

**Part A. PERSONAL INFORMATION**

<b>CV date</b>	<b>14/10/2019</b>
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First and Family name	<b>Justo P. Castaño Fuentes</b>		
ID number		Age	
Researcher codes	WoS Researcher ID*	<b>A-7124-2010</b>	
	SCOPUS Author ID*	<b>7005931268</b>	
	ORCID**	<b>0000-0002-3145-7287</b>	

(\*) At least one of these is mandatory (\*\*) Mandatory

**A.1. Current position**

Name of University/ <i>Institution</i>	University of Cordoba (UCO) <i>Maimonides Biomedical Research Institute of Córdoba (IMIBIC)</i>		
Department / <i>Research Group</i>	Department of Cell Biology, Physiology and Immunology <i>Hormones and Cancer Group (GC08) IMIBIC</i>		
Address and Country			
Phone number		E-mail	
Current position	Professor of Cell Biology / PI of GC08 (IMIBIC)	From	14/07/2010
Key words	Neuroendocrine tumor, Alternative Splicing, Pancreatic cancer, Pituitary tumor, Cellular and molecular endocrine oncology, Signaling		

**A.2. Education**

<b>PhD</b>	<b>University</b>	<b>Year</b>
Doctor in Biological Sciences	University of Córdoba (UCO)	1993
Graduate (Licenciado) in Biological Sciences	University of Córdoba (UCO)	1987

**A.3. JCR articles, h Index, thesis supervised: Research Sexennia (Tramos Investigación):** 5 (1989-2019, last 2019). **PhD Thesis:** 10 Supervised (2009-19); 8 Currently under supervision. **SCOPUS (October 2019):** Total JCR articles: 185; Q1 133 (73.9 %), D1 27 (14.6 %). **H-Index:** 34, **Total Citations:** 3801. Average Citation/year: 336,8 (2014-18): 311,292, 322, 383, 376 respectively.

**Part B. CV SUMMARY (max. 3500 characters, including spaces)**

**Justo P. Castaño** (1964) is **Professor of Cell Biology** in the Department of Cell Biology, Physiology and Immunology of the **University of Córdoba (UCO)** and **Head of the Hormones and Cancer group** of the Maimonides Institute for Biomedical Research of Córdoba (**IMIBIC**), Spain. He graduated and obtained his PhD in Biological Sciences at UCO 1993 and completed his postdoctoral training through a **Fulbright Fellowship** at the Medical University of South Carolina (USA). His team investigates the cellular and molecular basis of neuroendocrine tumors (NETs), pituitary tumors, pancreatic adenocarcinoma, and other cancers, exploring the **emerging pathophysiologic and oncogenic role of alternative splicing** and its related mechanisms. His original work on the regulation of pituitary cell types by neuropeptides and their receptors under normal and pathological conditions advanced with the discovery of anomalous variants of somatostatin receptor subtype 5 (SST<sub>5</sub>TMD4) and ghrelin (In1-ghrelin). These variants, which are overexpressed in different types of tumors, prompted his team to investigate in more detail the process of alternative splicing and its regulation in different cancers.

Dr. Castaño has **published 185 indexed scientific articles** (most as senior author) and 65 book chapters and has contributed more than 400 communications to congresses. His current total number of citations is >3800, and his H-index 34. He has obtained **continued competitive funding support from national institutions (MINECO) since 2002**, and has gained also funding support from diverse private companies (IPSEN, Novartis), Foundations and Associations (GETNE, SEEN, SAEDYN). He has registered 8 international patents. He actively participates in national (CIBERobn, TransBioNet), and international (P2Med-MSCA) actions, and activities to disseminate research and scientific advances (FECYT2018-AULEXIDT), showing a clear leadership role. He has received numerous invitations to participate as speaker in national and international meetings: European Society of Endocrinology (ESE), GH&IGFI Society, Spanish Group of Neuroendocrine Tumors (GETNE), European Neuroendocrine Association (ENEA), Spanish Society of Endocrinology and Nutrition (SEEN). He also has acted as a **referee/member of several Spanish and International funding agencies** (ANEP, Carlos III Health Institute, SERGAS, Argentina CONCYT, Dutch Arthritis Association, Cancer Research-UK) and is currently Area Coordinator in the Agency for the Quality of the University System of Castilla y León. He serves as Editor in various

journals (ESENews, Sci Rep, J Clin Med, Front Endocrinol, Endocr Diab Nutr), and has been Senior/board editor previously for J Endocrinol-J Mol Endocrinol J Clin Endocrinol Metab, Mol Cell Endocrinol, Endocrine, J Alzh Dis. He is member of the Executive Committee of the GETNE and SEEN, and serves in the Advisory Board of the ENETS, and its working group on Nuclear Medicine. He has been President of the Iberian Association of Comparative Endocrinology (AIEC) and member and acting Secretary of the ESE Executive Committee. He has Chaired several Program Organizing Committees (ECE2013; SEEN2015; GETNE2017), and served in various POC: ICE2008; ENEA2010, ICE/ECE2012, ECE2014. He has served as Vice-rector of Scientific Policy and Campus of Excellence of the UCO and General Coordinator of the Campus of International Excellence in Agri-food ceiA3 (2012-14) and Vice-Director (2009-11) and Director (2015-19) of the IMIBIC.

## Part C. RELEVANT MERITS

### C.1. Publications (including books)

1. Durán-Prado M, Gahete MD, Martínez-Fuentes AJ, Luque RM, Quintero A, Webb SM, Benito-López P, Leal A, Schulz S, Gracia-Navarro F, Malagón MM, **Castaño JP**. 2009. Identification and characterization of two novel truncated but functional isoforms of the somatostatin receptor subtype 5 differentially present in pituitary tumors. J Clin Endocrinol Metab. 94:2634-43. IF: 6.202. D1 Endocrinology & Metabolism.
2. Durán-Prado M, Gahete MD, Hergueta-Redondo M, Martínez-Fuentes AJ, Córdoba-Chacón J, Palacios J, Gracia-Navarro F, Moreno-Bueno G, Malagón MM, Luque RM, **Castaño JP**. 2012. The new truncated somatostatin receptor variant sst5TMD4 is associated to poor prognosis in breast cancer and increases malignancy in MCF-7 cells. Oncogene 31:2049-61. IF: 7.357. D1 Oncology.
3. Luque RM, Ibáñez-Costa A, Neto LV, Taboada GF, Hormaechea-Agulla D, Kasuki L, Venegas-Moreno E, Moreno-Carazo A, Gálvez MÁ, Soto-Moreno A, Kineman RD, Culler MD, Gahete MD, Gadelha MR, **Castaño JP**. 2015. Truncated somatostatin receptor variant sst5TMD4 confers aggressive features (proliferation, invasion and reduced octreotide response) to somatotropinomas. Cancer Lett. 359:299-306. IF: 5.992 Q1 Oncology
4. Capdevila J, Casanovas O, Salazar R, Castellano D, Segura A, Fuster P, Aller J, García-Carbonero R, Jimenez-Fonseca P, Grande E, **Castaño JP**. 2017. Translational research in neuroendocrine tumors: pitfalls and opportunities. Oncogene 36:1899-1907. IF: 6.854. D1 Genetics & heredity
5. Hormaechea-Agulla D, Gahete MD, Jiménez-Vacas JM, Gómez-Gómez E, Ibáñez-Costa A, L-López F, Rivero-Cortés E, Sarmento-Cabral A, Valero-Rosa J, Carrasco-Valiente J, Sánchez-Sánchez R, Ortega-Salas R, Moreno MM, Tsomaia N, Swanson SM, Culler MD, Requena MJ, **Castaño JP\***, Luque RM. 2017. The oncogenic role of the In1-ghrelin splicing variant in prostate cancer aggressiveness. Mol Cancer. 16:146 \*Co-corresponding author IF: 10.679 D1 Oncology.
6. Pedraza-Arévalo S, Gahete MD, Alors-Pérez E, Luque RM, **Castaño JP**. 2018. Multilayered heterogeneity as an intrinsic hallmark of neuroendocrine tumors. Rev Endocr Metab Disord. 19:179-192. IF: 4.963. Q1 Endocrinology & Metabolism
7. Gahete MD, Del Rio-Moreno M, Camargo A, Alcalá-Díaz JF, Alors-Pérez E, Delgado-Lista J, Reyes O, Ventura S, Pérez-Martínez P, **Castaño JP\***, López-Miranda J, Luque RM. 2018. Changes in splicing machinery components influence, precede, and early predict the development of type 2 diabetes: from the CORDIOPREV Study. EBioMedicine 37:356-365 \*Co-corresponding author IF: 6.183 D1 Medicine, Research & Experimental
8. Vázquez-Borrego MC, L-López F, Gálvez-Moreno MA, Fuentes-Fayos AC, Venegas-Moreno E, Herrera-Martínez AD, Blanco-Acevedo C, Solivera J, Landsman T, Gahete MD, Soto-Moreno A, Culler MD, **Castaño JP\***, Luque RM. 2019. A new generation somatostatin-dopamine analogue exerts potent antitumoral actions on pituitary neuroendocrine tumor cells. Neuroendocrinology. July 4. In press \*Co-corresponding author IF: 6.804 D1 Endocrinology and Metabolism
9. Vázquez-Borrego MC, Fuentes-Fayos AC, Venegas-Moreno E, Rivero-Cortés E, Dios E, Moreno-Moreno P, Madrazo-Atutxa A, Remón P, Solivera J, Wildemberg LE, Kasuki L, López-Fernández JM, Gadelha MR, Gálvez-Moreno MA, Soto-Moreno A, Gahete MD, **Castaño JP\***, Luque RM. 2019. Splicing machinery is dysregulated in pituitary neuroendocrine tumors and is associated with aggressiveness features. Cancers (Basel). 11: E1439. \*Co-corresponding author IF: 6.162 Q1 Oncology

10. Vázquez-Borrego MC, Gupta G,...**Castaño JP\***, Luque RM\* (22 authors; Co-senior author)s. 2019. A novel SST3 agonist shows potential antitumor effects in experimental models of Nonfunctioning Pituitary Tumors. Clin Cancer Res [In press]. \*Co-corresponding author IF: 8.911 D1 Oncology

### C.2. Research projects and grants

1. Alteraciones de la maquinaria de splicing alternativo en cáncer de páncreas: Identificación de nuevos biomarcadores diagnósticos, pronósticos y terapéuticos. MINECO. BFU2016-80360-R. 181.500€. IP: **Castaño JP**. 2017-2019

2. IMIBIC Fellowship Programme for Personalised and Precision Medicine (P2Med): H2020 MSCA COFUND FP 2018. FIBICO. GA nr: 847468. 662.040 €. (Total cost 1.183.680 €) PI: **JP Castaño**. FIBICO. 2019-2024.

3. Promoviendo vocaciones STEM desde la Biomedicina. FECYT. FCT-18-13958. 20.000€. PI: **JP Castaño**. FIBICO. 2019-2020

4. Afianzando la red bioinformática traslacional TransBioNet (Redes de Investigación). Ministerio de Ciencia, Innovación y Universidades. RED2018-102404-T. 20.000€. PI: Valencia A; Responsable nodo Córdoba: **JP Castaño**. FIBICO. 2019-2020

5. Determinación de una huella molecular de splicing predictiva en el desarrollo de tumores neuroendocrinos y su aplicación en el diagnóstico y tratamiento. GETNE. 20.000€. PI: **JP Castaño**. 2015-18.

6. Early predictors and causes of loss of phenotypic flexibility as individual risk factor of metabolic disease: towards a personalized medicine. ISCIII. (FLEXI-MET). 605.000€ PI: López-Miranda J; WP4: **JP Castaño**. 2015-18.

7. Papel del splicing alternativo y su (des)regulación en patologías tumorales y cáncer: potencial diagnóstico y terapéutico. Ministerio de Economía y Competitividad. 127.000€. PI: **JP Castaño**. 2014-16.

8. Sistema de detección de compuestos volátiles para diagnóstico precoz de cáncer (Proyecto ONCOVER) europeo. FEDER. ONCOVER. 4.873.530€ IP: **JP Castaño**. 2012-16.

9. Papel de somatostatina, cortistatina y ghrelina en la interacción patológica entre obesidad y cáncer de mama. Ministerio de Ciencia e Innovación. 216.280,68€ IP: **JP Castaño**. 2011-13.

10. Investigación traslacional sobre tumores neuroendocrinos: bases moleculares, nuevas señales y oportunidades terapéuticas. Consejería de Educación y Ciencia de la Junta de Andalucía. 219.280,68 € IP: **JP Castaño**. 2010-2013.

### C.3. Contracts:

1. Evaluation of the effect of Dopastatin compounds on hormone secretion and cell viability in primary human pituitary adenoma cells from Cushing's patients and non-functioning pituitary adenomas. IPSEN-SCRAS S.A.S. 52.352,94 €. PI: **JP Castaño**. 2016-18.

2. Testing of the therapeutic relevance of sst3 in Non-Functioning Pituitary Adenoma (NFPA) using primary human NFPA culture cells. IPSEN-SCRAS S.A.S. 47.058 €. PI: **JP Castaño**. 2016-2018.

3. In1-ghrelin, a novel aberrantly spliced ghrelin variant, GOAT and GHSR1a and GHSR1b in neuroendocrine tumors, prostate cancer and Cushing disease: presence, function and therapeutic potential. IPSEN-SCRAS S.A.S. 120.000 €. PI: **JP Castaño**. 2011-2014.

4. Characterization of gene expression in gastroenteropancreatic neuroendocrine tumors and its correlation with clinical aspects and tumor behavior. Spanish Group of Endocrine and Neuroendocrine Tumors (GETNE) 72.649,61 €. PI: **JP Castaño**. 2012-2016.

5. Truncated sst5TMD4/5 receptors in neuroendocrine tumors, prostate cancer and Cushing disease: functional role and potential therapeutic value. IPSEN-SCRAS S.A.S. 165.000 €. PI: **JP Castaño**. 2011-2014.

6. Molecular analysis of pituitary tumors (SAEN project). NOVARTIS oncology. 146.760,4 €. PI: **JP Castaño**. 2009-2012.

As member of the team: 1) Molecular and functional characterization of bladder cancer: search of novel therapies. Eli Lilly & Company. 46.200 €. 2019-20.

#### C.4. Patents

**1.** López-Pedrerá C; Luque RM; **Castaño JP**; Ibáñez-Costa A. P201930123. Method of obtaining useful data for the diagnosis, stratification and/or follow-up of patients with rheumatoid arthritis. National Phase (14/09/2018) UCO/SAS/IMIBIC. **2.** **Castaño JP**; Luque RM; Gahete MD. P201930104. Method for the diagnosis and prognosis of the development of prostate cancer (08/02/2019) National Phase. UCO/SAS/IMIBIC. **3.** Luque RM; **Castaño JP**; Gahete MD. P201831039. Method for the diagnosis, prognosis and treatment of neuroendocrine tumors (25/10/2018) National Phase UCO/SAS/IMIBIC. **4.** Gahete MD, López J, Pérez P, Delgado J, García A, Alcalá JF, Yubero E, Camargo A, del Río M, Alors E, Luque RM, **Castaño JP**, Ventura S, Reyes O. P201831095. Method for the prediction and prognostic of the development of type 2 diabetes mellitus (13/11/2018) National Phase. UCO/SAS/IMIBIC. **5.** Gahete MD, Luque RM, **Castaño JP**, del Río M, Alors E. PCT/ES2018/070361. Peptides derived from the truncated somatostatin receptor 5 sst5TMD4 as biomarkers and therapeutic tools in tumoral pathologies (16/12/2016) International Phase. UCO/SAS. **6.** Luque RM, **Castaño JP**, Gahete MD, Ibáñez A, Hormaechea D, Jiménez JM, Sarmento-Cabral A, L-López F, Requena MJ, Gómez E, Carrasco J. PCT/ES2017/070797. Non-invasive diagnostic method of cancer (16/12/2016) International Phase. UCO/SAS. **7.** Luque RM, **Castaño JP**, Gahete MD, Hormaechea D, Requena MJ, Gómez E, Carrasco J. Ibáñez A, Moreno MM, Valero J. PCT/ES2016/070844. Ghrelin-O-acyl transferase (GOAT) and their uses. International Phase (27/11/2015) UCO/SAS. **8.** Luque RM, **Castaño JP**, Gahete MD, Córdoba J, Gracia F, Martínez AJ, Benito P, Kineman RD. P201030905. Ghrelin variant and its uses (8/01/2013) National Phase. UCO/SAS/University Illinois at Chicago.

#### C.5. Management of Scientific/Academic activities

**1.** Director of the Environmental Protection Service of the UCO 2000/04. **2.** General Director of the Service of Prevention of Health and Environmental Protection 2004/06. **3.** Director of the Secretariat for Scientific Infrastructure / Central Research Support Service 2006/10. **4.** Scientific Sub-Director of the Maimonides Biomedical Research Institute of Córdoba (IMIBIC) 2009/11. **5.** Vice-rector of Scientific Policy and Campus of Excellence of the UCO and General Coordinator and head of R & D of the Campus of International Excellence in Agri-food ceiA3 2012/14. **6.** Director of the IMIBIC 2015/19. **7.** President of the Iberian Association of Comparative Endocrinology (AIEC). **8.** Member and acting Secretary of the ESE Executive Committee. **9.** Executive Committee Spanish Group of Neuroendocrine Tumors (GETNE). **10.** Executive Committee Spanish Society of Endocrinology and Nutrition (SEEN)

#### C.6. Membership of editorial committees

**1)** Senior Editor, J Endocrinol/J Mol Endocrinol. **2)** Section Editor-in-Chief. Frontiers in Endocrinology: Systems and Translational Endocrinology. **3)** Member of Editorial Board: J Clin Med; Scientific Reports; Endocrinología y Nutrición; Int J Clin Exp Med; Front Neuroendocrine Sci **4)** Previous: Mol Cell Endocrinol; J Clin Endocrinol Metab; J Alzheim Dis; Endocrine.

**C.7. Member/reviewer of scientific evaluation panels.** 1) Area Coordinator, Agency for the Quality of the University System of Castilla y León. 2) Carlos III Health Institute (ISCIII; FIS-projects: Pane 507: "Other chronic diseases and inflammation (2005-2009)" 3) Current referee/member of several Spanish and International funding agencies (ANEP, SERGAS, CONCYT, Cancer Research-UK)

#### C.8-9. Invitation / Organization of International Congresses

**Invited to 1st World NET Forum - A Forum on Basic, Translational and Global NET Aspects .**

Talk: RNAs and All Their Variants in NET Tumor Biology: Update and Relevance. March 2020 Barcelona.

> 30 Invited conferences at National and International meetings, including plenary/keynote lectures

**President**, Program Organizing Committee (POC) of European Congress of Endocrinology (ECE) 2013, SEEN 2015 and GETNE 2017, POC member: International Congress of Endocrinology, ICE 2008; ENEA 2010, ICE / ECE 2012, ECE 2014; Co-chair Basic Endocrinology Courses of ESE, 2006, 2009 and 2016.

#### C.10. Relevant awards

Prize for the Research in Neuroendocrinology. Spanish Society of Endocrinology and Nutrition. 2010. Prize for the group's trajectory awarded by the Foundation of the Spanish Society of Endocrinology and Nutrition (FSEEN) 2016. IMIBIC-ROCHE Award for the best innovation project "Non-invasive method of cancer diagnosis" 2018