

Parte A. DATOS PERSONALES

Fecha del CVA	02-10-2019
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Nombre y apellidos	Acaimo GONZÁLEZ REYES		
DNI/NIE/pasaporte	29086308w	Edad	54
Núm. identificación del investigador	Researcher ID	L-1993-2014	
	Código Orcid	0000-0003-3048-0968	

A.1. Situación profesional actual

Organismo	CSIC		
Dpto./Centro	Centro Andaluz de Biología del Desarrollo		
Dirección	Campus de la Univ. Pablo de Olavide. Ctra. De Utrera Km. 1		
Teléfono	954 348672	correo electrónico	agonrey@upo.es
Categoría profesional	Professor of Research, CSIC	Fecha inicio	14/09/ 2018
Espec. cód. UNESCO	240901		
Palabras clave	<i>Drosophila</i> , Developmental Biology, Genetics, Cell Biology, Stem cells		

A.2. Formación académica (título, institución, fecha)

Licenciatura/Grado/Doctorado	Universidad	Año
Licenciado en Bioquímica y Biología Molecular	Universidad Autónoma de Madrid	Julio 1987
Doctor en Biología	Universidad Autónoma de Madrid	Abril 1991

A.3. Indicadores generales de calidad de la producción científica (véanse instrucciones)

Number of research “sexenios” (date of last one granted): 5 (31/12/2017)

Supervised PhD Thesis since 2014: 1 + 1 (expected date of PhD viva: Dec. 2019). 3 more in progress.

Total citations (WOS): 2074

Average number of citations/ year in the last 5 years (not including the current year): 86

Number of publications in the 75% (or above) percentile (Q1): 32

H index: 21

Parte B. RESUMEN LIBRE DEL CURRÍCULUM (máximo 3500 caracteres, incluyendo espacios en blanco)

During my professional life, I have followed a number of objectives always related to the field of Developmental Biology using *Drosophila melanogaster* as a model system. The experimental strategies and the biological questions at stake have been varied and they encompass traditional genetic approaches to proteomic, transcriptomic, biophysical techniques and advanced live imaging, in an attempt to address questions related to the biology of stem cells, morphogenesis or axis determination. To follow is a brief synopsis of my professional path so far.

I did a PhD thesis and a short post-doc in Prof. Ginés Morata’s laboratory in Madrid (1988-1992; CBM, Centre for Molecular Biology). I studied the role of homeotic genes in embryonic patterning. We defined the phenomenon of “phenotypic suppression” (later termed “posterior prevalence” in vertebrates) by which posteriorly expressed homeotic genes suppressed the phenotypic consequences of anterior ones. We also demonstrated the existence of transvection in the promoter of the Ubx gene.

In my postdoctoral period in the laboratory of Professor Daniel St Johnston (1993-1998; Wellcome/ CR-UK Institute, Univ. of Cambridge, UK) I started using the ovary to study oocyte determination, the origin of anterior-posterior and dorsal-ventral polarity in *Drosophila* and epithelial patterning utilising the follicular epithelium.

I started running my own laboratory in Cambridge, at the LMB-MRC (1998-2000, Laboratory of Molecular Biology-Medical Research Council). After obtaining a permanent position in the Spanish National Research Council (CSIC), I joined the Institute of Parasitology and Biomedicine (2000-2004, Granada). My interests during these years were placed in the molecular characterisation of two genes involved in oocyte determination, which turned out to be required for DNA repair in meiosis, thus linking oocyte determination and progression through meiosis. We also studied several aspects essential for oocyte

determination at the cell biological level. Finally, we started the analyses of the biology of germline stem cells present in the ovary, a theme that we are still pursuing.

After moving to the newly created CABD in 2004, we focussed our efforts on a number of aspects related (1) to stem cell behaviour and their interaction with the surrounding microenvironment and (2) to epithelial morphogenesis from a cell biological point of view. As such, we have utilised genomic, proteomic and biophysical techniques to try and understand different aspects of niche cell-stem cell communication, the role of the extra cellular matrix in niche activity and tissue homeostasis, and the genetic logic behind stem cell maintenance. As for epithelial morphogenesis, we have dissected the role of integrins in preventing the hyperplastic growth of the follicular epithelium and have determined a critical role for the extra cellular matrix in the regulation of epithelial migration during egg formation. We are applying modelling and mathematical analysis to our research on epithelial morphogenesis.

I have acted as Vice-Director (2003-2007) and Director (2007-2011) of the CABD. I was elected member of the EMBO Young Investigator programme (EMBO-YIP) in 2001.

Publication record: <https://www.ncbi.nlm.nih.gov/pubmed/?term=gonzalez-reyes+a+AND+drosophila>

Parte C. MÉRITOS MÁS RELEVANTES

(2014-present); A: Original Article R: Review.

C.1. Publicaciones (selected publications)

1 Rojas-Ríos, P. and González-Reyes, A. (2014) The plasticity of stem cell niches: a general property behind tissue homeostasis and repair. *Stem Cells*, 32, 852–859. DOI: 10.1002/stem.1621 (IF 6.5) CLAVE: R

2 Rosales-Nieves, Alicia E. and González-Reyes, A. (2014) Genetics and mechanisms of ovarian cancer: parallels between *Drosophila* and humans. *Seminars in Cell & Dev. Biology*, 28, 104-109. DOI: 10.1016/j.semcdb.2014.03.031 (IF 6.3) CLAVE: R

3 Pearson, J., Zurita, F., Tomás-Gallardo, L., Díaz-Torres, A., Díaz de la Loza, M. C., Franze, K., Martín-Bermudo, M. D. and González-Reyes, A. (2016) ECM-regulator timp is required for stem cell niche organization and cyst production in the *Drosophila* ovary. *PLoS Genet* 12(1): e1005763. doi:10.1371/journal.pgen.1005763. (IF 7.5) CLAVE: A

4 Valencia-Expósito, A., Grosheva, I., Míguez, D. G., González-Reyes, A.* and Martín-Bermudo, M. D.* (2016) Myosin Light Chain Phosphatase regulates basal actomyosin oscillations during morphogenesis. *Nat. Comms.* doi: 10.1038/ncomms10746 (* authors for correspondence and equal contribution). (IF 11.5) CLAVE: A

5 Castelli-Gair Hombría, J. and González-Reyes, A. (2016) Cell signalling: combining pathways for diversification and reproducibility. *Current Biology*, 26, R1153-R1155. (IF 9) CLAVE: R

6 Díaz de la Loza, M. C., Díaz-Torres, A., Zurita, F., Rosales-Nieves, A. E., Moeendarbary, E., Franze, K., Martín-Bermudo, M. D. * and González-Reyes, A.* (2017) Laminin levels regulate tissue migration and Anterior-Posterior polarity during egg morphogenesis in *Drosophila*. *Cell Reports*, 20, 211-223. doi: 10.1016/j.celrep.2017.06.031 (* authors for correspondence and equal contribution). (IF 8.9) CLAVE: A

(7) Lobo-Pecellín, M., Marín-Menguiano, M. and González-Reyes, A. (2018) *mastermind* regulates niche ageing independently of the *Notch* pathway in the *Drosophila* ovary. *Open Biology*, in press. CLAVE: A

C.2. Proyectos

1- Project title: Análisis Genético, Molecular y Celular de las células troncales y del epitelio follicular del ovario de *Drosophila*

Funding Agency: Ministerio de Economía y Competitividad. Dirección General de Investigación Científica y Técnica. PN-Biología Fundamental y de Sistemas (área de Biología Molecular y Celular). Proyecto BFU2012-35446

Participant organisation: CSIC

From: 01.01.2013 To: 31.12.2015 Amount granted: 230.000 EUR

Principal Investigator: Acaimo Gonzalez Reyes

Number researchers participating in the project: 4

2- Project title: Análisis Genético, Molecular y Celular de las células troncales del ovario de *Drosophila*

Funding Agency: Ministerio de Economía y Competitividad. Dirección General de Investigación Científica y Técnica. PN-Biología Fundamental y de Sistemas (área de Biología Molecular y Celular). Proyecto BFU2015-65372

Participant organisation: CSIC

From: 01.01.2016 To: 31.12.2018 Amount granted: 248.000 EUR

Principal Investigator: Acaimo Gonzalez Reyes

Number researchers participating in the project: 3

3- Project title: Adquisición de un sistema de PCR Digital para la cuantificación precisa de DNAs diana.

Funding Agency: MINECO. AYUDAS A INFRAESTRUCTURAS Y EQUIPAMIENTO CIENTÍFICO-TÉCNICO. SUBPROGRAMA ESTATAL DE INFRAESTRUCTURAS CIENTÍFICAS Y TÉCNICAS Y EQUIPAMIENTO (PLAN ESTATAL I+D+I 2013-2016)

Proyecto: UNPO15-CE-3372

Participant organisations: Univ. Pablo de Olavide

From: 2016 Amount granted: 126.358 EUR

Principal Investigator: Acaimo González Reyes

Number researchers participating in the project: 19

4- Project title: Decision making in Cell Collectives (DMC2).

Funding Agency: MINECO. María de Maeztu Programme.

Proyecto: MdM-2016-0687

Participant organisations: CSIC

From: July 2016-June 2020 Amount granted: 2.000.000 EUR

Principal Investigator: J. Luis Gómez-Skarmeta (AGR as participating PI)

Number researchers participating in the project: 10

5- Project title: Análisis genético, molecular y celular del nicho de células troncales del ovario y de la morfogénesis epitelial de *Drosophila*.

Funding Agency: Ministerio de Univ., Ciencia e Investigación. Agencia Estatal de Investigación. Programa Estatal de Generación del Conocimiento. Área de Biociencias y Biotecnología (subárea de Biología Molecular y Celular). Proyecto: PGC2018-097115-B-I00

Participant organisation: CSIC

From: 01.01.2019 To: 31.12.2021 Amount granted: 190.500 EUR

Principal Investigator: Acaimo Gonzalez Reyes

Number researchers participating in the project: 3

C.3. Contratos

C.4. Patentes

C.5

MAJOR COMMITTEE ASSIGNMENTS

- 2000-Present** Grant reviewer for the Spanish Ministry of Science, the Biotechnology and Biological Sciences Research Council (BBSRC; UK), the National Science Foundation (NSF; USA), the Foundation for Science and Technology (Portugal), Agencia Nacional de Promoción Científica y Tecnológica (Argentina), la Agence Nationale de la Recherche (ANR; Francia).
- 2000-Present** *Ad hoc* reviewer for Development, Journal of Cell Science, Nature Cell Biology, Current Biology, Developmental Biology, Developmental Dynamics, Mechanisms of Development, Experimental Cell Research, Genetics, EMBO Reports, International Journal of Developmental Biology, Molecular and Cellular Biology, PLoS Genet., PLoS 1.
- 2012** External expert. Evaluation Committee of the Jacques Monod Institute (Paris).
- 2014-2018** Collaborator. Agencia Estatal de Investigación. Programa de Biología Fundamental (BFU), Subprograma de Biología Molecular y Celular (BMC).

C.6, C.7... Otros

Since 2014 I have supervised 2 PhD Thesis, one of them finished and defended in 2015 and another one about to have the examination (expected date of *viva* December 2019).

At present, there are 3 PhD students in my laboratory, one of them holding a FPI fellowship (started in Oct. 2016) and the other two enjoying FPU fellowships (starting dates Oct. 2016 and Oct. 2018).