

CURRICULUM VITAE ABREVIADO (CVA)

1. PERSONAL INFORMATION

First name	Borja		
Family name	Sañudo Corrales		
Gender (*)	Male		
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-9969-9573		

(*) *Mandatory*

1.1. 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	
Key words	Exercise; technologies; clinical populations, physical activity		

1.2. Previous positions (research activity interruptions, indicate total months)

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

1.3. Education

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

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 41 (Google Scholar) and 30 in Scopus or WOS. He has about 5000 citations (Google Scholar) and 2269 (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 different 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 fitness 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 32 research projects (6 European, 3 National funding Plans, 1 Carlos III, 3 at a regional level and numerous projects with private funding).

2. Research projects

1. **Sport and STEM Fest**; Funding Entity: **European Commission**; Total Project/Contract Amount: **€250,000**. 01/01/2026 – 31/12/2028. Investigador principal.
2. **kidsTUMove goes Europe**; Funding Entity: **European Commission**; Total Project/Contract Amount: **€400,000**. 01/01/2022 – 31/12/2025. Investigador principal.
3. **Diseño, validación e implementación de un dispositivo wearable para la prevención primaria de la osteoporosis y las fracturas radio-distales en la mujer (PID2022-142316OB-I00)**. Funding Entity: **Ministry of Science and Innovation**; Type of Call: **National**; Total Project/Contract Amount: **€ 168.750,00**. 01/09/2023-31/08/2027. Investigador principal.
4. **GreenTick**. Funding Entity: **European Commission**; Total Project/Contract Amount: **€250,000**. 01/01/2023 – 31/12/2025. Investigador principal.
5. **IDHEApp. Using technologies to promote healthy lifestyles in adolescents with intellectual disabilities**. Funding Entity: **European Commission**; Total Project/Contract Amount: **€250,000**. 01/01/2023 – 31/12/2025. Investigador principal.
6. **Efecto del ejercicio físico supervisado a nivel cerebral, cognitivo y metabólico 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.
7. **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.
8. **SMART 2.0 Social Mobile Approaches to Reducing weightT 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.
9. **MUVONE. 2nd INNOLABS Open Call Innovative Health Solutions**. Financing entity. Horizonte 2020 (nº691556). Call. Europea H2020. Grant. 51.000€. 02/11/2018 – 01/08/2020. Investigador.
10. **Consultoría técnica para el desarrollo de tecnología orientada para la práctica del ejercicio físico enfocado a la salud y el rendimiento deportivo (3659/0996)**. Funding Entity: **SmartCoach Technologies Inc**; Total Project/Contract Amount: **10.500,00 €**. 01/06/2019 – 30/11/2019. Investigador.

3.1. Contracts, technological or transfer merits

1. **Asesoría en la gestión de los programas de entrenamiento en diferentes perfiles de la población. (4985/1178)**. Funding Entity: **YO 10 HEALTH, S.L.**; Total Project/Contract Amount: **1.000,00 €**. 02/11/2023-01/11/2024. Investigador/a



2. **Asesoría en el análisis, evaluación y desarrollo de ejercicios y actividades deportivas frecuentes en centros deportivos e instalaciones deportivas. (4894/1178).** Funding Entity: **INMUUV AT HOME, S.L.**; Total Project/Contract Amount: 9.090,90 €
3. 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€
4. Asesoramiento en el uso de las nuevas tecnologías para el diseño y control del entrenamiento de fuerza y resistencia (4621/1131). ACADEMIA SAN ILDEFONSO, S.L. 14/10/2022 al 13/10/2023. 961,95€.

3. Publications

1. Gomez-Garcia C, Maher CA, Sañudo B, Jurado-Castro JM. Mobile Health Interventions for Individuals with Type 2 Diabetes and Overweight or Obesity-A Systematic Review and Meta-Analysis. *J Funct Morphol Kinesiol*. 2025 Jul 29;10(3):292. doi: 10.3390/jfkm10030292.
2. Sañudo B, Reverte-Pagola G, Maher C, Godino J, et al. Effectiveness of an mHealth-based impact exercise program for bone health in postmenopausal women: a randomised controlled trial protocol. *BMC Public Health*. 2025 Jul 10;25(1):2426. doi: 10.1186/s12889-025-22576-9.
3. Sanchez-Trigo H, Wing D, Mansour-Assi SJ, Nichols JF, Larsen BA, Sañudo B, Yarish NM, Jain S, Godino JG. The influence of physical activity intensity on bone mineral density and trabecular bone score in young adults with overweight and obesity. *Int J Obes (Lond)*. 2025 Sep;49(9):1840-1846. doi: 10.1038/s41366-025-01833-2. Epub 2025 Jul 3. PMID: 40610757.
4. Sañudo B, Sanchez-Trigo H, Domínguez R, et al. A randomized controlled mHealth trial that evaluates social comparison-oriented gamification to improve physical activity, sleep quantity, and quality of life in young adults. *Psychol Sport Exerc*. 2024;72:102590. doi:10.1016/j.psychsport.2024.102590
5. Sañudo B, Reverte-Pagola G, Seixas A, Masud T. Whole-Body Vibration to Improve Physical Function Parameters in Nursing Home Residents Older than 80 Years: A Systematic Review with Meta-Analysis. *Phys Ther*. Published online February 29, 2024. doi:10.1093/ptj/pzae025
6. García Moriana AJ, Sánchez Arteaga A, Gil Delgado JL, et al. Evaluation of rectus abdominis muscle strength and width of hernia defect in patients undergoing incisional hernia surgery. *Hernia*. 2023;27(4):919-926. doi:10.1007/s10029-023-02834-8
7. Sanchez-Trigo H, Maher C, Godino JG, Sañudo B. Effects of an mHealth physical activity intervention to prevent osteoporosis in premenopausal women. A randomized controlled trial. *J Sci Med Sport*. 2023;26(10):545-552. doi:10.1016/j.jsams.2023.09.004
8. Sanchez-Trigo H, Kemmler W, Duque G, Sañudo B. Assessment of Osteogenic Exercise Efficacy via Bone Turnover Markers in Premenopausal Women: A Randomized Controlled Trial. *Int J Sport Nutr Exerc Metab*. 2023;34(1):20-29. Published 2023 Oct 11. doi:10.1123/ijsnem.2023-0104
9. 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.
10. Dos Santos JM, Taiar R, Ribeiro VGC, et al. Whole-Body Vibration Training on Oxidative Stress Markers, Irisin Levels, and Body Composition in Women with Fibromyalgia: A Randomized Controlled Trial. *Bioengineering (Basel)*. 2023;10(2):260. Published 2023 Feb 16. doi:10.3390/bioengineering10020260
11. Costilla M, Casals C, Marín-Galindo A, et al. Changes in Muscle Deoxygenation During Squat Exercise After 6-Week Resistance Training With Different Percentages of Velocity Loss. *J Strength Cond Res*. 2023;37(8):1573-1580. doi:10.1519/JSC.0000000000004430
12. Reverte-Pagola G, Sánchez-Trigo H, Saxton J, Sañudo B. Supervised and Non-Supervised Exercise Programs for the Management of Cancer-Related Fatigue in Women with Breast Cancer: A Systematic Review and Meta-Analysis. *Cancers (Basel)*. 2022;14(14):3428. Published 2022 Jul 14. doi:10.3390/cancers14143428
13. Dos Santos JM, Rodrigues Lacerda AC, Ribeiro VGC, et al. Oxidative Stress Biomarkers and Quality of Life Are Contributing Factors of Muscle Pain and Lean Body Mass in Patients with Fibromyalgia. *Biology (Basel)*. 2022;11(6):935. Published 2022 Jun 19. doi:10.3390/biology11060935



14. 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
15. 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.
16. Sañudo B, de Hoyo M, McVeigh JG. Improved Muscle Strength, Muscle Power, and Physical Function After Flywheel Resistance Training in Healthy Older Adults: A Randomized Controlled Trial. *J Strength Cond Res*. 2022;36(1):252-258. doi:10.1519/JSC.0000000000003428
17. Muñoz-López A, De Hoyo M, Nuñez FJ, Sañudo B. Using Tensiomyography to Assess Changes in Knee Muscle Contraction Properties After Concentric and Eccentric Fatiguing Muscle Actions. *J Strength Cond Res*. 2022;36(4):935-940. doi:10.1519/JSC.0000000000003562
18. 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.
19. Muñoz-López A, Marín-Galindo A, Corral-Pérez J, et al. Effects of Different Velocity Loss Thresholds on Passive Contractile Properties and Muscle Oxygenation in the Squat Exercise Using Free Weights. *J Strength Cond Res*. 2022;36(11):3056-3064. doi:10.1519/JSC.0000000000004048
20. Muñoz-López A, Floría P, Sañudo B, Pecci J, Carmona Pérez J, Pozzo M. The Maximum Flywheel Load: A Novel Index to Monitor Loading Intensity of Flywheel Devices. *Sensors (Basel)*. 2021;21(23):8124. Published 2021 Dec 4. doi:10.3390/s21238124
21. van Heuvelen MJG, Rittweger J, Judex S, et al. Reporting Guidelines for Whole-Body Vibration Studies in Humans, Animals and Cell Cultures: A Consensus Statement from an International Group of Experts. *Biology (Basel)*. 2021;10(10):965. Published 2021 Sep 27. doi:10.3390/biology10100965
22. Bernardo-Filho M, Bembem 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
23. Sañudo B, de Hoyo M, Haff GG, Muñoz-López A. Influence of Strength Level on the Acute Post-Activation Performance Enhancement Following Flywheel and Free Weight Resistance Training. *Sensors (Basel)*. 2020;20(24):7156. Published 2020 Dec 14. doi:10.3390/s20247156
24. 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
25. Bernardo-Filho M, Sañudo B, Integrated Role of Nonpharmacological Interventions for Rehabilitation of Individuals with Musculoskeletal Disorders. *Biomed Res Int*. 2020;2020:9493623. Published 2020 Jun 22. doi:10.1155/2020/9493623
26. 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.
27. Álvarez-Barbosa F, Del Pozo-Cruz J, Sañudo B, Alfonso-Rosa RM. Is the Wii balance board a valid and reliable instrument to assess postural stability in older adults with type 2 diabetes mellitus?. *Diabetes Res Clin Pract*. 2020;166:108313. doi:10.1016/j.diabres.2020.108313
28. Sañudo B, Seixas A, Gloeckl R, et al. Potential Application of Whole Body Vibration Exercise For Improving The Clinical Conditions of COVID-19 Infected Individuals: A Narrative Review From the World Association of Vibration Exercise Experts (WAVex) Panel. *Int J Environ Res Public Health*. 2020;17(10):3650. Published 2020 May 22. doi:10.3390/ijerph17103650