

Date of the CVA

02/01/2020

## Section A. PERSONAL DATA

Name and Surname	Juan Antonio Giménez Bastida		
DNI/NIE/Passport		Age	
Researcher's identification number	Researcher ID	T-2721-2017	
	Scopus Author ID	35483713800	
	ORCID	0000-0002-1244-8764	

### A.1. Current professional situation

Institution	Centro de Edafología y Biología Aplicada del Segura		
Dpt. / Centre	Food Science and Technology / CEBAS-CSIC		
Address			
Phone		Email	
Professional category	Juan de la Cierva Postdoctoral Fellow	Start date	2018
UNESCO spec. code	320608 - Nutrients		
Keywords	Food chemistry		

### A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Integration and Modulation of Signals in Biomedicine	University of Murcia	2012
Master In Biomedical Sciences, Research and Technology	University of Murcia	2009
Bachelor in Food Science and Technology	University of Murcia	2005

### A.3. General quality indicators of scientific production

The applicant (h index = 13), is a well published candidate with **22 SCI scientific papers** (1st author in 15, and corresponding author in 2), 4 reviews (1st author in all of them) and 5 book chapters (1st author in three). He has **mentored graduate students, attended numerous international conferences** (14 posters and 3 oral presentations) where he received **several travel and outstanding poster awards**. He also **has worked in EU-, NIH-, national-, and private companies-funded projects**. The candidate completed his PhD very successfully with **8 publications in high-impact factor journals** and **4 posters and 1 oral presentation presented in international conferences**. His PhD ("study of the anti-inflammatory effects of polyphenols at the intestinal and vascular level") was supervised by **Prof. J.C. Espín** and two other scientists (M.T. García-Conesa and M. Larrosa) and received the **cum laude** distinction. The applicant received **the Extraordinary Doctorate Award** (Faculty of Medicine, Univ. of Murcia), and one **Outstanding poster award (€250)** in the 5th International Conference in Polyphenols and Health (ICPH2011). The **EU-funded Refresh project** gave the candidate the opportunity to work at the Institute of Animal Reproduction and Food Research -IARFR- (Olsztyn, Poland). The applicant **mentored one predoctoral student, Ms Patricia Garcia Mora**, and the results of this collaboration **were published in a peer-reviewed journal (J Funct Foods, 2015, 18, 319-332)**. **The applicant also designed and managed his own experiments, publishing 2 papers as corresponding author ( PDMI: 27709826; 26142696)** indicating its ability **to work without close supervision and act and think independently**. He was also attended to the 252ND American Chemical Society National Meeting & Exposition (Philadelphia, EEUU) as **invited speaker**. In 2014, the applicant joined Dr Schneider's lab at Vanderbilt University (Nashville, TN, EEUU). The candidate **quickly developed a clear understanding of his project** producing quantitative data, while **grew into many fruitful collaborations** with many of the world leaders of eicosanoid research (Drs. John Oates, Olivier Boutaud, Stokes Peebles, and Ambra Pozzi). The candidate was awarded with **one of the prestigious Postdoctoral Grants of the American Heart Association –AHA- (2 years)**, what resulted in **7 publications in high-impact factor journals**, and numerous oral/poster presentations in international conferences, where the candidate received **2 Travel (1000**

and 500\$) and 1 Outstanding Poster (300\$) awards. The results generated were the base for the project renewal (NIH R01, GM076592-07), creating new goals for the next few years. Additionally, he trained summer and rotation students (Sheryl Vermudez and Jade Williams). To date, the applicant is working in the host group (since 06/2018) after being awarded (despite the low rate of success) with one Juan de la Cierva Fellowship (Ministry of Science, Innovation and Universities). The candidate has been principal investigator of a AHA-funded project, has established permanent international collaborations (IARFR and Vanderbilt University), has acquired a background in nutrition and food science as well as in pharmacology and clinical pharmacology. His multidisciplinary knowledge of a wide range of techniques ( some of them will be brought to the hosting laboratory) makes him an excellent candidate for this proposal.

## Section B. SUMMARY OF THE CURRICULUM

### Section C. MOST RELEVANT MERITS (ordered by typology)

#### C.1. Publications

- 1 Scientific paper.** JA Giménez-Bastida; et al. (4/1). 2019. Conjugated Physiological Resveratrol Metabolites Induce Senescence in Breast Cancer Cells: Role of p53/p21 and p16/Rb Pathways, and ABC Transporters Molecular Nutrition and Food Research. Wiley. ISSN 1613-4133.
- 2 Scientific paper.** Ávila-Gálvez MA; et al. (4/2). 2019. Tissue deconjugation of urolithin A glucuronide to free urolithin A in systemic inflammation. Food and Function. American Chemical Society. 10-6, pp.3135-3141. ISSN 2042-650X.
- 3 Scientific paper.** Zielinska D; et al. (5/5). 2019. Role of Apple Phytochemicals, Phloretin and Phloridzin, in Modulating Processes Related to Intestinal Inflammation. Nutrients. MDPI. 11-5.
- 4 Scientific paper.** Giménez-Bastida JA; et al. (5/1). 2019. Residual cyclooxygenase activity of aspirin-acetylated COX-2 forms 15 R-prostaglandins that inhibit platelet aggregation. FASEB JOURNAL. 33-1, pp.1033-1041.
- 5 Scientific paper.** Robert E. Boer; et al. (6/2). 2018. Total Synthesis and Biological Activity of the Arachidonic Acid Metabolite Hemiketal E2. Organic Letters. American Chemical Society (ACS). 20-13, pp.4020-4022.
- 6 Scientific paper.** Nakashima F; et al. (10/8). 2018. Structural and functional insights into S-thiolation of human serum albumins Nature Scientific Reports. Nature Research. 8-932, pp.1-12.
- 7 Scientific paper.** Gimenez-Bastida JA; et al. (5/1). 2017. Biomimetic synthesis of hemiketal eicosanoids for biological testing Prostaglandins and Other Lipid Mediators. ELSEVIER. 132, pp.41-46. ISSN 1098-8823.
- 8 Scientific paper.** Gimenez-Bastida JA; et al. (4/1). 2017. Roles of 5-lipoxygenase and cyclooxygenase-2 in the biosynthesis of hemiketals E2 and D2 by activated human leukocytes FASEB JOURNAL. Federation of American Societies for Experimental Biology. 31-5, pp.1867-1878. ISSN 1530-6860.
- 9 Scientific paper.** Gimenez-Bastida JA; et al. (5/1). 2016. Buckwheat bioactive compounds, their derived phenolic metabolites and their health benefits Molecular Nutrition and Food Research. Wiley Online Library. 61-7. ISSN 1613-4125.
- 10 Scientific paper.** Gimenez-Bastida JA; et al. (5/1). 2016. Hesperetin and its sulfate and glucuronide metabolites inhibit TNF- $\alpha$  induced human aortic endothelial cell migration and decrease plasminogen activator inhibitor-1 (PAI-1) levels Food and Function. Royal Society of Chemistry. 7-1, pp.118-126. ISSN 2042-6496.
- 11 Scientific paper.** García-Mora P; et al. (8/5). 2015. Simultaneous release of peptides and phenolics with antioxidant, ACE-inhibitory and anti-inflammatory activities from pinto bean (*Phaseolus vulgaris* L. var. pinto) proteins by subtilisins Journal of Functional Foods. ELSEVIER. 18-A, pp.319-332. ISSN 1756-4646.

- 12 **Scientific paper.** Gimenez-Bastida JA; Surma M; Zielinski H. (3/1). 2015. In vitro evaluation of the cytotoxicity and modulation of mechanisms associated with inflammation induced by perfluorooctanesulfonate and perfluorooctanoic acid in human colon myofibroblasts CCD-18Co Toxicology In Vitro. ELSEVIER. 29-7, pp.1683-1691. ISSN 0887-2333.
- 13 **Scientific paper.** González-Sarrías A; et al. (7/2). 2014. Phase-II metabolism limits the antiproliferative activity of urolithins in human colon cancer cells European Journal of Nutrition. Springer. 53-3, pp.853-864. ISSN 1435-1293.
- 14 **Scientific paper.** Truchado P; et al. (8/2). 2012. Inhibition of Quorum Sensing (QS) in *Yersinia enterocolitica* by an Orange Extract Rich in Glycosylated Flavanones. Journal of Agricultural and Food Chemistry. AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA. 60-36, pp.8885-8894. ISSN 0021-8561.
- 15 **Scientific paper.** Giménez-Bastida JA; et al. (6/1). 2012. Intestinal ellagitannin metabolites ameliorate cytokine-induced inflammation and associated molecular markers in human colon fibroblasts. Journal of Agriculture and Food Chemistry. AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA. 60-36, pp.8866-8876. ISSN 0021-8561.
- 16 **Scientific paper.** García-Villalba R; et al. (5/2). 2012. Alternative method for gas chromatography-mass spectrometry analysis of short-chain fatty acids in faecal samples. Journal of Separation Science. WILEY-V C H VERLAG GMBH, BOSCHSTRASSE 12, D-69469 WEINHEIM, GERMANY. 35-15, pp.1906-1913. ISSN 1615-9306.
- 17 **Scientific paper.** Giménez-Bastida JA; et al. (7/1). 2012. Urolithins, ellagitannin metabolites produced by colon microbiota, inhibit Quorum Sensing in *Yersinia enterocolitica*: Phenotypic response and associated molecular changes. Food Chemistry. Elsevier. 132-3, pp.1465-1474.
- 18 **Scientific paper.** Giménez-Bastida JA; et al. (6/1). 2012. Ellagitannin metabolites, urolithin A glucuronide and its aglycone urolithin A, ameliorate TNF- $\alpha$ -induced inflammation and associated molecular markers in human aortic endothelial cells. Molecular Nutrition & Food Research. WILEY-BLACKWELL, 111 RIVER ST, HOBOKEN 07030-5774, NJ USA. 56-5, pp.784-796. ISSN 1613-4125.
- 19 **Scientific paper.** González-Sarrías Antonio; et al. (13/2). 2010. Occurrence of urolithins, gut microbiota ellagic acid metabolites, and proliferation markers expression response in the human prostate gland upon consumption of walnuts and pomegranate juice Molecular Nutrition & Food Research. WILEY-V C H VERLAG GMBH, PO BOX 10 11 61, D-69451 WEINHEIM, GERMANY. 54-3, pp.311-322. ISSN 1613-4125.
- 20 **Scientific paper.** Giménez-Bastida JA; et al. (5/1). 2009. A citrus extract containing flavanones represses plasminogen activator inhibitor-1 (PAI-1) expression and regulates multiple inflammatory, tissue repair, and fibrosis genes in human colon fibroblasts. Journal of Agricultural and Food Chemistry. AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA. 57-19, pp.9305-9315. ISSN 0021-8561.
- 21 **Scientific paper.** Abdul-Musawwir Alli-Oluwafuyi; et al. (8/4). 2019. Curcumin induces secretion of glucagon-like peptide-1 through an oxidation-dependent mechanism BIOCHIMIE. Elsevier. 165, pp.250-257. ISSN 0300-9084.
- 22 **Scientific paper.** Mohammad Saleem; et al. (11/4). 2019. Sox6 as a new modulator of renin expression in the kidney American Journal of Physiology-Renal Physiology. American Physiological Society. ISSN 1522-1466.
- 23 **Scientific paper.** Giménez-Bastida JA; et al. (4/1). 2018. Buckwheat and Buckwheat enriched products exert anti-inflammatory effect on myofibroblasts of colon CCD-18Co Food and Function. Royal Society of Chemistry. 9-6, pp.3387-3397.
- 24 **Book chapter.** Gimenez Bastida JA; Swaantie; Laparra-Llopis, J.M.(3/1). 2017. Nutritional and Health Implications of Pseudocereal Intake Pseudocereals: Chemistry and Technology. Wiley. pp.217-232. ISBN 978-1-118-93828-7.
- 25 **Book chapter.** Cilla A; et al. (4/3). 2015. Overview of the role of bioactive compounds as complementary therapy for celiac disease Biology of Bioactive Compounds: Sources and Applications. Wiley. pp.583-597. ISBN 978-1-118-73349-3.

- 26 Book chapter.** J.A. Giménez Bastida; et al. (7/1). 2011. Urolithins, Metabolites Produced by Human Colonic Microflora, Act as Quorum Sensing Inhibitors of *Yersinia enterocolitica* Affecting its Gene Expression Science and Technology against Microbial Pathogens. Research, Development and Evaluation. A Mendez-Vilas (Formatex Research Center, Spain). ISBN 978-981-4354-85-1.
- 27 Book chapter.** Gimenez Bastida JA; Surma M; Bukowska J. (3/1). 2016. In vitro study of the exposure of human myofibroblasts of colon CCD-18Co to perfluorooctanoic acid (PFOA) Perfluorooctanoic Acid (PFOA): Global Occurrence, Exposure and Health Effects. Nova Publisher. pp.33-51. ISBN 978-1-63484-892-3.
- 28 Book chapter.** Surma M; Gimenez Bastida JA; Zielinski H. (3/2). 2016. Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS): Global Occurrence, Exposure and Health Effects Perfluorooctanoic Acid (PFOA): Global Occurrence, Exposure and Health Effects. Nova Publishers New York. pp.1-31. ISBN 978-1-63484-913-5.
- 29 Review.** Giménez-Bastida JA; et al. (4/1). 2018. Pharmacological Efficacy/Toxicity of Drugs: A Comprehensive Update About the Dynamic Interplay of Microbes. Journal of Pharmaceutical Sciences. Wiley. 107-3, pp.778-784.
- 30 Review.** Gimenez-Bastida JA; Zielinski H. (2/1). 2015. Buckwheat as a Functional Food and its Effects on Health Journal of Agricultural and Food Chemistry. ACS publications. 63-36, pp.7896-7913. ISSN 0021-8561.
- 31 Review.** Gimenez-Bastida JA; Piskula M; Zielinski H. (3/1). 2015. Recent Advances in Development of gluten-free buckwheat products Trends in Food Science & Technology. ELSEVIER. 44-1, pp.58-65. ISSN 0924-2244.
- 32 Review.** Gimenez-Bastida JA; Piskula M; Zielinski H. (3/1). 2015. Recent Advances in Processing and Development of Buckwheat Derived Bakery and Non-Bakery Products – a review Polish Journal of Food and Nutrition Science. De Gruyter Open. 65-1, pp.9-20. ISSN 2083-6007.

## C.2. Participation in R&D and Innovation projects

## C.3. Participation in R&D and Innovation contracts

## C.4. Patents