de peso en sujetos obesos y sedentarios. ECA. Estudio EVIDENT III. Study. IP: Luis García Ortiz. Entity: *Health Institute Carlos III*. Date: 01/01/2017-31/12/2019. Type of participation: collaborator researcher.

5 Reference: SAF2017-88854-R. Estrategias farmacológicas de prevención del cáncer de mama mediante modificación de la involución postlactancia. IP: Jesús Pérez Losada. Entity: Ministry of Education and Science. Amount: 169.400. Date: 01/01/2017-31/12/2019. Type of participation: collaborator researcher.

6 Reference: PI14/01465. Title: Programa de Actividad Física para los pacientes con demencia y sus cuidadores familiares. Ensayo Clínico Aleatorio en Atención Primaria. AFISDEMyF. IP: Emiliano Rodríguez Sánchez. Entity: *Health Institute Carlos III*. Date: 01/01/2015-31/12/2017. Amount: Type of participation: collaborator researcher.

7 Reference: BIO/SA53/15. Title: Evaluación de la estructura y función vascular en enfermos con neoplasias mieloproliferativas Filadelfia negativos, versus controles. IP: María-Carmen



Patino-Alonso. Entity: *Regional Health Management of the Ministry of Health of Castilla y León (Biomedicine)*. Date: 01/04/2015 a 30/05/2016. Amount: 14286. Type of participation: principal investigator.

8 Reference: BIO16/00004. Title: Análisis de la heterogeneidad celular y genética de los meningiomas: predicción de las recidivas. IP: María-Purificación Galindo-Villardón. Entity: Institute of Biomedical Research of Salamanca (IBSAL). Date: 01/01/2016 a 31/12/2016. Type of participation: principal investigator.

9 Reference: PI13/00618. Title: Efectividad del uso de una herramienta móvil añadida a una intervención estándar en la mejora de estilos de vida en población adulta. Ensayo clínico aleatorizado, Estudio EVIDENT II. IP: Luis García Ortiz. Entity: *Health Institute Carlos III*. Date: 01/01/2014-31/12/2016. Type of participation: collaborator researcher.

10 Reference: PI13/00618. Title: Avances en el manejo del riesgo intermedio. Estudio MARK (improving intermediate risk management). IP: Emilio Ramos Delgado. Entity: *Health Institute Carlos III*. Date: 01/01/2011-31/12/2013. Amount: 33.275. Type of participation: collaborator researcher.

C.5 Others

PhD THESIS SUPERVISED:

Zaira Jazmín Zarate Santana, “Aportaciones al Análisis de Datos de Enfoques de Aprendizaje y Afrontamiento de Estrés Académico en Estudiantes Universitarios desde una Perspectiva Multivariante. September 2021.

Gonzalo Isaac Carrasco Oberto, “Cluster no Jerárquicos vs Cart y Biplot”, USAL, November 2020.

Olaya Tamayo Morales, “Intervención conductual sobre cuidadores de familiares con comportamientos disruptivos relacionados con la asistencia al centro de día”, USAL, November 2020.

Rosario Alonso Domínguez, “Efectividad de una intervención multifactorial, basada en la mejora de la dieta y la actividad física, en pacientes con diabetes mellitus Tipo 2, en Atención Primaria”, USAL, June 2019.

María Vega Hernández, “Caracterización multivariante de los estilos y estrategias de aprendizaje en alumnos de la Universidad de Salamanca”, USAL, May 2018.

Leticia Gómez Sánchez, “Componentes del síndrome metabólico con la rigidez arterial en sujetos con riesgo cardiovascular intermedio. Estudio MARK”, USAL, June 2018.

Natalia Sánchez Agudero, “Efecto del índice glucémico del desayuno sobre la función vascular y el rendimiento cognitivo”, USAL, June 2018.

INDUSTRIAL AND INTELLECTUAL PROPERTY

Title: Intervención Multifactorial EMID

Application Number: SA-51-19

Country: España. Comunidad Autónoma: Castilla y León

Date: 14/09/2017