Fecha del CVA	22/01/2025

Parte A. DATOS PERSONALES

Nombre	David		
Apellidos	Foronda Álvaro		
Sexo	No Contesta	Fecha de Nacimiento	
DNI/NIE/Pasaporte			
URL Web			
Dirección Email			
Open Researcher and Contributor ID (ORCID)			

A.1. Situación profesional actual

Puesto	Profesor Asociado		
Fecha inicio	2021		
Organismo / Institución	Universidad Europea de Madrid		
Departamento / Centro			
País		Teléfono	
Palabras clave	240991 - Genética del Desarrollo		

A.2. Situación profesional anterior (incluye interrupciones en la carrera investigadora - indicar meses totales, según texto convocatoria-)

Periodo	Puesto / Institución / País
2020 - 2021	Tit Sup de actividades técnicas y profesionales / Consejo Superior de Investigaciones Científicas
2019 - 2019	Tit Sup de actividades técnicas y profesionales / Consejo Superior de Investigaciones Científicas
2018 - 2018	Tit Sup de actividades técnicas y profesionales / Consejo Superior de Investigaciones Científicas
2017 - 2018	Tit Sup de actividades técnicas y profesionales / Consejo Superior de Investigaciones Científicas
2021 -	Contratado posdoctoral / Centro de Biología Molecular Severo Ochoa

A.3. Formación académica

Grado/Master/Tesis	Universidad / País	Año
Biología molecular y genética	Universidad Autónoma de Madrid	2007
Licenciado en Ciencias Sección Biología	Universidad Autónoma de Madrid	2001

Parte B. RESUMEN DEL CV

My professional profile is that of a researcher and University Professor, with the primary focus of my research being the genetic control of morphogenesis, particularly the shaping of animal organs during development. I completed my doctoral thesis (read in 2007) under the supervision of Professor Ernesto Sánchez-Herrero at the Universidad Autónoma de Madrid, investigating the functional differences of isoforms of the Drosophila Hox gene Abdominal-B. Throughout my thesis and subsequent years, I worked on the specification of different organs comprising the terminalia and the posterior part of the abdomen as distinct morphogenetic models.

During my predoctoral period, I was awarded competitive grants, including the Collaboration Grant with the Departments of UAM (2000), the Madri+D Grant (2002), and the University Teaching Staff Training Grant (FPU) (2003).

In 2008, I completed a stay in Dr. Enrique Martín-Blanco's laboratory, where I had the opportunity to learn techniques for in vivo specimen filming through partial specimen dissection, ex vivo explant culture, and confocal microscopy coupled with time-lapse imaging techniques.

Since then, I have further developed these techniques to tailor them to my work requirements, creating new specific protocols and some of them being published.

For my postdoctoral work (2010-2014) at Professor Stephen Cohen's laboratory at the Institute of Molecular and Cell Biology (IMCB) in Singapore, I conducted research on the genetic control of cell differentiation in the intestine stem cells mediated by microRNAs. During those years, I developed techniques for knockout mutant generation, cloning and transgenesis of 'sponges' and microRNA sensors, as well as absolute and relative quantification of gene expression, particularly using RT-PCR techniques for mRNAs and microRNAs. I also expanded my expertise by working with totipotent cells and genetic control of differentiation and proliferation of stem cells in contexts of metabolic stress and in relation to tumoral progression.

The initial part of my postdoctoral tenure was covered by a competitive contract granted by the Ministry of Science and Innovation (2010-2012) through the Spanish Foundation for Science and Technology (FECYT).

From 2014 to 2018, I worked with the NGO Drosafrica organizing workshops and postgraduate courses in various sub-Saharan countries, including Uganda, Kenya and Nigeria, and other African countries, like Tunisia. Associated tasks included managing equipment transport, setting up on-site laboratories, purchasing and arranging materials, coordinating schedules, and control and justification of the budgets, as well as actively participating in some of the workshops as a lecturer. Particularly relevant, in 2017, during one of the workshops conducted in Ibadan, Nigeria, I participated in the session where the first pan-African Science Society working with Drosophila as an animal model was created.

Since 2018, I have been collaborating as a postdoctoral researcher at CBMSO with Professor Ernesto Sánchez-Herrero, focusing on the genetics controlling the development of the internal genitalia of Drosophila, which is a great example of a gene network ruling the acquisition of the organ shape and controlling processes such as collective cell migration and coordinated tissue growth. Concurrently, I have been holding a teaching position as a Professor of Physiology, Biochemistry, and Genetics for the Medicine degree at the European University of Madrid, specifically in the subjects of Biochemistry and Genetics, and a position as Honorary Professor of Genetics for the Biology degree at the Universidad Autónoma de Madrid. Additionally, I have tutored 7 consecutive Bachelor's theses (TFG) students in these years.

Throughout my career from 2007 to the present, I have participated in 9 research projects, with 8 of them funded by the `Plan Nacional' for Scientific Research and the remaining one funded by the Agency for Science, Technology, and Research of Singapore (A'STAR). I have authored 15 articles, contributed to several chapters in specialized books, supervised various Bachelor's theses, participated and contributed to more than 10 international scientific conferences, and delivered several Master's courses, accumulating over 700 accredited hours of university teaching in the Medicine degree, specifically in Biochemistry and Genetics.

Moreover, in collaboration with the coordinators of the 1st-year subjects at the University, I developed a lecture series on the Scientific Method and Medicine, which has been incorporated into the syllabus of the Medicine degree and recognized with CTS credits.

Currently I am developing a radio program in podcast format aimed at disseminating knowledge in Genetics and general Biology. This program will be broadcast through the University's communication channels, contributing to the promotion of scientific literacy among the broader public.

Parte C. LISTADO DE APORTACIONES MÁS RELEVANTES

C.1. Publicaciones más importantes en libros y revistas con “peer review” y conferencias

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores. Si aplica, indique el número de citaciones

1 **Artículo científico**. Curt JR.; Martin P.; Foronda D; et al; Sánchez-Herrero E.2025. Ambivalent partnership of the Drosophila posterior class Hox protein Abdominal-B with Extradenticle and Homothorax. PLOS Genetics. Public Library of Science. 21-1.
2 **Artículo científico**. Foronda D.2025. Tracking Abdominal-B Expression and Function in the Fly Internal Reproductive System by Explants Imaging. Methods in Molecular Biology. Humana Press. 2889, pp.25-37.
3 **Artículo científico**. Alonso R.; Foronda D.; Córdoba S.; Felipe-Cordero D.; Baonza A.; David G; Carlos. 2024. Cell proliferation and Notch signaling coordinate the formation of epithelial folds in the Drosophila leg. Development. The Company of Biologists. 151-8.
4 **Artículo científico**. Romero-Pozuelo J.; Foronda D; Martín P.; Hudry B; Merabet S.; Graba Y.; Sánchez-Herrero E.2019. Cooperation of axial and sex specific information controls Drosophila female genitalia growth by regulating the Decapentaplegic pathway. Developmental Biology. Society for Developmental Biology. 454-2, pp.145-155.
5 **Artículo científico**. De Las Heras JM.; García-Cortrés C.; Foronda D; Pastor-Pareja JC.; Sashidara LS; Sánchez-Herrero E.2018. The Drosophila Hox gene Ultrabithorax controls appendage shape by regulating extracellular matrix dynamics. Development. The Company of Biologists. 145-13.
6 **Artículo científico**. Foronda D.; Curt JR.; Martín P.; Sánchez-Herrero E.2015. The elimination of an adult segment by the Hox gene Abdominal-B. Mechanisms of Development. International Society of Developmental Biology. 138-2, pp.210-217.
7 **Artículo científico**. Foronda D.; Weng R.; Verma P.; Chen YW.; Cohen S.2014. Coordination of insulin and Notch pathway activities by microRNA miR-305 mediates adaptive homeostasis in the intestinal stem cells of the Drosophila gut. Genes and Development. Cold Spring Harbor Laboratory Press. 28-21, pp.2421-2431.
8 **Artículo científico**. de Navas L; Foronda D.; Del Saz D; Sánchez-Herrero E. Ernesto. 2014. A genetic strategy to obtain P-Gal4 elements in the Drosophila Hox genes. Methods in Molecular Biology. Humana Press. 1196, pp.49-57.
9 **Artículo científico**. Foronda D; Martín P.; Sánchez-Herrero E.2012. Drosophila Hox and sex-determination genes control segment elimination through EGFR and extramacrochetae activity. PLOS Genetics. Public Library of Science. 8-8.
10 **Artículo científico**. Foronda D.; de Navas LF; Garaulet DL; Sánchez-Herrero E.2009. Function and specificity of Hox genes.International Journal of Developmental Biology. EHU Press. 53-8-10, pp.1404-1419.
11 **Artículo científico**. Foronda D; Pérez-Garijo A.; Martín FA. 2009. Dpp of posterior origin patterns the proximal region of the wing. Mechanisms of Development. The International Society of Developmental Biologists. 126-3-4, pp.99-106.
12 **Artículo científico**. Sánchez-Herrero E.; Garaulet DL.; Foronda D.; Calleja M.2008. Polycomb-dependent Ultrabithorax Hox gene silencing induced by high Ultrabithorax levels in Drosophila. Development. The Company of Biologists. 135-19, pp.3219-3228.
13 **Artículo científico**. De Navas L.; Foronda D.; Suzanne M.; Sánchez-Herrero E.2006. A simple and efficient method to identify replacements of P-lacZ by P-Gal4 lines allows obtaining Gal4 insertions in the bithorax complex of Drosophila. Mechanisms of Development. The International Society of Developmental Biologists. 123-11, pp.860-867.
14 **Artículo científico**. Foronda D.; Estrada B.; De Navas L.; Sánchez-Herrero E.2006. Requirement of Abdominal-A and Abdominal-B in the developing genitalia of Drosophila breaks the posterior downregulation rule. Development. The Company of Biologists. 133-1, pp.117-127.

C.2. Congresos

1 Sánchez-Herrero E.; Olivera I.; Prieto >N.; Foronda D.. Coordination of Testis and Genital Disc Development mediated by Abd-B.. 1st Drosophila Spanish Meeting. Drosospain. 2024.

2 Sánchez-Herrero E.; Foronda D.; Delas Heras J.; García-Cortés C.. Regulation of haltere shape by the Hox gene Ultrabithorax.. 26th European Drosophila Research Conference. EPFL. 2019.

3 Sánchez-Herrero E.; Graba Y.; Hudry B.; Merabet S.; Curt JR.; Martín P.; Foronda D.; Romero-Pozuelo J.. Size control in the female genital disc.. 1st Spanish Conference on the Molecular, Cellular and Developmental Biology of Drosophila.. Aiguablava-Begur. 2012.

4 SánchezHerreroE.; Graba Y.; Merabet S.; Hudry B.; MartínP.; Foronda D.; Romero-Pozuelo J.. Growth repression of the A9 primordiumof the female genital disc is controlled by the concerted action of AbdB, Hth/Exd and Dsx.. 22nd European Drosophila Research Conference. European Drosophila Society. 2011.

5 Sánchez-Herrero E.; MartínP.; Romero-PozueloJ.; Foronda D.. Abdominal-B, homothorax and dsx control of growth in the Drosophila genitalia. 16th International Society of Developmental Biologists Congress. International Society of Developmental Biologists. 2009.

6 Sánchez-Herrero E.; Calleja M.; Foronda D.; Garaulet DL.. Polycomb-dependent Drosophila Ultrabithorax Hox gene silencing induced by high Ultrabithorax levels.. Joint Meeting of the British & Spanish Developmental Biology Societies. SEBD, BSDB. 2008.

7 Sánchez-Herrero E.; de Navas L.; Estrada B.; Foronda D.. Function of abdominal-A and Abdominal-B in the development of Drosophila genitalia. 47th Annual Drosophila Research Conference.. Genetics Society of America. 2006.

8 Sánchez-Herrrero E.; de Navas L; Estrada B.; Foronda D.. abdominal-A, Abdominal-B m and Abdominal-B r are required for the development of different regions of Drosophila genitalia and bear crossregulatory interactions opposite to those of the embryonic epidermis. International Workshop "Upstream and downstream of Hox genes". EMBO. 2005.