



Part A. PERSONAL INI	FORMATION CV date		08/12/2020	
First and Family name	MONICA GONZALEZ SANCHEZ			
Social Security, Passport, ID number	20258546P	Age	47	
Researcher codes	Open Researcher and Contributor ID (ORCID**)		0000-0001-7788- 3516	
	SCOPUS Author ID (*)			
	WoS Researcher ID (*)		M-5705-2016	
(*) Optional (**) Mandatory A.1. Current position				
Name of	COMPLUTENSE UNIVERSITY OF MADRID			

University/Institution				
Department	GENETICS, PHYSIOLOGY AND MICROBIOLOGY			
Address and Country	JOSE ANTONIO NOVAIS 2. MADRID. SPAIN			
Phone number	+34 600501360 E-mail mgs@cm.es			
Current position	PROFESOR CONTRATADO DOCTOR	From	OCT 2013	
Key words				

A.2. Education

PhD, Licensed, Graduate	University	Year
BIOLOGY PhD	COMPLUTENSE UNIVERSITY OF MADRID	2004
BIOLOGY LICENSED	COMPLUTENSE UNIVERSITY OF MADRID	1997

A.3. General indicators of quality of scientific production

Six-year periods of Research Approved (Sexenios): 2 Total Publications 23 (Q1): 9 Citations 466 (average /year 20,26

H index: 13

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

My researching expertise is based on the field of Cytogenetics and has been developed mostly in the Faculty of Biology at the Universidad Complutense de Madrid, more specifically in the Department of Genetics, Physiology and Microbiology, to which I currently belong as a professor "contratado doctor", with 22 years of research experience and 14 years of teaching experience.

The results of my researching work have produced 23 scientific publications that have been published in specific journals in the field of Genetics, such as Heredity, Genetics, Genome, Chromosome Research and Cytogenetic and Genome Research, of Biochemistry and Cell Biology, such as Plant Cell, Mitochondrion or Redox Biology, and related to Gerontology, such as Experimental Gerontology.

I have been a member of 13 competitive research projects (DGICYT-MEC, Santander- Complutense, Universidad Complutense-Comunidad de Madrid, Banco Santander Central Hispano), receiving continuous funding throughout my research career.

I have participated in 35 contributions in the form of oral communication and posters in national and international conferences such as Congress of the Spanish Society of Genetics (SEG), Seminars on Cytogenetics (SEG), International Chromosome Conference, B-Chromosome Conference, European Meiosis Meeting (EMBO), International APLE-APLF Congress, International Symposium on The Pathophysiology of Reactive Oxygen and Nitrogen Species or Mitochondria, Apoptosis And Cancer (EMBO), XIV Congress of the Spanish Society of Anti-Aging and Longevity Medicine (SEMAL) and at the Scientific Conference of the Immunology Society of the Community of Madrid (SICAM).

I have participated as a reviewer of scientific articles in the journals Chromosome Research and Genetics and Molecular Biology and I have been part of the organizing committee of the 12th International Chromosome Conference and IV Congress of the Spanish Society of Genetics. The publication González-Sanchez et al., 2003 has received



special recognition by being highlighted in nature.com together with articles from Nature and Nature Genetics.

I have been a member of several doctoral courts and I have directed and tutored 12 research projects leading to the completion of studies: Degree in Biology (UAM), Degree in Biology (UCM), Master in Teacher Training (UCM) and Interuniversity Master in Genetics and Cell Biology (UAM, UCM and UAH).

Currently, I belong to the UCM research group "Aging, Neuroimmunology and Nutrition" led by Dra. Monica de la Fuente, where I am involved in the analysis, the cellular changes that occur during immunosenescence and the identifications of biomarker for biological age from a cytogenetic approach.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

1-PUERTAS MJ AND **GONZÁLEZ-SÁNCHEZ M**. 2020. INSERTIONS OF MITOCHONDRIAL DNA INTO THE NUCLEUS—EFFECTS AND ROLE IN CELL EVOLUTION. GENOME 63: 365–374

2- GONZALEZ-BERMUDEZ B, KOBAYASHI H, NAVARRETE A,.... PLAZA GR (**5**/10) 2020. SINGLE-CELL BIOPHYSICAL STUDY REVEALS DEFORMABILITY AND INTERNAL ORDERING RELATIONSHIP IN T CELLS. SOFT MATTER 16: 5669-5678

3-LANZAS P, PERFECTTI F, GARRIDO-RAMOS M, RUIZ-REJON C, **GONZALEZ-SANCHEZ M**, PUERTAS MJ, CAMACHO JPM 2018. LONG-TERM MONITORING OF A SAME POPULATION IN PROSPERO AUTUMNALE (ASPARAGACEAE) ALLOWS WITNESSING B CHROMOSOME INVASION AND NEUTRALIZATION EVOLUTION. SOCIETY FOR THE STUDY OF EVOLUTION 72-6:1216-1224.

4- VIDA C, MARTÍNEZ DE TODA I, CRUCES J, GARRIDO A, **GONZALEZ-SANCHEZ M**, DE LA FUENTE M 2017. ROLE OF MACROPHAGES IN AGE-RELATED OXIDATIVE STRESS AND LIPOFUSCIN. REDOX BIOLOGY 12: 423-437.

5- MARTÍNEZ-CISUELO V, GÓMEZ J, GARCÍA-JUNCEDA I,BARJA G (**8**/10) 2016. RAPAMYCIN REVERSES AGE-RELATED INCREASES IN MITOCHONDRIAL ROS PRODUCTION AT COMPLEX I, OXIDATIVE STRESS, ACCUMULATION OF mtDNA FRAGMENTS INSIDE NUCLEAR DNA AND LIPOFUSCIN LEVEL IN LIVER OF MIDDLE-AGED MICE. EXPERIMENTAL GERONTOLOGY. 83:130-138.

6- **GONZÁLEZ-SÁNCHEZ M**, HEREDIA V, DIEZ M, PUERTAS MJ. 2014. RYE B CHROMOSOME INFLUENCE THE DYNAMICS OF HISTONE H3 METHYLATION DURING MICROGAMETOGENESIS. CYTOGENETIC AND GENOME RESEARCH. 143: 189-199.

7- BANAEI-MOGHADDAM A M, SCHUBERT V, KUMKE K ,.... HOUBEN A. (**8**/14) 2012. NONDISJUNCTION IN FAVOUR OF A CHROMOSOME: THE MECHANISM OF RYE B CHROMOSOME DRIVE DURING POLLEN MITOSIS. PLANT CELL. 24-10: 4124-4134.

8- CUACOS M, GONZÁLEZ-GARCÍA M, **GONZÁLEZ-SÁNCHEZ M**, PUERTAS MJ, VEGA JM. 2011. ACTIVATION OF RYE 5RL NEOCENTROMERE BY AN ORGANOPHOSPHATE PESTICIDE. CYTOGENETIC AND GENOME RESEARCH. 134: 51-162.

9-GONZÁLEZ-GARCÍA M; CUACOS M; **GONZÁLEZ-SÁNCHEZ M**; PUERTAS MJ; VEGA JM. 2011. PAINTING THE RYE GENOME WITH GENOME-SPECIFIC SEQUENCES. GENOME. 54, pp.555-564.



10- CARO, P, GOMEZ, J, ARDUINI, A,.... BARJA, G (**4**/10) 2010. MITOCHONDRIAL DNA SEQUENCES ARE PRESENT INSIDE NUCLEAR DNA IN RAT LIVER AND INCREASE WITH AGE. MITOCHONDRION. 10-5: 479-486.

C.2. Research projects

1. DEFORMABILIDAD DE LINFOCITOS T COMO BIOMARCADOR MECANICO DE INMUNOSENESCENCIA Y DESARROLLO DE TECNOLOGIA PARA SU APLICACION CLINICA DGICYT-MEC. IP: GUSTAVO RAMON PLAZA BAONZA (UNIVERSIDAD POLITÉCNICA DE MADRID) 12/2016-12/2019. 50.000 €.

2. CENTRÓMEROS Y CROMOSOMAS ARTIFICIALES DE CEREALES DGICYT-MEC. IP: JUAN MANUEL VEGA (UNIVERSIDAD COMPLUTENSE DE MADRID). 12/2011-06/2016. 85.000 €.

3. ANÁLISIS CITOGENÉTICO Y GENÓMICO UNIVERSIDAD COMPLUTENSE DE MADRID- BANCO SANTANDER. (UNIVERSIDAD COMPLUTENSE DE MADRID). 11/2014- 11/2015. 2.163 €.

4. GENÓMICA FUNCIONAL DE LOS CENTRÓMEROS DE CEREALES COMUNIDAD DE MADRID-UCM. IP: JUAN MANUEL VEGA (UNIVERSIDAD COMPLUTENSE DE MADRID). 01/01/2011- 31/12/2011. 15.000 €.

5. ANÁLISIS ESTRUCTURAL Y FUNCIONAL DE LOS CENTRÓMEROS DE CEREALES DGICYT-MEC. IP: JUAN MANUEL VEGA (UNIVERSIDAD COMPLUTENSE DE MADRID) 01/10/2006- 01/10/2010. 40.000 €

C.3. Contracts, technological or transfer merits

C.4. Patents

C.5, C.6, C.7...

C.5. Communications in international conferences

1- CELLMECH 2019 Milan, ITALY ORAL COMMUNICATION

2- 3RD B- CHROMOSOME CONFERENCE 2014 GATERSLEBEN (GERMANY) POSTER

3- 2ND INTERNATIONAL APLE-APLF CONGRESS: POLLEN BIOTECHNOLOGY, DIVERSITY AND FUNCTION IN A CHANGING ENVIRONMENT 2013 MADRID ORAL COMMUNICATION

4- INTERNATIONAL SYMPOSIUM ON THE PATHOPHYSIOLOGY OF REACTIVE OXYGEN AND NITROGEN SPECIES 2010 SALAMANCA, SPAIN PÓSTER

5- 6 TH PLANT SCIENCE STUDENT CONFERENCE 2010 IPK GATERSLEBEN (ALEMANIA) POSTER