CURRICULUM VITAE ABREVIADO (CVA)

***IMPORTANT** – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.*

Part A. PERSONAL INFORMATION

First name	Borja		
Family name	Sañudo Corrales		
Gender (*)			
e-mail	bsancor@us.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-9969-9573	

(*) Mandatory

A.1. Current position

Position	(Full Professor) Catedrático de universidad		
Initial date	25-11-2016		
Institution	University of Seville		
Department/Center	Physical Education and Sport	Physical Education and Sport	
Country	Spain	Tele. number	
Key words	Exercise; technologies; clinical populations, physical activity		

A.2. Previous positions (research activity interuptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2015-to present	Scientific Director Muvhit Movement and Health

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Degree Sport Sciences	Granada	21/09/2004
PhD Sport Sciences	Sevilla	25/05/2009

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

Educational and professional information. Borja Sañudo is a PhD in sports sciences. MSc in high sport performance (University Pablo de Olavide) and in Physical Activity and Health (International University of Andalusia). He is full professor and the Head of the Department of Physical Education and Sport at the University of Seville and teaching in numerous master's degree programs in Health and Sport Sciences in Spain. He is co-founder of the BIOFANEX (Biological and Functional Analysis of Exercise) research group.

Research career summary. Borja is author of more than 100 publications in indexed JCR/SJR journals, with more than 30% in 1st quartile in the category and 50% as author of relevance. He has an H index of 35 (Google Scholar) and 26 in Scopus or WOS. He has more than 3829 citations (Google Scholar) and 1719 (Scopus). He is guest editor in different Editorial Committees in international journals (e.g., *Frontiers in aging neuroscience,* Q1 ISI-SCI), participating as *ad hoc* reviewer in different scientific publications (Q1-Q2 SIS-SCI). He is also the author of more than 30 books and chapters (in the main editorials, i.e., SPI), and has been a speaker at many international conferences, regularly presenting in Europe (e.g., Portugal) or America (e.g., Brazil).

His major research interests are centred on the role of exercise and other lifestyle factors for promoting improvements in physiological function, quality of life and disease-free survival in clinical populations. Since 2005 he has been working on a number of studies with clinical populations (mainly fibromyalgia, Type 2 diabetes, obesity and osteoporosis) with special interest in the assessment and management of frailty in older adults. He led two large randomized controlled trials and acquired

expertise in the objective measurement of physical activity, fitness, and function, and utilized a variety of combined sensors (e.g., accelerometers) and instruments for balance and gait assessment.

He is the Director of the international network on *Technologies Applied to the Promotion of Healthy lifestyle styles in the field of physical activity and sport* (*TAPAS). TAPAS research focuses on how to promote health and prevent disease and disability through creative use of wireless and networked technologies that support systems-level interventions in clinical and community settings.* Has incorporated an important net of international collaborations working together in this field. This line is complemented with another one related to the effect of physical exercise for the management of clinical populations (e.g., fibromyalgia, obesity, diabetes, and osteoporosis) where he has participated in numerous research projects obtained in public and competitive calls and / or research contracts of special relevance with the public administration or with other private entities. The one by the Ministry of Economy and Competitiveness called EFICCOM (Effect of Supervised Physical Exercise at the Brain, Cognitive and Metabolic Level) can be highlighted. At a European level, the OSTEOTECH project (FI-C3 - FIWARE Accelerators - Care and Wellbeing) aimed at developing a device for preventing osteoporosis (System for preventing osteoporosis by wearable technologies), a concessionaire in the Future Internet Public-Private call, stands out Partnership (FI-PPP) with European funds.

Borja is a leading researcher at the national and international level in the management of fibromyalgia through supervised physical exercise, with important results both in the assessment and the follow-up of exercise interventions in this population group. In the last couple of years Dr. Sañudo was also focused on the assessment and analysis of bone health in different conditions (e.g., older adults or osteoporosis), as well as in most of the complementary variables of the present report. He has participated in a total of 29 research projects (2 European, 2 National funding Plans, 1 Carlos III, 2 at a regional level and numerous projects with private funding).

Training capacity. Borja has supervised 5 Theses (all of them with “Cum Laude” qualification) and another 4 are almost complete. Moreover, have supervised more than 50 bachelor/master theses. Further 2 predoc students (1 FPU/1PIF) are currently under his supervision.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

1. Sanchez-Trigo H, Rittweger J, Sañudo B. Effects of non-supervised exercise interventions on bone mineral density in adult women: a systematic review and meta-analysis. Osteoporos Int. 2022 Jul;33(7):1415-1427. doi: 10.1007/s00198-022-06357-3.
2. Sanchez-Trigo H, Molina E, Tejero S, Sañudo B. **Applying Machine Learning to estimate osteoporosis risk based on compliance with WHO guidelines for physical activity in postmenopausal women**. In: Sañudo and García. Innovation in Physical Activity and Sport. Springer. 2022. ISBN: 978-3-030-92896-4
3. Sanchez-Trigo H, Molina-Martínez E, Grimaldi-Puyana M, Sañudo B. Effects of lifestyle behaviours and depressed mood on sleep quality in young adults. A machine learning approach. Psychol Health. 2022 Apr 27:1-16. doi: 10.1080/08870446.2022.2067331.
4. Zymbal V, Carrasco L, Sañudo B, Luís D, Baptista F. Mediating effect of muscle power on the relationship of physical activity with physical fitness and physical function in older women. Exp Gerontol. 2022 Feb;158:111660. doi: 10.1016/j.exger.2021.111660.
5. Bernardo-Filho M, Bemben MG, Taiar R, Sañudo B, Furness T, Clark BC. Interventional Strategies for Enhancing Quality of Life and Health Span in Older Adults. Front Aging Neurosci. 2020;12:253. Published 2020 Sep 11. doi:10.3389/fnagi.2020.00253
6. Grimaldi-Puyana M, Fernández-Batanero JM, Fennell C, Sañudo B. Associations of Objectively-Assessed Smartphone Use with Physical Activity, Sedentary Behavior, Mood, and Sleep Quality in Young Adults: A Cross-Sectional Study. Int J Environ Res Public Health. 2020;17(10):3499. Published 2020 May 17. doi:10.3390/ijerph17103499
7. Estévez-López F, Maestre-Cascales C, Russell D, et al. Effectiveness of exercise on fatigue and sleep quality in fibromyalgia: a systematic review and meta-analysis of randomised trials [published online ahead of print, 2020 Jul 25]. Arch Phys Med Rehabil. 2020;S0003-9993(20)30434-2.

8. Machado C, Sañudo B, Stark C, Schoenau E. (2018). **Effects of Mechanical Vibration on Bone Tissue**. En: Taiar et al. (Eds.): Whole Body Vibrations Physical and Biological Effects on the Human Body. CRC Press – Taylor & Francis Group. ISBN 13: 978-1-138-50001-3
9. Sañudo B, Sanchez-Oliver AJ, del Rio-Rama MC. (2018). **Gamification and New Technologies to Promote Healthy Lifestyles and Its Role in Creative Industries**. En: Peris M (Eds.). Cultural and Creative Industries. A Path to Entrepreneurship and Innovation. Springer. ISBN 978-3-319-99589
10. Sañudo B, de Hoyo M, Del Pozo-Cruz J, Carrasco L, Del Pozo-Cruz B, Tejero S, Firth E. A systematic review of the exercise effect on bone health: the importance of assessing mechanical loading in perimenopausal and postmenopausal women. Menopause. 2017 Oct;24(10):1208-1216.

C.2. Congress

1. Sanchez-Trigo H, Sánchez-Oliver A, Sañudo B. Effects of a physical activity intervention for osteoporosis prevention on bone biomarkers. 27th Congress Of the European Collage of Sport Science. Seville (Spain). 30-2 de September, 2022. Oral presentation
2. Sanchez-Trigo H, Reverte G, Sañudo B. Non-Supervised Exercise Interventions for Osteoporosis Prevention in Older Women. A Meta-Analysis. International Virtual Congress "Exercise, Aging and Health". Cádiz (Spain). 13-14 May, 2021. Invited Conference
3. Kaitlyn W, Sañudo B, Sánchez-Oliver AJ, Fennell C. Physical activity, sedentary behavior, smartphone use, and sleep Patterns of young adults during covid-19 quarantine. SEACSM. Virtual. 18-19 de febrero de 2021. Oral presentation
4. Sanchez-Trigo, H., Sanchez-Oliver, A.J., Sañudo B. Effectiveness of a physical activity intervention using wearable technologies in improving bone health in premenopausal women. A randomized controlled trial. 25th Annual Congress of the European College of Sport Science. Virtual. 28 al 30 de octubre de 2020. Oral presentation
5. Sánchez Oliver A, Sánchez Trigo H, Sañudo B. Quantification of physical activity in programs for the prevention of osteoporosis - Where to place the accelerometer? VIII Congreso internacional de actividad físico-deportiva para mayores. Málaga. 14 de noviembre de 2020. Oral presentation
6. Velasco L, Sañudo B. The Impact Of Mobile Phone Use On Body Composition, Physical Fitness, Quality Of Life, And Selective Attention On Office Workers. 1st International Conference on Technology in Physical Activity and Sport. Virtual. 24 al 27 de noviembre de 2020. Oral Pres.
7. Jiménez-Pavón D; Sánchez-Delgado A; Velázquez-Díaz V; Ponce-González JG; España- Romero V; Casals Vázquez C; Grao-Cruces A; Sañudo B…; Carbonell-Baeza A y el MOVE-IT Research Group. Effect of supervised physical exercise at cerebral, cognitive and metabolomic levels in older people at risk of mild cognitive impairment: the eficcom project. Alzheimer's Association International Conference 2019. Amsterdam (Holanda). 26-30 de julio de 2019. Oral presentation
8. Sañudo B; Carrasco L; de Hoyo M. Using wearable technologies to promote physical activity and healthy eating in young adults. 8th International Conference European Initiative for Exercise in Medicine. Amsterdam (Holanda). 20-21 de septiembre de 2019. Oral presentation
9. Estevez-Lopez F; Maestre-Cascales C; Russell D; Alvarez-Gallardo IC; Rodriguez-Ayllon M; Hughes C; Davison GW; Sañudo B; McVeigh JG. Effectiveness of exercise in the management of fatigue and sleep quality in fibromyalgia: a systematic review and meta-analysis. EULAR: Annual European Congress of Rheumatology. Madrid (Spain). 12-15 de junio de 2019. Oral presentation
10. Pires C; Páez L; Sañudo B; Raimundo A; Pereira C. Relationship between functional physical fitness, physical activity level and health related quality of life in sedentary older women. International Congress CIDESD. Exercise and Health, Sports and Human Development. Évora (Portugal). 11-12 de noviembre de 2016. Oral presentation

C.3. Research projects

1. **Efecto del ejercicio físico supervisado a nivel cerebral, cognitivo y metabolómico en personas mayores con deterioro cognitivo leve. EFICCOM (DEP2016-76123-R)**. Financing entity. Economía y Competitividad. Call. RETOS Project. Grant. 121.000€. 30/12/2016 – 29/12/2019. Investigador.
2. **TAPAS Tecnologías Aplicadas a la Promoción de estilos de vidA Saludables en el Ámbito de la actividad Física y el deporte (23/UPB/22).** Financing entity. Ministerio de Cultura y Deporte. 2022. Grant. 7.900€. Investigador principal.
3. **SMART 2.0 Social Mobile Approaches to Reducing weighT in Young Adults.** Financing entity. National Institutes of Health (NIH) Call. 1R01HL136769-01A1 (U.S. NIH). Grant. 100.000€. 01/04/2019 – 01/02/2023. Investigador.
4. **MUVONE. 2nd INNOLABS Open Call Innovative Health Solutions.** Financing entity. Horizonte 2020 (nº691556). Call. Europea H2020. Grant. 51.000€. 02/11/2018 – 01/08/2019. Investigador.
5. **FI-C3 – FIWARE Accelerators (Care and Wellbeing)**. Financing entity. Future Internet Public-Private Partnership (FI-PPP). Call. European. Grant. 47.000€. 01/10/2016 – 01/07/2017. Investigador.
6. **TAPAS Tecnologías Aplicadas a la Promoción de estilos de vidA Saludables en el Ámbito de la actividad Física y el deporte (38/UPB/21).** Financing entity. Consejo Superior de Deportes. 2021. Grant. 6.900€. Investigador principal.
7. **Osteotech. System for preventing Osteoporosis by wearable technologies.** Financing entity: Future Internet Connected incubator. Programa FP7-ICT.- Call. European. Grant. 111.994,00 €. 01/10/2015 – 01/07/2016. Investigador.
8. **S.A.P.I.N (Sport Activities Promotion Interactive Network).** Financing entity. FINODEX (FIWARE) con Call. European Union Seventh Framework Programme FP7/20072013. Grant. 10.000€. 18/02/2015 – 18/02/2016. Investigador.
9. **Aplicación de las TICs para la educación en hábitos saludables y el control del ejercicio físico en adultos diabéticos tipo 2**. Financing entity. HERGAR. Call. Nacional i+d+i. Grant. 900,00€. IP. 01/05/2014 – 15/04/2015. Investigador principal.
10. **Perceived exertion, fatigue, pain, and Sleeplessness after exercise in fibromyalgia syndrome**. Financing entity. University of Seville. Call. Regional. Grant. 2770,00€. 18/08/2013. Inv. Principal.

C.4. Contracts, technological or transfer merits

1. Technical consulting for the development of technology oriented for the practice of physical exercise focused on health and sports performance. SmartCoach Technologies Inc. 01/06/2019-30/11/2019. 15000€.
2. Asesoría en innovación tecnológica y la gestión de los programas de entrenamiento en diferentes perfiles de la población (4624/1178). YO 10 HEALTH, S.L. 28/10/2022 al 27/10/2023. 1000€
3. Asesoramiento en el uso de las nuevas tecnologías para el diseño y control del entrenamiento de fuerza y resistencia (4621/1131). ACADEMIA SAN ILDEFONSO. 14/10/2022 al 13/10/2023. 961,95€.
4. Valoración y optimización del rendimiento en jugadores profesionales de futbol. Real Betis Balompie S.A.D. 18/02/2019-21/10/2019. 2536,30€.
5. Análisis de las adaptaciones al entrenamiento de jugadores profesionales de fútbol. Sevilla FC S.A.D. Fecha: 30/06/2018-16/07/2019. 9200,00 €.
6. Investigación sobre las enseñanzas deportivas de régimen especial: actualización y desarrollo de nuevos materiales didácticos (BC LOE-EDRE) (3657/1006). Instituto Andaluz del Deporte. Fecha: 08/07/2019-30/12/2020. 6500€.
7. Muvhit, Movement and Health. Análisis de las vías de transferencia entre la Universidad y la Empresa en Ciencias del Deporte (3179/0277). Muvhit Movement and Health. 10-10-2017
8. Investigación y análisis de consumidores en centros de fitness (2918/0443). Dos Hermanas Gestión Deportiva, S.L. Fecha: 15/04/2016-31/12/2016. 606,40€.
9. Calidad de vida, salud y ejercicio físico en la población barbateña (2794/0830). EXCMO Ayuntamiento de Barbate. Fecha: 10/06/2015-10/03/2017. 4800€.
10. Evaluación de la condición física y control de las adaptaciones al entrenamiento en jugadores profesionales de fútbol. Sevilla FC SAD. Fecha: 20/03/2015-01/10/2016. 11.616,00 €.