

CURRICULUM VITAE (CVA)

Date	12/01/2026
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Part A. PERSONAL INFORMATION

Name	Jorge		
Surname	Molina López		
Gender	Male	Date of birth	BLINDED
DNI, NIE, passport	BLINDED		
Email	BLINDED	URL Web	https://produccioncientifica.uhu.es/investigadores/211069/detalle
Open Researcher and Contributor ID (ORCID)	orcid.org/0000-0003-2516-5226		

A.1. Current professional situation

Job	Associate Professor of University		
Start date	January 2023		
Agency/ Institution	University of Huelva		
Department/ Center	Integrated Didactics. Didactics of Corporal Expression / Research Center COIDESO		
Country	Spain	Teléfono	BLINDED
Keywords	Physical Activity; Exercise Physiology; Nutrition; Clinical; Nutritional Assessment		

A.2. Previous professional situation

Periodo	Puesto/ Institución/ País / Motivo interrupción
2023 - Recent	University Professor
2021 - Recent	Hired Professor Doctor
2019 - 2021	Assistant Professor Doctor
2016 - 2019	Interim Substitute Professor
2016	Postdoctoral - COST TD1304. EU
2015	Postdoctoral - Bridge Contract. Plan Propio. University of Granada.
2011-2015	FPU Predoctoral Researcher (University Teacher Training).

A.3. Academic Education

Degree/Master's/Thesis	University/Country	Year
Ph.D. in Nutrition and T.A. International Mention	University of Granada	2013
Master's in human nutrition	University of Granada	2009
Degree in Sports Sciences	University of Granada	2008

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

Academic Leadership and Institutional Management Associate Professor currently serving as Coordinator for the Degree in Physical Activity and Sports Sciences and Chair of the institutional Quality Assurance Committee. Responsibilities include the strategic oversight of academic curricula and the management of quality accreditation processes for both Undergraduate and Master's programmes in Health and Sports Sciences.

Research Trajectory and Scientific Specialization PhD in Physiology (International Mention, Cum Laude), supported by a competitive national predoctoral fellowship (FPU). Research expertise focuses on the biochemical markers of oxidative stress, systemic inflammation, and micronutrient deficiencies, with a primary emphasis on their metabolic impact on physical exercise and athletic performance. Postdoctoral development includes bridging contracts and international fellowships (linked to COST Actions and European Framework Programmes), specifically investigating the molecular mechanisms of zinc homeostasis and cellular transdifferentiation in





human skeletal muscle fibroblasts (hSKM).

International Mobility and Research Networks Established a robust international profile through specialized research stays at King’s College London (molecular signaling), Aix-Marseille University (nutritional genetics), and Mendel University in Brno (nanotechnology). This international trajectory is complemented by participation in several consolidated research groups (PAIDI) and national excellence networks funded by the National Sports Council (CSD). These collaborations focus on human locomotion, functional dynamometry, and the physiological monitoring of diverse populations across the lifespan.

Knowledge Transfer and Applied Science Active principal investigator and collaborator in multiple industry-academia contracts (Art. 60/83) involving professional sports clubs, municipal governments, and clinical entities. Research outputs have directly impacted nutritional protocols for elite athletes, children with chronic pathologies, and menopausal women. This commitment to the scientific community is further evidenced by serving as a regular peer reviewer for high-impact JCR-indexed journals and participating in knowledge-transfer networks specialized in sports functionality and health promotion.

Teaching Excellence and Mentorship Extensive teaching record since 2011 in Physiology and Sports Sciences at Undergraduate and Postgraduate levels. Significant contribution to human capital development through the supervision of 5 Doctoral Theses, over 40 Master’s Dissertations (TFM), and 30 Undergraduate Dissertations (TFG). Proven track record in mentoring predoctoral researchers under national competitive grants (FPU), contributing to the consolidation of high-performance research teams in the field of Experimental and Sports Sciences.

Part C. LIST OF THE MOST RELEVANT CONTRIBUTIONS.

C.1. Most important publications in books and peer-reviewed journals and conferences.

1. Barrera-Domínguez FJ, Talpey S, Almagro BJ, Molina-López J. Effect of Individualized Training Based on Change of Direction Deficit on Speed Performance in Basketball Players. *J Strength Cond Res.* 2025 Dec 9. doi: 10.1519/JSC.0000000000005343. Epub ahead of print. PMID: 41369578. (JCR Q1, IF: 3.0).
2. Barrera-Domínguez FJ, Almagro BJ, Molina-López J. Effect of Different Individualised Strength Training Approaches to Improve Physical Performance in Male Basketball Players. *Sports (Basel).* 2025 Jul 2;13(7):214. doi: 10.3390/sports13070214. PMID: 40711099; PMCID: PMC12300547. (JCR Q1, IF: 2.9).
3. Barrera-Domínguez FJ, Jones PA, Almagro BJ, Molina-López J (2025). Influence of Functional Movement, Jumping Ability and Linear Speed on Change of Direction Speed in Female Basketball Players: Novel vs. Traditional Approaches. *Journal of Human Kinetics*, 96 (Spec Issue), 37-51. DOI: 10.5114/jhk/196780 (JCR Q1, IF: 2.8).
4. Barrera-Domínguez FJ, Jones PA, Almagro BJ, Molina-López J (2025). Validity and Inter-Device Reliability of an Artificial Intelligence App for Real-Time Assessment of 505 Change of Direction Tests. *European Journal of Sport Science*, 25, e12252. DOI: 10.1002/ejsc.12252 (JCR Q1, IF: 3.0)
5. Barrera-Domínguez FJ, Almagro BJ, Molina-López J (2025). Effect of Different Individualised Strength Training Approaches to Improve Physical Performance in Male Basketball Players. *Sports*, 13 (7):214. <https://doi.org/10.3390/sports13070214> (JCR Q1, IF: 2.9).
6. Barrera-Domínguez FJ, Del-Cuerpo I, Riego-Ruiz A, Martínez-García D, Jerez-Mayorga D, Javier Chiroso-Ríos L, Molina-López J. Strength characteristics in faster change of direction basketball players: A comparison across cutting angles. *Eur J Sport Sci.* 2024 Sep;24(9):1260-1269. doi: 10.1002/ejsc.12164. (Sport Sciences) IF 2.400 (Q2)
7. Molina-López J, Florea D, Gamarra-Morales Y, Herrera-Quintana L, Vázquez-Lorente H, Hogstrand C, Planells E. Zinc transporters expression profile in professional handball players





- supplemented with zinc. *J Trace Elem Med Biol.* 2024 Sep;85:127473. doi: 10.1016/j.jtemb.2024.127473. (Biochemistry & Molecular Biology) IF 3.600 (Q2)
8. Barrera-Domínguez, F.J., Jones, P. A., Almagro, B. J., & Molina-López, J. (2024). Determination of change of direction deficit thresholds across a spectrum of angles in basketball players. *Journal of sports sciences*, 1–8. <https://doi.org/10.1080/02640414.2024.2354624> (Sport Sciences) IF 3.400 (Q1)
9. Lopez-Bermudez, E., Gomez-Baya, D., Planells, E., & Molina-Lopez, J. (2024). The mediational role of positive youth development in the relationship between physical activity and health-related quality of life in adolescents from urban and rural environments. *International Journal of Adolescence and Youth*, 29(1). <https://doi.org/10.1080/02673843.2024.2354917> (Psychology, Developmental) IF 4.500 (Q2)
10. Barrera-Domínguez, F.J., Almagro, B. J., & Molina-López, J. (2024). The Influence of Functional Movement and Strength upon Linear and Change of Direction Speed in Male and Female Basketball Players. *Journal of human kinetics*, 92, 147–159. <https://doi.org/10.5114/jhk/177313> (Sport Sciences) IF 2.300 (Q3)
11. Barrera-Domínguez, F.J., Martínez-García, D., Jerez-Mayorga, D., Chiroso-Ríos, L. J., Almagro, B. J., & Molina-López, J. (2023). Vertical Versus Horizontal Training for Improving the Change of Direction Speed in Adult Basketball Players: A Systematic Review and Meta-analysis. *Journal of strength and conditioning research*, 10.1519/JSC.000000000004674. Advance online publication. <https://doi.org/10.1519/JSC.000000000004674> (Sport Sciences) IF 3.200 (Q2)
12. Barrera-Domínguez FJ, Almagro BJ, de Villarreal ES, Molina-López J. Effect of individualised strength and plyometric training on the physical performance of basketball players. *Eur J Sport Sci.* 2023 Jul 20:1-28. doi: 10.1080/17461391.2023.2238690. Sport Sciences) IF 3.200 (Q2)

C.2. Congress.

1. Invited speech. Creación y desarrollo de TEDI: Tu Entrenador Deportivo Inteligente, para fomentar un entrenamiento de calidad y salud en la población. Molina-López J and Barrera-Domínguez FJ. I Congreso COIDESO Mirando al Futuro. University of Huelva, Huelva, Spain. 28/11/2025.
2. Invited speech. Multidirectional speed in sport: New perspectives on assessment and individualized training. Molina-López J and Barrera-Domínguez FJ. II International Pleokinetic Network Congress. University La Frontera, Temuco, Chile. 24-25/10/2024.
3. Oral communication. Barrera-Domínguez FJ, Sáez de Villarreal E, Almagro BJ, Molina-López J. Decisive factors for a greater performance in linear-multidirectional speed in basketball players based on gender. Barrera-Domínguez, F.J.; Almagro-Torres, B.J.; Molina-López, J. XIV Strength Symposium. 16-17/12/2022.
4. Oral communication. Barrera-Domínguez FJ, Sáez de Villarreal E, Almagro BJ, Molina-López J. Effect of individualized strength and plyometric training on the physical performance of basketball players. 8º Congreso Internacional de Readaptación y Prevención de Lesiones Actividad Física y el Deporte. 6º Congreso Internacional de Salud y Ejercicio Físico. FUNIBER. NSCA España. 1-10/04/2022
5. Invited speech. Zn transporter expression profiles in human skeletal muscle derived fibroblasts following fatty acid treatments. Molina-López J, Jaka O, Harridge S, Maret W, Hogstrand C. Zinc-Net (Cost Action TD1304). Antalia, Turquía. 02-04/11/2015.
6. Invited speech. Dietetics supplements in high performance players as an instrument to improve health and performance. Molina Lopez J. I Congreso de Investigación y Formación en Balonmano. Universidad de Granada. Granada, SP. 01-02/06/2012.





C.3. Projects or lines of research in which you have participated.

1. Estrategias motivacionales y emocionales en clases de Educación Física. Territorial scope: Regional. Founder: EPIT. Main researcher: BLINDED. Duration: 2025-2026. Reference: EPIT22762025. Amount: 7.500€.
2. Creación y desarrollo de TEDI “Tu Entrenador Deportivo Inteligente” para fomentar un entrenamiento de calidad y salud en la población. Territorial scope: Regional. Founder: Micro-proyectos del Plan de Políticas Científicas de COIDESO, Universidad de Huelva. Main Researcher: BLINDED. Duration: 01/05/2024 to 31/10/2025 (6 months). Amount: 1.500€. Type of participation: Co-IP.
3. Development of a startup from Huelva (Asstrapp Sport METrics), based on AI to optimize the performance of athletes. Participating entities: Cátedra Provincia. University of Huelva. Jan 2024 Dec 2024. PI BLINDED. 5,000 euros.
4. Response to intervention with n-acetylcysteine and other antioxidants, and study of prognostic biomarkers during ICU stay in critically ill patients by Covid-19. Entity: R+D+i projects within the framework of the FEDER Operational Program. Call: National. Participating entities: University of Granada. Jan 2021 Dec 2023. PI BLINDED. 25,000 euros.
5. European COST Project. Management Committee Member COST Action Zn-Network TD-1304. Duration: 2014 - 2017. MSC of Working Group Biomarkers Discovery. COST Action Zn-Network TD-1304: BLINDED. 2,000,000 euros.
6. Study of comprehensive intervention in autistic children. BLINDED. Entity: Mutua Madrileña Foundation. Participating entities: University of Granada. 2011 a 2015. 15,000 euros.
7. Study of oxidative stress and malnutrition in the development of systemic inflammatory response syndrome: genetic factors. Entity: Health research fund (FIS) PI10/1993. Participating entities: University of Granada. PI: BLINDED. Date: 2011-2014. 150,000 €.
8. Nutritional status in the antioxidant critically ill patient: multicenter study in Granada. Entity: Translational Excellence International (GREIB). Call: International. Participating entities: University of Granada. 2010 - 2011. PI: BLINDED. 10,000 euros.

C.4. Participation in technology/knowledge transfer activities and exploitation of results.

1. Contract 68/83: Development of Sports Talent at Real Club Recreativo de Huelva. University of Huelva and Real Club Recreativo de Huelva, S.A.D. Ref: 25-2024. Duration: 6 months from 15/03/2024. Budget: €900. PI: BLINDED. Role: Research team member.
2. Contract 68/83: Promotion of Healthy Ageing: *Salud Constante*. Intervention proposal through physical exercise to improve quality of life and prevent falls in older adults. University of Huelva and the Spanish Red Cross. Duration: 9 months from the signing date (20/03/2023). Budget: €1,000. PI: BLINDED. Role: Research team member.
3. Contract 68/83: *Huelva, the Light of Sport*. Project to promote the city of Huelva as a permanent training venue and organizer of international sporting events. Sports, tourism, and heritage. University of Huelva and the City Council of Huelva. Duration: 6 months from the signing date (25/01/2019). Budget: €6,534. PIs: BLINDED. Role: Research team member.
4. Sports Functional Dynamometry Network (RDFD). PI: BLINDED. Co-Investigators: J Molina López et al. Duration: 2023 (09/UPB/23); 2022 (06/UPB/22). Role: Network participant.
5. ANDARED: Research Network on Human Locomotion, Health, Cognition, and Functionality in Older Adults (CSD). PI: BLINDED. Co Investigators: J Molina López et al. Duration: 2021 (23/UPB/21). Role: Network participant.

