

CURRICULUM VITAE ABREVIADO (CVA)

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

Part A. PERSONAL INFORMATION

First name	Ana Belén		
Family name	Cerezo López		
Gender (*)		Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail	acerezo@us.es	URL Web	https://bibliometria.us.es/prisma/investigador/5118
Open Researcher and Contributor ID (ORCID) (*)	0000-0001-9290-2535		

A.1. Current position

Position	Associate Professor of Food Science and Nutrition		
Initial date	31/05/2021		
Institution	University of Seville		
Department/Center	Nutrition and Food Science, Toxicology and Forensic Medicine, Faculty of Pharmacy		
Country	Spain	Teleph. number	
Key words	Wine, alcoholic fermentation, acetic fermentation, Food bioactives, melatonin, hydroxytyrosol, indole acetic acid, polyphenols, LC-DAD, LC-MS/MS, biological activity, angiogenesis, VEGF		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
18/02/2018 – 30/05/2021	Lecturer in Food Science and Nutrition, University of Sevilla
01/05/2013 - 17/02/2018	Postdoctoral Contract of the IV and V Research Plan, University of Sevilla (Spain)
01/05/2011 – 30/04/2013	Marie Curie IEF Postdoctoral fellow, Institute of Food Research (Norwich, UK)
01/11/2009 – 04/04/2011	Postdoctoral Researcher, University of Sevilla, Spain
20/10/2005 – 19/10/2009	PhD student, Spanish Ministry of Science and Education fellowship, University of Sevilla, Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Postgraduate in Basic and Community Nutrition	University of Barcelona	2010
PhD. European Mention. Outstanding "Cum Laude", Extraordinary Prize.	University of Seville, Spain	2009
Degree in Biology	University of Seville	2005

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

Ana Belén Cerezo is PhD by the University of Sevilla (2009) with **European Doctorate Mention**, thanks to a **6-month stay at the University of Braunschweig (Germany)**. Her PhD Thesis was awarded with the **Extraordinary PhD Prize** of the University of Seville; Spanish Ministry of Science and Education FPI fellow (2005-2009); Postdoctoral Researcher (2009-2011); **Marie Curie IEF** Postdoctoral fellow at the Institute of Food Research (UK) (2011-2013); Postdoctoral Contract of the IV and V Research Plan obtained in competitive processes (2013-2018); Lecturer in Food Science and Nutrition (2018-2021) and **Associate Professor** (2021- present).



My research is focus on **characterization of bioactive compounds** (polyphenols, compounds derived from aromatic amino acids such as melatonin, indoleacetic acid and hydroxytyrosol) in foods and fermented products (wine and vinegars), to evaluate the impact of food processing on their quality and sensory properties. One of the research lines is devoted to **validating analytical methods** to characterize bioactive compounds in foods and food supplements by using reliable methods (liquid chromatography couple to DAD and Mass Spectrometry detectors.) Additionally, during my postdoc thanks to my Marie Curie fellowship, I have learnt to evaluate the **cardiovascular and cancer risk reduction (anti-angiogenic activity; anti-VEGF) by bioactive compounds** present in foods, in human cell lines. Currently, I am the responsible of this research line in my group.

I have acquired skills in **chemical analysis** by LC-DAD-MS, **sensory analysis** (tasting panel, descriptive analysis, triangular tests), and **molecular biology** (cell culture, western blot, ELISA assays, imaging analysis, etc).

My **mayor contributions** have been to: i) demonstrate that phenolic compounds are a useful tool to differentiate vinegars according to their elaborated wood; ii) identify phenolic compounds as a markers of vinegars aged in different woods; iii) development and validation of a protocol for sensory analysis of wine vinegar; iv) validation of analytical methods to determine melatonin in food supplements (currently of interest for food industry) and fermented products; v) selection of wine yeast major producers of melatonin (*S. cerevisiae* QA-23) and hydroxytyrosol (*S. cerevisiae* Red Fruit); vi) elucidation of a plausible molecular mechanism by which phenolic compounds and indolic compounds present in food protect against cardiovascular diseases and cancer by means of preventing vascular endothelial growth factor (VEGF) signaling (the main endogenous trigger of angiogenesis); vii) demonstration of melatonin, indoleacetic acid, hydroxytyrosol anti-VEGF activity.

These contributions resulted in many **papers** mostly JCR Q1. I am also **co-author of a patent** and one **intellectual property**, author of **international book chapters** and several conference papers. I have collaborated with international research groups (Dr. Paul Kroon, Dr. Peter Winterhalter, Dra. Giorgiana Cătunescu) resulting in numerous joint publications. I have been **PI of the European project "VegFenol"** (PIEF-GA-2010-274885) of the Marie Curie Actions and of the **Health Innovation Project "SAIBi educa Nutrition app"** of the Regional Ministry of Health and Family (PIN-0050-201), in which I gained project management and organizational abilities. In addition, I have **participated in several projects of the National Plan, projects of the Andalusian Regional Government and European project**. Likewise, my leadership skills are demonstrated by the **direction of PhD Theses** (Dr. Edwin Fernández and Inmaculada Rebollo; currently Assistant Professors in different Universities), and **one in development**, final degree projects and master's degree projects, as well as the Expert Course in Functional Foods of the US. I have been invited to several Research Conferences and an oral presentation at the International Congress on Food Bioactive and Health (Parma, 2022).

Regarding my **contributions to the society**, I have contributed as PI to develop and validate an innovative and efficient mHealth tool "SAIBi educa Nutrition app" in collaboration with a technological company and the Andalucian Health System which is currently been used by users of the Andalucian Health System with demonstrated improvement of their healthy eating habits. Additionally, I have participated in the European Researchers night and the IFR's Opens days (UK) as well as workshops in local Health centers devoted to topics such as healthy eating habits and food composition and bioactive compounds.

I have taught at the US for several years. I have recognized two periods of research (2 sexenios). I'm **currently department secretary** (since 2021).

Following DORA indications metric data has not been provided, but it can be easily found at <https://bibliometria.us.es/prisma/investigador/5118> and https://investigacion.us.es/sisius/sis_showpub.php?idpers=11547.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

1. Gallardo-Fernández, M., **Cerezo, A.B.**, Hornedo-Ortega, R., Troncoso, A.M., García-Parrilla, M.C. 2022. Anti-VEGF Effect of Bioactive Indolic Compounds and Hydroxytyrosol Metabolites. *Foods* 11, 526. **Q1**
2. Fernández-Cruz, E., Carrasco-Galán, F., **Cerezo, A.B.**, et al., García-Parrilla, M.C. (3/9). 2020. Occurrence of melatonin and indolic compounds derived from L-tryptophan yeast metabolism in fermented wort and commercial beers. *Food Chemistry*, 331,127192. **1st Decile**
3. Rebollo-Romero, I., Fernández-Cruz, E., Carrasco-Galán, F., Valero E., Cantos-Villar E., **Cerezo A.B.**, Troncoso, A.M., Garcia-Parrilla, M.C. 2020. Factors influencing the production of the antioxidant



hydroxytyrosol during alcoholic fermentation: Yeast strain, initial tyrosine concentration and initial must. *LWT*, 130, 109631. **Q1**

4. Fernández-Cruz, E., Cerezo, A.B., Cantos-Villar, E., Troncoso, A.M., García-Parrilla, M.C. 2019. Time course of L-tryptophan metabolites when fermenting natural grape musts: effect of inoculation treatments and cultivar on the occurrence of melatonin and related indolic compounds. *Australian Journal of Grape and Wine Research* 25(1), 92-100. **Q1**

5. Cerezo, A.B.; Labrador, M.; Gutiérrez, A.; Hornedo-Ortega, R.; Troncoso, A.M.; Garcia-Parrilla, M.C. 2019. Anti-VEGF signalling mechanism in HUVECs by melatonin, serotonin, hydroxytyrosol and other bioactive compounds. *Nutrients*, 11, 2421. **Q1**

6. Cerezo, A.B.; Hornedo-Ortega, R; Álvarez-Fernández, M A; Troncoso, A M; Garcia-Parrilla, M C. 2017. Inhibition of VEGF-induced VEGFR-2 activation and HUVEC migration by melatonin and other indolic related compounds. *Nutrients*, 9(3), 249. **Q1**

7. Cerezo, A.B., Leal, Á., Álvarez-Fernández, M.A., Hornedo-Ortega, R., Troncoso, A.M., García-Parrilla, M.C. 2016. Quality control and determination of melatonin in food supplements. *Journal of Food Composition and Analysis* 45, 80-86, **Q1**

8. Cerezo, AB; Winterbone, MS; Moyle, CW; Needs, PW; Kroon, PA. 2015. Molecular structure-function relationship of dietary polyphenols for inhibiting VEGF-induced VEGFR-2 activity. *Mol. Nutr. Food Res.*, 59, 2129 - 2131. **1st Decil**

9. Moyle, C.W.A., Cerezo, A.B., Winterbone, M.S., Hollands, W.J., Alexeev, Y., Needs, P., Kroon, P.A. 2015. Potent inhibition of VEGFR-2 activation by tight binding of green tea epigallocatechin gallate and apple procyanidins to VEGF: relevance to angiogenesis. *Molecular Nutrition and Food Research*, 59, 401-412. **1st Decil**

10. Stürtz, M., Cerezo, A.B., Cantos-Villar, E., Garcia-Parrilla, M.C. Determination of the melatonin content of different varieties of tomatoes (*Lycopersicon esculentum*) and strawberries (*Fragaria ananassa*). 2011. *Food Chemistry*, 127(3), 1329-1334. **1st Decil**

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

1. Cerezo, Ana B., Gallardo-Fernandez, Marta, Hornedo-Ortega, Ruth, Labrador, Maria, Troncoso, Ana M., Garcia-Parrilla, M. Carmen “Bioactive compounds present in fermented products by yeast synthesis from aromatic amino acids: antiangiogenic properties”. 3rd International Conference on Food Bioactives and Health - FBHC 2022. University of Parma. **Oral presentation. Presenting author: Ana**

B. Cerezo.

2. Gonzalez-Ramirez, Marina; Valero Eva; Cerezo Ana B; Troncoso Ana M; García-Parrilla, M Carmen. “Screening of hydroxytyrosol and tyrosine related metabolites in commercial wines by an UHPLC/MS validated method”. 12th In *Vino Analytica Scientia*” (IVAS) 2022, Neustadt (Germany). Poster.

3. Gonzalez-Ramirez, Marina; Guillamon Jose M; Valero Eva; Cerezo Ana B; Troncoso Ana M, García-Parrilla, M Carmen. “Factors influencing the production of the antioxidant hydroxytyrosol during alcoholic fermentation: Yeast Assimilable Nitrogen and Sugar. 12th In *Vino Analytica Scientia*” (IVAS) 2022, Neustadt (Germany). Poster.

4. Fernandez Cruz, Edwin, Carrasco Galán, Fernando, Cerezo, Ana B., García Parrilla, M Carmen, Troncoso, Ana M. Matrix effect of fermented products and stability of melatonin and other L-tryptophan derived compounds at different storage conditions. 11th In *Vino Analytica Scientia* 2019. Burdeos (Francia). Poster.

5. Cerezo, Ana B. Labrador, María, Gutierrez, Andrés, Garcia-Parrilla, M. Carmen, Troncoso, Ana M. Melatonin, serotonin and other bioactive compounds: anti-angiogenic mechanism against VEGF activity. 13th European Nutrition Conference 2019. Dublin (Ireland). Poster.

6. Cerezo, Ana B., Alvarez Fernández, María Antonia, Hornedo Ortega, Ruth, Troncoso, Ana M, García Parrilla, M Carmen: Melatonin and other indolic related compounds inhibit VEGF induced VEGFR-2 activation and HUVEC migration in vitro. 1st International Conference of Food Bioactives & Health 2016. Norwich (UK). Poster.

C.3. Research projects

1. PID2019-108722RB-C32. Bioactive Potential of Metabolites Synthesised by Selected Microorganisms and their Impact on the Quality and Safety of Fermented Beverages. Ministry of Economy and Competitiveness. 2020-2023. 157,300 euros. PI: M^a del Carmen García Parrilla and Ana M^a Troncoso González (University of Sevilla). Type of participation: Researcher.



- 2. P18-RT-3098.** Use of hydroxytyrosol-producing yeasts and derivatives as a strategy for the production of value-added wines. Funding entity. Regional Government of Andalusia (Regional Ministry of Economy and Knowledge). 2020-2023. 106,224 euros. PI: M^a del Carmen García Parrilla and Ana M^a Troncoso González (University of Sevilla). Type of participation: Researcher.
- 3. PIN-0050-2018.** Improvement of the eating habits of those attending the Primary Care Dietetic Council through the use of a mobile nutrition application. Funding Entity: Regional Ministry of Health and Family. 2018-2022. 45,440.79 euros. **PI: Ana Belén Cerezo López (University of Sevilla).**
- 4. AGL2016-77505-C3-2-R.** Metabolomic Analysis and Evaluation of the Bioactivity of Compounds Produced by Yeasts Present in Food. Funding Entity. Ministry of Economy and Competitiveness. 2016-2019. 203,280 euros. PI: M^a del Carmen García Parrilla and Ana M^a Troncoso González (University of Sevilla). Type of participation: Researcher.
- 5. PR.AVA.AVA2016013.** Research and technological innovation in viticulture. Funding Entity. Regional Government of Andalusia. Institute for Agricultural and Fisheries Research and Training (IFAPA). Co-financing FEDER Funds. 2016-2018. 193,996.84 euros. PI: Emma Cantos Villar (IFAPA Rancho de la Merced). Type of participation: Researcher.
- 6. AGL2013-47300-C3-2-R.** Chemical Characterization and Bioactivity Determination of Derived Compounds from Aromatic Aminoacid related to the Yeasts Metabolism. Ministry of Economy and Competitiveness. 2014-2017. 145,200 euros. PI: M^a del Carmen García Parrilla y Ana M^a Troncoso González (University of Sevilla). Type of participation: Researcher.
- 7. PIEF-GA-2010-274885.** Inhibition of VEGF signalling by dietary polyphenols as a plausible mechanism for their health benefits. 7th Framework Programme for Research EU, Marie Curie Actions, 2011-2013. 201,049.6 euros. **PI: Ana Belén Cerezo López (Institute of Food Research).**

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any

- 1. Ana Belén Cerezo López,** María del Carmen García Parrilla, Ana María Troncoso González, Antonio García Parrilla, Francisco de Cárdenas Domínguez-Adame, Mauricio Lozano Navarrete, Elena Salameo Sánchez-Gabriel, Ángela Cejudo López, Manuel Alfonso Torres Bengoa, Mercedes Barroso Vázquez, María José Sánchez Cordero, Manuel Segura Valbuena, Francisco José Pérez Barba, Marina González Ramírez. RPI 2021999012849289. Intellectual property registration of the nutrition app "SAIBi educa". 19/11/2021. Holders: Universidad de Sevilla, Servicio Andaluz de Salud (SAS) and Balaceat, Tecnologías Avanzadas de Nutrición, S.L. Company exploiting: Balanceat.
- 2. M^a Carmen García Parrilla, Michele Bogianchini, Ana Belén Cerezo López.** Patent No. P201130518. P201130518. Flavouring of low alcoholic beverages made from wine. 18/09/2013. Holder. University of Seville. International File No. PCT/ES2012/000077.