

**CURRICULUM VITAE ABREVIADO (CVA)****Part A. PERSONAL INFORMATION**

First name	HEREDIA-JIMENEZ		
Family name	JOSE MARIA		
Gender (*)	MALE	Birth date (dd/mm/yyyy)	17/05/1980
ID number	45294903Z		
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Open Researcher and Contributor ID (ORCID) (*)	0000-0003-0053-5884		

**A.1. Current position**

Position	FULL PROFESSOR (TITULAR DE UNIVERSIDAD)		
Initial date	2014		
Institution	UNIVERSITY OF GRANADA		
Department/Center	PHYSICAL EDUCATION & SPORTS		
Country	SPAIN	Teleph. number	+34956526141
Key words	Biomechanics, Physical Education, Physical Activity, Sport Sciences		

**A.2. Previous positions (research activity interruptions, indicate total months)****A.3. Education**

PhD, Licensed, Graduate	University/Country	Year
<i>Degree in Education</i>	<i>Granada</i>	2001
<i>Degree Sport Science</i>	<i>Granada</i>	2003
<i>Masters /Doctoral Program in Sport Science</i>	<i>Granada</i>	2006
<i>Masters in Human Nutrition</i>	<i>Granada</i>	2007
<i>PhD in Sport Sciences</i>	<i>Granada</i>	2009

(Include all the necessary rows)

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

My research interest is focused on human locomotion, based on biomechanics techniques. For this, I use 3D motion capture systems, synchronized with surface electromyography (sEMG) techniques and triaxial force plates systems. I follow two different working lines in the analysis of human locomotion: 1) A pathological aspects, where I have worked with patients with fibromyalgia and I am currently trying to open lines of work to understand the relationship between human locomotion and different neurodegenerative diseases. And, 2) another non-pathological line, where the study of the posture while walking carrying loads has focused my research interest, analysing the use of the backpack or trolley in elementary schoolchildren and their relationship with back pain, I published more than 40 JCR manuscripts in those areas and mentored 4 doctoral thesis. I am the head of different projects, highlighted the Infrastructure project of the Spanish Government funded with more than 350.000€ to make my own biomechanics lab.

Visiting professor in University of Central Lancashire (UK) (5 months-2019) under Jose Castillejo Program. University of Southern California (EEUU) (3 months-2016) under Fulbright- Jose Castillejo Program. University of Jyvaskylka (Finland) (3 months -2012) under Campus de Excelencia Internacional CEI-Biotic program.

Currently I am the head of the EMC<sup>2</sup> research group: Evaluation of Movement in Children & Clinical Biomechanics, and the Head of the HubemaLab: Human Behaviour and Motion Analysis Lab.

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

Authors: Orantes-Gonzalez, E, Heredia-Jimenez, J, Lindley, S. B., Richards, J. D., & Chapman, G.



Title: An exploration of the motor unit behaviour during the concentric and eccentric phases of a squat task performed at different speeds

Journal: Sport Biomechanics 2023, 1-12

I.F (JCR). 0,7 (2022). DOI: <https://doi.org/10.1080/14763141.2023.2221682>

Authors: Orantes-Gonzalez, E, Heredia-Jimenez,

Title: Exploring the physiological benefits of carrying a suspended backpack versus a traditional backpack

Journal: Ergonomics 2023, 1-7

I.F (JCR). 2,4 (2022). DOI: <https://doi.org/10.1080/14763141.2023.2221682>

Authors: Orantes-Gonzalez, E, Heredia-Jimenez, J, Chohan A, Richards, J.

Title: A thorax marker set model to analyse the kinematics of walking without the need to place markers on the back

Journal: Journal of Biomechanical Engineering 2021, 143(4) 044503

I.F (JCR). 1,940 (2020). DOI: <https://doi.org/10.1115/1.4049160>

Authors: Orantes-Gonzalez, E; Heredia-Jimenez, J

Title: Does school carriage equally affect obese/overweight and healthy-weight children?

Journal: Applied Ergonomics. 2021 DOI: <https://doi.org/10.1016/j.apergo.2020.103236>

I.F (JCR). 3,145 (2019). **Position:** 18 of 1684 in Psychology, Applied

Authors: Orantes-Gonzalez, E; Heredia-Jimenez, J

Title: Does a standard school trolley fit children of different heights?

Journal: Ergonomics. 2020 DOI: : <https://doi.org/10.1080/00140139.2020.1829089>

I.F (JCR). 2,190 (2019). **Position:** 7 of 16 in Ergonomics

Authors: Orantes-Gonzalez, E; Heredia-Jimenez, J

Title: Does school carriage equally affect obese/overweight and healthy-weight children?

Journal: Applied Ergonomics. 2020 DOI: <https://doi.org/10.1016/j.apergo.2020.103236>

I.F (JCR). 3,145 (2019). **Position:** 18 of 84 in Psychology Applied

Authors: Orantes-Gonzalez, E; Heredia-Jimenez, J, Robinson MA

Title: A kinematic comparison of gait with a backpack versus a trolley for load carriage in children

Journal: Applied Ergonomics. 2019. 80:28-34. : <https://doi.org/10.1016/j.apergo.2019.05.003>

I.F (JCR). 3,145 (2019). **Position:** 18 of 84 in Psychology Applied

Authors: Heredia-Jimenez, J. Orantes-Gonzalez, E.

Title: Gender Differences in patients with fibromyalgia: a gait analysis.

Journal: Clinical Rheumatology. 2019. 38(2)513-522. DOI: <https://doi.org/10.1007/s10067-018-4293-x>

I.F (JCR). 2,293 (2019). **Position:** 20 of 31 in Rheumatology

Authors: Orantes-Gonzalez E, Heredia-Jimenez J, Beneck GJ

Title: Children require less gait kinematic adaptations to pull a trolley than to carry a backpack

Journal: Gait & Posture. 2017 52: 189-193.

DOI: <http://dx.doi.org/10.1016/j.gaitpost.2016.07.255>

I.F. (JCR): 2,273 **Position** 31 of 81 (T2) in Sport Sciences

Authors: Orantes-Gonzalez E, Heredia-Jimenez J

Title: Pulling a school Trolley: A good kinematic option for children

Journal: Gait & Posture. 2017 53: 61-66

DOI: <http://dx.doi.org/doi:10.1016/j.gaitpost.2017.01.012>

I.F. (JCR) 2,273 **Position** 31 of 81 (T2) in Sport Sciences

Authors: Heredia, J.M. Soto, VM.

Title: Kinematics gait disorder in men with fibromyalgia

Journal: Rheumatology International. 2014. 34(1):63-65 DOI: 10.1007/s00296-012-2651-6  
I.F. (JCR). 1,516 (2014). **Position:** 22 of 32 (T2) in Rheumatology

Authors: Orantes-Gonzalez, E; Heredia-Jimenez, J; Soto-Hermoso, VM  
Title: The Effect of School Trolley Load on Spatiotemporal Gait Parameters of Children  
Journal: Gait & Posture (2015) 42, 390-393.  
DOI: <http://dx.doi.org/10.1016/j.gaitpost.2015.06.004>  
I.F. (JCR): 2.286 **Position:** 20 of 82 in Sport Science

Authors: Ruiz-Zafra, A.; Orantes González, E; Noguera, M., Benghazi, K.; Heredia, J.  
Title: A comparative study on the suitability of smartphones and IMU for mobile, unsupervised energy expenditure calculi  
Journal: Sensors (2015) 15:18270-18286 DOI: 10.3390/s150818270  
I.F. (JCR): 2.677 **Position:** 10 of 58 in Instruments & Instrumentation

Authors: Heredia-Jimenez, J; Orantes-Gonzalez, E; Soto-Hermoso, VM  
Title: Variability of gait, bilateral coordination, and assymetry in women with fibromyalgia  
Journal: Gait & Posture (2016)45: 41-44 DOI: <http://dx.doi.org/doi:10.1016/j.gaitpost.2016.01>.  
I.F. (JCR) 2.347 **Position** 20 of 81 in Sport Sciences

Authors: Heredia-Jimenez, J; Latorre-Roman, P; Santos-campos, MA; Orantes-Gonzalez, E; Soto-Hermoso, VM  
Title: Spatio-temporal gait disorder and Gait fatigue Index in a six-minute walk test in women with fibromyalgia  
Journal: Clinical Biomechanics (2016) 33:1-6. DOI: 10.1016/j.clinbiomech.2016.01.009  
I.F. (JCR): 1.874. **Position:** 31 of 81 in Sport Sciences

Authors: Heredia-Jimenez J, Orantes-Gonzalez E, Soto-Hermoso, V.  
Title: Spatiotemporal gait variables in the six minutes walk test in elderly women  
Journal: Gait & Posture (2016). DOI: <http://dx.doi.org/10.1016/j.gaitpost.2016.07.111>  
I.F. (JCR) 2,347 **Position** 20 of 81 in Sport Sciences

**C.3. Research projects**, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

**Title:** El transporte eficaz del equipo de combate: Influencia de la edad en el rendimiento físico y cognitivo en soldados de infantería. **Reference:** PIN5/1/20

**Funding:** Proyectos de Investigación del Centro Mixto (CEMIX) UGR-MADOC 2016.

**Amount:** 7.700€- **Date** 2020-2021

**Head:** José M<sup>a</sup> Heredia Jimenez. **UGR- Participation:** Head of the project (full time)

**Title:** Promoción de Actividad Física Saludable y Mejora de la Calidad de Vida Mediante un Sistema Ergonómico de Evaluación Integral y Prevención de Riesgos (PAQOL).

**Reference:** DEP2009-11850

**Funding:** Ministerio de Ciencia e Innovación. Plan nacional I+D+i 2008-2011

**Amount:** 146.410 €- **Date:** 2011-2013

**Head:** Víctor M Soto Hermoso (University of Granada). **Participation:** Researcher (full time)

**Title:** Efecto de hidrolizados proteicos vegetales procedentes de leguminosas sobre el metabolismo lipídico y energético en un modelo experimental de rata obesa. interacción con el ejercicio físico aeróbico. **Reference:** AGR-4658

**Funding:** Consejería de Innovación, Ciencia y Empresa de la Junta de Andalucía. Proyectos de Investigación de Excelencia. Proyectos Motrices.

**Amount:** 207.923,68€. **Date:** 2010-2014

**Head:** Jesús M Porres Foulquier. University of Granada. **Participation:** Researcher (full time)

**Title:** Efecto de un entrenamiento combinado de fuerza y aeróbico y del tratamiento dietético sobre parámetros del síndrome metabólico en ratas genéticamente obesas.

**Reference:** (DEP2011-27622)

**Funding:** Ministerio de Economía y Competitividad. Dirección Gral. De Investigación científica y técnica. Plan nacional de investigación

**Amount:** 84.700€. **Date:** 2012-2014

**Head:** Pilar Aranda Ramírez. University of Granada- **Participation:** Researcher (full time)

**Title:** Efecto de la carga de la mochila sobre los parámetros de locomoción en escolares de primaria.

**Reference:** mP-BS-18

**Funding:** III Convocatoria de proyectos de investigación de I+D+i del Campus de Excelencia Internacional BioTic Granada. Universidad de Granada

**Amount:** 3.000€- **Date** 2014-2015

**Head:** José M<sup>a</sup> Heredia Jimenez. **UGR- Participation:** Head of the project (full time)

**Title:** Efecto del peso de la mochila sobre parámetros biomecánicos de locomoción en soldados de infantería y su relación con la fatiga, la composición corporal y el estado físico

**Reference:** PIN23/16

**Funding:** Proyectos de Investigación del Centro Mixto (CEMIX) UGR-MADOC 2016.

**Amount:** 6.000€- **Date:** 2015-2016

**Head:** José M<sup>a</sup> Heredia Jimenez. **UGR. Participation:** Head of the project (full time)

**Title:** Laboratorio Multidisciplinar para el Análisis del Movimiento y Comportamiento Humano en el Campus de Ceuta. **Reference:** UNGR15-DE-3312

**Funding:** Ministerio de Economía y Competitividad. Gobierno de España. Fondo Europeo de Desarrollo Regional (FEDER). Unión Europea

**Amount:** 377.297,15 €. **Date:** 2015-2016

**Head:** Jose M<sup>a</sup> Heredia Jiménez (UGR)- **Participation:** Head of the project (full time)

**Title:** La carga física y el estrés del combatiente: Análisis integral del equipo de combate

**Reference:** PIN 21/18.

**Funding:** Proyectos de Investigación del Centro Mixto (CEMIX) UGR-MADOC 2018.

**Amount:** 6.500€. **Date:** 2018-2019

**Head:** José M<sup>a</sup> Heredia Jiménez (UGR). **Participation:** Head of the project (full time)

#### **C.4. Contracts, technological or transfer merits,**

**Title:** Formación biomecánica y sistemas de captura de Movimiento

**Funding:** : Metron Medical Supplies SL(Contrato OTRI-UGR)

**Amount:** 23.500€. **Date** 2021-2023. **Head:** Jose M<sup>a</sup> Heredia Jimenez (UGR)

**Title:** Formación en Electromiografía de Superficie

**Funding:** Trimedica. Contrato de Transferencia OTRI-

**Amount:** 7.000€. **Date** 2020. **Head:** Jose M<sup>a</sup> Heredia Jimenez (UGR)-

**Title:** Formación en Análisis del Movimiento humano

**Funding:** Metron Medical Supplies. Contrato de Transferencia OTRI-

**Amount:** 3.000€. **Date** 2019-2020. **Head:** Jose M<sup>a</sup> Heredia Jimenez (UGR)

**Title:** Formación en Biomecánica y Fisiología del Ejercicio

**Funding:** Psymtec SL. Contrato de Transferencia OTRI-

**Amount:** 3.200€. **Date** 2022. **Head:** Jose M<sup>a</sup> Heredia Jimenez (UGR)

**Title:** Formación en el uso y Manejo del software de Biomecánica Visual 3D

**Funding:** Metron Medical Supplies. Contrato de Transferencia OTRI-

**Amount:** 3.400€. **Date** 2018. **Head:** Jose M<sup>a</sup> Heredia Jimenez (UGR)