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Prof. Carlos Simón. M.D.; Ph. D.

Short CV

Surname: Simón
Name: Carlos
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Date of Birth: 08/03/1961
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1. Medical and Research Education:

Years	Title-Degree	Institution
1979 - 1985	M.D. Degree	School of Medicine, University of Valencia. Spain
1985 - 1986	Excellence Award	School of Medicine, University of Valencia. Spain
1986 - 1987	Doctor in Medicine and Surgery	School of Medicine, University of Valencia. Spain
1987 - 1991	Board Certified Obstetrics and Gynecology	University Clinic Hospital, University of Valencia. Spain
1991 - 1994	Research Fellowship in Reprod. Endocrinol.	Dep. Obs/Gyn, Stanford University, California, USA
2005 - present	Académico Correspondiente	Royal Academy of Medicine,Valencia. Spain
2007	National. Examination to become Full Prof. (1st Place)	Ministry of Education & Science Spanish Govern. Spain

2. Medical and Research Positions:

Years	Position	Institution
1991	Assistant Professor of Ob/Gyn	School of Medicine, University of Valencia. Spain
1994 - 2007	Associate Professor of Ob/Gyn	Dep. Ped. Obs/Gyn, University of Valencia. Spain
1994 - present	Scientific Director	Instituto Valenciano de Infertilidad. Spain
1994 - present	Scientific Director & Board member	IVI Foundation. Spain
2004 - 2011	Director of the Valencia Stem Cell Bank	Prince Felipe Research Centre. Spain
2005 - 2007	Coordinator Dep. of Regenerative	Prince Felipe Research Centre. Spain
2007 - present	Professor of Ob/Gyn	Dep. Ped. Obs/Gyn, University of Valencia. Spain
2009 - 2012	President	Valencian Bioregion (BIOVAL). Spain
2009 - 2011	Scientific Director	Prince Felipe Research Centre. Spain
2009 - present	Co-Founder and Scientific Director	IVIOMICS. Spain, India, Italy, Brazil.
2013 - Present	Co-Founder and Scientific Director	IVIGEN. Miami and Los Angeles. USA
2013 - 2019	Adjunct Clinical Professor	Dep. Ob/Gyn, Stanford University School of Medicine. USA
2014 - Present	Adjunct Professor	Dep. Ob/Gyn, Baylor College of Medicine. USA

3. Visiting Professor

Years	Institution
October 21st -December 1st, 1997	Dept. Obs/Gyn, University of Adelaide, Australia
December 1st- December 11th, 2006	Dept. Obs/Gyn, University of Hong-Kong, China
June 1st- September 11st, 2007	Dept. Obs/Gyn and Reproductive Sciences , Yale University, USA,

4. Research Awards and Honors:

NATIONALS

Years	Nº	Institution	Award
1984	1	School of Medicine, University of Valencia	López Sancho en Ob/Gyn.
1986	1	School of Medicine, University of Valencia	Excellence Award
1992-2002	6	Spanish Fertility Society (SEF)	SEF
1995	1	Valencian Obs/Gyn Society	Vicente Zaragozá Orts
1996, 1999, 2001, 2005, 2010, 2015	6	Salud 2000 Foundation	Support for Reproductive Research
1997, 1999	2	Spanish Obs/Gyn Society	1st Award In Assisted Reproduction
2003	1	Revista Iberoamericana de Fertilidad	Best Basic Paper 2003
2004	1	Consejería de Industria y CIERVAL.	2nd Bioemprenda Award 2004
2005	1	Valencian Diabetes Society (AVD)	Expectatives Award, AVD
2006	1	Foundation University Clinic Hospital of Valencia	Clinical Research Award. III Edition
2009	1	Merck Serono	Innovation, quality & image in AR
2011	1	Fundación Premios Rey Jaime I 2011	Medical Investigation

INTERNATIONALS

Years	Nº	Institution	Award
1993[1], 2002[1], 2009[2], 2014[1], 2015[1,2]	6	Society for Gynecologic Investigation. (USA)[*]	President's Poster Award[1] President's Presenter Award[2]
1993[1], 1995[1], 1997[1], 1999[1], 2001[1], 2005[2], 2008[1], 2011[3], 2012[3], 2013[3], 2014[3,4]	12	American Society for Reproductive Medicine. (USA)[*]	Prize Paper Award[1] Prize Poster Award[2] ASRM 2011 Star Award[3]
2004	1	M.I Acad. Mund. Ciencias, Tecnol., Educ. y Humanidades, C.T.E.H.	"2 First Stem Cells Lines in Spain"
2011	1	Serono Symposia International Foundation	Rewarding Scientific Excellence in Medical Education
2012	1	European Society of Human Reproduction and Embryology.	Basic Science Award for Oral Presentation

[*] In competition with > 1000 papers worldwide.

5. Granted Research Projects from Public and Private Institutions (as Principal Investigator):

	Internationals	Nationals
Spanish (FIS, CICYT) and Regional Governments (Valencian and Vasque)		24
International Organizations (NATO), Foundations & Pharmaceutical Companies	17	

6. Summary of Scientific Publications:

	Internationals	Nationals	TOTAL
Books (Editor)	12	5	17
Papers "peer reviewed"	376	98	474
Book Chapters	85	96	181
Patents	8	5	13

7. Participations in Scientific Meetings:

	Internationals	Nationals	TOTAL
Invited Lectures	403	91	494
Oral and Poster Presentations	467	225	692

8. Director of 31 PhD Thesis. All scored "Sobresaliente Cum Laude", including 5 Doctoral Excellence Awards, 4 European Doctorate and 1 Award from Medical College of Valencia.

9. Scientific Meetings Organized: 14 Internationals & 1 National

Symposium on Reproductive Medicine "Maternal-Embryo Interactions. Valencia (Spain). March 9-11, 1995.

El Mundo en el Siglo XXI: Crear la vida. Universidad de Valencia (Spain). February-May, 1996.

State of the Art of Human Implantation. Basic and Clinical Aspects. Madrid (Spain). May 18-19, 1998.

Campus ESHRE 98 on Ovarian Hyperstimulation Syndrome. Serono Symposia. Valencia (Spain). December 4-5, 1998.

I International Workshop on Human Implantation. Fundacion Bancaja Valencia (Spain). March 22-23, 1999.

Reproductive competence. Santiago de Chile, Chile. November 28-30, 2000.

II International Workshop on Human Implantation. Colegio Oficial de Medicos de Madrid (Spain). May 4-5, 2001.

III Human Implantation Workshop. Palacio Municipal de Congresos. Madrid (Spain). June 28, 2003.

19th Annual Meeting ESHRE 2003. Palacio Municipal de Congresos. Madrid (Spain). June 29 – July 2, 2003.

International Symposium on Reproductive Medicine. Cátedra Santiago Grisolía, Valencia (Spain). October 27 – 28, 2005.

Therapeutic Potencial of Stem Cells in Reproductive Medicine. Serono Symposia.Valencia (Spain). CIPF, March 31 – April 1, 2006.

2nd Summit of the SGI on Reproductive Medicine. Museo de las Ciencias Príncipe Felipe. Valencia (Spain). November 8-10, 2007.

1st Biomarker meeting in Reproductive Medicine: Emergence of a New Field. March 30 – 31, 2012. Valencia (Spain).

The top ten in reproductive medicine: debating breathrough basic and clinical papers with their authors. Serono Symposia International Foundation. September 20 – 21. Florence, Italy.

2nd Biomarker meeting in Reproductive Medicine: Personalized Reproductive Medicine; Biomarkers for the Assessment of Ovarian Reserve, Gametes, Embryos, Endometrium and Pregnancy. March 19 – 22, 2014. Valencia (Spain).

3rd Biomarker meeting in Reproductive Medicine: Personalized Reproductive Medicine; Biomarkers for the Assessment of Ovarian Reserve, Gametes, Embryos, Endometrium and Pregnancy. April 7 – 9, 2016. Valencia (Spain).

10. Other professional activities of interest:

Activity	N	Institution
Scientific Consultant of Universities	5	Universities of Sidney (Australia), Catholic University of Lieja (Belgium), Stanford, California (USA), Virginia Commonwealth (USA) , University of California, San Francisco (UCSF) (USA).
Scientific Consultant of Foundation and Associations	11	German-Israeli Foundation for Scientific Research & Development (1995, 96, 97, 2009), John Guggenheim Memorial Foundation (USA) since 1997, Wellcome Foundation (United Kingdom) since 1997, Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III since 2002, The Health Research, Charity for Women and Babies (WELLBEING). The Israel Science Foundation (ISF), UK Stem Cells Foundation, The Estonian Science Foundation (ETF), Fundación Victor Grífols i Lucas, Fundación para la Investigación Biomédica del Hospital Universitario La Paz, The research Foundation Flanders (FWO) Belgium.
Scientific Consultant of International Organizations	17	Scientific and Ethical Review Group de la Organización Mundial de la Salud, Ginebra (1998-present). Scientific Advisor in Reproductive Technology, Ciudad del Vaticano (2000). Expert Advisory Panel on Reproductive Medicine FIGO, Society of Gynecological Investigation International Committee, Endometriosis/Endometrium Special Interest Group (ESHRE), Health Research Board in Ireland (2001), Asesor Internacional Externo de ORGANON, Oss, Holanda, Miembro del Tribunal del Premio SALUD 2000. American Society for Reproductive Medicine (ASRM) Reproductive Immunology Special Interest Group. (RISIG). International committee International Federation of Fertility Societies (IFFS). International committee International Society for Stem Cell Research (ISSCR). Member of the Scientific Committee of Honor of the Gynecological Endocrinology Latin-American Association (ALEG). Asociación Endometriosis España, Association Française contre les Myopathies. ANEP, ANECA, AVAP.
Member of Editorial Board of Journals	26	Fertil Steril (Associate Editor 2011-Present), Hum Reprod (Associate Editor 2001-2005), Hum Reprod Update, Reprod Biomed Online, Reproduction, Reproductive Sciences, J Reprod Immunol, Am J Reprod Inmunol, Eur J Endocrinol, Gynecol Endocrinol, Ginecol Obstet Invest, Front Biosci, Regenerative Medicine, Clin Exp Reprod Med, Revista Iberoamericana de Fertilidad, Revista Española de Obstetricia y Ginecología, Medicina Reproductiva CEGYR, Revista de Reproducción Humana, Novedades Terapéuticas en Reproducción Humana, Virtual Journal de Ginecología y Obstetricia, Co-editor Cuadernos de Medicina Reproductiva (1995-2004), Reproducción Humana FLASEF, Obstetricia y Ginecología de Postgrado, Actualizaciones del SEF. Journal of Endometriosis. American Journal of Stem Cells.
Ad hoc Reviewer	34	Nature Medicine, Nature Protocols, The Lancet, Stem Cells, PNAS, Faseb J, Stem Cells Dev, Oncogene, Fertil Steril, Hum Mol Gen, J Clin Endocr Metab, Hum Reprod Update, Hum Reprod, Mol Hum Reprod, Endocrinology, Reprod Biomed Online, Biol Reprod, PLoS ONE, Am J Obstet Gynecol, Reprod Sciences, J Reprod Immnunol, J Assist Reprod Gen, Int J Gynecol Obstet, Rejuvenation Research, J Reprod Fertil, Neoplasia, J Endocrinol Invest, Eur J Obstet Gyn R B, Eur J Biochem, Clin Endocrinol, Cells Tissues Organs, Asian J Androl, Ann Biomed Eng, J Cell Mol Med.

11. Bibliometric evaluation of articles "in peer-review journals":

At ISI Web of Knowledge (http://apps.isiknowledge.com) Prof. Carlos Simón is author of **376 publications** with an accumulated impact factor of **1,667.545**, all publications add up a total of **12,754** cites with an average of **34** citations/publications. He is 1st, 2nd or last author in **227** of **376** publications in international constituting **60.37%** of all scientific publications. His **H-Index is 63.**

Prof. Carlos Simón. M.D.; Ph. D.

Board Certified and Full Professor of Obstetrics and Gynecology at the University of Valencia; Adjunct Clinical Professor, Department of Ob/Gyn, Stanford University School of Medicine, CA. USA; Adjunct Professor, Department of Ob/Gyn, Baylor College of Medicine, TX. USA; Scientific Director at Igenomix SL.

Since 1991, I have contributed pioneering work in the study of human endometrial receptivity (Ruiz-Alonso M et al., Biochim Biophys Acta. 2012; 1822(12): 1931-42), embryo viability (Thouas GA et al., Endocr Rev. 2015; 36(1): 92-130), and the mechanisms that regulate human embryonic implantation (Cha J, Vilella F, Dey SK and Simón C. *Science*, 2013, pp. [44-48]).

I discovered the functional relevance of the interleukin-1 system in endometrial receptivity regulation and human embryonic implantation (Simon et al., Endocrinology 1994) and demonstrated the deleterious effect of high levels of estradiol on endometrial receptivity in patients with high response to gonadotrophins, modifying established clinical practice and initiating the concept of mild stimulation (Simon et al., Human Reprod 1995). Using the human endometrial side population in a xenograft murine model, my lab demonstrated the existence and the functional proof of concept of human endometrial stem cells (Cervello et al., PlosOne 2010, 2011, 2012). Using microarray technology, I discovered the transcriptomic signature of human endometrial receptivity, publishing our findings in 20 works as first or last author (Ruiz-Alonso M et al., Fertil Steril 2011), one of them is the most cited article in the journal Molecular Human Reproduction (Riesewijk et al, Mol Hum Rep 2003). Clinical translation of this work resulted in a patent for the creation of a customized endometrial receptivity array (ERA) for the molecular diagnosis of endometrial receptivity in infertile patients, the creation of a biotech company (www.igenomix.com) and the creation of a free access endometrial gene expression database (www.endometrialdatabase.com) managed by University of Valencia. In an independent bibliometric analysis of publications in Reproductive Biology between 2003 and 2005, I was identified as the ninth most productive scientist in the world (Gonzalez-Alcaide G et al., Fertil Steril 90:941-56, 2008).

Since 2001, my work in human embryology allowed me to expand my research into the field of stem cells, resulting in the derivation, characterization, and registration in the National Stem Cell Bank (BNLC) of ten human embryonic stem cell lines (VAL-3,4,5,6M,7,8,9,9 /Oct-4, 10B & 11B). I pioneered the first derivation of embryonic stem cell lines in Spain and described a new system for freezing these cells in the absence of animal contaminants. I derived VAL-6M, the first Spanish line with a monogenic disorder (Myotonic Dystrophy Type I) used as disease model by other researchers. I participated with the VAL lines in a collaborative study demonstrating the lack of genetic diversity in the most common used cell lines in the world (Mosher JT et al. N Engl J Med 2009). My pioneering work in this field made possible the creation of the Valencia Node of the Spanish Stem Cell Bank in 2004, located in the Prince Felipe Research Center and from September 2009 to September 2011 I was Scientific Director of this Research Center. My lab has been working on the generation of artificial gametes using direct reprograming with 6 germ line-related factors in human somatic cells (Medrano JV, et al., Stem Cell Reports. 2015 In press).

Recently, we have created a prediction model for aneuploidy in early human embryo development revealed by single cell analysis. (Vera-Rodriguez M, et al Nat Commun. 2015 In press), together with the impact of mitochondrial DNA content as a viability score in human euploid embryos (Diez-Juan A , et al., Fertil Steril 2015), and my opinion on this topic has been considered in a recent article in Cell Stem Cell (Diez-Juan A & Simón C. Cell Stem Cell. 2015 May 7;16(5):457-8).

As Principal Investigator, his work has been funded through 18 projects sponsored by the Spanish Government, 4 by the Valencian Government, including 2 PROMETEO (granted to prestigious scientists) and 17 projects by international organizations, American Universities and private companies.

Metrics: At ISI Web of Knowledge (http://apps.isiknowledge.com) Prof. Carlos Simon is author of 376 publications in international peer-review journals, adding up to an accumulated impact factor of 1,667.545. His papers have received a total of 12,754 cites with an average of 34 cites/paper. His H-Index is 63 and he is editor of 17 books. He has been Director of 31 PhD Thesis all qualified with "Cum Laude", including 5 PhD Awards of Excellence and 4 European PhD. As inventor, his research has originated 13 Patent Applications, leading to the creation of Igenomix a biotech company http://igenomix.com.