



CURRICULUM VITAE (CVA)

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

Part A. PERSONAL INFORMATION

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|--|--|---|--|
| First name | José Manuel | | |
| Family name | Pérez Pérez | Birth date | |
| Gender | Male | URL Web | |
| ID number | Not shown | http://arolab.edu.umh.es/ | |
| e-mail | jmperez@umh.es | B-4247-2011 | |
| Open Researcher and Contributor ID (ORCID) | | 0000-0003-2848-4919 | |

A.1. Current position

| | | | |
|-------------------|---|------------|--|
| Position | Catedrático de Universidad | | |
| Initial date | 14/06/2019 | | |
| Institution | Universidad Miguel Hernández de Elche (UMH) | | |
| Department/Center | Instituto de Bioingeniería (IB) | | |
| Country | Spain | Phone num. | |
| Key words | plant development, hormonal signalling, functional genomics | | |

A.2. Previous positions (research activity interruptions, art. 45.2.c))

| Period | Position, Institution, Country |
|-----------|--|
| 2019-2009 | Profesor Titular, UMH, Spain |
| 2009-2009 | Profesor Contratado Doctor, UMH, Spain |
| 2009-2006 | Contratado postdoctoral “Juan de la Cierva”, UMH & IBMCP CSIC-UPV, Spain |
| 2006-2004 | Contratado postdoctoral “Marie Curie”, Utrecht University, The Netherlands |
| 2003-2001 | Ayudante de Universidad, UMH, Spain |

A.3. Education

| PhD, Licensed, Graduate | University, Country | Year |
|-------------------------|--------------------------------|------|
| Doctor | UMH, Spain | 2003 |
| Licenciado en Biología | Universidad de Alicante, Spain | 1997 |

Part B. CV SUMMARY

Career path. I was *Ayudante de Universidad* (2001-03), “Marie Curie” postdoctoral researcher at the Utrecht University (The Netherlands, 2004-06), “Juan de la Cierva” postdoctoral researcher (2006-09), and *Profesor Contratado Doctor* (2009) at the UMH. I was appointed as *Profesor Titular* in 2009 and I am *Catedrático de Universidad* since 2019.

Research summary. My research activity began in 1998. During my PhD and under the supervision of Profs. José Luis Micol and María Rosa Ponce at the IB-UMH, I carried out the positional cloning and functional characterization of two *ultracurvata* mutants of *Arabidopsis thaliana*, involved in brassinosteroid signalling and in the regulation of auxin transport, respectively (Pérez-Pérez *et al.* 2004; Pérez-Pérez *et al.* 2002). I also contributed there to the genetic analysis of natural variation in leaf architecture (Juenger *et al.* 2005; Pérez-Pérez *et al.* 2002). Between 2004 and 2009 I did two postdoctoral stages. In the first one, at the laboratory of Prof. Ben Scheres (Utrecht University, The Netherlands), I contributed to determine the function of the RETINOBLASTOMA RELATED (RBR) protein in the specification of totipotent cells in the Arabidopsis root meristem (Perilli *et al.* 2013; Wildwater *et al.* 2005) and I used clonal analysis to determine the function of the APC/C complex during plant development (Pérez-Pérez *et al.* 2008; Serralbo *et al.* 2006). During my second postdoc in the laboratory of Prof. José Luis Micol (UMH), I contributed to the development of a phenotyping platform in Arabidopsis (Wilson-Sánchez *et al.* 2014; Pérez-Pérez *et al.* 2011) and to the cloning and functional

characterization of genes involved in leaf development (Mateo-Bonmatí *et al.*, 2018; Muñoz-Nortes *et al.* 2017a; 2017b; Pérez-Pérez *et al.* 2013; Ferrández-Ayela *et al.* 2013; Esteve-Bruna *et al.* 2013; Pérez-Pérez *et al.* 2012; Horiguchi *et al.* 2011; Mollá-Morales *et al.* 2011; Pérez-Pérez *et al.* 2010).

Principal Investigator (PI). In January 2012, I started an independent research group at the IB-UMH aimed for the understanding of *de novo* plant organogenesis. In [my laboratory](#), we are studying adventitious root formation using *Arabidopsis thaliana* and tomato as model systems. We are following a genetical genomics approach to determine the gene networks involved in organ regeneration from differentiated cells and to clarify the molecular basis of the signalling crosstalk between different plant hormones in this process. In collaboration with six Agri-Tech companies, we initiated the transfer of our results to the optimization of vegetative propagation in ornamental species.

JCR articles and impact (WoS). The CNEAI granted me three *sexenios de investigación* (1999-2016). Since 2020 I published [70 articles in journals appearing in JCR](#), one book chapter and 140 communications to 73 congresses (29 national and 44 international). 61 of my publications (87.1%) are in journals at the first quartile (Q1) in the categories of *Plant Sciences*, *Genetics & Heredity*, *Biochemistry & Molecular Biology*, *Agronomy* and *Multidisciplinary Sciences*. 31 of them belong to the first decile (D1). I am the main authorship in 43 (30 as a corresponding author and 13 as a first author). My publications have been cited 2,089 times (232 citations in 2022, 217 in 2021, 187 in 2020, 129 in 2019, 146 in 2018, Web of Science [WoS]). My h-index is 23. See [here](#) my publications.

Training capacity. I supervised 11 Master's Theses, and five End of Career and 13 End of Degree Assignments. I also supervised six postdocs, ten graduate students (three ongoing and seven already presented their Doctoral Theses, three of which obtained the Extraordinary Doctorate Award), and six lab technicians. This list includes 23 women and 24 men. My former graduate students and postdocs (eight) reached the following professional categories: three high school teachers and four researchers in private companies.

Other responsibilities. I evaluated projects for the National Agency for Evaluation and Prospective (ANEP; 2015, 2017, 2019, 2021 and 2022), for the Research Foundation Flanders (FWO) of Netherlands and Belgium (2016, 2018-20), for the National Science Center (NSC) of Poland (2018), for the Israeli Government (2019, 2023) and for the Austrian Academy of Sciences (2023). I've been Coordinator of the Doctoral Program of Bioengineering of the UMH (2017-19), and member of the *Comisión A5 de Acreditación de Biología Celular y Molecular* del Programa ACADEMIA de la ANECA (2016-17). I am Associate Editor of *Frontiers in Plant Science* (since 2014), *Plants* (since 2020), and *Scientific Reports* (since 2022).

Part C. RELEVANT MERITS

C.1. Publications (49 since 2012; see <http://arolab.edu.umh.es/publications/> or [Pubmed](#))

1. Larriba E, Sánchez-García AB, Justamante MS, Martínez-Andújar C, Albacete A, Pérez-Pérez JM (2021). Dynamic hormone gradients regulate wound-induced *de novo* organ formation in tomato hypocotyl explants. *International Journal of Molecular Sciences* **22**, 11843. **IF: 5.923 (Q1)**.
2. Larriba E, Sánchez-García AB, Martínez-Andújar C, Albacete A, Pérez-Pérez JM (2021). Tissue-specific metabolic reprogramming during wound induced *de novo* organ formation in tomato hypocotyl explants. *International Journal of Molecular Sciences* **22**, 10112. **IF: 5.923 (Q1)**.
3. Alaguero-Cordovilla A, Sánchez-García AB, Ibáñez S, Albacete A, Cano A, Acosta M, Pérez-Pérez JM (2021). An auxin-mediated regulatory framework for wound-induced adventitious root formation in tomato shoot explants. *Plant and Cell Environment* **44**, 1642. **IF: 7.228 (D1)**.
4. Mhimdi M, Pérez-Pérez JM (2020). Understanding of adventitious root formation: what can we learn from comparative genetics? *Frontiers in Plant Science* **11**, 582020 **IF: 5.753 (D1)**.
5. Alaguero-Cordovilla A, Gran-Gómez FJ, Jadcak P, Mhimdi M, Ibáñez S, Bres C, Just D, Rothan C, Pérez-Pérez JM (2020). A quick protocol for the identification and characterization of early growth mutants in tomato. *Plant Science* **301**, 110673 **IF: 4.729 (Q1)**.
6. Justamante MS, Ibáñez S, Peidro A, Pérez-Pérez JM (2019). A genome-wide association study identifies new loci involved in wound-induced lateral root formation in *Arabidopsis thaliana*. *Frontiers in Plant Science* **10**, 311. **IF: 4.402 (D1)**.

7. Mateo-Bonmatí E, Esteve-Bruna D, Juan-Vicente L, Nadi R, Candela H, Lozano FM, Ponce MR, Pérez-Pérez JM, Micol JL (2018). *INCURVATA11* and *CUPULIFORMIS2* are redundant genes that encode epigenetic machinery components in Arabidopsis. *Plant Cell* **30**, 1596-1616. **IF: 8.726 (D1)**.
8. Cano A, Sánchez-García AB, Albacete A, González-Bayón R, Justamante MS, Ibáñez S, Acosta M, Pérez-Pérez JM (2018). Enhanced conjugation of auxin by GH3 enzymes leads to poor adventitious rooting in carnation stem cuttings. *Frontiers in Plant Science* **9**, 566. **IF: 4.298 (D1)**.
9. Bustillo-Avendaño E, Ibáñez S, Sanz O, Barros JAS, Gude I, Perianez-Rodriguez J, Micol JL, del Pozo JC, Moreno-Risueño MA, Pérez-Pérez JM (2018). Regulation of hormonal control, cell reprogramming and patterning during *de novo* root organogenesis. *Plant Physiology* **176**, 1709-1727. **IF: 6.456 (D1)**.
10. Lup SD, Tian X, Xu J, Pérez-Pérez JM (2016). Wound signaling of regenerative cell reprogramming. *Plant Science* **250**, 178-187. **IF: 3.437 (Q1)**.

C.2. Congress

Since 2012, I have contributed as a PI with 49 communications (10 of them as invited conferences, some of which are listed below) to 22 congresses (12 international and nine national).

1. Larriba E, Sánchez-García AB, Albacete A, Rothan C, Pérez-Pérez JM (2021). Tissue reprogramming during *de novo* organogenesis in tomato hypocotyl explants. Virtual Plant Regeneration Workshop organized by Hebrew University, Israel and RIKEN, Japan. Keynote speaker.
2. Alaguero-Cordovilla A, Ibáñez S, Sánchez-García AB, Cano A, Acosta M, Pérez-Pérez JM (2019). Regulation of hormonal control, cell reprogramming, and patterning during *de novo* root organogenesis. 3rd International Conference on Plant Cells & Tissues In Vitro, Vienna, Austria. Invited conference.
3. Justamante J, Villanova A, Cano EA, Cano A, Acosta M, Pérez-Pérez JM (2019). Integration of phenotypic, metabolomic and genetic data to identify novel regulators of adventitious root development in carnation. International Symposium on Plant Developmental Biology and Molecular Breeding of Tree Species. Beijing, China. Invited conference.
4. Sánchez-García AB, Villanova J, Ruiz H, Ibáñez S, Justamante MS, Pérez-Pérez JM (2015). Novel gene functions required for adventitious root development. XIV Congreso Hispano-Luso de Biología de Plantas, Toledo, Spain. Oral communication.
5. Pérez-Pérez JM, Villanova J, Cano A, Cano EA, van de Rhee M, Passarinho P, Acosta M. (2014). Genetical genomics of adventitious root formation in carnation cuttings. 7th International Symposium on Root Development, Weimar, Germany. Keynote speaker.

C.3. Research projects

Since 2012, I have been PI in 17 projects (one European project, five national projects, nine regional projects and two infrastructure grants). I also participated as investigator in other three projects (one regional project and two infrastructure grants) led by Prof. J.L. Micol (IB-UMH).

1. Estudios de asociación del genoma completo de la arquitectura del sistema radicular en tomate asociados con el uso eficiente de agua y nutrientes (TED2021-132256B-C22). Ministerio de Ciencia e Innovación. PI: José Manuel Pérez Pérez, IB-UMH (01/12/2022 - 30/11/2024).
2. Esclareciendo la función del complejo LSD1 durante la formación de raíces adventicias (PID2021-126840OB-I00). Ministerio de Ciencia e Innovación. PI: José Manuel Pérez Pérez, IB-UMH (01/09/2022 - 31/08/2025).
3. Transferencia de caracteres ancestrales de la raíz al cultivo de tomate para mejorar el uso eficiente de agua y nutrientes (AGROALNEXT/2022/036). Conselleria d'Innovació, Universitats, Ciència i Societat Digital, Generalitat Valenciana. PI: José Manuel Pérez Pérez, IB-UMH (22/04/2022 - 21/04/2025).
4. Plataforma tecnológica de caracterización y micropropagación vegetal (EDGJID/2021/025). Conselleria d'Innovació, Universitats, Ciència i Societat Digital, Generalitat Valenciana. PI: José Manuel Pérez Pérez, IB-UMH (01/11/2021 - 31/12/2022).

5. Reprogramación genética de la pluripotencia celular en tejidos vegetales diferenciados (GRISOLIAP/2019/098). Conselleria d'Innovació, Universitats, Ciència i Societat Digital, Generalitat Valenciana. PI: José Manuel Pérez Pérez, IB-UMH (16/09/2019 - 15/09/2022).
6. Caracterización de nuevos reguladores de la formación de raíces adventicias: función de la demetilasa de histonas LSD1 en la regulación de la respuesta a las auxinas (RTI2018-096505-B-I00). Ministerio de Ciencia, Innovación y Universidades. PI: José Manuel Pérez Pérez, IB-UMH (01/01/2019 - 31/08/2022).
7. Conservación funcional de los genes AINTEGUMENTA-LIKE (AIL) de tomate durante la formación de raíces adventicias (ACIF/2018/220). Conselleria d'Educació, Investigació, Cultura i Sport, Generalitat Valenciana. PI: José Manuel Pérez Pérez, IB-UMH (01/09/2018 - 31/08/2021).
8. Unidad de microscopía de hoja de luz para el estudio de la formación de raíces adventicias en tomate y clavel (IDIFEDER/2018/016). Conselleria d'Educació, Generalitat Valenciana. PI: José Manuel Pérez Pérez, IB-UMH (01/09/2018 - 31/12/2020).
9. Genómica comparada de la formación de raíces adventicias en tomate y clavel (BIO2015-64255-R). Ministerio de Economía y Competitividad. PI: José Manuel Pérez Pérez, IB-UMH (01/01/2016 - 31/12/2018).
10. Requisitos hormonales y genéticos de la formación de raíces adventicias: una aproximación multidisciplinar (AGL2012-33610). Ministerio de Economía y Competitividad. PI: José Manuel Pérez Pérez, IB-UMH (01/01/2013 - 31/12/2015).

C.4. Contracts, technological or transfer merits

Since 2012, I have been PI in 15 research contracts with five AgriTech companies, one University and one Research Centre.

1. Análisis transcriptómico para determinar el efecto fisiológico de dos tratamientos en cinco líneas de tomate (CEBAS1.21T). CEBAS-CSIC. PI: José Manuel Pérez Pérez, IB-UMH (13/12/2021 - 13/12/2022).
2. Análisis transcriptómico para determinar el efecto fisiológico de la adicción de fertilizantes naturales sobre el crecimiento radicular de maíz (ATLANTICA2.21T). Atlántica Agrícola S.A. PI: José Manuel Pérez Pérez, IB-UMH (02/07/2021 - 01/07/2023).
3. Análisis transcriptómico para determinar el efecto fisiológico de la adición de fertilizantes naturales sobre el crecimiento radicular en tomate (ATLANTICA3.20T). Atlántica Agrícola S.A. PI: José Manuel Pérez Pérez, IB-UMH (10/11/2020 - 09/08/2021).
4. Análisis de la expresión génica durante el crecimiento temprano del sistema radicular de maíz (UEX1.19I, UEX1.20D, UEX1.21D). Universidad de Extremadura. PI: José Manuel Pérez Pérez, IB-UMH (09/02/2020 - 30/10/2021).
5. Validación experimental de un bioensayo para la evaluación del efecto fisiológico de fertilizantes naturales sobre la germinación y el crecimiento radicular (ATLANTICA1.19T, ATLANTICA5.19D). Atlántica Agrícola S.A. PI: José Manuel Pérez Pérez, IB-UMH (19/02/2019 - 30/11/2020).
6. Desarrollo experimental de un bioensayo para la evaluación del efecto fisiológico y genético de fertilizantes naturales (IDAINATURE1.18CC). Idai Nature S.L. PI: José Manuel Pérez Pérez, IB-UMH (03/07/2018 - 02/03/2019).
7. Micropropagación de plantas de ágave y de dos portainjertos de frutales de hueso (VIVCANOS1.14I, VIVCANOS2.16D). Viveros Canós S.L. PI: José Manuel Pérez Pérez, IB-UMH (23/02/2016 - 22/02/2017).
8. Optimización del enraizamiento de esquejes en olivo, *Olea europaea* L. y *Polygala myrtifolia* L. (MOMCOR1.15A). Momcor Esquejados, S.L. PI: José Manuel Pérez Pérez, IB-UMH (21/12/2015 - 20/06/2016).
9. Saneamiento de *Ficus carica* y detección y cuantificación de patógenos en el género Ágave y Yucca (VIVCANOS1.16T). Viveros Canós S.L. PI: José Manuel Pérez Pérez, IB-UMH (26/09/2014 - 25/09/2016).
10. CARNOMICS: Design and evaluation of molecular breeding tools for cultivated carnation (*Dianthus caryophyllus* L.) (BARBERET1.12CC). Barberet & Blanc, S.A. PI: José Manuel Pérez Pérez, IB-UMH (23/07/2012 - 22/07/2015).