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AGENCIA
ESTATAL DE
INVESTIGACIÓN

CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

CV date 14/6/2024

First name	Jonatan		
Family name	Ruiz Ruiz		
Gender (*)	Man	Birth date	22/03/1978
ID number	46779494R		
e-mail	ruizj@ugr.es		Web: https://bit.ly/3IJ49Jw
Open Researcher and Contributor ID (ORCID)	0000-0002-7548-7138		

A.1. Current position

Position	Full Professor - <i>Profesor Catedrático de Universidad</i>		
Initial date	7/03/2024		
Institution	University of Granada		
Department/Center	Physical Education and Sports	Faculty of Sport Sciences	
Country	Spain	Teleph. number	+34 699581771
Key words	Cardiometabolic health; Exercise; Obesity		

A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
2017-2024	Associated Professor/ University of Granada/Spain
2016-2017	Assistant Professor/University of Granada/Spain
2011-2015	Ramón y Cajal Research Fellow/ University of Granada/Spain
2007-2010	Post-Doc Researcher/Karolinska Institutet/Sweden
2005-2006	Pre-Doc Researcher/ Karolinska Institutet/Sweden
2003-2006	Pre-Doc Researcher/University of Granada/Spain
2001-2002	Starting Researcher/ University of Granada/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD in Medical Sciences	Karolinska Institutet/Sweden	30-03-2007
PhD in Exercise Physiology	University of Granada/Spain	22-02-2007
Master Degree in Sport Sciences research	University of Granada/Spain	2003
Degree in Sport Sciences	University of Granada/Spain	2002
Degree in Physical Education	University of Granada/Spain	1999

Part B. CV SUMMARY

Scientific research and transference: Dr. Jonatan Ruiz Ruiz (Ruiz) research focuses on the aetiology and pathophysiology of obesity and the role of physical activity and fitness on prevention and treatment of obesity-related comorbidities. As undergraduate student, Ruiz developed a novel methodology to assess handgrip strength in humans that has been adopted by international fitness test batteries. Ruiz's PhD Thesis in the University of Granada (UGR) provided strong evidence on that physical fitness is a powerful marker of cardiometabolic health in adolescents, and received the best Thesis in Biomedicine award. During the PhD training, Ruiz did several research stays in Karolinska Institutet (KI, Sweden), and carried out a second PhD Thesis. In KI, Ruiz demonstrated that physical activity has a strong impact on obesity and cardiometabolic health in European children as young as 9 years of age, and received several international awards. Ruiz worked on several large-scale longitudinal cohorts during the *post-doctoral period in KI and South Carolina (USA)* and revealed that higher level of fitness is associated with a reduced risk (15-30%) of cardiovascular disease, cancer, and all-cause mortality in adults. Ruiz became a world expert in the physical activity and fitness area and developed the International ALPHA

fitness test battery that has been implemented in the European health monitoring system as well as in more than 20 non-EU countries. During the post-doc period, Ruiz demonstrated in a number of novel gene-lifestyle interaction studies that physical activity can counteract the genetic predisposition to develop obesity. Back in the UGR as a Ramón y Cajal Research Fellow (ranked N°1, 2011), **Ruiz established his own research group**, and conducted innovative exercise intervention studies in women during pregnancy, overweight/obese children, young and middle-aged adults, and in elderly people. His results have been broadly disseminated not only in original research and invited authoritative reviews but also in international conferences and in a number of media channels including radio, TV programs and press. **In the past decade**, Ruiz became a leading expert in human brown adipose tissue (BAT) metabolism and physiology. Ruiz's team developed a new personalized cooling protocol to activate BAT, conducted novel methodological studies to enhance BAT assessment, and identified a new human BAT depot in the dorsocervical region. Ruiz's research demonstrates that the contribution of human BAT to energy balance is relatively modest compared to small mammals. Furthermore, despite exercise reducing visceral adipose tissue, it does not affect BAT volume or activity in humans. **More recently**, Ruiz has coordinated several interdisciplinary weight loss and lifestyle intervention studies, and demonstrated improvements in ectopic fat depots and cardiovascular health in adults with obesity.

Leadership: Ruiz is the Director of the Sport and Health Research Institute (iMUDS, from June 2024), co-Director of a relatively young research group (CTS-977, mean age: 35 years, 68 members) founded in January 2013 (<http://profith.ugr.es>), that has raised >4M €; and Coordinates a CIBEROBN research group with a special focus on exercise, obesity and related comorbidities (ref. CB22/03/00058). He also coordinates the working group of exercise in the Spanish Association for the study of Obesity (SEEDO). Ruiz is within the Top 3 researchers in Sport Sciences in Spain and is listed in the 2021, 2022 and 2023 editions of Stanford University's top 2% Scientists worldwide. He has a very active and fruitful collaboration with National and International research groups (>70% of publications with international researchers). Ruiz has received 36 prizes/awards; is elected Vice-President of the prestigious Spanish Young Academy (<https://academiajoven.es>), is member of the Fundación GADEA Ciencia, and of national and international scientific networks on exercise (EXERNET), diabetes (EFSD), and BAT (EuroBat).

Supervisor: Ruiz has supervised 35 PhD Theses (18 awarded) and is currently supervising 5 PhD students and 6 post-docs. Former Ruiz's PhD students have achieved significant career milestones, including positions as Full or Assistant Professors. Many of them hold prestigious research grants, such as the Marie Skłodowska-Curie Global Fellowship (n=2), Ramón y Cajal (n=5), Miguel Servet (n=2), Juan de la Cierva (n=6), Sara Borrell (n=2), Ramón Areces, Martín Escudero, and Margarita Salas.

Reviewer: Ruiz is regular member of International Review Boards including the ERC program, and national Research Agencies from Spain, Finland, The Netherlands, Denmark, Germany, Switzerland, and is regular reviewer of prestigious journals including Science, Nature or NEJM.

Organizer of Scientific events: Ruiz has been actively involved in the organization and coordination of more than 40 National and International congresses, symposiums and summer courses.

Part C. RELEVANT MERITS

C.1. Publications

Ruiz has published more than 550 papers in the most prestigious journals in the area of Sport Sciences, Nutrition & Dietetics, Endocrinology and in Physiology - [pubmed link](#); >225 as first or last author; >70% Q1; WoS h-index 81; 1 paper cited >1650 times; 20 cited >200 times; 52 cited >100 times).

1. Clavero-Jimeno A, Dote-Montero M, Migueles JH, Camacho-Cardenosa A, Osés M, Medina JE, Alcantara JMA, Muñoz-Torres M, Labayen I, **Ruiz JR** (10/10). Impact of lifestyle moderate-to-vigorous physical activity timing on glycemic control in sedentary adults with overweight/obesity and metabolic impairments. *Obesity*. 2024 Jun 10. (IF: 6.9, 12/88 Nutrition and Dietetics, Q1).
2. Jurado-Fasoli L, Sanchez-Delgado G et al. ***Ruiz JR** (9/10; *share senior authorship). Changes in plasma signaling lipids after 2 h of cold exposure are associated with a healthier cardiometabolic profile independently of brown adipose tissue in young adults. *Cell Rep Med* 2024 Jan 18:101387. (IF: 14.3, 5/136 Medicine, Research & Experimental, D1).
3. Jurado-Fasoli L, Sanchez-Delgado G et al. **Ruiz JR** (9/9). Adults with metabolically healthy overweight or obesity present more brown adipose tissue and higher thermogenesis than their metabolically unhealthy counterparts. *EBioMedicine*. 2024 Jan 6;100:104948. (IF: 11.1, 10/136 in Medicine, Research & Experimental, D1).

4. Martinez-Tellez B, Sanchez-Delgado G, Acosta FM et al. **Ruiz JR** (23/23). No evidence of brown adipose tissue activation after 24 weeks of supervised exercise training in young sedentary adults: The ACTIBATE randomized controlled trial. *Nat Commun* 2022; 13(1):5259. (IF: 17.694, 6/73 in Multidisciplinary Sciences, D1).
5. Jurado-Fasoli L, Di X, Sanchez-Delgado G, et al. ***Ruiz JR** (15/16; *share senior authorship). Acute and long-term exercise differently modulate plasma levels of oxylipins, endocannabinoids, and their analogues in young sedentary adults: A sub-study and secondary analyses from the ACTIBATE randomized controlled-trial. *EBioMedicine*. 2022; 85:104313. (IF: 11.1, 10/136 in Medicine, Research & Experimental, D1).
6. Carneiro-Barrera A, Amaro-Gahete FJ, Guillén-Riquelme A, Jurado-Fasoli L, Sáez-Roca G, Martín-Carrasco C, Buéla-Casal G, **Ruiz JR** (8/8). Effect of an Interdisciplinary Weight Loss and Lifestyle Intervention on Obstructive Sleep Apnea Severity: The INTERAPNEA Randomized Clinical Trial. *JAMA Netw Open*. 2022; 5(4): e228212 (IF: 13.366, 15/172 in Medicine, General & Internal, D1).
7. Sanchez-Delgado G, Martinez-Tellez B, Acosta FM, Virtue S, Vidal-Puig A, Gil A, Llamas-Elvira JM, **Ruiz JR** (8/8). Brown Adipose Tissue Volume and Fat Content are Positively Associated with Whole-Body Adiposity in Young Men, Not in Women. *Diabetes*. 2021 Jul;70(7):1473-1485 (IF: 9.337, 12/146 in Endocrinology and Metab, D1).
8. Sanchez-Delgado G, Acosta FM, Martinez-Tellez B et al. **Ruiz JR** (10/10). Brown Adipose Tissue Volume and 18F-fluorodeoxyglucose Uptake Are Not Associated With Energy Intake in Young Human Adults. *Am J Clin Nutr* 2020; 111(2):329-339. (IF: 6.568, 5/87 in Nutrition & Dietetics D1).
9. Sanchez-Delgado G, Alcantara JMA, Acosta FM et al. **Ruiz JR** (9/9). Estimation of non-shivering thermogenesis and cold-induced nutrient oxidation rates: Impact of method for data selection and analysis. *Clin Nutr*. 2019; 38 (5), 2168-2174. (IF: 6.402, 6/87 in Nutrition & Dietetics, D1).
10. Acosta FM, Martinez-Tellez B, Sanchez-Delgado G et al. **Ruiz JR** (10/10). Association of objectively measured physical activity with brown adipose tissue volume and activity in young adults. *J Clin Endocrinol Metab*. 2019; 104(2) 223-233. (IF: 5.6, 22/145 in Endocrinology and Metab, Q1).

C.2. Congress - *invited speaker* in >80 National/International Conferences, see a selection:

1. 9th Symposium European Youth Heart Study. Universidade de Lisboa, Lisbon, Sept 2018.
2. Copenhagen Brown Adipose Tissue Conference, Copenhagen, June 2019.
3. FINUT 2020 Congress, Mexico, October 2020.
4. IV FESNAD Conference, Zaragoza, October 2020.
5. University of Concepción, Chile, March 2021.
6. XVIII National Congress SEEDO, Barcelona 2022.
7. 64th Congress of the Spanish Society of Endocrinology and Nutrition, Barcelona 2023.
8. XXXV Congreso de la Sociedad Española de Diabetes, Granada 2024.

C.3. Research Projects - Ruiz has been PI in 18 research projects. Ruiz is PI of the UGR partner in an EU Erasmus + SPO project (ref. 101089829 - FitBack4Literacy - 2023-2025), and has been researcher in two other EU Projects (H2020, ref. SE-210221640, 2016-2021; Erasmus + project, ref. 613010-EPP-1-2019-1-SI-SPO-SCP, 2020-2022). From 2011, Ruiz has raised more than 2M € from national and private calls, excluding funds for hiring personnel (n=34 contracts).

Selection of Top Research Projects with Ruiz as Principal Investigator in the last 5 years:

1. Impact of Time-Restricted Eating and Supervised Exercise on Hepatic Steatosis and Cardiometabolic Health in Adults with Obesity: Deciphering the Role of Gut Microbiota (TEMPUS). Ministerio de Ciencia e Innovación (ref. PID2022-141506OB-I00). Period: Sept 2023-August 2027. Funding: 406,250€ + PhD student contract (FPI - 111,758€).
2. Diurnal variation of the effect of aerobic exercise on glycemic metabolism and cardiometabolic health in healthy sedentary women and men; DIVA project. Consejo Superior de Deportes (EXP_77437). Period: May 2023- Dec 2023. Funding: 143,264€.
3. Unravelling the human brown adipose tissue secretome and its implication on obesity (UHBATO). CIBEROBN intramural. Period: June 2023- Dec 2023. Funding: 50,000€.
4. Intervención Interdisciplinaria para la Pérdida de Peso y Cambio de Hábitos de Vida en Apnea Obstructiva del Sueño en Mujeres: Ensayo Clínico Aleatorizado INTERAPNEA-Women. Consejería

de Turismo, Cultura y Deporte, Instituto Andaluz del Deporte, Junta de Andalucía (Ref. G/46B/22706/29). Period: 2022-2023. Funding: 7,237€

5. Time restricted eating and ectopic fat in adults with obesity. Junta de Andalucía, Consejería de Transformación económica, Industria, Conocimiento y Universidades (A-CTS-516-UGR20). Period: 2021-2023. Funding: 35,000€.
6. Molecular transducers of exercise and brown adipose tissue activation: Looking for new therapeutic targets within intercellular communication. Junta de Andalucía, Consejería de Economía, Conocimiento, Empresas y Universidad (P18-RT-4455). Period: 2020-2023. Funding: 142,352€.

C.4. Contracts, technological or transfer merits

- Kerry Inc. (165,635€, 2022-2024); Vyaire S.L. (21,000€; 2020-2022), Wiemsbpro S.L. (7,797€; 2020-2022); HSN S.L. (15,000€; 2020-2021); Lactalis IBERIA, Puleva S.A. Biosearch, Biosearch, S.A (197,000€; 2013-2016).
- Scientific Advisor of a scientific outreach company devoted to disseminate science (The Voice of Science S.L., <https://thevoiceofscience.net>) whose CEO is a former PhD Student (Dr. Martinez-Tellez) (2020 – 2023).
- Scientific Advisor of the University Concepción, Chile (2021 – present).
- Co-Author of the Physical activity guidelines for Andalusia (SE-8656-2010, 2010) – document downloaded more than 50,000 times (<https://bit.ly/3Gakcrl>); and Co-Author of the white book for Physical Activity and Health of the EU Commission (<https://bit.ly/3dgOVGW>).

C.5. Patents - transference

- Open-Software to monitor skin body temperature in humans: [Temperatus®](#). University of Granada: Safe Creative (identificador: 1904110623465). April 2019.
- Open-Software: [BMI clasificador®](#). University of Granada: Safe Creative (identificador: 2004243758191). April 2020.
- Open-Software: A sociodemographic, anthropometric and lifestyle-based prediction score for screening children with overweight/obesity for hepatic steatosis; the HEPAKID index. Public University of Navarra. Safe Creative (identificador: 2101126558890). May 2021.
- Patent: application of *Roseburia inulinivorans* for improving muscular strength. Leiden University Medical Center and University of Granada, Dutch Patent Application No 2032642. Dec 2022.

C.6. Prizes and awards

Ruiz has received 36 prizes or awards; see a selection:

2012	University of Granada (Spain) Award to the best young researcher.
2012	Spanish Association of Sports Sciences Award to the best young researcher.
2015	Young Researcher award (Type 2 Diabetes and Obesity) - AstraZeneca Foundation.
2018	Danone Foundation - Impact of physical activity and diet on gut microbiota.
2018	National Award to the best researchers born in 1978.
2019	National Award: estrategia NAOS, Agencia Española de Seguridad alimentaria y nutrición.
2021	Award of the Royal Academy of Medicine of Andalusia.
2024	Sports Medicine National Research Award - Fundación Cajastur.

C.7. Institutional responsibilities

2011 –	Teacher of the Physical activity and health module in the Department of Physical Education and Sports, Faculty of Sports Sciences, University of Granada.
2013 – 2017	Vice-director of the Department of Physical Education and Sport, Faculty of Sport Sciences, University of Granada, Spain.
2012 – 2020	Vice-president of the Spanish Association of Sport Sciences.
2021 –	Vice-president of the Spanish Young Academy, https://academiajoven.es .
2022 –	President of the Scientific Advisory Board of the <i>Unidad de Atención al Paciente Oncológico Foundation</i> , that is treating, through a lifestyle multidisciplinary approach, to >600 patients with cancer.
2024 –	Coordinator of the Exercise Working Group of the Spanish Society for the Study of Obesity (SEEDO).
2024 –	Director of the Sport and Health Research Institute (iMUDS), University of Granada.