

Curriculum Vitae

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PROFILE

1. Main Research Interests and Current Projects

I´m physiotherapy degree by Castilla-La Mancha University (2012). I´m Master´s in Manual Therapy in Musculoskeletal System (2015) and Master´s in Basic and Clinical Aspect of Pain (URJC, 2016). During five years, I have work how clinical physiotherapy in rehabilitation of different musculoskeletal disorder. In 2018, I started my PhD degree in Health Science from Castilla-La Mancha University about transcutaneous spinal cord stimulation (tSCS) in spinal cord injury within framework Neurotrain Project. In 2019, I started work at the Biomechanics and Technical Aids Department (Hospital Nacional de Paraplégicos, Toledo, Spain) within framework to EXTEND European project to (Bidirectional Hyper-Connected Neural System, European Commission, Horizon 2020 - Research and Innovation Framework Programme, ref. H2020-ICT-2017). My main research field at the Biomechanical and Technical Aids Department is focused on the rehabilitation of movement disorders. I participate in evaluation of human acceptance, safety, and functional and motor outcomes of exoskeleton device in neurorehabilitation. Moreover, I´m working in combination of transcutaneous spinal stimulation and robotic system in spinal cord injury gait rehabilitation. In relation to this, currently I participate in RECODE, a health national project investigates electrical stimulation of different target neural structure (cortical, spinal) and his combination with robotic gait training in incomplete spinal cord injury.

2. Academic Degrees

- Physiotherapy Degree at University of Castilla-La Mancha (UPM), Spain 2012.
- Master's in Manual Therapy in Musculoskeletal System at University of Alcalá de Henares (UAH), Spain 2015.
- Master's in Basic and Clinical Aspect of Pain at University Rey Juan Carlos, (URJC), 2016.

3. Current Position

- High Laboratory Technical, physiotherapy at the Biomechanics and Technical Aids Department, National Hospital for Spinal Cord Injury, Toledo, Spain. (2019- Present).

4. Publications

Scientific journal

- Megía-García Á, Serrano-Muñoz D, Bravo-Estaban E, Ando S, Avendaño-Coy J, Gómez-Soriano J. Efectos analgésicos de la estimulación eléctrica nerviosa transcutánea (TENS) en pacientes con fibromialgia: una revisión sistemática. Aten Primaria. 2018. <https://doi.org/10.1016/j.aprim.2018.03.010>.
- Megía-García Á, Serrano-Muñoz D, Taylor J, Avendaño-Coy J, Gómez-Soriano J. Transcutaneous Spinal Cord Stimulation and motor rehabilitation in spinal cord injury: a systematic review. Neurorehabilitation and Neural Repair. 2019. <https://doi.org/10.1177/1545968319893298>.
- Gómez-Soriano J, Megía-García Á, Serrano-Muñoz D, Osuagwu B, Taylor J. Non-invasive spinal direct current stimulation for, spasticity therapy following spinal cord injury: mechanistic insights contributing to long-term treatment effects. J Physiol. 2019. <https://doi.org/10.1113/JP277740>.
- Gil-Agudo A, Del Ama-Espinosa A, Lozano-Berrio V, Fernández-López A, Megía-García A, Benito-Penalva J, Pons JL. Terapia Robótica con Exo H2 en la rehabilitación de la marcha en pacientes con lesión medular incompleta. Una experiencia clínica. Rehabilitación. 2019.
- Del Ama-Espinosa A, Megía-García A, Lozano-Berrio V, Lozano-Berrio V. Cambios en la cinemática articular tras entrenamiento de la marcha con exoesqueleto robótico ambulatorio. XI Simposio CEA de

Bioingeniería. Valencia. 2019.

- Megía-García A, Del Ama-Espinosa AJ, Gómez-Soriano J, Comino N, Gil-Agudo A, Serrano-Muñoz S, Avendaño-Coy J, Taylor J, Moreno J. Modificación del reflejo muscular de la raíz posterior debido a cambios en el porcentaje de peso corporal en sujetos voluntarios sanos. X Congreso Iberoamericano de Tecnologías de Apoyo a la Discapacidad Iberdiscap. Buenos Aires. 2019.