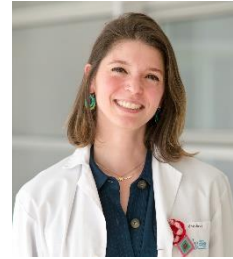


Curriculum Vitae

M^a Isabel Sinovas Alonso

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PROFILE

1. Main Research Interests and Current Projects

M^a Isabel Sinovas Alonso holds a Diploma in Physiotherapy from the University of Salamanca since 2009. She began her clinical experience in different rehabilitation centers in Spain and she worked from 2011 to 2016 in the French public hospital system, mainly in the area of paediatric neurological disorders and respiratory diseases. In 2015 she completed her academic education with a Master's degree in Human Movement Sciences at Aix-Marseille University, carrying out a study based on gait analysis in children with mucopolysaccharidosis. She then started her research career at the Institute of Biomechanics of Valencia (IBV) in 2016, developing an expertise in the management of biomechanical motion analysis technological applications for patient's clinical assessment. Since 2019 she currently works as physiotherapist at the Biomechanics and Technical Aids Department at National Hospital for Spinal Cord Injury, Toledo (Spain).

Nowadays her main scientific interests are focused in the area of new technologies applied in neurorehabilitation, specifically in gait recovery and its analysis in neurological impaired patients, such as spinal cord injured (SCI) patients. For this purpose, her professional activity is developed in a double way: a clinical and a research activity with the common aim of studying gait disorders and its measure. On the one hand, her clinical activity is based on the development of gait analysis tests of SCI inpatients and outpatients in the Laboratory for Gait Analysis of the Biomechanics and Technical Aids Department, together with the close collaboration of a fellow engineer of the department. On the other hand, her currently research activity is attached to a recent project based on customizable robotic and neuroprosthetic modular systems for pathological gait assistance, where different functional scenarios have been described with the aim of developing a customizable technology that allow gait compensatory strategies in patients regardless of their pathology. Related to this, she is presently working on a systematic review to analyze the scientific evidence of the gait metrics that are regularly used in the clinical practice in SCI patients.

2. Academic Degrees

- Master's degree in Sciences and Techniques of Physical and Sports Activities, Research specialty in Human Movement Sciences: Learning, Biomechanics and Motor Control; at Aix-Marseille University (2015)
- Diploma (2009) and Bachelor's degree (2013) in Physiotherapy at the University of Salamanca.

3. Current Position

- Physiotherapist at the Biomechanics and Technical Aids Department (National Hospital for Spinal Cord Injury, Toledo, Spain) since 2019.

4. Publications

Scientific journal

- De Rosario H, Vivas MJ, Sinovas MI, Page Á. Relationship between neck motion and self-reported pain in patients with whiplash associated disorders during the acute phase. *Musculoskelet Sci Pract.* 2018 Dec;38:23-29.

Conference abstracts

- C. Herrera-Ligero, L. Garcés-Pérez, M.J. Vivas-Broseta, I. Sinovas-Alonso. Functional assessment in a case of meniscopathy. Usefulness of an application to evaluate gait, single-limb support and the climb and descent of stairs in front of isolated gait studies in the biomechanical characterization of the knee. *Gait & Posture.* Volume 57, Supplement 1, September 2017, Pages 359-360. ESMAC 2017 Abstracts.
- Francisca Peydro de Moya, Cristina Herrera Ligero, M^a José Vivas Broseta, Salvador Pitarch Corresa, M^a Isabel Sinovas Alonso, Adrián Colás Benito. Utilidad del análisis biomecánico de la marcha en la valoración de la parálisis cerebral infantil. Evaluación del resultado de un tratamiento experimental con células madre de cordón umbilical. N°334/182. 56 Congreso SERMEF. Mayo 2018.

5. Recent Projects

- Sistemas Modulares Robóticos y Neuroprotésicos Personalizables para la Asistencia de la Marcha Patológica (TAILOR). Proyecto Coordinado (Instituto Cajal-CSIC, Universidad Politécnica de Catalunya e Institut Guttman). Convocatoria 2018 de proyectos de I+D+i "Retos de Investigación". Ref. RTI2018-097290-B-C31
- Brain4Train: Development of innovative Training contents based on the applicability of Virtual Reality in the field of Stroke Rehabilitation. Erasmus+. Ref: 2017-1-PL01-KA202-038370 (2017-2019)