

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	VICTOR MANUEL		
Family name	SOTO HERMOSO		
Gender (*)	Male	Birth date	19/06/1967
ID number	24224479 M		
e-mail	vsoto@ugr.es	URL Web	
Open Researcher and Contributor ID (ORCID)	0000-0002-0213-5844		

A.1. Current position

Position	Full Profesor (CATEDRÁTICO de Universidad)		
Initial date	11-02-2017		
Institution	Universidad de Granada (University of Granada) (UGR)		
Department/ Center	Dpto. Physical Education and Sport. School of Sport Sciences. Sport and Health University Research Institute (iMUDS) of UGR.		
Country	Spain	Teleph. number	+34 958 246637
Key words	Biomechanics, Motion Analysis, Ergonomics, Performance, Risk Prevention, Health, Quality of Life, Technological Development, Photogrammetry, Virtual Advisors, Artificial Intelligence, Exoskeletons, Running, Locomotion, Healthy Cities.		

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

Period	Position/ Institution/ Country/ Interruption cause
1991-1993	Research scholarship. University of Granada (Spain)
1993-1998	Profesor Asociado Tipo 1, 2 y 3. University of Granada (Spain)
1998-1999	Profesor Titular Interino. University of Granada (Spain)
1999-2017	Profesor Titular de Universidad. University of Granada (Spain)

A.3. Education

PhD, Licensed, Graduate	University/ Country	Year
PhD in Physical Activity and Sport Sciences	U.Granada (Spain)	1995
Degree in Physical Activity and Sport Sciences	U.Granada (Spain)	1990

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

I started my research activity in 1989, thanks to a scholarship, developing 3D photogrammetric technologies for the analysis of movement. In 1990 I started doctoral studies. In 1991 I was awarded a Predoctoral Scholarship (FPI) from Junta de Andalucía (Spain). I read my thesis in 1995, focused on the development of biomechanical systems applied to sports.

My main research line has been oriented towards Sports Biomechanics and Technological Development for Movement Analysis. Biomechanics is an internationally consolidated research area (UNESCO code: 240604). In recent years I have broadened my research lines into the field of Ergonomics, Performance Analysis-Optimization, Musculoskeletal risk prevention, Health promotion through Physical Activity, Virtual Advisors, Artificial Intelligence applied to Sports, and Exoskeletons. My last projects, in which I participate as Principal Researcher (IP), go in these directions.

My undergraduate and graduate university teaching activity, has been mainly linked to Sports Biomechanics and other related subjects such as: Ergonomics and Physical Activity for Health.

These are my most outstanding actions of my research activity:

- I have been Principal Researcher (IP) in projects and contracts financed by prestigious entities:
 - IP in 1 Project "PROFIT" call.
 - IP in 4 Projects "Plan Nacional/Estatal de Investigación Fundamental y Retos".



- IP in 2 Projects “Plan Nacional”, Innplanta call, for Sport & Health U.Research Institute.
- IP in 2 Projects funded by “Centro Mixto UGR-MADOC”.
- IP in 2 Projects “Plan Nacional, Ayudas Infraestructuras y Equipam.Científico-Técnico”.
- IP in 1 Contract funded by the Ministry of Defense of the Spanish Government.
- IP in 1 Project funded by “Plan Andaluz I+D+I, Ayudas Actividades de Transferencia”.
- IP in 1 Project funded by “Ministerio de Educación y Formación Profesional”.
- IP in 1 Contract funded by the enterprise ITURRI S.A.
- IP in 2 Projects funded by “Ministerio de Industria, Comercio y Turismo”.
- IP2 in 1 Contract funded by “Ministerio Asuntos Económicos y Transformación Digital”.
- IP in 1 Project with “Consejería Turismo, Cultura y Deporte”, Junta Andalucía.
- IP in 1 Project funded by “Ministerio de Cultura y Deporte - CSD”.
- Director of “Cátedra Universitaria ReceDxT” with 7 enterprises and UGR.
- I lead the project of the Sport and Health University Research Institute (iMUDS) since its creation, construction, equipment, and start-up; being its director (from 2010 to 2024), coordinating a group of 121 researchers, and 22 research groups.
- Director of “Cátedra Universitaria ReceDxT-UGR”, participating 7 enterprises (from 2023).
- Researcher in 10 Research Projects and 2 “Acciones Especiales, Plan Nacional/Estatal”.
- Researcher in 6 Reseacher Projects from “Ministerio Educación Cultura y Deporte-CSD”.
- IP in 17 Projects of Biomechanical Support to Spanish Sport Federations: athletics, cycling.
- Researcher in 4 Projects funded by “Plan Propio de la UGR”.
- I participate in laboratories specialized in biomechanics: Member of the Biomechanical Lab in Dpto. Physical Education (1993-2004). Member and Director “Ergolab” Lab (2005-2011). Member and Director of “Human Lab” in iMUDS (from 2012).
- Director of 3 scholarships (FPU). Director of 5 Research Suport Technicians that were contracted with the funding of some research projects from “Plan Nacional de I+D+i”.
- I have been part of two research groups funded by Junta de Andalucía (Spain): CTS-362 (1989-2004), and CTS-545 (from 2004 to present). Responsible of the research group: “Actividad Física, Deporte y Ergonomía para la Calidad de Vida” (CTS-545).
- Member of the next Research Societies: Sociedad Ibérica de Biomecánica y Biomateriales, International Society of Biomechanics, International Society of Biomechanics in Sports.
- Total funding received:
 - Projects funded by prestigious entities: 9,544,868 €, being IP in 9,333,642 €.
 - Special relevance Contracts with enterprises & public entities: 816,410€, IP in 277,030€
 - Other Contracts managed by “Fundación General UGR”: 35,617 €, IP in 35,617 €.

General indicators of quality of scientific production (JCR articles, h Index, thesis, patents):

Citation Index by Google Scholar : <ul style="list-style-type: none"> • N° Citations • h-index • i10-index 		global 2841 28 53	from 2019 1525 20 41	Impact in Web of Science: Sum of times cited = 969 h-index= 15
116 Articles in scientific journals: 100 International 17 National. Total of JCR articles: 85 1 st quartil Q1: 20 ; Q2: 25 ; Q3: 17		Citations in Web of Science 		Citations in Google Scholar
PATENTS: 1		Sexenios Investigación: 4 , last in 2013-2018 Sexenios Transferencia: 1 , 2009-2018		16 Thesis, 10 from 2010 2 Thesis in development
				3 Books 6 Book Chapters

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (10 papers most relevant)

Molina-Molina,A; Delgado-García,G; Richards,J; Mercado-Palomino,E; Soto-Hermoso,VM; Latorre-Román,PA (2024). Increasing cadence with a metronome and running barefoot



- changes the sagittal kinematics of the lower limbs and trunk. *Journal of Sports Sciences*. 42 (5), 404-414. (JCR, **Q1** in Sport Sciences).
- Olivares-Jabalera,J; Filter,A; Dos'Santos,T; Ortega,J; Soto-Hermoso,VM; Requena,B. (2022). The Safe Landing warm up technique modification programme: An effective anterior cruciate ligament injury mitigation strategy to improve cutting and jump-movement quality in soccer players. *J. of Sports Sciences*, 40 (24), 2784-2794. (JCR, **Q1** in Sport Sciences).
- Molina-Molina,A; Latorre-Román,PA; Mercado-Palomino,E; Delgado-García,G; Richards,J; Soto-Hermoso,VM. (2022). The effect of two retraining programs, barefoot running vs increasing cadence, on kinematic parameters: A randomized controlled trial. *Scandinavian Journal of Medicine & Science in Sports*, 32 (3), 533-542. (JCR, **Q1** in Sport Sciences).
- Latorre-Roman,PA; Redondo,F; Parraga,J; Soto-Hermoso,VM; Consuegra,PJ; García-Pinillos,F. (2019). Analysis of foot strike pattern, rearfoot dynamic and foot rotation over childhood. A cross-sectional study. *Journal of Sports Sciences*. 37, 5: 477-483. (JCR, **Q1** in Sport Sci.).
- Roche-Seruendo,LE; García-Pinillos,F.; Haicaguerre,J.; Bataller-Cervero,AV.; Soto-Hermoso,VM; Latorre-Roman,PA. (2018). Lack of influence of muscular performance parameters on spatio-temporal adaptations with increased running velocity. *Journal of Strength and Conditioning Research*. 32, 2, 409-415. (JCR, **Q1** in Sport Sciences)
- Heredia-Jimenez,JM; Orantes-Gonzalez,EM; Soto-Hermoso,VM. (2016). Spatiotemporal gait variables in the six-minute walk test in elderly women. *Gait & Posture*. 49, 47. (JCR, **Q1** in SS)
- Heredia,JM; Orantes,EM; Soto-Hermoso,VM. (2016). Variability of gait, bilateral coordination, and asymmetry in women with fibromyalgia. *Gait & Posture*. 45, 41-44. (JCR, **Q1** in Sp.Sc)
- Muñoz,M.; Latorre,PA.; Soto-Hermoso,VM; García,F. (2015). Influence of shod/unshod condition and running speed on foot-strike patterns, inversion/eversion, and vertical foot rotation in endurance runners. *J.Sports Sciences*. March. 33:19, 2035-2042. (JCR, **Q2** in Sp.Sci.)
- Chillón,P; Castro,J; Ruiz,JR; Soto,VM; Carbonell,A; Dafos,J; Vicente,G; Castillo,MJ; Ortega,FB. (2010). Hip flexibility is the main determinant of the back-saver sit-and-reach test in adolescents. *J.Sports Sciences*, 28:6, 641-648. (JCR, **Q1** in Sport Sciences, citations: 94).
- Barbero,JC; Soto,VM; Barbero,V; Granda,J. (2008). Match analysis and heart rate of futsal players during competition. *J.Sports Sciences*, 26:1, 63-73. (JCR, **Q2** in Sp.Sci, citations: 775).
- Soto,V.M. y Gutiérrez,M. (1996). Parámetros inerciales para el modelado biomecánico del cuerpo humano. *Motricidad (European Journal of Human Movement)*, Vol.2, junio, 169-189.

C.2. Congress

- C.2.1.** Invited Conference: Soto,VM. (2022). "Iniciativas puestas en marcha a nivel autonómico: el papel de los asesores virtuales". Jornadas de Políticas públicas de deporte, educación y salud. Instituto Andaluz del Deporte. 28-junio-2022.
- C.2.2.** Invited Conference: Soto,VM. (2021). "El rol de los asesores virtuales en el mundo de la actividad física, la salud y el deporte", I Congreso Intern. Rendimiento Deportivo, Actividad Física y Salud y Experiencias Educativas en EF". U.Jaén. Úbeda (España), 25-abril-2021.

C.3. Research projects (10 most relevant)

- C.3.1.** Project: "Desarrollo de una plataforma digital que permita monitorizar indicadores de rendimiento y salud deportiva para población andaluza involucrada en deporte federado y en programas de ejercicio físico saludable" (AndaMove). Ref.: EXP_74829. Ayudas para Proyectos de Investigación en Ciencia y Tecnología aplicada a la Actividad Física Beneficiosa para la Salud y la Medicina Deportiva. Consejo Superior de Deportes, Ministerio Cultura y Deporte. Funding: 155,999 €. Duration: 8 months (2023). IP: VM.Soto.
- C.3.2.** Project: "Innovación y transferencia de las nuevas tecnologías aplicadas al deporte en la formación profesional" (TICsDeportivasFP). Ref. IAFP21/00141. Convocatoria 2021 de proyectos de innovación e investigación aplicadas y transferencia del conocimiento en la Formación Profesional. Ministerio de Educación y Formación Profesional. Funding: 190,000 €. Duration: 1.5 years (2022-2023). IP of UGR subproject: VM.Soto.
- C.3.3.** Project: "Desarrollo de asesores virtuales y su validación en un proyecto educativo integral para población deportista de bachillerato, formación profesional y universitaria involucrados en formación dual" (EduSport). Ref. PID2020-115600RB-C21. Plan Estatal de I+D+i, Conv. Retos. Funding: 36,421 €. Duration: 3.7 years (2021-2025). IP: VM.Soto.
- C.3.4.** Project: "Desarrollo de un prototipo de exoesqueleto pasivo adaptado a bota técnica, para la optimización de la locomoción humana, válido para el ámbito militar y civil (ExoLimb2)". Ref.5974. Convocatoria 2017 de Ayudas a Actividades de Transferencia de



Conocimiento entre los Agentes del Sistema Andaluz del Conocimiento y el Tejido Productivo, Plan Andaluz de I+D+i (PAIDI 2020). Funding: 90,000 €. Duration: 1.7 years (2019-2021). IP: VM.Soto Hermoso.

- C.3.5.** Project: “Equipamiento avanzado para investigación orientada hacia el desarrollo del concepto de smart cities/healthy cities en el Instituto Mixto Universitario Deporte y Salud”. Ref. EQC2018-004702-P. Plan Estatal de I+D+i, Ayudas para la Adquisición de Equipamiento Científico-Técnico. Funding: 826,125 €. Duration: 2018-2020. IP: VM.Soto.
- C.3.6.** Project: “Equipamiento para investigación en el ámbito de Big Data aplicado al área del Deporte y la Salud en el Instituto Mixto Universitario deporte y Salud”. Ref. UNGR15-CE-3400. Plan Estatal de I+D+i, Ayudas a Infraestructuras y Equipamiento Científico-Técnico. Funding: 716,400 €. Duration: 1 year (2016-2017). IP: VM.Soto Hermoso.
- C.3.7.** Project: “Monitorización y fomento de hábitos saludables, mediante una plataforma basada en sensores portables y asesores virtuales, para la promoción del envejecimiento activo en población activa y mayor” (Avisame). Ref. DEP2015-70980-R. Plan Estatal de I+D+i, conv. Retos. Funding: 102,850 €. Duration: 3 years (2016-2018). IP: VM.Soto.
- C.3.8.** Project: “Sistema ergonómico integral para la evaluación de la locomoción como predictor de la calidad de vida relacionada con la salud en mayores” (Ergoloc). Ref. DEP2012-40069. Plan Nacional de I+D+i, convocatoria de Investigación Fundamental. Funding received: 50,820 €. Duration: 3 years (2013-2015). IP: VM.Soto Hermoso.
- C.3.9.** Project: “Promoción de actividad física saludable y mejora de la calidad de vida mediante un sistema ergonómico de evaluación integral y prevención de riesgos” (Paqol). Ref. DEP2009-11850. Nacional de I+D+i, convocatoria de Investigación Fundamental. Funding: 146,410 €. Duration: 3 years (2010-2012). IP: VM.Soto Hermoso.

C.4. Contracts, technological or transfer merits (10 most relevant)

- C.4.1.** Agreement (Convenio) with 7 companies and with the University of Granada for the creation of the “ReceDxT” University Chair (Cátedra Universitaria). The participating companies are: Hospital Vithas Granada, Granada La Palma, Lidera Sport Consulting, European Sports and Health Institute, Bios Technology Solution, Intelinova Software, Target3D Iberia. Funding: 120,000 €. Duration: 2 years (2023-2025). Director: VM.Soto.
- C.4.2.** Project: “Desarrollo, testeo e implantación de un sistema informático que dé soporte al Plan Andaluz de Prescripción de Actividad y Ejercicio Físico (Ref: Andalucía Muévete). Convenio Específico with Consejería de Turismo, Cultura y Deporte de la Junta de Andalucía (Dirección General de “Sistemas y Valores del Deporte”), and Universidad de Granada, with NexGenerationEU funding. Funding: 400,000 €. Duration: 1 year (2023). IP: VM.Soto.
- C.4.3.** Project: “Fomento del envejecimiento activo y saludable a través de soluciones digitales y programas conjuntos de actividad física para personas mayores.” Ref.: “AndalucíaMuévete_Mayores”. Convenio Específico with Consejería de Turismo, Cultura y Deporte de la Junta de Andalucía and Universidad de Granada. Funding: 15,000 €. Duration: 3 years (2019-2022). IP: VM.Soto Hermoso. ColP: MC.García Ríos.
- C.4.4.** Research Contract: “Optimización comercial para clientes de centros deportivos basada en Inteligencia Artificial” (OCDIA). Project funded by Ministerio de Asuntos Económicos y Transformación Digital. The Enterprise Intelinova SL contract UGR for some tasks. Funding: 484,000 €. Duration: 20 months. IP: J.M.Benítez. VM.Soto is the IP of Sport Science group.
- C.4.5.** Research Contract: “Asesoría técnica para el desarrollo de un asesor virtual optimizado para la formación en el uso de exoesqueletos (ITURRI ExoAvatar). Project funded by the enterprise ITURRI S.A. Funding: 20,349.51 €. Duration: 9.5 months. IP: VM.Soto.
- C.4.6.** Research Contract: “Exoesqueleto pasivo adaptado a la bota” (ExoBoot). Ref. 10032/18/0053/00 (2018). Project funded by Ministry of Defense of Spain. SEDEF Dir. Gen. Armamento y Material. Funding: 65,000 €. Duration: 4 months. IP: VM.Soto Hermoso.
- C.4.7.** Creation and Management of a startup Company called “Soluciones Ergonómicas Integrales S.L.”. This startup/spin-off is a Technological Based Enterprise. Activities: Ergonomics, Risk Prevention, Health Promotion, Quality of life, Performance and Technologies. This Company. This company has allowed to transfer the know-how in R+D+i obtained in our group. I have been Director (CEO) and founder of this startup-spinoff.
- C.4.8.** PATENT approved. Authors: Soto-Hermoso,VM; Chicano-Gutiérrez,JM; Ramos-Muñoz,JL; Guerrero-Martínez,A. “Exoesqueleto pasivo para bota técnica”. N/Ref.: 202130719. Patente Nacional. Date: 8-august-2023. Titular entity: Universidad de Granada.