MINISTERIO DE CIENCIA E INNOVACIÓN

Cofinanciado por la Unión Europea

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	29/11/2021

First name	Vanesa		
Family name	Jiménez Ortega		
Gender (*)	Female	Birth date (dd/mm/yyyy)	16/05/1978
Social Security, Passport, ID number	ID number	46920377D	
e-mail	jimenezv@ucm.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0001-7553-5446	

(*) Mandatory

A.1. Current position

Position	Profesor titular			
Initial date	08/05/2018			
Institution	Universidad Complutense de Madrid			
Department/Center	Bioquímica y Biología Molecular	Facultad de Medicina		
Country	Spain		Teleph. number	91-3941678
Key words	obesity, metabolism, type 2 Diabetes, inflammation melatonin, chronobiology			

A.2. Previous positions (research activity interuptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
18-02-2014/7-7-2014	Daughter birth
21-04-2015/1-09-2015	Son birth

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD	Universidad Complutense de Madrid/Spain	2006
Licensed	Universidad Complutense de Madrid/Spain	2001

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

My scientific training began during my graduated studies with a competitive Collaboration Grant (2000/2001), awarded by the Ministry of Education, Science and Sport (MECD) in the Animal Biology II (Physiology) Department, in the Biology Faculty (UCM), where I first learned cell culture methodology. In June 2001, I graduated in Biological Sciences from UCM and I got a predoctoral fellowship (MECD- 2002-2005) in Biochemistry and Molecular Biology Department of the Faculty of Medicine of the UCM, that culminated in the defense of my doctoral thesis with cum laude in 2006. During this pre-doctoral period, I obtained Research Proficiency in the Neurosciences doctoral program and a Fellowship with the University Personnel Training Program (MECD- 2004) to stay for six-months on the Dr. Bartke´s lab in

the School of Medicine, University of Springfield, Illinois (SIU) in USA. There, I could learn novel techniques of molecular biology and several mice experimental animal models.
From 2006 to nowadays, I develop simultaneously my research career and teaching career, promoting from Assistant Professor to Doctor Assistant professor, Associated and finally, University Professor in the Biochemistry and Molecular Biology Department of the School of Medicine (2006-2021). During that time, I enjoyed a second short stay in SIU, thanks to a "Help for Professors of the UCM abroad", that allowed me to learn more about obesity metabolic disorder with knock-out mice. All in all, my research work has focused on the chronobiological effects of certain disruptors, as the obesity due to changes in the diet composition, on the coordination of immune-endocrine systems, and to recover the body's homeostasis or prevent the alterations through certain treatments, such as melatonin. To achieve this goal, I have cultivated extensive experience working with a wide range of animal models, encompassing rats, mice, and rabbits. My research has involved both wild-type and genetically modified (knockout) animals, and I have conducted experiments under diverse conditions such as obesity, caloric restriction, alcoholism, or aging.
Thanks to my participation as a researcher in 12 competitive research projects and one as principal investigator, my scientific productivity could be summarized in 52 scientific publications (see ORCID reference) (3D1 and 13Q1), with 841 total times cites and H-index of 17, together with 5 book chapters. Our scientific results have been communicated in national and international congresses with the contribution of 32 research papers; 25 of them published in prestigious scientific journals.
I have contributed to the training of young researchers with the codirection of one doctoral thesis, 10 final master's projects in Human Nutrition and Dietetics Mater (UCM) since 2016, one final master's project in Research in Biomedical Sciences Master's Degree (UCM), one final degree project with a master's mention at the School of Medicine (UCM) and one final degree project at the Nutrition and Dietetics Faculty (UCM). I´m member of the UCM Research Group "Chronobiological molecular Mechanisms", that I lead together with Mª Pilar Fernández Mateos since 2017 to 2021.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

- Rios-Lugo MJ, Cano P, **Jiménez-Ortega V**, Fernandez-Mateos MP, Scacchi PA, Cardinali DP, Esquifino AI. (2010) "Melatonin effect on plasma adiponectin, leptin, insulin, glucose, triglycerides and cholesterol in normal and high-fat fed rats". Journal of Pineal Research; 49:342-348.

- Cano P, Cardinali DP, **Jiménez-Ortega V**, Ríos-Lugo MJ, Scacchi PA, Esquifino AI. (2010) "Effect of a high-fat diet on 24-hour pattern in expression of prolactin, redox pathway enzyme and clock genes in the rat adenohypophysis". Open Obesity Journal, 2:1-9.

- Cardinali D, Cano-Barquilla P, **Jiménez-Ortega V**, Esquifino AI (2011). "Melatonin and the Metabolic Syndrome. Physiopathologic And Therapeutical Implications". Neuroendocrinology, 93(3):133-42.

- **Jiménez-Ortega V**, Cano MP, Pagano ES, Fernández-Mateos MP, Esquifino A, Cardinali PD (2012). "Melatonin Supplementation Decreases Prolactin Synthesis and Release in Rat Adenohypophysis. Correlation with Anterior Pituitary Redox State and Circadian Clock Mechanisms". Chronobiology Int.: 29(8):1021-35.

- Fernández-Mateos P, Rios Lugo J, Cano MP, **Jiménez-Ortega V**, Esquifino AI, Larrad A. (2012). "Effect Of Subtotal Colectomy on Body Weight and Food Intake in an Experimental Model of Obesity in Male Wistar Rats". Open Obesity Journal, 4: 51-54.

- Cano Barquilla P, Pagano ES, **Jiménez-Ortega V**, Fernández-Mateos P, Esquifino AI, Cardinali DP (2014). "Melatonin normalizes clinical and biochemical parameters of mild inflammation in diet-induced metabolic syndrome in rats". Journal Pineal Res., 57(3):280-90. 2014.

- Virto L, Cano P, **Jiménez-Ortega V**, Fernández-Mateos P, González J, Esquifino AI, Sanz M (2018). Obesity and Periodontitis. An Experimental Study to Evaluate the Periodontal and Systemic Effects of the Co-Morbidity. J Periodontol. 89(2):176-185.

- Virto L, Haugen HJ, Fernández-Mateos P, Cano P, González J, **Jiménez-Ortega V**, Esquifino AI, Sanz M (2018). Melatonin expression in periodontitis and obesity: An experimental in-vivo investigation. J Periodontal Res.;53(5):825-831.

- Virto L, Cano P, **Jiménez-Ortega V**, Fernández-Mateos P, González J, Haugen HJ, Esquifino AI, Sanz M (2018). Melatonin as adjunctive therapy in the treatment of periodontitis associated with obesity. J Clin Periodontol.; 45(11):1336-1346.

- Perez-Miguelsanz J, **Jiménez-Ortega V**, Cano-Barquilla P, Garaulet M, Esquifino AI, Varela-Moreiras G and Fernández-Mateos P (2021). Early Appearance of Epicardial Adipose Tissue through Human Development. Nutrients, 13, 2906.

- Fernández-Mateos P, Cano-Barquilla P, **Jiménez-Ortega V**, Virto L, Pérez-Miguelsanz J, Esquifino AI (2023). Effect of Melatonin on Redox Enzymes Daily Gene Expression in Perirenal and Subcutaneous Adipose Tissue of a Diet Induced Obesity Model. Int J Mol Sci. 2023 Jan 4;24(2):960.

- Cano-Barquilla, P; **Jiménez-Ortega, V**; Fernández-Mateos, P; Virto, L; Maldonado Bautista, E.; Perez-Miguelsanz, J.; Esquifino, AI (2025). Daily Lipolysis Gene Expression in Male Rat Mesenteric Adipose Tissue: Obesity and Melatonin Effects. Int. J. Mol. Sci. 2025, 26, 577.

C.2. Congress

- Póster. Esquifino Parras AI, Cano P, **Jiménez-Ortega V**, Ríos-Lugo MJ, Fernández-Mateos MP, Cardinali PD. Effect of high-fat diet on 24-hour pattern in gene expression of prolactin, redox pathway enzymes genes in the rat anterior pituitary. 27th Annual Scienctific Meeting of the Obesity Society. 24-28 October, 2009. Washington, DC, USA.

- Póster. Esquifino Parras AI, Ríos-Lugo MJ, Cano P, **Jiménez-Ortega V**, Fernández-Mateos MP, Cardinali PD. Effect of high-fat diet on 24-hour pattern of circulating adipocytokines in rats. 27th Annual Scienctific Meeting of the Obesity Society. 24-28 October, 2009. Washington, DC, USA.

- Póster. Rios-Lugo J, Cano Barquilla P, **Jimenez-Ortega V**, Fernandez-Mateos P, Esquifino Parras AI. Melatonin Treatment Prevents Obesity-Induced Changes in 24 h. Variations of NPY and POMC Gene Expression at the Mediobasal Hypothalamus in Male Rats. 28th Annual Scientific Meeting of the Obesity Society. 8-12 October. 2010. San Diego, CA, USA.

- Póster. **Jiménez-Ortega V**, Rios-Lugo J, Esquifino Parras AI, Fernández Mateos P. Melatonin Treatment Along with a Hyperlipidic Diet Modifies 24 h. Variations of Pituitary Hormone Secretion. 28th Annual Scientific Meeting of the Obesity Society. 8-12 October. 2010. San Diego, CA, USA.

- Póster. Cano P, Fernández- Mateos MP, **Jiménez-Ortega V**, Spinedi E, Rios Lugo J, Esquifino Parras A. 24-Hour Variation in the Relative Expression of Heme Oxygenase 1 and 2 Genes on Perirenal Fat in Normal and High-Fat-Fed Rats: Effect of Melatonin Treatment. 29th Annual Scientific Meeting of the Obesity Society. 1-5 October. 2011. Orlando, EEUU.

- Póster. Cano P, **Jimenez-Ortega V**, Fernández-Mateos MP, Larrad A., Esquifino A. 24-Hour Variation in the Relative Expression of Inducible and Neural Nitric Oxide Synthase Genes on Perirenal Fat in Normal and High-Fat-Fed Rats: Effect of Melatonin Treatment. 29th Annual Scientific Meeting of the Obesity Society. 1-5 October. 2011. Orlando, EEUU.

- Póster. Fernández-Mateos MP, Esquifino AI, Cano P, **Jiménez-Ortega V**. Effect of subtotal colectomy on body weight and food intake in an experimental model of obesity in male wistar rats. 53 Congreso de la Sociedad Española de Endocrinología. 18-20 May. 2011. Santiago, Spain.

- Póster. Rios J, Cano P, **Jiménez-Ortega V**, Fernández-Mateos P, Esquifino AI. Melatonin and Obesity in male rats: Plasma PYY, Grhelin and Leptin Changes and expression of Leptin receptor at the hypothalamus. 2nd International Congress on Abdominal Obesity. 24-26 February. 2011. Buenos Aires, Argentina.

- Póster. Cano P, **Jiménez-Ortega V**, Rios J, Fernández-Mateos P, Cardinali DP, Esquifino AI. Melatonin and Obesity: Insulin regulatory mechanism. 2nd International Congress on Abdominal Obesity. 24-26 February. 2011. Buenos Aires, Argentina.

- Póster. Rios Lugo J, **Jiménez-Ortega V,** Cano P, Fernández- Mateos MP, Esquifino Parras A. Prevention efficacy of exogenous melatonin for deleterious neuropeptide regulation in obese male rat. ISN-ASN (International Society of Biochemistry-American Society of Biochemistry).20-24 April, 2013. Cancún, Méjico.

- Póster. Fajardo D, **Jiménez-Ortega V**, Cano P, Cano-Gil A, Virto L, Pérez de Miguelsanz J, Esquifino A, Fernández-Mateos P. Efectos de la dieta sobre la expresión génica diaria de las enzimas redox en la grasa subcutánea de la rata macho Wistar. XXII Jornadas de nutrición práctica-XII Congreso internacional de Nutrición, alimentación dietética. 11-12 april. 2018 Madrid, Spain.

- Póster. Fajardo D, **Jimenez-Ortega V**, Caballero P, Cano-Barquilla P, Perez de Miguelsanz MJ, Esquifino AI and Fernandez-Mateos P. Effect of melatonin on the peripheral insulin resistance through its hepatic signaling on a diet induced obesity experimental model. World Congress on Diabetes and Endocrinology. 22-23 of August. 2018. Rome, Italy.

- Póster. Fajardo D, Cano-Barquilla P, Virto Ruiz L, Perez de Miguelsanz MJ, **Jimenez-Ortega V**, Esquifino AI and Fernandez-Mateos P. High fat diet induced obesity and changes mesenteric fat lipolysis. World Congress on Diabetes and Endocrinology. 23-23 of August, 2018. Rome, Italy.

- **Jiménez-Ortega V**, Fajardo D, Virto Ruiz L, Fernández-Mateos P, Pérez-Miguelsanz MJ, Esquifino AI y Cano-Barquilla P. Efecto de la melatonina sobre el metabolismo lipídico diario en grasa mesentérica. XXIV Jornada Internacional de Nutrición Práctica. I Congreso de la Historia de la alimentación. 31 of may, 2019. Madrid. Spain.

C.3. Research projects

- CCG08-UCM/SAL-4188. “Estudio del mecanismo temporal que regula la actividad de los relojes endógenos del eje hipotálamo-hipofisario: Efecto de la exposición a dosis bajas de cadmio”. Proyectos de investigación en el marco del Programa de Creación y Consolidación de Grupos de Investigación Universidad Complutense-Comunidad de Madrid. IP: Vanesa Jiménez Ortega. 01/01/2009 al 31/12/2009. **Investigador principal**.

- Fundación Médica Mutua Madrileña. “Papel del colon en el mecanismo de adaptación intestinal, en ratas obesas sometidas a by-pass biliopancreático”. 01.10.2009-30.09.2012. Investigador.

- PR26/16-20317. “Contribución del metabolismo lipídico a la resistencia hepática a la insulina asociada a obesidad”. Convocatoria UCM-Santander 2016. IP: Ana I Esquifino Parras. 22/12/2016 al 30/07/2018. Investigador.

- PR87/19-22548. “Abordaje de sensores de nutrientes (PASK/AMPK) para controlar la obesidad. Implicaciones del tejido adiposo y los genes del reloj”. Proyectos de Investigación Santander-UCM. Convocatoria 2019. IP.: Mª Carmen Sanz Miguel. 13/12/2019 al 12/09/2021. Investigador.

- Programa de fortalecimiento de la comunidad de Startups basadas en la ciencia de la Comunidad de Madrid. DeepTech Madrid 2025. Fundación Madrid+d. Línea 1.

C.4. TEACHING INNOVATION PROJECTS

- Participation in six educational innovation projects. The last one in force (years 2009, 2010, 2011, 2016, and 2017).