



# CURRICULUM VITAE (maximum 4 pages)

DATE	11/2021
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## Part A. Personal Information

Surname(s)	HEREDIA-JIMENEZ	
Forename	JOSE MARIA	
ID number	45294903Z	
Sex	MALE	
Age	41	
Researcher codes	WoS Researcher ID	
	SCOPUS Author ID	36611869500
	ORCID	0000-0003-0053-5884

### A.1. Current position

Post/ Professional Category	PROFESSOR (Profesor Titular de Universidad)	
UNESCO Code		
Key Words	Biomechanics, Physical Education, Physical Activity, Sport Sciences	
Name of the University/Institution	University of Granada	
	Department/Centre	Physical Education & Sports
	Full Address	C/ Cortadura del Valle, s/n Ceuta
	Email Address	heredaj@ugr.es
	Phone Number	+34 956526141
Start date	15/10/2007	

### A.2. Education (title, institution, date)

Year	University	Degree	Title
2001	Granada	degree	Bsc in Education
2003	Granada	degree	MD in Sport Sciences
2006	Granada	Masters /Doctoral Program	Sport Sciences
2007	Granada	Masters	Human Nutrition
2009	Granada	PhD	PhD

### A.3. Indicators of Quality in Scientific Production (See the instructions)

I supervised four doctoral thesis, I am author or co-author of more than 25 JCR research articles, some of them in the first quartile or in the reference journals in the area of biomechanics. I participated in more than 70 congresses' contributions and 20 research projects as a full time researcher in a great diversity of public calls (national, regional...)

I have 2 research six year terms (2 sexenios de investigación) and 5 of 6 autonomic terms (5 tramos autonómicos de la Junta de Andalucía). I was visiting professor in University of Central Lancashire (UK) (Jose Castillejo Program, University of Jyväskylä (Finland) (CEI-Biotic UGR program) and University of Southern California (USC) (Fulbright Program) with more than 1 year in foreign universities. I am the head of different private contracts with national companies for more than 30.000€

Supervised PhD thesis: 4 (1 as an international PhD) + 3 thesis in progress

h-index: 13

i-10: 20

cites: 745

## Part B. Free Summary of CV (Max. of 3.500 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 aspect, 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 mentorized 4 doctoral thesis. I am the head of different projects,



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highlighted the Infrastructure project of the Spanish Government funded with more than 350.000€ to make my own biomechanics lab.

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 accomplishments . C.1. Publications

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.



# CURRICULUM VITAE (maximum 4 pages)

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., Bengazi, 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.2016.01.011>

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.2. Research Projects and Grants

**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 Mª 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 Mª 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 Mª 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 Mª 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 Mª Heredia Jiménez (UGR). **Participation:** Head of the project (full time)

### C.3. Contracts

**Title:** Formación en Electromiografía de Superficie

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

**Amount:** 7.000€. **Date:** 2020. **Head:** Jose Mª 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 Mª 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 Mª Heredia Jimenez (UGR)

### C.5, C.6, C.7... Other

**Grant:** Ayudas de movilidad

**University:** University of Southern California (USC), EEUU

**Period:** 01/12/2009 – 08/03/2010

**Grant:** Estancias de movilidad del campus de excelencia Internacional UGR

**University:** University of Jyvaskyla. Finland.

**Period:** 08/03/2012 - 15/05/2012

**Grant:** Fulbright Program / José Castillejo.

**University:** University of Southern California (USC). EE.UU.

**Period:** 01/03/2016 - 01/06/2016

**Grant:** Estancias de Movilidad de la UGR

**University:** University of Central Lancashire (UCLAN), UK.

**Period:** 01/08/2018 . 31/08/2018

**Grant:** José Castillejo.

**University:** University of Central Lancashire (UCLAN), UK

**Period:** 01/03/2019 - 31/08/2019