

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Ignacio		
Family name	Flor Parra		

A.1. Current position

Position	Profesor Titular de Universidad / Senior Lecturer in Biology		
Initial date	20/11/2021		
Institution	Universidad Pablo de Olavide		
Department/Center	Biología Molecular e Ingeniería Bioquímica	Facultad de Ciencias Experimentales	

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2020-2021	Profesor Contratado Doctor/Spain
2019-2020	Profesor Ayudante Doctor/Spain
2017-2019	Profesor Sustituto Interino/Spain
2015-2017	Investigador Talent Hub/Spain
2011-2015	Investigador Fulbright/EEUU
2007-2011	Investigador Juan de la Cierva/Spain

A.3. Education

PhD	University	Year
PhD in Molecular Biology	Universidad Autónoma de Madrid	2007
Bachelor in Biology	Universidad de Sevilla	2002

(Include all the necessary rows)

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Ignacio Flor Parra studied Biology at the University of Sevilla (1997-2002) and specialized in Molecular Biology and Genetics. He joined the Genetics Department fascinated about the molecular mechanisms that govern metabolic pathways and the cell cycle machinery. He moved to Madrid (2002-2007) to join Dr. Perez-Martin lab who was leading the research on cell cycle regulation in *Ustilago maydis*. The aim of his thesis was the identification of new virulence-specific factors connected with the cell cycle control identifying two key proteins involved in the regulation of the cell cycle and the pathogenic development and published two first-author papers in "The Plant Cell" and contributed as author in a "PLoS Pathogens" paper. Ignacio had also the opportunity to work at the Max-Planck Institute in Marburg in Dr. Jörg Kämper lab and at the CABD in Dr. Juan Jimenez lab.

Postdoctoral stage:

-2007-2011 At the CABD as a Juan de la Cierva investigator under the supervision of Dr. Rafael Daga. The major focus was to understand how cells regulate the cell cycle and cell division when shape is perturbed. Flor-Parra developed a protocol for gently removing the cell wall and characterized the cell cycle and division of these unshaped cells (published in "Yeast" and "Biology Open" respectively).

-2011-2015 Ignacio joined Dr. Fred Chang lab at Columbia University with a Fulbright fellowship to work on cell size regulation publishing a first author paper in the journal "eLife". In the last two years he developed a systems-wide approach to understand the role of +TIP proteins as a group, in the regulation of microtubules, essential elements in the cell cycle and morphogenesis of all eukaryotic cells. These studies in fission yeast provide an important quantitative framework for future studies on microtubule regulation. He was involved in other projects and collaborations and was supervising and mentoring undergrads and graduate students.

-2015-2021 Dr. Flor-Parra held an "Andalucía Talent Hub" research grant awarded by the European Research Council and the Andalusian government from 2015-2017 working at the Andalusian Center for Developmental Biology studying the role of XMAP215 in the regulation of microtubule nucleation and the mechanisms of meiotic spindle disassembly. He published these results in the journals "Current Biology" and "Cell Reports" respectively and contributed actively to other papers in the lab (MBoC, Cell Reports, BMC Biology)

-2022-present Ignacio left R. Daga's lab in 2021 after a productive interaction (8 papers) to continue his work in an independent laboratory at the CABD. He is focused on cell cycle regulation including cell size regulation and microtubule nucleation and dynamics, research lines he initiated during his postdoctoral stage at Columbia University.

Leadership and funding: I have published two papers as **corresponding author** (Current Biology 2018, and MBoC 2019), both of them in the study of MT nucleation and MT dynamics. As **Principal Investigator**, I have directed a grant from the Junta de Andalucía (Talent Hub) and two competitive projects granted by the University Pablo de Olavide.

Competitive Fellowships and Contracts:

All my career has been funded by public competitive fellowships (Undergrad: Beca de Colaboración, Predoc: FPI, Postdoc: Juan de la Cierva, Fulbright/MEC, Marie Curie/TalentHub):

2015-2017 Marie Curie Cofund/ Andalucía Talent Hub
2011-2014 Postdoctoral Fulbright Award/MEC
2010 Contrato investigación Universidad Pablo de Olavide
2007-2010 Juan de la Cierva
2005 Ayudas estancias breves Max-Plank Alemania
2004 Ayudas estancias breves Sevilla
2003-2007 Beca de Formación de Personal Investigador (FPI)
2002 Beca de Colaboración Ministerio de Educación

Contributions to society, dissemination activities, public entities, institutions and other end-users of the research

Participation in two major events organized by the University Pablo de Olavide and promoted by the European Commission are 'The European Researchers' Night' and 'The week of the Science'. Ignacio is also involved in activities organized by different organizations or institutions to bring science closer to different social collectives such as high school students, people in jail (ONG-Solidarios).

Contributions to the training of young researchers and research activities

24 Directions of end-of degree project; 16 Academic Supervision of internships in companies; 16 Direction of end-of masters project; 2 Supervision of Graduate Students at Columbia University (PhD at Stanford and PhD at Columbia University); Supervision of PhD Students at Pablo de Olavide University; Reviewer for the Journal Microbiological Research; Associate Professor Tribunal 2; PhD Thesis tribunals 5; End-of-degree tribunals 24; End-of-Masters Tribunal 10

Other contributions

13 Certificate obtained in 2019

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

17 publications including *Current Biology* (2), *Cell Reports* (2), *Elife*, *Plant Cell* (2) or *BMC Biology*. 8 First Author and 2 Corresponding author.

1: **Flor-Parra I**, Sabido-Bozo S, Ikeda A, Hanaoka K, Aguilera-Romero A, Funato K, Muñiz M, Lucena R. (2021). The Ceramide Synthase Subunit Lac1 Regulates Cell Growth and Size in Fission Yeast. **Int J Mol Sci**. Dec 28;23(1):303.

2: Facchetti G, Knapp B, **Flor-Parra I**, Chang F, Howard M. (2019) Reprogramming Cdr2-Dependent Geometry-Based Cell Size Control in Fission Yeast. **Curr Biol**. Jan 21;29(2):350-358.e4.

3: **Flor-Parra I***, Iglesias-Romero AB, Chang F. (2018) The XMAP215 Ortholog Alp14 Promotes Microtubule Nucleation in Fission Yeast. **Curr Biol**. 2018 Jun 4;28(11):1681-1691.e4

4: **Flor-Parra I**, Iglesias-Romero AB, Salas-Pino S, Lucena R, Jimenez J, Daga RR. (2018) Importin α and vNEBD Control Meiotic Spindle Disassembly in Fission Yeast. **Cell Rep**. 2018 Apr 24;23(4):933-941.

5: Pan KZ, Saunders TE, **Flor-Parra I**, Howard M, Chang F. (2014) Cortical regulation of cell size by a sizer cdr2p. **Elife**. Mar 18;3:e02040.

6: **Flor-Parra I**, Bernal M, Zhurinsky J, Daga RR. (2014) Cell migration and division in amoeboid-like fission yeast. **Biol Open**. 2014 Jan 15;3(1):108-15.

7: **Flor-Parra I**, Zhurinsky J, Bernal M, Gallardo P, Daga RR. (2014) A Lallzyme MMX- based rapid method for fission yeast protoplast preparation. **Yeast**. Feb;31(2):61-6.

8: Heimel K, Scherer M, Vranes M, (...) **Flor-Parra I**, Kämper J (9/10). (2010) The transcription factor Rbf1 is the master regulator for b-mating type controlled pathogenic development in *Ustilago maydis*. **PLoS Pathog**. Aug 5;6(8):e1001035.

9: **Flor-Parra I**, Castillo-Lluva S, Pérez-Martín J. (2007) Polar growth in the infectious hyphae of the phytopathogen *Ustilago maydis* depends on a virulence- specific cyclin. **Plant Cell**. Oct;19(10):3280-96.

10: **Flor-Parra I**, Vranes M, Kämper J, Pérez-Martín J. (2006) Biz1, a zinc finger protein required for plant invasion by *Ustilago maydis*, regulates the levels of a mitotic cyclin. **Plant Cell**. Sep;18(9):2369-87.

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

24 international/10 national, 17 Oral Presentations (7 International)/17 Posters (11 International)

1- Iglesias AB; Flor-Parra I; Soto T.; Cansado J; Daga R. MAPKs signaling regulate spindle assembly checkpoint robustness through Slp1-Cdc20 degradation. THE 10TH INTERNATIONAL FISSION YEAST MEETING. EMBO. 2019. España. Ponencia Invitada
2- Sánchez-Molina A; Expósito M; Flor-Parra I; Salas-Pino S; Daga RR. Nuclear envelope remodelling during mitotic spindle disassembly in the fission yeast *Schizosaccharomyces pombe*. THE 10TH INTERNATIONAL FISSION YEAST MEETING. EMBO. 2019. Póster

- 3- Iglesias AB; Flor-Parra I; Soto T.; Cansado J; Daga R. IMPLICATIONS OF THE MAPK PMK1 IN THE SPINDLE ASSEMBLY CHECKPOINT. THE 9TH INTERNATIONAL FISSION YEAST MEETING. Canada. 2017. Póster
- 4- Iglesias AB; Flor-Parra I; Soto T.; Cansado J; Daga R. IMPLICATIONS OF THE MAPK PMK1 IN THE SPINDLE ASSEMBLY CHECKPOINT. THE 9TH INTERNATIONAL FISSION YEAST MEETING. Canada. 2017. Ponencia oral
- 5- Flor-Parra I.; Chang F. The XMAP215 Ortholog Alp14 Promotes Microtubule Nucleation in Fission Yeast. Plant and Microbial Cytoskeleton. Gordon Research Conferences. 2016. Estados Unidos de América. Póster
- 6- Iglesias AB; Flor-Parra I; Soto T.; Cansado J; Daga R. Fine-tune regulation of Mitotic Checkpoint by MAP kinase Pmk1. 8th International fission yeast meeting- Osaka University. 2015. Japón. Póster.
- 7- Flor-Parra I.; Chang F. The XMAP215 Ortholog Alp14 Promotes Microtubule Nucleation in Fission Yeast. 8th International fission yeast meeting (PERIODICO). Osaka University. 2013. Japón. Ponencia oral invitada
- 8- Flor Parra I.; Pan K.; Ko PJ; Chang F. Microtubule regulation by +TIP proteins in fission yeast. Plant and Microbial Cytoskeleton. Gordon Research Conferences. 2014. Estados Unidos de América. Póster.
- 9- Flor Parra I.; Pan K.; Ko PJ; Chang F. A systems analysis of microtubule regulation by +TIP proteins in fission yeast. Microtubules: Structure, Regulation and Functions. EMBO. 2014. Alemania.
- 10- Flor Parra I.; Pan K.; Ko PJ; Chang F. A systems analysis of microtubule regulation by +TIP proteins in fission yeast. Microtubules: Experimental and Theoretical Perspectives. University of Warwick. 2014. Reino Unido.

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

As Principal Investigator:

1. Ayudas puente para la concurrencia al plan estatal DE I+D+I. Plan Propio Universidad Pablo de Olavide. **Investigador Principal**. 01/01/2024-31-12-2024
2. **ANÁLISIS MUTACIONAL DE SITIOS PUTATIVOS DE FOSFORILACIÓN EN EL COMPONENTE ESENCIAL DEL COMPLEJO GAMMA TUBULINA ALP4 Y SU RELEVANCIA EN LA DINÁMICA DE MICROTÚBULOS**. Ayudas para el Desarrollo de Líneas de Investigación Propias PP12023-00118-001. **Investigador Principal**. 01/07/2023-30/06/2024
3. Papel de Alp14/XMAP215 en la nucleación de microtúbulos (Junta de Andalucía-TalentHub). 01/03/2015-28/02/2017. **Investigador principal**.

As member of main Research Team:

- 1- Función Esencial del Factor de Splicing Cwf15 en el mantenimiento de la Estabilidad Genómica. Ref: UPO-1381219. FEDER Andalucía 2014-2020. 01/07/2021-30/06/2023.
- 2- Arquitectura y mecánica nuclear en la levadura de fisión. Plan Nacional. 2019-2021. 142.901€. Investigador.
- 3- RO1-GM056836. Assembly and Placement of the Cell Division Ring Fred Chang. (Columbia University). 01/01/2012 - 31/12/2015 545.000\$
- 4- RO1-GM069670, Microtubule Organization and Nuclear Positioning Instituto de Salud Carlos III. RO1. Fred Chang. (Columbia University). 01/02/2010-31/01/2014. 760.000\$
- 5- División en levaduras. Un modelo funcional eucarionte. Plan Nacional CICYT. (Universidad Pablo de Olavide). 01/01/2009-31/12/2012. 150.000€.
- 6- Control de la polaridad celular: Implicaciones en diferenciación y cáncer. Plan Andaluz de Investigación. Proyectos de Excelencia. (Universidad Pablo de Olavide). 01/12/2009-01/12/2012. 237.500€.