

**Part A. PERSONAL INFORMATION**

CV date

28/04/2022

First and Family name	GONZALEZ, ANTONIO		
Social Security, Passport, ID number	11774048A	Age	52
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0001-8380-0270	
	SCOPUS Author ID (*)	7404578389	
	WoS Researcher ID (*)	C-5428-2018	

(\*) *Optional*

(\*\*) *Mandatory*

**A.1. Current position**

Name of University/Institution	UNIVERSITY OF EXTREMADURA / INSTITUTE OF MOLECULAR PATHOLOGY BIOMARKERS		
Department	DEPARTMENT OF PHYSIOLOGY		
Address and Country	Avenida de las ciencias s/n		
Phone number	+34 927251377	E-mail	<a href="mailto:agmateos@unex.es">agmateos@unex.es</a>
Current position	Professor in Physiology	From	25/06/2019
Key words	Brain; Pancreas; Oxidative stress; Melatonin; Cancer; Neurodegenerative diseases		

**A.2. Education**

PhD, Licensed, Graduate	University	Year
<i>Degree in Veterinary Medicine</i>	<i>Extremadura</i>	1992
<i>PhD in Physiology</i>	<i>Extremadura</i>	1996

**A.3. General indicators of quality of scientific production (see instructions)**

- Research periods (positive evaluation) 4 (last granted in 2016).
- Research periods - Autonomic: 2 (last granted in 2013).
- Director of Doctoral Thesis (in last 10 years): 3
- Publications:

ResearchGate Score: 36,46. [https://www.researchgate.net/profile/Antonio\\_Gonzalez2](https://www.researchgate.net/profile/Antonio_Gonzalez2).

**Part B. CV SUMMARY (max. 3500 characters, including spaces)**

Degree in Veterinary Medicine at the University of Extremadura (1992), Doctoral Degree in 1996. Distinguished student (honor award) 1992, Extraordinary Prize of Degree (honor award) 1993, Extraordinary Prize of Doctorate (honor award) 1996.

Research fellow 1993-1996 (granted by the Spanish Ministry of Education). Doctoral training. Title of Thesis: Ionic mechanisms in the stimulus-secretion coupling in the pancreatic secretion.

At the present I have a Professorship in Physiology full position in the Department of Physiology of the University of Extremadura, in Cáceres (Spain). Since 2004 I am also Vice-Dean for Academic Management at the Faculty of Veterinary of the University of Extremadura (continued activity). Since 2018 I am Coordinator of the research group "Biology and Cellular Communication" (CTS051).

Languages: Spanish, English (fluent), German (level G III DAAD), Italian (ground level).

I have performed several stays in research centers abroad: School of Applied Biology-University of Central Lancashire (Preston, UK, one month, 1993), Medical School-University of Newcastle Upon Tyne (Newcastle Upon Tyne, UK, one month, 1994), and Physiology Institute II-University of Saarland (Homburg/Saar, Germany, one month, 1996). Additionally, I have performed postdoctoral stays at the Physiology Institute II-University of Saarland (Homburg/Saar, Germany, two years, 1997-1998 and one month in 2003).

My lines of research are focused onto the study of stimulus-response coupling in the exocrine pancreas and hippocampus, and calcium homeostasis and oxidative stress study in non-excitabile cells. During the last 12 years my research has focused onto the role of melatonin on cell physiology in cancer and non-cancer cells.



I have collaborated in six research projects (beginning of my research activity) and I have participated as researcher in 35 research projects, being principal investigator in 15 of them. I have supervised 36 students in their research projects, which include Doctoral Thesis, Final Projects of Carrier, Final Degree Projects and Final Master Projects.

I am awarded the professional habilitation for the use of animals in research (RD 1201/2005), my research activity has been positively evaluated from 1993 until 2016 (4 periods of 6 years each one) and also my teaching activity (1993-2017; 5 periods of 5 years each one).

I am Executive Editor for Journal of Physiology and Biochemistry, Editorial board for Frontiers in Physiology (Frontiers in Physics and Frontiers in Cell and Developmental Biology, Section Membrane Physiology and Membrane Biophysics), Guest Editor for International Journal of Molecular Sciences, Board Member for The Open Clinical Chemistry Journal (until 2015), Editorial Board for Insight – Biochemistry (PsicoMed Publishing Pte. Ltd. Singapore) and Editorial Team for SRL Gastroenterology & Hepatology. I am also reviewer for a high number (more than 100) of international Scientific Journals.

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

#### **C.1. Publications** (see instructions).

-Estaras M, Gonzalez-Portillo MR, Fernandez-Bermejo M, Mateos JM, Vara D, Blanco-Fernandez G, Lopez-Guerra D, Roncero V, Salido GM, **González A.** Melatonin Induces Apoptosis and Modulates Cyclin Expression and MAPK Phosphorylation in Pancreatic Stellate Cells Subjected to Hypoxia. *Int J Mol Sci.* 2021 May 24;22(11):5555. **Q1. I.F.: 5.923.**

-Estaras M, Gonzalez-Portillo MR, Martinez R, Garcia A, Estevez M, Fernandez-Bermejo M, Mateos JM, Vara D, Blanco-Fernández G, Lopez-Guerra D, Roncero V, Salido GM, **Gonzalez A.** Melatonin Modulates the Antioxidant Defenses and the Expression of Proinflammatory Mediators in Pancreatic Stellate Cells Subjected to Hypoxia. *Antioxidants (Basel).* 2021 Apr 8;10(4):577. **Q1. I.F.: 6.312.**

-Estaras M, Ameer FZ, Estévez M, Díaz-Velasco S, **Gonzalez A.** The lysine derivative amino adipic acid, a biomarker of protein oxidation and diabetes-risk, induces production of reactive oxygen species and impairs trypsin secretion in mouse pancreatic acinar cells. *Food Chem Toxicol.* 2020 Jul 30;145:111594. **Q1. I.F.: 4.6.**

-Díaz-Velasco S, **González A,** Peña FJ, Estévez M. Noxious effects of selected food-occurring oxidized amino acids on differentiated CACO-2 intestinal human cells. *Food Chem Toxicol.* 2020 Oct;144:111650. **Q1. I.F.: 4.6.**

-Estaras M, Martinez-Morcillo S, García A, Martinez R, Estevez M, Perez-Lopez M, Miguez MP, Fernandez-Bermejo M, Mateos JM, Vara D, Blanco G, Lopez D, Roncero V, Salido GM, **Gonzalez A.** Pancreatic stellate cells exhibit adaptation to oxidative stress evoked by hypoxia. *Biol Cell.* 2020 Jul 6. 112, 280-299. **Q2. I.F.:3.506.**

-**Gonzalez A,** Estaras M, Martinez-Morcillo S, Martinez R, García A, Estévez M, Santofimia-Castaño P, Tapia JA, Moreno N, Pérez-López M, Míguez MP, Blanco-Fernández G, Lopez-Guerra D, Fernandez-Bermejo M, Mateos JM, Vara D, Roncero V, Salido GM. Melatonin modulates red-ox state and decreases viability of rat pancreatic stellate cells. *Sci Rep.* 2020 Apr 14;10(1):6352. **Q1. I.F.: 3.998.**

-Estaras M, Ameer FZ, Roncero V, Fernandez-Bermejo M, Blanco G, Lopez D, Mateos JM, Salido GM, **Gonzalez A.** The melatonin receptor antagonist luzindole induces Ca<sup>2+</sup> mobilization, reactive oxygen species generation and impairs trypsin secretion in mouse pancreatic acinar cells. *Biochim Biophys Acta Gen Subj.* 2019 Nov;1863(11):129407. **Q2. I.F.: 3.422.**

-Santofimia-Castaño P, Lan W, Bintz J, Gayet O, Carrier A, Lomberk G, Neira JL, **González A,** Urrutia R, Soubeyran P, Iovanna J. Inactivation of NUPR1 promotes cell death by coupling ER-stress responses with necrosis. *Sci Rep.* 2018 Nov 19;8(1):16999. **Q1. I.F.: 3.998.**

-Ameer FZ, Mehedi N, Kheroua O, Saïdi D, Salido GM, **Gonzalez A.** Sulfanilic acid increases intracellular free-calcium concentration, induces reactive oxygen species production and impairs trypsin secretion in pancreatic AR42J cells. *Food Chem Toxicol.* 2018 Jul 3;120:71-80. **Q1. I.F.: 3.977.**

-Santofimia-Castaño P, Izquierdo-Alvarez A, de la Casa-Resino I, Martinez-Ruiz A, Perez-Lopez M, Portilla JC, Salido GM, **Gonzalez A.** Ebselen alters cellular oxidative status and



induces endoplasmic reticulum stress in rat hippocampal astrocytes. *Toxicology* 2016 357: 74-84. **Q1. IF: 3.582.**

-Santofimia-Castaño P, Ruy DC, Garcia-Sanchez L, Jimenez-Blasco D, Fernandez-Bermejo M, Bolaños JP, Salido GM and **Gonzalez A.** Melatonin induces the expression of Nrf2-regulated antioxidant enzymes via PKC and Ca<sup>2+</sup> influx activation in mouse pancreatic acinar cells. *Free Radical Biology & Medicine* (2015) 87:226-236. **Q1. IF: 5.736.**

-Jimenez-Blasco D, Santofimia-Castaño P, **Gonzalez A,** Almeida A and Bolaños JP. Astrocyte NMDA receptors activity sustains neuronal survival through a Cdk5-Nrf2 pathway. *Cell Death and Differentiation* (2015) 22:1877-1889. **Q1. IF: 8.38.**

-**Gonzalez A,** del Castillo-Vaquero A, Miro-Moran A, Tapia JA, Salido GM. Melatonin reduces pancreatic tumor cell viability by altering mitochondrial physiology. *Journal of Pineal Research* (2011), 50 (3), 250-260. **Q1. IF: 5.79.**

-Castillo-Vaquero A, Salido GM, **Gonzalez A.** Melatonin induces calcium release from CCK-8- and thapsigargin-sensitive cytosolic stores in pancreatic AR42J cells. *Journal of Pineal Research* (2010), 49 (3), 256-263. **Q1. IF: 5.86.**

## C.2. Research projects.

- Title: SISTEMA DE ANÁLISIS DE MICROSCOPIA CONFOCAL DE ALTA RESOLUCIÓN. Funding source: EQC2019 Adquisición Equipamiento C-T (PLAN ESTATAL I+D+I 2017-2020) (EQC2019-005660-P). 2019-2021. FEDER: 591.599,00 € **PI: Dr. Antonio González.** Number of researchers: 24.

- Title: ESTACIÓN DE DETECCIÓN Y CARACTERIZACIÓN DE AMPLIO ESPECTRO DE BIOMOLÉCULAS. Funding source: EQC2019 (PLAN ESTATAL I+D+I 2017-2020) (EQC2019-006153-P). Year 2019. FEDER: 102.141,00 € **PI: Dr. José Antonio Tapia.** Number of researchers: 10.

- Title: CITOMETRÍA DE FLUJO MULTIPARAMÉTRICA 5 LÁSERES CON HUELLA ESPECTRAL. Funding source: EQC2019 Adquisición Equipamiento C-T (PLAN ESTATAL I+D+I 2017-2020) (EQC2019-005393-P). Year 2019. FEDER: 350.000,00 € **PI: Dr. Fernando J. Peña.** Number of researchers: 12.

- Title: Estación de detección para amplio espectro de biomarcadores. Funding source: EQC2018-P Adquisición Equipamiento C-T. (Plan estatal I+D+I 2017-2020) (EQC2018-004646-P). Year 2018. Cuantía de la subvención (FEDER): 115.924,00 € **PI: Dr. D. Antonio González.** Number of researchers: 52.

-Title: Caracterización de los efectos de la melatonina sobre la fisiología de las células estrelladas del páncreas: un estudio de fibrosis pancreática. Funding Source: Ministerio de Economía y Competitividad (BFU2016-79259-R). From 30/12/2016 to 31/12/2020. (FEDER): 133.100,00 € **PI: Dr. Antonio González.** Number of researchers: 6.

-Title: "Implicación de las células estrelladas del páncreas en las patologías que afectan a la glándula. Efectos de la melatonina". Funding Source: Consejería de Economía e Infraestructuras–Comunidad Autónoma de Extremadura (IB16006). From 03/06/2017 to 30/11/2020. (FEDER): 132972,40 € **PI: Dr. Antonio González.** Number of researchers: 6.

-Title: Actualización de sistema de análisis de imagen FICEL. Funding Source: Ministerio de Economía y Competitividad (UNEX13-1E-1608). 2015. (FEDER): 21296 € **PI: Dr. Antonio González.** Number of researchers: 22

-Title: Estudio de las acciones de los antioxidantes naturales en los elementos de respuesta frente al estrés oxidativo y su papel en la proliferación celular en el sistema nervioso central Funding Source: Regional Plan of Research (PRIS10014). 2011. Awarded: 21100 € **PI: Dr. Antonio González.** Number of researchers: 3

-Title: "Estudio de las acciones de los antioxidantes naturales frente a la carcinogénesis pancreática". Funding Source: Consejería de Economía, Comercio e Innovación – Junta de Extremadura (PRI08-A018). From 2008 to 2011. Awarded: 24959 € **PI: Dr. Antonio González.** Number of researchers: 3