

## CURRICULUM VITAE

**CV date**

27/04/2023

### Part A. PERSONAL INFORMATION

First name	Celestino		
Family name	Santos-Buelga		
Gender	Male	Birth date	14/07/1957
ID number	10577196W		
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Open Researcher and Contributor ID (ORCID)	0000-0001-6592-5299		

#### A.1. Current position

Position	Full Professor (Catedrático)		
Initial date	7/12/2002		
Institution	Universidad de Salamanca		
Department/Center	Nutrición y Bromatología	Facultad de Farmacia	
Country	Spain	Teleph. number	(+34) 663 161 520
Key words	Food, phenolic compounds, flavonoids, metabolites, biological activity, health		

#### A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
1/11/1980 - 15/12/1984	Graduate Teaching Assistant (Ayudante no doctor) / Universidad de Salamanca (Spain)
16/12/1984 - 13/05/1986	Assistant Professor (Profesor Ayudante Doctor) / Universidad de Salamanca (Spain)
14/05/1986 - 6/12/2002	Associate Professor (Profesor Titular de Universidad) / Universidad de Salamanca (Spain)
1/10/1989-15/12/1989	Visiting Researcher / Institut de Produits de la Vigne-Narbonne (France)
1/01/1993-31/10/1993	Visiting Researcher / Lehrstuhl für Obstbau Technische Universität München (Germany)
1/03/1994-15/09/1994	Visiting Researcher / Lehrstuhl für Obstbau Technische Universität München (Germany)

#### A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Degree Pharmacy	Universidad de Salamanca	1979
PhD Pharmacy	Universidad de Salamanca	1984

### Part B. CV SUMMARY

Professor of Food Science at the University of Salamanca (Spain) since 2002, and since 2017 Head of the "Grupo de Investigación en Polifenoles" (Polyphenols Research Group, GIP-USAL), acknowledged as Consolidated Research Unit (UIC-158) and Group of Excellence (GR133) by the Autonomous Community of "Castilla y León" (Spain). Experience related to the chemistry of polyphenols, extraction, analysis and characterization, influence on the stability and sensory properties of processed foods, dietary intake and health implications. Current research interests focused on the health implications of dietary flavonoids, their bioavailability, metabolism and evaluation of the biological activity and mechanisms in model systems. Responsible researcher in 26 competitive projects funded by European and national entities; director of 22 PhD Thesis and 25 Master or DEA Thesis; co-editor in 3 reference

books, and co-author of 18 chapters in international books, and more than 300 articles in JCR journals; 12 invited lectures in International Conferences. Associate editor of the journal *Phytochemical Analysis* in the period 2005-2016; current member of the Editorial Boards of the journals *Molecules* and *Ciência e Técnica Vitivinícola-Journal of Viticulture and Enology* indexed in the JCR. Visiting researcher at the *Institut de Produits de la Vigne (Station Expérimentale de Pech Rouge-Narbonne, France)* in 1989, and the Department of Fruitculture (*Lehrstuhl für Obstbau*) at the *Technische Universität München (Freising-Weihenstephan, Germany)* in years 1993 and 1994. Associate coordinator ('Adjunto') to the area of Food Science and Technology at the Spanish Agency for Research Evaluation (ANEP) in the period 2005-2011. Member of R+D+i Evaluation Commission (area of Food) at the Andalusian Evaluation Agency (DEVA) in the period 2016-2021. Awarded the "María de Maeztu" Prize to the Scientific Excellence (University of Salamanca, Spain) in November 2011. Recognition with the invitation to give the Master Lecture entitled "Del color a la salud" in the solemn ceremony of 'Santo Tomás de Aquino' on January 28, 2016 at the University of Salamanca. Positive evaluation of 6 six-year periods of research activity.

## Part C. RELEVANT MERITS

### C.1. Publications: Ten recent representative refereed publications

Santos-Buelga, C.\*; González-Paramás, A.M., González-Manzano, S. (2023). Phenolic acids and derivatives: description, sources, properties, and applications. In: Caroch, M., Heleno, S.A., Barros, L. (eds) *Natural Secondary Metabolites*. Springer, Cham; pp. 37-72. DOI: 10.1007/978-3-031-18587-8\_3. (\*corresponding author)

Ayuda-Durán, B.; Sánchez-Hernández, E.; González-Manzano, S.; Santos-Buelga, C.; González-Paramás, A.M.\* (2022). The effects of polyphenols against oxidative stress in *Caenorhabditis elegans* are determined by coexisting bacteria. *Frontiers in Nutrition* 9, 989427. DOI: 10.3389/fnut.2022.989427

Madureira, J.; Cabo Verde, S.\*; Margaça, F.M.A.; Santos-Buelga, C.; Ferreira, I.C.F.R.; Barros, L. (2022). Applications of bioactive compounds extracted from olive industry wastes: a review. *Comprehensive Reviews in Food Science and Food Safety* 21, 453-476. DOI: 10.1111/1541-4337.12861

Filaferro, M.; Codeluppi, A.; Brighenti, V. (...); Pellati, F.\*; Vitale, G.\* (2022). Disclosing the antioxidant and neuroprotective activity of an anthocyanin-rich extract from sweet cherry (*Prunus avium* L.) using in vitro and in vivo models. *Antioxidants* 11, 211. DOI: 10.3390/antiox11020211 (Author position: 6/9).

Rodrigo-Gonzalo, M.J.; González-Manzano, S.\*; Méndez-Sánchez, R.; Santos-Buelga, C.; Recio-Rodríguez, J.I. (2022). Effect of polyphenolic complements on cognitive function in the elderly. *Antioxidants* 11, 1549. DOI: 10.3390/antiox11081549

Álvarez-Suárez, J.M.; Cuadrado, C.; Ballesteros Redondo, I.; Giampieri, F.; González-Paramás, A.M.; Santos-Buelga, C.\* (2021). Novel approaches in anthocyanin research - Plant fortification and bioavailability issues. *Trends in Food Science and Technology*, 117, 92-105. DOI: 10.1016/j.tifs.2021.01.049

González-Paramás, A.M.; Brighenti, V.; Bertoni, L.; Marcelloni, L.; Ayuda-Durán, B.; González-Manzano, S.; Pellati, F.\*; Santos-Buelga, C.\* (2020). Assessment of the in vivo antioxidant activity of an anthocyanin-rich bilberry extract using the *Caenorhabditis elegans* model. *Antioxidants* 9, 509. DOI: 10.3390/antiox9060509.

Ayuda-Durán, B.; González-Manzano, S.; Miranda-Vizuet, A. (...) Santos-Buelga, C.\*; González-Paramás, A.M. (2019). Exploring target genes involved in the effect of quercetin on the response to oxidative stress in *Caenorhabditis elegans*. *Antioxidants* 8, 585. DOI: 10.3390/antiox8120585. (Author position: 7/9).

Ayuda-Durán, B.; González-Manzano, S.; Miranda-Vizuet, A.; Dueñas, M.; Santos-Buelga, C.\*; González-Paramás, A.M. (2019) Epicatechin modulates stress-resistance in *C. elegans* via insulin/IGF-1 signaling pathway. *PLoS ONE* 14, e0199483. DOI: 10.1371/journal.pone.0199483

Santos-Buelga, C.\*; González-Paramás, A.M.; Oludemi, T.; Ayuda-Durán, B.; González-Manzano, S. (2019). Plant phenolics as functional food ingredients. *Advances in Food and Nutrition Research* 90, 183-257. DOI: 10.1016/bs.afnr.2019.02.012

Further information on publications at:

- Web: <https://produccioncientifica.usal.es/investigadores/56229/indicadores>
- Google Scholar: <https://scholar.google.es/citations?hl=es&user=ECXmKs4AAAAJ>

## C.2. Congresses: Selected invited lectures

Santos-Buelga, C. "Wine, polyphenols and Mediterranean diet: what else is there to say?". 2nd Science & Wine World. Wine and Olive Oil Production: The fluid aspect of the Mediterranean diet". Porto (Portugal) 2-3 June 2021.

Santos-Buelga, C. "Wine and health: a matter of moderation?". First Science & Wine World. Porto (Portugal) 8-10 May 2019.

Santos-Buelga, C. "Polyphenols identification. Has LC-MS killed HPLC-DAD?". 10º Encontro Nacional de Cromatografia. Bragança (Portugal) 4-6 December 2017.

Santos-Buelga, C. "Polyphenols: old products for new ingredients". I International Conference on Research for Sustainable Development in Mountain Regions, Bragança (Portugal) 3-7 October 2016.

Santos-Buelga, C. "Evaluation of the biological activity of phytochemicals using in vivo model organisms". XXV International Meeting of the Italo-Latin American Society of Ethnomedicine (SILAE2016), Modena (Italia), 11-15 September 2016.

Santos-Buelga, C. "Alimentación y salud: más allá de los nutrientes" (Opening lecture) Biodisponibilidad y metabolismo de flavonoides". V Congreso Ecuatoriano de Ingeniería en Alimentos / XIV Jornadas de Ciencia y Tecnología en Alimentos. Quito (Ecuador), 25-28 November 2014.

## C.3. Research projects (last 10 years)

### As principal investigator:

"Evaluación del potencial neuroprotector de los flavonoides de la uva en la prevención de la enfermedad de Alzheimer" (PID2019-106167RB-I00). Ministerio de Ciencia e Innovación (2020-2023).

"Implicaciones sensoriales y efectos para la salud de los compuestos fenólicos de la uva" (SA093P20). Junta de Castilla y León (2020-2023).

"Polifenoles y metabolitos. Estudio en *C. elegans* de sus mecanismos de acción y relación con la microbiota" (AGL2015-64522-C2-2-R). Ministerio de Ciencia e Innovación (2016-2020).

"Estudio de los mecanismos moleculares implicados en la bioactividad de los flavonoides de la dieta utilizando *Caenorhabditis elegans* como modelo" (Ref. BFU2012-35228). Ministerio de Economía y Competitividad (2013-2015).

### As group/line responsible:

"PLANTS4AGEING: Potencial das Plantas Aromáticas e Mediciniais no Envelhecimento Cardiovascular" (PD21\_00003). Fundação "la Caixa"/Fundação para a Ciência e a Tecnologia (Portugal) (2022-2025).

"Unidad de Producción Agrícola y Medio Ambiente" (CLU2018-04). Programa de ayudas destinadas a financiar planes estratégicos y programas estratégicos de investigación. Junta de Castilla y León. Coordinator: Oscar Lorenzo Sánchez. (2019-2023).

"Red cooperativa de investigación en el ámbito de polifenoles y sus aplicaciones industriales" (528\_IBERPHENOL\_6\_E). EP-INTERREG V A España Portugal (POCTEP). Coordinator: M. Teresa Escribano-Bailón (2018-2021).

"Desarrollo de un nuevo producto con características saludables mejoradas a partir de subproductos de vinificación" (INNFACTO, Ref. IPTR-2012-0130-060000) Ministerio de Economía y Competitividad (2012-2015).