

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	Alfonso		
Family name	Mate Barrero		
Gender (*)	Male	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number		e-mail	
URL Web:	https://bibliometria.us.es/prisma/investigador/2605		
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-2719-8825		

(*) Mandatory

A.1. Current position

Position	Full Professor (<i>Catedrático de Universidad</i>)		
Initial date	July 31, 2023		
Institution	Universidad de Sevilla		
Department/Center	Physiology (School of Pharmacy)		
Country	Spain	Teleph. number	
Key words	Cell culture; Functional foods; Health; Molecular mechanisms of disease; Physiology; Research models; Therapeutics		

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

Period	Position/Institution/Country/Interruption cause
2009-2023	Associate Professor / Universidad de Sevilla
2002-2009	Assistant Professor / Universidad de Sevilla
1999-2002	Research fellow (FPI) / Universidad de Sevilla

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD Pharmacy	Universidad de Sevilla	2000
Licensed, Pharmacy	Universidad de Sevilla	1996

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

- **Citation metrics.** Source: PRISMA (<https://bibliometria.us.es/prisma/investigador/2605>).
 - Web of Science Documents: 69 (total publications in Q1-JCR: 29)
 - Total Times Cited: 1671 (WOS) / 1783 (Scopus)
 - h-index: 19 (WOS) / 21 (Scopus)
 - Average Citations per Item: 24 (WOS) / 32 (Scopus)
- **Research periods (sexenios):** 5 (1998-2003, 2004-2009, 2010-2015, 2016-2021, 2009-2016 (knowledge transfer)).
- Thesis supervised (last 10 years): 5
- End-of-Degree/Master projects supervised (last 10 years): 52

Alfonso Mate holds a permanent position as a Full Professor at the University of Seville (Department of Physiology). He has been teaching Human Physiology-related subjects since 1999, including both undergraduate (Bachelor's Degree in Pharmacy; Bachelor's Degree in Optics) and graduate (MS in Physiology and Neuroscience; MS in Biomedical Research; MS in Pharmaceutical Science & Rational Use of Medicines) students. Excellence in Teaching Award (University of Seville, 2007), he has also been a visiting professor at the University of Catania within the framework of Erasmus Teaching Mobility Program. His research interest topics include cardiovascular, renal, and eye physiology, pathophysiology and end organ damage in arterial hypertension, dietary supplementation with functional foods in cardiovascular and ocular disease, and pregnancy-related hypertension, among others. He



has participated in research projects funded by National/Regional public organisms and private corporations (AEI, Instituto de Salud Carlos III, AECID, Junta de Andalucía, EGMASA, Sigma-Tau, ADEON, etc.). Upon being awarded and leading a research contract funded by the public agency EGMASA (currently known as Agencia de Medioambiente y Agua de Andalucía), he introduced a new research line in his group that focuses on the benefits of wild olive oil as a pharm-food to treat cardiovascular and eye diseases. He has co-authored 51 research papers with an average impact factor (ISI-JCR) of 4.7 in the last 5 years (h index = 19), and is member of the Editorial Board of the journal *Aspects of Molecular Medicine* (an official journal of the International Union of Biochemistry and Molecular Biology). A visiting researcher at several universities, including the University of Barcelona the University Hospital Zurich in Switzerland, Queen's University Belfast in the UK, and the Pontifical Catholic University of Chile, he was also a Fulbright Visiting Scholar at the University of Mississippi Medical Center in the USA. The latter allowed him to become familiar with experimental models of preeclampsia that he later successfully established in his own laboratory. He has presented 125 scientific communications in national and international meetings. His most relevant research results have also been disseminated in different media (press, radio, social media). In addition to PhD supervision duties, he has obtained funding from different programs related to mentoring and training of young researchers. Ad Hoc Project & Post-doctoral Fellowship Reviewer (State Research Agency (AEI), 2015-Present; Regional Government of Andalusia, 2008-Present). Prof. Mate held Membership of the Executive Committee of the Spanish Physiological Society (2014-2018). He has also been Executive Vice Dean for Academic Affairs (School of Pharmacy) since 2017; Additional Service includes appointment to the Faculty Senate (Claustro, 2005-present), Faculty Council (Consejo de Gobierno, 2013-2018), Faculty Board (Junta de Centro, 2009-present), and various Institutional, Teaching & Recruiting Committees (2002-present), among others.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions; limited to 10 items)

- 1 Research article.** Santana-Garrido A, Reyes-Goya C, Espinosa-Martín P, Troya-Toledo R, André H, **Mate A***, Vázquez CM **(*)Corresponding author.** Unveiling protective mechanisms of wild olive (acebuche) oil in retinal pigment epithelial cells with hypertensive phenotype. *J. Physiol.-London* 2025 (<https://doi.org/10.1113/JP287367>). IF: 4,4; Q1.
- 2 Research article.** Lucchesi M, Marracci S, Amato R, Lapi D, Santana-Garrido A, Espinosa-Martín P, Vázquez CM, **Mate A***, Dal Monte M **(*)Corresponding author.** The anti-inflammatory and antioxidant properties of acebuche oil exert a retinoprotective effect in a murine model of high-tension glaucoma. *Nutrients* 2024;16:409 (<https://doi.org/10.3390/nu16030409>). IF: 4,8; Q1.
- 3 Research article.** Santana-Garrido A, Durán-Lobato M, **Mate A**, Martín-Banderas L, Vázquez CM. Ophthalmic wild olive (acebuche) oil nanoemulsions exert oculoprotective effects against oxidative stress induced by arterial hypertension. *Int. J. Pharm.* 2024;649:123602 (<https://doi.org/10.1016/j.ijpharm.2023.123602>). IF: 5,3; D1.
- 4 Research article.** Reyes-Goya C, Santana-Garrido A, Espinosa-Martín P, Vázquez CM, **Mate A**. Wild and cultivated olive trees: nutraceutical insights of extra virgin olive oils in cardiovascular and ocular diseases. *Biochim. Biophys. Acta Mol. Basis Dis.* 2024;1870:166904 (<https://doi.org/10.1016/j.bbadis.2023.166904>). IF: 4,2; Q1.
- 5 Research article.** Santana-Garrido A, Reyes-Goya C, André H, Vázquez CM, **Mate A*** **(*)Corresponding author.** Exploring the potential of wild olive (acebuche) oil as a pharm-food to prevent ocular hypertension and fibrotic events in the retina of hypertensive mice. *Mol. Nutr. Food Res.* 2024;68:2200623 (<https://doi.org/10.1002/mnfr.202200623>). IF: 4,5; Q1.
- 6 Research article.** Santana-Garrido A, Reyes-Goya C, Espinosa-Martín P, Sobrevía L, Beltrán LM, Vázquez CM, **Mate A***. Oxidative and inflammatory imbalance in placenta and kidney of sFlt1-induced early-onset preeclampsia rat model. *Antioxidants* 2022;11:1608 (<https://doi.org/10.3390/antiox11081608>). IF: 7,0; D1. **(*)Corresponding author**
- 7 Research article.** Santana-Garrido A, Reyes-Goya C, Milla-Navarro S, de la Villa P, André H, Vázquez CM, **Mate A***. Anti-inflammatory action of dietary wild olive (acebuche) oil in the retina of hypertensive mice. *Foods* 2021;10:1993 (<https://doi.org/10.3390/foods10091993>). IF: 5,561; Q1. **(*)Corresponding author**
- 8 Research article.** Santana-Garrido A, Reyes-Goya C, Pérez-Camino MC, André H, **Mate A***, Vázquez CM. Retinoprotective effect of wild olive (acebuche) oil-enriched diet against ocular



oxidative stress induced by arterial hypertension. **Antioxidants** 2020;9:885 (<https://doi.org/10.3390/antiox9090885>). IF: 6,313; D1. (*)**Corresponding author**

9 Research article. Santana-Garrido A, Reyes-Goya C, André H, Aramburu O, **Mate A***, Vázquez CM. Sunitibib-induced oxidative imbalance and retinotoxic effects in rats. **Life Sci.** 2020; 257:118072 (<https://doi.org/10.1016/j.lfs.2020.118072>). IF: 5,037; Q1.

(*)**Corresponding author**

10 Research article. Blanca AJ, Ruiz-Armenta MV, Zambrano S, [...], **Mate A* (pos. 8/9)**, Vázquez CM. L-Carnitine ameliorates the oxidative stress response to angiotensin II by modulating NADPH oxidase through a reduction in protein kinase c activity and NF-κB translocation to the nucleus. **Food Chem.** 2017;228:356-366 (<https://doi.org/10.1016/j.foodchem.2017.02.011>). IF: 4,946; D1. (*)**Corresponding author**

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

*Total = 128 contributions, including invited conferences and oral/poster presentations. Selected recent communications:

- 1** Santana-Garrido A, Reyes-Goya C, André H, **Mate A**, Vázquez CM. Dietary supplementation with acebuche oil prevents retinal dysfunction and fibrotic events in L-NAME-induced hypertensive mice (poster presentation). 14th European Nutrition Conference (FENS 2023). Belgrado (Serbia).
- 2** Santana-Garrido A, Durán-Lobato M, **Mate A**, Martín-Banderas L, Vázquez CM. Ophthalmic acebuche oil nanoemulsions against ocular oxidative stress induced by arterial hypertension (poster presentation). 14th European Nutrition Conference (FENS 2023). Belgrado (Serbia).
- 3** Santana-Garrido A, Reyes-Goya C, Espinosa-Martín P, André H, Vázquez CM, **Mate A**. Extracellular vesicles mirror the beneficial effect of wild olive (acebuche) oil in hypertensive-like retinal pigment epithelial cells (poster presentation). 26th EVER (European Association for Vision and Eye Research) Congress. 2023. Valencia (Spain). <https://doi.org/10.1111/aos.15860>.
- 4** Santana-Garrido A, Durán-Lobato M, **Mate A**, Martín-Banderas L, Vázquez CM. Antioxidant insights of wild olive (acebuche) oil ophthalmic nanoemulsions against arterial hypertension (oral presentation). 26th EVER (European Association for Vision and Eye Research) Congress. 2023. Valencia (Spain). <https://doi.org/10.1111/aos.15870>.
- 5** Blanco A, Albistegui R, Morales A, Espinosa P, Santana A, Reyes C, Gutiérrez J, **Mate A**, Vázquez CM, Leiva A. Polyphenol-enriched-extra-virgin-olive-oil (EVOO) improves vascular dysfunction and oxidative stress in a model of hypercholesterolemia in pregnancy (poster presentation). V Meeting of the Latin American Regional Society for Developmental Origins of Health and Disease (LA-DOHaD) & XXXIV Meeting Chilean Society of Reproduction (SChRD). 2023. Valdivia (Chile).
- 6** Lucchesi M, Marracci S, Lapi D, Santana-Garrido A, Espinosa P, **Mate A**, Vázquez CM, Dal Monte M. The anti-inflammatory and antioxidant properties of Acebuche oil exert a retinoprotective effect in a murine model of high-tension glaucoma (poster presentation). 73rd Congress of the Italian Society of Physiology. 2023. Pisa (Italy).

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

- 1** PID2023-149187OB-I00, Food and Visual Health: Assessing the Role of Wild Olive Oil and its Phenolic Fraction in Models of Age-Related Macular Degeneration. Ministerio de Ciencia, Innovación y Universidades. **ALFONSO MATE BARRERO**. 01/09/2024-31/08/2027. € 225.000. **Principal investigator**.
- 2** PROYEXCEL_00516, Expandiendo el potencial nutracéutico del aceite de acebuchina: papel mediador y protector de las vesículas extracelulares en el daño ocular hipertensivo. **ALFONSO MATE BARRERO**. 02/12/2022-31/12/2025. € 164.280. **Principal investigator**.
- 3** PID2019-109002RB-I00, Recuperación del olivo silvestre en la dieta mediterránea: beneficios del aceite de acebuchina en la patología ocular hipertensiva. Ministerio de Ciencia e Innovación / Ministerio de Universidades. **ALFONSO MATE BARRERO**. 01/01/2020-31/12/2022 (extended 30/09/2023). € 100.430. **Principal investigator**.
- 4** PI-0456-2018, Estudio multidisciplinar de potenciales marcadores precoces de preeclampsia: estudio en muestras de sangre obtenidas en el primer trimestre de gestantes sanas y con preeclampsia, complementado con un estudio en ratas gestantes a las que se le induce



preeclampsia con diferentes edades gestacionales. Junta de Andalucía. Consejería de Salud. LUIS MATÍAS BELTRÁN ROMERO. 28/12/2018-27/12/2022. € 60.224,33. Group member.

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

Contracts

- 1 0302/0180, Estudio de la composición química y posible actividad antioxidante y antitumoral del acebuché u olivo salvaje (*Olea europaea*, var. *sylvestris*). Empresa de Gestión Medioambiental (EGMASA), Consejería de Medio Ambiente, Junta de Andalucía. **ALFONSO MATE BARRERO**. 29/01/2010-29/07/2010. €34.800.
- 2 PRJ201803388/0836, Dietas artificiales basadas en restricciones selectivas de aminoácidos para el tratamiento de cánceres metastásicos. Aminovita, S.L. MIGUEL LÓPEZ LÁZARO. 30/06/2018-29/06/2021. €135.000. Group member.

Patents

- 1 Santana-Garrido A, Reyes-Goya C, **Mate A**, Vázquez CM, André H. P202030625. Use of acebuchin oil in retinal damage associated with arterial hypertension and hypertension-associated retinal pathologies. 19/12/2022. <https://consultas2.oepm.es/InvenesWeb/detalle?referencia=P202030625>.
- 2 Santana-Garrido A, Reyes-Goya C, **Mate A**, Vázquez CM, André H. P202230081. Acebuchin oil for use as an ocular hipotensor. 03/08/2023 (pub date). <https://consultas2.oepm.es/InvenesWeb/detalle?referencia=P202230081>.
- 3 López-Lázaro M, Calderón-Montaño J, Jiménez-Alonso JJ, Guillén-Mancina E, Jiménez-González V, **Mate-Barrero A**, Pérez-Guerrero MC, Burgós-Morón E. PCT/ES2020/070571. Metabolic cancer therapy. 31/03/2022. <http://patentscope.wipo.int/search/en/WO2022064079>.
- 4 Jiménez-Castellanos MR, Lucero MJ, Casas M, Vázquez CM, **Mate A**. P201201199 - PCT/ES2013/000258. Use of L-carnitine in dermatological cosmetic products for the treatment of stretch marks and scars. 24/03/2015. <http://patentscope.wipo.int/search/en/WO2014080051>.
- 5 Aramburu O, Ruiz MV, Blanca A, Zambrano S, Miguel-Carrasco JL, Monserrat MT, Arias JL, **Mate A**, Vázquez CM. P201130900 - PCT/ES2012/070405. Combined compositions and preparations of Sunitinib and L-carnitine. 22/10/2013. <http://patentscope.wipo.int/search/en/WO2012164138>.
- 6 Vázquez CM, Blanca A, Zambrano S, Ruiz MV, Miguel-Carrasco JL, Monserrat MT, Arias JL, Aramburu O, **Mate A**. P201031914 - PCT/ES2011/070895. Use of L-carnitine and compositions thereof for treating and preventing renal damage. 11/09/2013. <http://patentscope.wipo.int/search/en/WO2012085321>.
- 7 **Mate A**, Miguel-Carrasco JL, Vázquez CM, Monserrat MT. P200901567 - PCT/ES2010/000294. Use of captopril as a cardioprotector and anti-inflammatory for heart trouble associated with arterial hypertension. 19/09/2011. <http://patentscope.wipo.int/search/en/WO2011004040>.
- 8 **Mate A**, Miguel-Carrasco JL, Vázquez CM, Monserrat MT. P200901543 - PCT/ES2010/000290. Use of L-carnitine for preventing inflammatory cardiac damage associated with arterial hypertension. 19/09/2011. <http://patentscope.wipo.int/search/en/WO2011004038>.
- 9 **Mate A**, Vázquez CM, Miguel-Carrasco JL, Gómez-Amores L. P200701091 - PCT/ES2008/000249. Use of L-carnitine for treating arterial hypertension. 19/08/2009. <http://patentscope.wipo.int/search/en/WO2008125714>.