



MINISTERIO
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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 23/01/2023

| | | | |
|--|--|---|--|
| First name | SERGIO | | |
| Family name | MONTSERRAT DE LA PAZ | | |
| Gender | | Birth date | |
| ID number | URL Web: | https://investigacion.us.es/sisius/sis_showpub.php?idpers=19496 | |
| e-mail | delapaz@us.es | | |
| Open Researcher and Contributor ID (ORCID) | 0000-0001-5400-3192 | | |

A.1. Current position

| | | | |
|-------------------|--|--------------|--|
| Position | Associate Professor (<i>Profesor Titular de Universidad</i>) | | |
| Initial date | 08/10/2021 | | |
| Institution | University of Seville | | |
| Department/Center | Dept. Medical Biochemistry and Molecular Biology and Immunology / School of Medicine | | |
| Country | Spain | Phone number | |
| Keywords | Lipoproteins; Fatty Acids; Postprandial Metabolism; Olive Oil; Omics; Cardiovascular Diseases; Immunology; Nutrition | | |

A.2. Previous positions

| Period | Position / Institution / Country |
|-----------|---|
| 2019-2021 | Assistant Professor / University of Seville / Spain |
| 2017-2019 | Postdoctoral Researcher / University of Seville / Spain |
| 2016-2017 | Postdoctoral Researcher / IATA-CSIC / Spain |
| 2012-2016 | PhD Student / IG-CSIC / Spain |
| 2011-2012 | Research Technician / Vall d'Hebron Hospital / Spain |

A.3. Education

| PhD, Graduate Degree | University / Country | Year |
|--|-------------------------------|-------------|
| PhD in Pharmacy | University of Seville / Spain | 2016 |
| Bachelor's Degree in Optic and Optometry | University of Seville / Spain | 2015 |
| Master's Degree in Pharmacy | University of Seville / Spain | 2011 |
| Bachelor's Degree in Pharmacy | University of Seville / Spain | 2010 |

Part B. CV SUMMARY

Since 2021, **Dr. Sergio Montserrat de la Paz** is Associate Professor (*Profesor Titular de Universidad*) based at the University of Seville and attached to the Dept. of Medical Biochemistry, Molecular Biology and Immunology (School of Medicine). He has been accredited one research *sexenio* (six-year period) and one training *quinquenio* (five-year period).

In 2010, Sergio Montserrat de la Paz holds a bachelor's degree in Pharmacy from the University of Seville and he started his research career as PhD student (FPI grant) in the Laboratory of Cellular and Molecular Nutrition (PAIDI BIO300) at the Dept. Food & Health (*Instituto de la Grasa-CSIC*). In 2016, he



obtained his international PhD with the thesis entitled "**Effect of olive oil and niacin on postprandial inflammation. Implications for atherosclerosis and metabolic syndrome**" with the rate of *Summa Cum Laude* and he was granted with the Extraordinary Doctoral Mention. He completed his international training with two stays (8 months) at the **Cardiovascular Research Institute of Maastricht** (CARIM, Maastricht, The Netherlands). When he completed his PhD, he was hired as a Postdoctoral Researcher at the *Instituto de Agroquímica y Tecnología de los Alimentos* (IATA-CSIC) for a project on "immunological disorders related to obesity" a research line in his area of expertise. In 2017, he returned to the University of Seville as **Head of the Laboratory of Immunonutrition and Immunometabolism** (PAIDI CTS1074). Recently, he has led as PI a funding project about the proteomics and lipidomics of high-density lipoproteins (HDL) in Metabolic Syndrome. Currently, he leads as PI a funding national project in the framework of circular economy in the olive industry (TED2021-130521A-I00). His research has focused on deciphering the functionality of dietary fatty acids associated to proteomic and lipidomic composition of lipoproteins, mainly chylomicrons and HDL. As results of his research line, he has co-authored **74 scientific articles** [55 Q1 (16 D1)], with **main authorship in more than the 70%** and all of them funded by research projects in which he participated as a research team member. He has collaborated with numerous groups and institutions at national and international level, mainly with Latin American countries through the CYTED. He has co-authored in 7 book chapters, 3 patents, and 104 contributions to national and international congresses and several lectures in national and international forums. In terms of contributions to society, he has participated in **8 contracts with companies (2 as PI) and in 16 R+D projects (4 as PI)** with a total amount of 1,517,783.18 €, of which 292,665.00 € have been obtained as PI. He has led different funding science dissemination activities as "NutreConCiencia dissemination project" (2021). He has done interviews and press releases related to the food and immunonutrition and received 11 awards related to the quality of his research such as "Young Research Award 2017" by the Spanish Society of Pharmacology and "Scientific Culture Award 2018" by City Hall of Seville. In his experience in training young researchers, he has supervised 19 TFG, 11 TFM, and 3 Doctoral Theses (4 in progress). He has participated as lecturer in different master's degrees. He has supervised the stay of several postdoctoral researchers from different countries since 2017. He has participated as a reviewer of 10 national and international projects and more than 50 papers in journals of Food Science and Technology's area.

Part C. RELEVANT MERITS

C.1. Publications (*Highly related with the current proposal*)

Publications: 74 [55 Q1 (16 D1)] and 7 book chapters.

First author: 28; **Last author:** 21 (**Corresponding author:** 35); **Scopus cites:** 1216; **h-index:** 20

1. Scientific paper. Grao-Cruces E, Santos-Mejias, Ortea I, Marquez-Paradas, Martin ME, Barrientos-Trigo S, Bermudez B, **Montserrat-de la Paz S (CA)**. *Proteomic analysis of postprandial high-density lipoproteins in healthy subjects*. International Journal of Biological Macromolecules **2023**, 225, 1280-1290. [https://doi.org/ 10.1016/j.ijbiomac.2022.11.187](https://doi.org/10.1016/j.ijbiomac.2022.11.187). [I.F.: 8.025 **D1**]

2. Scientific paper. Vazquez-Madrigal C, Lopez S, Grao-Cruces E, Millan-Linares MC, Rodriguez-Martin NM, Martin ME, Alba G, Santa-Maria C, Bermudez B, **Montserrat-de la Paz S (CA)**. *Dietary fatty acids into postprandial triglyceride-rich lipoproteins modulate human monocyte-derived dendritic cell maturation and activation*. Nutrients **2020**, 12, 3139. [https://doi.org/ 10.3390/nu12103139](https://doi.org/10.3390/nu12103139). [I.F.: 5.717 **Q1**]

3. Scientific paper. Toscano R, Millan-Linares MC, Lemus-Conejo A, Claro C, Sanchez-Margalet V, **Montserrat-de la Paz S (CA)**. *Postprandial triglyceride-rich lipoproteins promote M1/M2 microglia polarization in a fatty acid-dependent manner*. Journal of Nutritional Biochemistry **2020**, 75, 108248. <https://doi.org/10.1016/j.jnutbio.2019.108248>. [I.F.: 6.048 **Q1**]

4. Scientific paper. Toscano R, Millan-Linares MC, Naranjo MC, Lemus-Conejo A, Claro C, **Montserrat-de la Paz S (CA)**. *Unsaponifiable and phenolic fractions from virgin olive oil prevent neuroinflammation*



skewing microglia polarization toward M2 phenotype. Journal of Functional Foods **2019**, 62: 103543. <https://doi.org/10.1016/j.jff.2019.103543>. [I.F.: 3.701 **Q1**]

5. Scientific paper. Montserrat-de la Paz S (CA), Naranjo MC, Millan-Linares MC, Lopez S, Abia R, Biesecker EAL, Muriana FJG, Bermudez B. *Monounsaturated fatty acids in a high-fat diet and niacin protect from white fat dysfunction in the metabolic syndrome*. Molecular Nutrition & Food Research **2019**, 63: 1900425. <https://doi.org/10.1002/mnfr.201900425>. [I.F.: 5.309 **D1**]

6. Scientific paper. Montserrat-de la Paz S, Lopez S, Bermudez B, Guerrero JM, Abia R, Muriana FJG. *Effects of immediate-release niacin and dietary fatty acids on acute insulin and lipid status in individuals with metabolic syndrome*. Journal of the Science of Food and Agriculture **2018**, 98: 2194-2200. <https://doi.org/10.1002/jsfa.8704>. [I.F.: 2.422 **Q1**]

7. Scientific paper. Montserrat-de la Paz S (CA), Rodriguez D, Cardelo P, Naranjo MC, Bermudez B, Abia R, Muriana FJG, Lopez S. *The effects of exogenous fatty acids and niacin on human monocyte-macrophage plasticity*. Molecular Nutrition & Food Research **2017**, 61: 1600824. <https://doi.org/10.1002/mnfr.201600824>. [I.F.: 5.151 **D1**]

8. Scientific paper. Montserrat-de la Paz S (CA), Naranjo MC, Lopez S, Abia R, Muriana FJG, Bermudez B. *Olive oil, compared to a saturated fat, has a protective role on atherosclerosis in niacin-treated mice with metabolic syndrome*. Journal of Functional Foods **2016**, 26: 557-564. <https://doi.org/10.1016/j.jff.2016.08.028>. [I.F.: 3.144 **Q1**]

C.2. Congress (Highly related with the current proposal)

Total contribution: 104

1. Invited lecture. Montserrat-de la Paz S. “An insight of metabolism and disease from lipoproteomic perspective”. II International Congress of Micro-Immunotherapy. Virtual **2022**.

2. Oral presentation. Montserrat-de la Paz S, et al. “Metabolic syndrome remodels high-density lipoprotein lipidome”. 29th Annual European Congress on Obesity. Maastricht, The Netherlands **2022**.

3. Poster presentation. Montserrat-de la Paz S, et al. Divergent effects of dietary fatty acids on postprandial exosome functionality and their proteomic profile. Implications in neuroinflammation. 22nd International Congress of Nutrition. Tokyo, Japan **2022**.

C.3. Research projects

Project participation: 16 (4 PI). Total amount: 1,401,783.30 €

1. Project. Alimentación Circular para un Envejecimiento Saludable a través de la obtención de nuevos ingredientes Tecnofuncionales a partir de subproductos de la industria Oleícola. Ministerio de Ciencia e Innovación, 112,700.00 €. [Ref.: TED2021-130521A-I00] (01/12/2022 – 30/11/2024) – **PI: Sergio Montserrat de la Paz**.

2. Project. Obtención y desarrollo sostenible de péptidos neuroprotectores de la semilla de cáñamo (NeuroHPep). Conserjería de Economía, Conocimiento, Empresas y Universidad de la Junta de Andalucía, 100,000.00 €. [Ref.: US-1381492] (01/01/2022 – 31/12/2023) – **PI: M^a Carmen Millán Linares**.

3. Project. Economía Circular de Residuos Agroindustriales del Cáñamo Mediante la Obtención y Optimización de Péptidos Neuroprotectores. Proyecto ECONEUPEP. Conserjería de Economía, Conocimiento, Empresas y Universidad de la Junta de Andalucía, 81,965.00 €. [Ref.: P20_00661] (05/10/2021 – 31/12/2022) – **PI: Sergio Montserrat de la Paz**.

4. Project. Descifrando El Papel de los Ácidos Grasos de la Dieta Sobre la Funcionalidad de las HDL. Conserjería de Economía, Conocimiento, Empresas y Universidad de la Junta de Andalucía, 80,000.00 €. [Ref.: US-1263458] (01/02/2020 – 30/04/2022) – **PI: Sergio Montserrat de la Paz**.



5. Project. Papel de la Leptina en el Transporte Placentario de Nutrientes y su Implicación en la Diabetes Mellitus Gestacional. Instituto de Salud Carlos III, 75,000.00 €. [Ref.: PI19/01741] (01/01/2019 – 31/12/2022) – Researcher. PI: Victor Sánchez Margalet.

6. Project. Desarrollo de ingredientes alimentarios a partir de cultivos ancestrales iberoamericanos. Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo CYTED, 25,000.00 €. [Ref.: 119RT0657] (01/01/2019 – 31/12/2022) – Researcher. PI: Claudia Mónica Haros.

7. Project. Revalorización de péptidos bioactivos de residuos de productos hidrobiológicos para contribuir a la desnutrición infantil y al incremento de la competitividad de la industria pesquera de la Bahía de Sechura-Piura. Ministerio de la Producción de Perú, 135,000.00 €. [Ref.: PNIPA-PES-SIADE-PF-000118] (01/01/2019 – 31/12/2022) – Researcher. PI: M^a Carmen Millán Linares.

8. Project. Desarrollo de nuevos hidrolizados de proteína de arroz funcionales, seguros y de alta calidad para su aplicación en alimentación infantil. Ministerio de Ciencia, Innovación y Universidades, 236,607.03 €. [Ref.: RTC-2017-6672-2] (01/07/2018 – 30/06/2021) – Researcher. PI: Francisco Millán Rodríguez.

C.4. Contracts, technological or transfer merits

Participation in contracts with companies: 8 (2 PI). Total amount: 115,999.78 €

1. Contract. Nuevas técnicas de microscopía electrónica en la identificación de biomoléculas de interés industrial y agroalimentario. Ref.: 4110/1030 ELAIA S.A. – **PI: Sergio Montserrat de la Paz.** 31/03/2021-31/07/2021. Amount: 6,296.00 €.

2. Contract. Evaluación del riesgo cardiovascular en pacientes obesos con tratamiento multidisciplinar. Ref.: 4131/1095. Salena Medical. Researcher - PI: Lourdes M Varela. 31/03/2021-30/03/2023. Amount: 4,386.25 €.

3. Contract. Estudio biomolecular de las variedades arbequina y Arbosana de Extremadura (Spain) y su relación con la mejora del rendimiento de la extracción del aceite de oliva virgen (Project Bioextractoil). Ref.: 20195733. ELAIA, S.A. Spanish Branch. Researcher - PI: María del Carmen Millán Linares. 01/10/2019-01/10/2021. Amount: 51,209.02 €.

4. Contract. Estudio microscópico de biomoléculas de las variedades arbequina y arbosana de Extremadura (España). Ref.: 3785/1030 ELAIA S.A. – **PI: Sergio Montserrat de la Paz.** 01/09/2019-01/09/2020. Amount: 8,995.32 €.

5. Patent. **Montserrat-de la Paz S,** et al. Método para obtener péptidos antiinflamatorios y/o inmunomoduladores. Universidad de Sevilla P202230873.

6. Patent. **Montserrat-de la Paz S,** et al. Uso del aceite de cáñamo para la prevención y/o el tratamiento de la fibromialgia. Universidad de Sevilla P201500071.

7. Patent. **S. Montserrat-de la Paz S,** et al. Metabolitos de tirosol e hidroxitirosol. Consejo Superior de Investigaciones Científicas P201431890.

C.5. Other research merits

1. Abroad Stay. Stay at the Cardiovascular Research Institute of Maastricht (CARIM, University of Maastricht, The Netherlands). 8 months (07/07/2014-03/11/2014 and 26/06/2015-23/10/2015).

2. Theses direction (3, 4 ongoing). “Efecto protector del aceite de oliva sobre la activación de la microglía” Rocío Toscano Sánchez, PhD. Outstanding *cum laude*. University of Seville 2020.

3. Recruitment of international research talent (3). “Study of postprandial extracellular microvesicles”. Clevio Nobrega, PhD-mobility scholarship of the University of Seville 2021.