MINISTERIO DE CIENCIA E INNOVACIÓN

CURRICULUM VITAE (maximum 4 pages)

AGENCIA ESTATAL DE INVESTIGACIÓN

CV date	12/03/2021

Part A. PERSONAL INFORMATION

First and Family name	Sonia Sánchez Campos		
ID number	09781164T	Age	52
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0003-2672-734X	
	SCOPUS Author ID (*)	6603129709	
	WoS Researcher ID (*)	F-9654-2015	

(*) Optional
(**) Mandatory

A.1. Current position

Name of University/Institution	University of León		
Department	Institute of Biomedicine (IBIOMED)		
Address and Country	University Campus, 24071 León, Spain		
Phone number	+34 987 291266	E-mail	ssanc@unileon.es
Current position	Associate Professor of Physiology	From	2008
UNESCO code	241100 - Human Physiology		
Key words	Liver, gut microbiota, inflammation, antioxidants, gut-liver axis, prebiotics, probiotics, metabolomics, fecal microbiota transplantation, bile acids		

A.2. Education

PhD, Licensed, Graduate	University	Year
Physiology PhD	University of León, Spain	1998
Bachelor of Veterinary Science/Medicine	University of León, Spain	1994

A.3. General indicators of quality of scientific production *(see instructions)*

Number of six-year research periods: 4, (last 2020)
Supervised doctoral theses since 2010: 8
Bibliometric indicators:
Scopus: H-index: 26, Total citations: 2,631; Mean citations/year last 5 years: 250
WOS (core collection): H-index: 26, Total citations: 2,480; Mean citations/year last 5 years: 232
Google Scholar: H-index: 28, Total citations: 3,647; Mean citations/year last 5 years: 339

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

Ms. Sonia Sánchez Campos (PhD) is Associate Professor of Physiology and since February 2019 Head of the Department of Biomedical Sciences at the University of León (Spain). She was Secretary from 2011 to 2018 and has been Deputy Head of the Institute of Biomedicine (IBIOMED) at the University of León since 2018. From 1999 to 2001, she was a postdoctoral fellow for the "Asociación Española para el estudio del Hígado (AEEH)" carrying out her research activity at the Molecular Toxicology Unit at INSERM in Paris (France). From 2002 to 2008 she was Associate University School Professor at the University of León. Ms. Sánchez has participated as a researcher in more than 30 competitive research projects funded by different Spanish research programs, six of them as main researcher including two within the framework of the "Programa Estatal de I+D+i Orientada a los Retos de la Sociedad". She has been carrying out her basic and translational research activity at CIBERehd since its creation as well as in a Consolidated Research Unit (UIC) of the Junta de Castilla y León (UIC064), developing an established research line focused on the study of pathogenic mechanisms related to hepatic and digestive diseases and in the establishment of new therapeutic approaches in their management and in close collaboration with researchers from the Complejo Asistencial Universitario de León (CAULE) and other basic and clinical centers integrated in the CIBERehd. She has had four recognized research periods (last one 2020) by CNEAI. She has been reviewer for different scientific journals, coordinator for more than 30 Master's degree final projects, author of 12 chapters for books, 42 peer-reviewed articles and more than 130 scientific contributions at national and international meetings in the field of hepatic and digestive diseases.

Part C. RELEVANT MERITS *(sorted by typology)*
C.1. Publications (representative)

1. R. Quiroga, E. Nistal, B. Estébanez, …, S. Sánchez-Campos (AC)*, M.J. Cuevas* (10/11). 2020. Exercise training modulates gut microbiota profile and impairs inflammatory signaling pathways in obese children. Experimental & Molecular Medicine 52:1048-1061. JCR IF 4,743 (Q1)
2. P. Petrov, M.V. García-Mediavilla, C. Guzmán, ..., S. Sánchez-Campos*, R. Jover* (AC) (9/10). 2019. A network involving gut microbiota, circulating bile acids and hepatic metabolism genes that protects against non-alcoholic fatty liver disease. Molecular Nutrition and Food Research 63:e1900487. JCR IF 4,65 (Q1, first decile)
3. S. Carbajo-Pescador, D. Porras, M. V. García-Mediavilla, …, E. Nistal*, S. Sánchez-Campos*(AC) (10/10). 2019. Beneficial effects of exercise on gut microbiota functionality and barrier integrity, and gut-liver crosstalk in an *in vivo* model of early obesity and non-alcoholic fatty liver disease. Disease Models & Mechanisms 12:pii:dmm039206. JCR IF 4,03 (Q1)
4. D. Porras, E. Nistal, S. Martínez-Flórez, ..., S. Sánchez-Campos (AC) (8/8). 2019. Functional interactions between gut microbiota transplantation, quercetin and high fat diet determine non-alcoholic fatty liver disease development in germ-free mice. Molecular Nutrition and Food Research 63:e1800930. JCR IF 4,65 (Q1, first decile)
5. D. Porras, E. Nistal, S. Martínez-Flórez, J. L. Olcoz, R. Jover, J. González-Gallego, M. V. García-Mediavilla, S. Sánchez-Campos* (A/C) (8/8). 2017. Protective effect of quercetin on high-fat diet-induced non-alcoholic fatty liver disease in mice is mediated by modulating intestinal microbiota imbalance and related gut-liver axis activation. Free Radical Biology & Medicine 102:188-202. JCR IF 6,02 (Q1)
6. M. Bozic, C. Guzmán, M. Benet, …, R. Jover (4/9). 2016. Hepatocyte vitamin D receptor regulates lipid metabolism and mediates experimental diet-induced steatosis. Journal of Hepatology 65: 748-757. JCR IF 12,49 (Q1, first decile)
7. S. Pisonero-Vaquero, A. Martínez-Ferreras, M. V. García-Mediavilla, … S. Sánchez-Campos (A/C) (10/10). 2015. Quercetin ameliorates dysregulation of lipid metabolism genes via the PI3K/AKT pathway in a diet-induced mouse model of nonalcoholic fatty liver disease. Molecular Nutrition and Food Research 59:879-893. JCR IF 5.15 (Q1, first decile)
8. S. Pisonero-Vaquero, M.V. García-Mediavilla, F. Jorquera, P.L. Majano, M. Benet, R. Jover, J. González-Gallego, S. Sánchez-Campos (A/C) (8/8). 2014. Modulation of PI3K-LXRα-dependent lipogenesis mediated by oxidative/nitrosative stress contributes to inhibition of HCV replication by quercetin. Laboratory Investigation 94:262-74. JCR IF 3.676 (Q1).
9. C. Guzmán, M. Benet, S. Pisonero-Vaquero, … R. Jover (8/9). 2013. The human liver fatty acid binding protein (FABP1) gene is activated by FOXA1 and PPARα; and repressed by C/EBPα: implications in FABP1 down-regulation in nonalcoholic fatty liver disease. Biochimica Biophysica Acta 1831: 803-818. JCR IF 4.97 (Q1)
10. M. E. Miquilena-Colina, E. Lima-Cabello, S. Sánchez-Campos, …C. García-Monzón (3/12). 2011. Hepatic fatty acid translocase CD36 upregulation is associated with insulin resistance, hyperinsulinaemia and increased steatosis in non-alcoholic steatohepatitis and chronic hepatitis C. Gut 60: 1394-1402. JCR IF 17.01 (Q1, first decile)

**Shared senior authorship*

C.2. Research projects

1. LE017-P20. Efecto de la melatonina y su combinación con *Akkermansia muciniphila* sobre la composición y funcionalidad de la microbiota intestinal en el tratamiento de la fibrosis hepática. Consejería de Educación, Junta de Castilla y León. Convocatoria 2020. Lead investigator: Javier González Gallego. 2020-2022. 80.000 €. Co-investigator.
2. BFU2017-87960-R. Efecto de la combinación de ejercicio físico y quercetina y del trasplante de microbiota intestinal funcionalmente protectora o predisponente adicionada con *Akkermansia muciniphila* en modelos de NAFLD. Programa Estatal de Investigación, Desarrollo e Innovación Orientada a los Retos de la Sociedad. Convocatoria 2017. Lead investigators: Javier González Gallego/Sonia Sánchez Campos. 2018-2020. 96.800 €. Co-PI.
3. GRS1888/A/18. Estudio longitudinal metagenómico y metabolómico en pacientes con obesidad mórbida con o sin enfermedad de hígado graso no alcohólico (NAFLD) antes y después de cirugía bariátrica en la provincia de León. Gerencia Regional de Salud de Castilla y León. Convocatoria 2018. Lead investigator: Francisco Jorquera Plaza. 2018-2020. 20.000 €. Co-investigator.

4. LE063U16. Estudio del efecto modulador del ejercicio físico sobre la microbiota intestinal y su repercusión en el desarrollo de obesidad y síndrome metabólico en niños. Consejería de Educación, Junta de Castilla y León. Convocatoria 2016. Lead investigator: Javier González Gallego. 2016-2018. 120.000 €. Co-PI.
5. BIO/LE02/15. Estudio del efecto de la modulación de la microbiota intestinal mediante el tratamiento con quercetina en el desarrollo de esteatosis asociada a obesidad y síndrome metabólico en un modelo de NAFLD. Consejería de Sanidad Junta de Castilla y León. Convocatoria 2015. Lead investigator: Sonia Sánchez Campos. 2015. 13.401 €. PI.
6. BFU2013-48141-R. Estudio del efecto del tratamiento con quercetina y del trasplante de microbiota intestinal en modelos experimentales de hígado graso no alcohólico. Programa Estatal de Investigación, Desarrollo e Innovación Orientada a los Retos de la Sociedad. Convocatoria 2013. Lead investigators: Javier González Gallego/Sonia Sánchez Campos. 2014-2016. 106.480 €. Co-IP.
7. GRS1000-A-14. Estudio de la regulación del metabolismo lipídico hepático en la evolución de la enfermedad de hígado graso no alcohólico (NAFLD). Gerencia Regional de Salud de Castilla y León. 2014. Lead investigator: José Luis Olcoz Goñi. 2014-2015. 15.182 €. Co-investigator.
8. LE135U13. Efecto de flavonoides sobre el desarrollo de esteatosis, esteatohepatitis y hepatocarcinoma en modelos *in vivo* e *in vitro* de NAFLD. Convocatoria 2013. Consejería de Educación, Junta de Castilla y León. Lead investigator: Javier González Gallego. 2014-2016. 34.650 €. Co-investigator.
9. BFU2010-15784. Papel del LXRalfa y de genes lipogénicos e inflamatorios en el desarrollo de esteatosis: efectos de un tratamiento con quercetina. Plan Nacional de I+D, Programa de Investigación Fundamental no orientada. Lead investigator: Javier González Gallego. 2011-2013. 108.900 €. Co-investigator.
10. BFU2007-6297.7. Estudio de los mecanismos patogénicos de la hepatitis C en un modelo *in vitro*: efectos de una terapia antioxidante con flavonoides. Plan Nacional de I+D, Programa de Biología Fundamental. Lead investigator: Javier González Gallego. 2008-2010. 121.000 €. Co-investigator.

C.3. Contracts

- 2016/00058/001. Asesoramiento para la utilización de técnicas moleculares y celulares en el campo de investigación en neurociencias. Fundación Leonesa Pro-Neurociencias. Lead investigators: Sonia Sánchez Campos/Javier González Gallego y. 2016. 3.000 €.
- 2013/00046/001. Efectos de moléculas antioxidantes sobre la progresión de NAFLD a hepatocarcinoma. Fundación para la Investigación Sanitaria en León (FISLeón). Lead investigators: Sonia Sánchez Campos /Javier González Gallego. 2013-2014. 30.250 €.

C.4. Institutional responsibilities

- Head, Department of Biomedical Sciences, University of León. Since February 2019.
- Co-Head, Institute of Biomedicine (IBIOMED), University of León. Since 2018.
- Secretary, Institute of Biomedicine (IBIOMED), University of León. 2011-2018.

C.5. Research awards

- Best research work (poster presentation) in the XIV Jornadas Científicas del CIBERehd (2020). Title: "MCJ-KO genotype determines a gut microbiota signature involved in a protective effect against non-alcoholic steatohepatitis".
- Best research work (poster presentation) in the XIII Congreso Anual de Biotecnología (BAC) (2019). Title: "Beneficial effects of a nutritional intervention with *Akkermansia muciniphila* and quercetin in a rat model of early obesity and NAFLD".
- Best research work (poster presentation) in the XI Jornadas Científicas del CIBERehd (2017). Title: "Liver gene expression profile in gut microbiota transplanted mice is substantially disturbed by the occurrence of NAFLD in donors".
- Best research work (poster presentation) in the IX Jornadas Científicas del CIBERehd (2015). Title: "Modulation of intestinal microbiota and gut-liver axis by quercetin improve HFD-induced metabolic syndrome and NAFLD in mice".

C.6. Project-related Congress Contributions (representative)

- P.P. Petrov, P. Soluyanova, J.V. Castell, S. Sánchez-Campos, R. Jover. Amoxillin-clavulanate induced cholestasis: clavulanic acid hampers FXR signaling, triggers the Nrf2 antioxidant response

and lowers reduced glutathione and intracellular cholesterol in cultured human hepatocytes. XIV Jornadas Científicas del CIBERehd. Barcelona, 2020.

- D. Porras, N. Goikoetxea-Usandizaga, M. V. García-Mediavilla, H. Rodríguez, E. Nistal, M. Juárez-Fernández, S. Martínez-Flórez, M. Rincón, M. Varela-Rey, J. González-Gallego, L. Abecia, J. Anguita, M. Martinez-Chantar, S. Sánchez-Campos. MCJ-KO genotype determines a gut microbiota signature involved in a protective effect against non-alcoholic steatohepatitis. XIV Jornadas Científicas del CIBERehd. Barcelona, 2020.
- E. Nistal, D. Porras, M. Juárez-Fernández, P. Petrov, M. V. García-Mediavilla, S. Román-Sagüillo, S. Martínez-Flórez, F. Jorquera, J. González-Gallego, R. Jover, S. Sánchez-Campos. Combination of Quercetin and *Akkermansia muciniphila* as an adjuvant therapy for early obesity and NAFLD through modulation of gut microbiota composition, lipid metabolism, bile acid pool and associated signalling pathways. XIV Jornadas Científicas del CIBERehd. Barcelona, 2020.
- N. Goikoetxea-Usandizaga, D. Porras, M.V. García-Mediavilla, H. Rodríguez, E. Nistal, M. Juárez-Fernández, S. Martínez-Flórez, M. Rincón, M. Varela-Rey, J. González-Gallego, L. Abecia, J. Anguita, M. Martínez-Chantar, S. Sánchez-Campos. Transplantation of gut microbiota derived from MCJ-KO genotype determines a protective profile against non-alcoholic fatty liver disease in germ-free mice. 55th Annual Meeting of the European Association for the Study of the Liver (EASL), The International Liver Congress (ILC). 2020.
- M. Juárez-Fernández, D. Porras, M.V. García-Mediavilla, S. Martínez-Flórez, S. Román Sagüillo, P. Petrov, R. Jover, González-Gallego, E. Nistal, S. Sánchez-Campos. Dietary intervention together with *Akkermansia muciniphila* and quercetin administration restores intestinal dysbiosis in an in vivo model of early obesity and NAFLD. World of Microbiome. 2020.
- D. Porras, N. Goikoetxea-Usandizaga, M.V. García-Mediavilla, H. Rodríguez, E. Nistal, M. Juárez-Fernández, S. Martínez-Flórez, M. Rincon, M. Varela-Rey, J. González-Gallego, L. Abecia, J. Anguita, M. Martinez-Chantar, S. Sánchez-Campos. Transferencia del efecto protector del genotipo MCJ-KO frente al desarrollo de la enfermedad de hígado graso no alcohólico a ratones libres de gérmenes mediante el trasplante de microbiota intestinal. 45 Congreso Anual de la Asociación Española para el Estudio del Hígado (AEEH). Madrid, 2020.
- P.P. Petrov, P. Soluyanova, M.V. García-Mediavilla, J.V. Castell, S. Sánchez-Campos, R. Jover. Amoxillin-clavulanate induced cholestasis: clavulanic acid, but not amoxicillin, triggers an extensive dysregulation of hepatobiliary transporters in human hepatocytes. XIII Jornadas Científicas del CIBERehd. Barcelona, 2019.
- D. Porras, S. Carbajo-Pescador, M. Juaréz-Fernández, S. Martínez-Flórez, M.V. García-Mediavilla, M.J. Cuevas, J.L. Mauriz, F. Jorquera, J. González-Gallego, E. Nistal and S. Sánchez-Campos. Exercise modulates gut microbiota and intestinal barrier functionality counteracting early obesity and NAFLD in an *in vivo* model. The European Association for the Study of the Liver (EASL). Viena (Austria), 2019.

C.7. Other merits

- Researcher, Grupo de Investigación de Excelencia (GR17), Junta de Castilla y León. 2007-2015.
- Researcher, Consolidated Research Unit (UIC 064), Junta de Castilla y León. 2015-present.
- Centro de Investigación Biomédica en Red de Enfermedades Hepáticas y Digestivas (CIBERehd). 2007-present. Investigator
- Membership of scientific societies: Asociación Española para el Estudio del Hígado, Sociedad Española de Microbiota, Probióticos y Prebióticos.
- Evaluator/member of committees for different organisms and agencies: Sistema de Gestión de Evaluaciones de la Agencia Nacional de Evaluación y Prospectiva (ANEP), Ministerio de Economía, Industria y Competitividad, and Banco de evaluadores del Fondo para la Investigación Científica y Tecnológica (FONCyT). Ministerio de Ciencia, Tecnología e Innovación Productiva. Argentina.
- International and National Conferences Speaker. Reviewer for JCR-indexed journals
- Accreditation for work with experimental animals (RD 1201/2005): Categories B and C (Junta de Castilla y León).
- Participation on Grupo Nacional de Enfermedad Metabólica Grasa (HEPAmet) and on Grupo de Hepatotoxicidad Spanish DILI Registry.
- Scientist Comittee Member on Biotechnology Annual Congress (BAC). csiBAC Issue: Personalized Medicine. XI Congress of FEBiotec. 2017.