
PERSONAL DATA

First Name: **Francisco Javier**
Last Name: **Ruiz-Ojeda**
Date of birth: **30/09/1988**
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CURRENT POSITION

- 29/01/2021- present **Postdoctoral position** (*Juan de la Cierva-Incorporación*, Spanish Government) at Department of Biochemistry and Molecular Biology II, Faculty of Pharmacy, **University of Granada**, Granada, Spain. Supervisors: Prof. Dr. Ángel Gil and Prof. Dr. Concepción Aguilera García.

PREVIOUS POSITION

- 31/01/2018 – 28/01/2021 **Postdoctoral position at Institute for Diabetes and Obesity (IDO)** in **Helmholtz Zentrum München** German Research Center for Environmental Health (GmbH), Munich, Germany. Supervisor: Dr. Siegfried Ussar.

EDUCATION

- 19/11/2016 – 30/01/2018 **Postdoctoral position** at Department of Biochemistry and Molecular Biology II, Faculty of Pharmacy, **University of Granada**, Granada, Spain. Supervisors: Prof. Dr. Ángel Gil and Prof. Dr. Concepción Aguilera García.
- 01/08/2012 – 18/11/2016 **PhD in Human Nutrition (Sobresaliente Cum Laude)** at University of Granada, Granada, Spain. Supervisors: Prof. Dr. Ángel Gil and Prof. Dr. Concepción Aguilera García. Title Thesis: Biological implications of insulin resistance-signaling, inflammation and extracellular matrix genes in human adipose tissue-derived mesenchymal stem cell cultures.
- 01/09/2011 – 30/06/2012 **Master in Human Nutrition (Distinction Award)** at University of Granada, Granada, Spain.
- 01/09/2009 – 05/12/2011 **Bachelor in Food Science and Technology**. University of Granada, Granada, Spain.
- 01/09/2009 – 05/12/2011 **Diploma in Human Nutrition and Dietetics**. University of Granada, Granada, Spain.

FUNDING RECEIVED (FELLOWSHIPS)

- 01/05/2013 – 01/05/2017 **Predoctoral University Teacher Training Fellowship (FPU)** funded by the Spanish Ministry of Education, Culture and Sport. Department of Biochemistry and Molecular Biology II, Faculty of Pharmacy, University of Granada, Granada, Spain.
- 10/09/2014 – 11/12/2014 **Fellowship for PhD internship funded by Spanish Government** at School of Life Sciences in Medical School, The University of Nottingham. Nottingham, United Kingdom. Supervisor: Dr. Ian Macdonald.

10/05/2016 – 09/08/2016

Fellowship for PhD internship funded by Spanish Government at Li Ka Shing Centre for Health Research Innovation, University of Alberta. Edmonton, Alberta, Canada. Supervisor: Dr. Spencer Proctor.

01/08/2012 – 30/04/2013

Predoctoral Fellowship funded by the Institute of Health Carlos III, Madrid, Spain. Department of Biochemistry and Molecular Biology II, Faculty of Pharmacy, University of Granada, Granada, Spain.

15/10/2010 – 31/07/2011

Research Collaboration Fellowship for Undergraduates funded by Spanish Ministry of Education, Culture and Sport. Department of Nutrition, Faculty of Pharmacy, University of Granada, Granada, Spain.

PARTICIPATION IN SCIENTIFIC TRAINING COURSES

1. **Course of experimental animals at Helmholtz Zentrum München:** approved conducting experiments.

REVIEWING AND EVALUATING ACTIVITIES

Scientific Reports; Diabetes and Obesity Metabolism; BBA Molecular and Cell Biology; International Journal of Obesity; Food and Chemical Toxicology; Obesity reviews; International Journal of Molecular Science; Journal of Molecular Endocrinology; Nutrients; Plos One; Nutrition and Metabolism; Journal of Translational Medicine; and Cellular and Molecular Biology Letters.

PUBLICATIONS IN PEER-REVIEWED SCIENTIFIC JOURNALS

1. **Ruiz-Ojeda FJ**, Wang J, Bäcker T, Krueger T, Zamani S, Rosowski S, Gruber T, Onogi Y, Feuchtinger A, Schulz TJ, Fässler R, Müller TD, García-Cáceres C, Meier M, Blüher M, Ussar S. Active integrins regulate white adipose tissue insulin sensitivity and brown fat thermogenesis. *Mol Metab* 2021 Jan 6:101147. (IF: 7,422).
2. Gruber T, Pan C, Contreras RE, Wiedemann T, Morgan DA, Skowronski A., Lefort S, De Bernadis Murat C, Le Thuc O, Legutko B, **Ruiz-Ojeda FJ**, Fuente-Fernández M, García-Villalón AL, González-Hedström D, Huber M, Kuspers I, Joris PJ, Stehouwer CDA, Müller TD, Ussar S, Pfluger PT, Woods SC, Ertürk A, Yi CX, LeDuc C, Rahmouni K, Granado M, Horvath TL, Tschöp MH, García-Cáceres C. Obesity-associated hyperleptinemia alters the gliovascular interface of the hypothalamus to promote hypertension. *Cell Metab*. 2021 Apr 30:S1550-4131(21)00173-X. (IF: 27,287).
3. Plaza-Díaz J, Izquierdo D, Torres-Martos A, Tariq Baig A, Aguilera CM, **Ruiz-Ojeda FJ***. Impact of Physical Activity and Exercise on the Epigenome in Skeletal Muscle and Effects on Systemic Metabolism. *Biomedicines* 2022, 10(1):126. *Corresponding author. (IF: 6,081-Q1).
4. Casuso RA, Al Fazazi S, Plaza-Díaz J, **Ruiz-Ojeda FJ**, Rueda-Robles A, Aragón-Vela J, Huertas JR. Physiological Doses of Hydroxytyrosol Modulate Gene Expression in Skeletal Muscle of Exercised Rats. *Life (Basel)* (IF: 3.24; Q1). 2021 Dec 12;11(12):1393
5. Aragón-Vela J, Solis-Urra P, **Ruiz-Ojeda FJ**, Álvarez-Mercado AI, Olivares-Arancibia J, Plaza-Díaz J. Impact of Exercise on Gut Microbiota in Obesity. *Nutrients* (IF: 4.55; Q1). 2021 Nov 10;13(11):3999. doi: 10.3390/nu13113999.
6. Reina-Pérez I, Olivas-Martínez A, Mustieles V, **Ruiz-Ojeda FJ**, Molina-Molina JM, Olea N, Fernández MF. Bisphenol F and bisphenol S promote lipid accumulation and adipogenesis in human adipose-derived stem cells. *Food Chem Toxicol*. 2021 Apr 15:112216. (IF: 6,023).
7. Anguita-Ruiz A, Bustos-Aibar M, Plaza-Díaz J, Mendez-Gutierrez A, Alcalá-Fdez J, Aguilera CM, **Ruiz-Ojeda FJ**. Omics Approaches in Adipose Tissue and Skeletal Muscle Addressing the Role of Extracellular Matrix in Obesity and Metabolic Dysfunction. *Int. J. Mol. Sci.* 2021, 22(5), 2756. (IF: 5,923).

8. Casuso RA, Al Fazazi S, **Ruiz-Ojeda FJ**, Plaza-Díaz J, Rueda-Robles A, Aragón-Vela J, Huertas JR. Hydroxytyrosol modifies skeletal muscle GLUT4/AKT/Rac1 axis in trained rats. *J Cell Physiol*. 2021 Jan; 236(1):489-494. (IF: 4,546).
9. Plaza-Díaz J, Pastor-Villaescusa B, Rueda-Robles A, Abadia-Molina F, **Ruiz-Ojeda FJ***. Plausible Biological Interactions of Low- and Non-Calorie Sweeteners with the Intestinal Microbiota: An Update of Recent Studies. *Nutrients*. 2020 Apr 21;12(4):1153. (IF: 5,717). *Corresponding author
10. Huertas JR, **Ruiz-Ojeda FJ**, Plaza-Díaz J, Nordsborg NB, Martín-Albo J, Rueda-Robles A, Casuso RA. Human muscular mitochondrial fusion in athletes during exercise. *FASEB J* 2019; 33(11):12087-12098. (IF: 5,191).
11. **Ruiz-Ojeda FJ***, Méndez-Gutiérrez A, Aguilera CM, Plaza-Díaz J. Extracellular Matrix Remodeling of Adipose Tissue in Obesity and Metabolic Diseases. *Int J Mol Sci.* 2019 Oct 2;20(19):4888. (IF: 4,556). *Corresponding author
12. **Ruiz-Ojeda FJ***, Anguita-Ruiz A, Rupérez AI, Gomez-Llorente C, Olza J, Vázquez-Cobela R, Gil-Campos M, Bueno G, Leis R, Cañete R, Moreno LA, Gil A, Aguilera CM. Effects of X-chromosome Tenomodulin Genetic Variants on Obesity in a Children's Cohort and Implications of the Gene in Adipocyte Metabolism. *Sci Rep.* 2019 Mar 8;9(1):3979. doi: 10.1038/s41598-019-40482-0. (IF: 3,998-Q1). *Corresponding author
13. Anguita-Ruiz A, Plaza-Díaz J, **Ruiz-Ojeda FJ**, Ruperez AI, Leis R, Bueno G, Gil-Campos M, Vázquez-Cobela R, Cañete R, Moreno LA, Gil A, Aguilera CM. X chromosome genetic data in a Spanish children cohort, dataset description and analysis pipeline. *Sci Data.* 2019; 22;6(1):130. (IF: 5,929).
14. Plaza-Díaz J, Gómez-Fernández A, Chueca N, de la Torre-Aguilar MJ, Gil A, Perez-Navero JL, Flores-Rojas K, Martín-Borreguero P, Solis-Urra P, **Ruiz-Ojeda FJ**, Garcia F, Gil-Campos M. Autism spectrum disorder (ASD) with and without mental regression is associated with changes in the fecal microbiota. *Nutrients* 2019; 11:337; (IF: 4,546).
15. **Ruiz-Ojeda FJ***, Plaza-Díaz J, Sáez-Lara MJ, Gil A. Effects of Sweeteners on the Gut Microbiota: A Review of Experimental Studies and Clinical Trials. *Adv Nutr.* 2019 Jan 1;10(suppl_1):S31-S48. doi: 10.1093/advances/nmy037. (IF: 7,265). *Corresponding author
16. Plaza-Díaz J, **Ruiz-Ojeda FJ**, Gil-Campos M, Gil A. Mechanisms of Action of Probiotics. *Adv Nutr.* 2019 Jan 1;10(suppl_1):S49-S66. doi: 10.1093/advances/nmy063. (IF: 7,265).
17. **Ruiz-Ojeda FJ**, Anguita-Ruiz A, Leis R, Aguilera CM. Genetic Factors and Molecular Mechanisms of Vitamin D and Obesity Relationship. *Ann Nutr Metab.* 2018;73(2):89-99. (IF: 2,84).
18. Plaza-Díaz J, **Ruiz-Ojeda FJ**, Gil-Campos M, Gil A. Immune-Mediated Mechanisms of Action of Probiotics and Synbiotics in Treating Pediatric Intestinal Diseases. *Nutrients.* 2018 Jan 5;10(1). pii: E42. doi: 10.3390/nu10010042. (IF: 4,546).
19. Plaza-Díaz J, **Ruiz-Ojeda FJ**, Vilchez-Padial LM, Gil A. Evidence of the Anti-Inflammatory Effects of Probiotics and Synbiotics in Intestinal Chronic Diseases. *Nutrients.* 2017 May 28;9(6). pii: E555. doi: 10.3390/nu9060555. (IF: 4,546).
20. Casuso RA, Plaza-Díaz J, **Ruiz-Ojeda FJ**, Aragón-Vela J, Robles-Sánchez C, Nordsborg NB, Hebberecht M, Salmeron LM, Huertas JR. High-intensity high-volume swimming induces more robust signaling through PGC-1 α and AMPK activation than sprint interval swimming in m. triceps brachii. *PLoS One.* 2017;12(10):e0185494. (IF: 2.740).
21. **Ruiz-Ojeda FJ**, Gomez-Llorente C, Aguilera CM, Gil A, Rupérez AI. Impact of 3-Amino-1,2,4-Triazole (3-AT)-Derived Increase in Hydrogen Peroxide Levels on Inflammation and Metabolism in Human Differentiated Adipocytes. *PLoS One.* 2016 Mar 29;11(3):e0152550. (IF: 2.740).
22. **Ruiz-Ojeda FJ**, Rupérez AI, Gomez-Llorente C, Gil A, Aguilera CM. Cell Models and Their Application for Studying Adipogenic Differentiation in Relation to Obesity: A Review. *Int J Mol Sci.* 2016 Jun 30;17(7). pii: E1040; DOI: 10.3390/ijms17071040. (IF: 4,556).
23. **Ruiz-Ojeda FJ**, Aguilera CM, Rupérez AI, Gil A, Gomez-Llorente C. An analogue of atrial natriuretic peptide (C-ANP4-23) modulates glucose metabolism in human differentiated adipocytes. *Mol Cell Endocrinol.* 2016 Aug 15;431:101-8. doi: 10.1016/j.mce.2016.05.011. Epub 2016 May 13. (IF: 3.871).

24. Sáez-Lara MJ, Robles-Sánchez C, **Ruiz-Ojeda FJ**, Plaza-Díaz J, Gil A. Effects of Probiotics and Synbiotics on Obesity, Insulin Resistance Syndrome, Type 2 Diabetes and Non-Alcoholic Fatty Liver Disease: A Review of H18.
25. Roman S, Agil A, Peran M, Alvaro-Galue E, **Ruiz-Ojeda FJ**, Fernández-Vázquez G, Marchal JA. Brown adipose tissue and novel therapeutic approaches to treat metabolic disorders. *Transl Rev.* 2014; 165(4):464-79.
26. Navarro-Alarcón M, **Ruiz-Ojeda FJ**, Blanca-Herrera RM, A-Serrano MM, Acuña-Castroviejo D, Fernández-Vázquez G, Agil A. Melatonin and metabolic regulation: a review. *Food Funct.* 2014; 5(11):2806-32. *uman Clinical Trials. Int J Mol Sci.* 2016 Jun 13;17(6). pii: E928. (IF: 4,556).
27. Navarro-Alarcon M, **Ruiz-Ojeda FJ**, Blanca-Herrera RM, Kaki A, Adem A, Agil A. Melatonin administration in diabetes: regulation of plasma Cr, V, and Mg in young male Zucker diabetic fatty rats. *Food Funct.* 2014;5(3):512-6. (IF: 2,791).
28. Navarro-Alarcon M, **Ruiz-Ojeda FJ**, Blanca-Herrera RM, Agil A. Antioxidant activity of melatonin in diabetes in relation to the regulation and levels of plasma Cu, Zn, Fe, Mn, and Se in Zucker diabetic fatty rats. *Nutrition.* 2013;29(5):785-9. PMID: 23352467. (IF: 3,046).

BOOK CHAPTERS

1. Julio Plaza Diaz; **Francisco Javier Ruiz Ojeda**; Maria Jose Arias Téllez; Patricio Solis Urra; Maria Jose Sáez Lara; Angel Gil. Use of Probiotics in Inflammatory Bowel Disease. Microbiome and Metabolome in Diagnosis, Therapy, and other Strategic Applications. pp. 149 - 153. Elsevier, 01/02/2019. ISBN 978-0-12-815249-2
2. Carolina Gomez Llorente; **Francisco Javier Ruiz Ojeda**; Azahara I Rupérez; Concepción M Aguilera. AMPK as a Postulated Target for Metabolic Syndrome and Obesity. Anti-Obesity Drug Discovery and Development. 4, pp. 1 -36. ELSEVIER, 2019. ISSN 2210-2698.
3. **Francisco Javier Ruiz Ojeda***; Josune Olza; Angel Gil; Concepcion Maria Aguilera. Oxidative Stress and Inflammation in Obesity and Metabolic Syndrome. Obesity, oxidative stress and dietary antioxidants. pp. 1 - 13. London(Reino Unido): Elsevier, 13/08/2018. Disponible en Internet en: <<https://doi.org/10.1016/B978-0-12-812504-5.00001-5>>. ISBN 978-0-12-812504-5. *Corresponding author.
4. Concepción Maria Aguilera García; Azahara Iris Ruperez Cano; **Francisco Javier Ruiz Ojeda**. *Regulación de la expresión génica mediada por lípidos.* Tratado de Nutrición. 3^a Edición. Tomo II: Bases moleculares de la nutrición. 2, pp. 261 - 280. Panamericana, 2017. ISBN 978-84-9110-191-8.
5. **Francisco Javier Ruiz Ojeda**; Julio Plaza Diaz and Angel Gil. RNA analyses. Chapter 6: Principles of Nutrigenetics and Nutrigenomics, 2020. ISBN: 9780128045879.

Publication impact metrics summary

Total number of citations: **1807** (Google Scholar)

Total number of indexed publication: **28 (11 as first/last author)**

Total number of publication in the first quartile: **19**

h-Index: **17** and i10: **19** (Google Scholar)

Master Thesis Supervised: **9**

NATIONAL AND INTERNATIONAL CONFERENCES

1. **Francisco Javier Ruiz-Ojeda**, Jiefu Wang, Theresa Baecker, Samira Zamani, Matthias Blüher, Siegfried Ussar. Adipose selective loss of Kindlin-2 causes a lean insulin resistance phenotype. KEYSTONE SYMPOSIA. Obesity and Adipose Tissue Biology. Banff, Canada. 10-14 February 2019. Scholarship Award. Poster Communication.

2. **Francisco Javier Ruiz-Ojeda**, Concepción Aguilera-García, Carolina Gómez-Llorente, Ángel Gil y Azahara I. Rupérez-Cano. Catalase: metabolic effects in adipocytes. SLAN (Sociedad Latinoamericana de Nutrición), Punta Cana, República Dominicana. 8-12 November 2015. Oral communication
3. **Francisco Javier Ruiz-Ojeda**, Concepción Aguilera-García, Azahara I. Rupérez-Cano, Ángel Gil y Carolina Gómez-Llorente. C-ANP4-23 modulates gene expression associated with signaling pathway insulin and inflammation in human adipocytes. FENS (Federation of European Nutrition Societies), Berlin, Germany. 20-23 October 2015. Oral communication.
4. **Francisco Javier Ruiz-Ojeda**, Concepción Aguilera-García, Carolina Gómez-Llorente, Ángel Gil y Azahara I. Rupérez-Cano. Efectos metabólicos de la catalasa en adipocitos diferenciados. Sociedad española de endocrinología pediátrica (SEEP). Córdoba, Spain. 27-29 April 2016. Oral communication.
5. **Francisco Javier Ruiz-Ojeda**, Azahara I. Rupérez-Cano, Ángel Gil, Concepción Aguilera-García y Carolina Gómez-Llorente. La activación del receptor 3 de los péptidos natriuréticos aumenta los niveles de adenosín monofosfato ciclado (AMPc) en adipocitos humanos. Federación Española de Sociedades de Nutrición, Alimentación y Dietética (FESNAD). Sevilla, Spain. 5-7 March 2015. Poster communication.
6. **Francisco Javier Ruiz-Ojeda**, Carolina Gómez-Llorente, Azahara I. Rupérez-Cano, Ángel Gil y Concepción Aguilera-García. Estudio de la expresión del gen Tenomodulina en adipocitos diferenciados de células mesenquimales derivadas de tejido adiposo humano. Sociedad Española de Nutrición (SEÑ). Pamplona, Spain. 3-5 July 2014. Poster communication.

PARTICIPATION IN RESEARCH PROJECTS (PI and team member)

1. Implicaciones fisiopatológicas de la vasorina (VASN) en la obesidad y en la resistencia a la insulina. Programa 20. Proyectos de Investigación Precompetitivos para Jóvenes Investigadores. Modalidad 20.a. Proyectos para jóvenes doctores, Universidad de Granada. **IP: Francisco J. Ruiz-Ojeda**. Presupuesto: 1500 €.
2. Integrin-matrix interactions in the regulation of metabolism. Institute for Diabetes and Obesity (IDO), Helmholtz Zentrum München, Munich, Germany. 01/01/2018-31/12/2019. PI: Siegfried Ussar. **Team member. Collaborator**
3. Generate a comprehensive map of cell surface regulators of insulin receptor function in adipocytes. IDO, Helmholtz Zentrum München, Munich, Germany. 01/01/2018-31/12/2019. PI: Siegfried Ussar **Team member. Collaborator**
4. Obesity-induced hypertension is driven by hypothalamic HIF-1 α /VEGF signaling cascade. PI: Dr. Cristina García-Cáceres. Astrocytes group. Helmholtz Zentrum München, Munich, Germany. 01/01/2019-30/09/2020. **Team member. Collaborator**
5. SAF2013-45752-R: "Mecanismos moleculares del efecto anti-obesidad de la melatonina en la rata Zucker obesa y diabética". Proyecto de Investigación del Plan Nacional. Ministerio de Economía y Competitividad. PI: Ahmad Agil Abdalla. University of Granada. 01/01/2014-31/12/2017. 62.920 €. **Team member. Collaborator**
6. PI13/01393: "ACTIBATE: Activating Brown Adipose Tissue through Exercise. Efectos de un programa de ejercicio sobre la actividad y cantidad de tejido adiposo marrón: Estudio aleatorizado controlado". Ministerio de Economía y Competitividad. PI: Jonatan Ruiz Ruiz. University of Granada. 01/01/2014-31/12/2016. 171.273 €. **Team member. Collaborator**
7. P10-CTS-6770: "Implicaciones biológicas de genes de las vías de señalización de la insulina, inflamación y de la matriz extracelular en cultivos de células madre mesenquimales de tejido adiposo". University of Granada. 15/03/2011-15/03/2014. 93.283,5 €. **Team member. Collaborator**
8. OBN20PI03/202. Unraveling the pathophysiology of adipose tissue of obese children through next-generation RNA sequencing-KIDSADIPOSEQ. University of Granada. 2020-2022. 75000 €. PI: Dr. Laura Herrero. **Team member. Collaborator**

9. P18-RT-4455: "Transductores Moleculares Del Ejercicio Físico Y La Activación Del Tejido Adiposo Pardo: En Busca De Nuevas Dianas Terapéuticas En La Comunicación Intercelular". Entidad Financiadora: Feder Junta de Andalucía. 140352 €. PI: Dr. Concepcion Aguilera/Jonatan Ruiz. **Team member. Collaborator**

10. DEP2016-79512-R: "Ejercicio En La Prevencion Y Tratamiento De La Obesidad Y Resistencia A La Insulina: Analisis Inteligentes-Intervenciones Inteligentes". Ministerio de Economía y Competitividad. 121000 €. PI: FRANCISCO BARTOLOME ORTEGA PORCEL/JONATAN RUIZ RUIZ. **Team member. Collaborator**

CONTRACTS, TECHNOLOGICAL OR TRANSFER MERITS

1. RD08/0072/0028, Red de salud materno-infantil y del desarrollo Redes Temáticas 2008 (RETIC, Red Samid, Instituto de Salud Carlos III, Madrid). PI: Angel Gil Hernández, University of Granada. 01/08/2012-31/03/2013. 72.489,05 €. **Team member.**

2. Guía para la sustanciación de declaraciones de salud en alimentos: Funciones inmune, cognitiva y síndrome metabólico. PULEVA BIOTECH, S.A. PI: Carolina Gomez Llorente (University of Granada). 01/01/2012-01/01/2017. 200.000 €. **Team member.**

3. Travel grant to attend to the European Congress of Obesity (ECO) in Maastricht in May 2022.

TEACHING EXPERIENCE

1. **Biochemistry and Molecular Biology:** first course in the Human Nutrition and Dietetics degree, Department of Biochemistry and Molecular Biology II, School of Pharmacy, University of Granada, Granada, Spain (2014 – 2017).

2. **Master:** Online master of Clinical Nutrition, University of Granada, Spain (2017-2020).

ACREDITATIONS

1. "*Profesor Contratado Doctor*" accreditation by ANECA (*Agencia Nacional de Evaluación de la Calidad y Acreditación*, Spanish Government) in order to apply for Associate Professor Position at the University in Spain.