CV Date	15/05/2025

Part A. PERSONAL INFORMATION

First Name	David Alejandro		
Family Name	Juan Sopeña		
Sex	Male	Date of Birth	30/09/1975
ID number Social Security, Passport	11823255J		
URL Web			
Email Address	da.juan@cnb.csic.es		
Open Researcher and Contributor ID (ORCID)	0000-0003-1912-9667		

A.1. Current position

Job Title	Científico Titular		
Starting date	2024		
Institution	Consejo Superior de Investigaciones Científicas		
Department / Centre	Systems Biology Department / Centro Nacional de Biotecnología		
Country		Phone Number	
Keywords	Evolutionary biology; Computational biology; Environmental genomics; Epigenetics; Genomics; Cancer		

A.3. Education

Degree/Master/PhD	University / Country	Year
Molecular Biology	Universidad Autónoma de Madrid / Spain	2016
Bachelor's degree in Chemistry (sp. Biochemistry)	Universidad Complutense de Madrid	2000

Part B. CV SUMMARY

I recently joined the Spanish National Centre for Biotechnology (CNB-CSIC) as a Científico Titular to lead the Functional and Comparative Multiomics group. Our research integrates computational and experimental approaches to unravel how evolutionary changes in the genome, epigenome, transcriptome, and proteome shape the diversity of biological traits across humans, non-human primates, and other mammals. My work focuses on key questions in evolution, co-evolution, cell differentiation, biodiversity, and disease.

Since 2003, I have contributed to a total of 58 publications, including 47 articles (Nature, Science, Cell, Nat. Immunol, Genome Res., PNAS, Nat. Comm., etc), 3 reviews, and 6 book chapters that have been cited 4,548 times according to Scopus (8,002 according to Google Scholar). My H-index is 32 according to Scopus (38 according to Google Scholar).

As a mentor, I have supervised five PhD theses and three TFMs to completion, with three more PhD theses expected to conclude in the coming years.

Part C. RELEVANT ACCOMPLISHMENTS

C.1. Most important publications in national or international peer-reviewed journals, books and conferences

AC: corresponding author. (nº x / nº y): position / total authors. If applicable, indicate the number of citations

1 **Scientific paper**. Ferrandez-Peral, Luis; Zhan, Xiaoyu; Alvarez-Estape, Marina; et al; Zhang, Guojie; (13/14) Juan, David (AC). 2022. Transcriptome innovations in primates revealed by single-molecule long-read sequencing. Genome Research. Cold Spring Harbor Laboratory. pp.gr.276395.121-gr.276395.121.

2 **Scientific paper**. García-Pérez, Raquel; Esteller-Cucala, Paula; Mas, Glòria; et al; Marquès-Bonet, Tomàs; (12/13) Juan, David (AC). 2021. Epigenomic profiling of primate lymphoblastoid cell lines reveals the evolutionary patterns of epigenetic activities in gene regulatory architectures. Nature communications. 12-1, pp.3116-3116. ISSN 2041-1723.

3 **Scientific paper**. Serres-Armero, Aitor; Davis, Brian W.; Povolotskaya, Inna S.; Morcillo-Suarez, Carlos; Plassais, Jocelyn; (6/8) Juan, David (AC); Ostrander, Elaine A.; Marques-Bonet, Tomas. 2021. Copy number variation underlies complex phenotypes in domestic dog breeds and other canids. Genome Research.

4 **Scientific paper**. Marina Brasó-Vives; Inna S Povolotskaya; Diego A Hartasánchez; et al; (13/13) David Juan (AC). 2020. Copy number variants and fixed duplications among 198 rhesus macaques (Macaca mulatta). PLoS Genetics. 16-5, pp.e1008742.

5 **Scientific paper**. Heredia-Genestar, José María; Marqués-Bonet, Tomás; (3/4) Juan, David (AC); Navarro, Arcadi. 2020. Extreme differences between human germline and tumor mutation densities are driven by ancestral human-specific deviations. Nature Communications. 11-2512.

6 **Bibliographic review**. Juan, David; Santpera, Gabriel; Kelley, Joanna L.; Cornejo, Omar E.; Marques-Bonet, Tomas. 2023. Current advances in primate genomics: novel approaches for understanding evolution and disease. Nature Reviews Genetics. 24, pp.314-331.

C.2. Conferences and meetings

1 David. Epigenomic profiling of primate LCLs reveals the evolutionary patterns of epigenetic activities in gene regulatory architectures. The GECKO Conference. Epigenetic Inheritance Across Species. Gametic Epigenetics Consortium Against Obesity. 2021. Participatory - oral communication. Conference.

2 Raquel García Pérez; Gloria Mas Martin; Martin Kuhlwilm; et al; David Juan. Recent evolution of the epigenetic regulatory landscape in human and other primates. XIV Symposium on Bioinformatics. UGR, Genyo, BSC, INB. 2018. Spain. Participatory - oral communication. Conference.

3 Juan D; Perner; Carrillo-De Santa Pau E; et al; Valencia A. Epigenomic Co-localization and Co-evolution Reveal a Key Role for 5hmC as a Communication Hub in the Chromatin Network of ESCs. European Conference in Computational Biology. DTL, BioSB, VU, TU Delft. 2016. United States of America. Participatory - oral communication. Conference.

4 David Juan; Juliane Perner; Enrique Carrillo-De Santa Pau; et al; Alfonso Valencia. Epigenomic Co-localization and Co-evolution Reveal a Key Role for 5hmC as a Communication Hub in the Chromatin Network of ESCs. XIII Symposium on Bioinformatics. UPV, INB. 2016. Spain. Participatory - oral communication. Conference.

5 Enrique Carrillo-De Santa Pau; David Juan; Felipe Were; Vera Pancaldi; Daniel Rico; Alfonso Valencia. Searching for the chromatin determinants of hematopoiesis. XIII Symposium on Bioinformatics. UPV, INB. 2016. Spain. 'Participatory - poster. Conference.

C.3. Research projects and contracts

1 **Project**. EUR2023-143475, Molecular strategies involved in Peto's paradox in great apes. Plan Estatal de Investigación Científica, Técnica y de Innovación - Proyectos Europa Excelencia. Juan Sopeña PI. (Centro Nacional de Biotecnología). 11/01/2024-01/12/2025. 100.000 €. Principal investigator. I