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**ACADEMIC DEGREES:**

- Master in Neuroscience and Behavioral Biology, University of Pablo de Olavide (Seville, Spain). 2016
- Degree in Biology, University of Seville (Spain). 2015

**RESEARCH AND PROFESSIONAL EXPERIENCE:**

- 2017 - Current Position: *Ph.D. student* (FPI fellowship) of University of Castilla-la-Mancha (EID-UCLM). Experimental Neurophysiology and Neuronal Circuits Lab (GNEC) and Functional Exploration and Neuromodulation of the Nervous System Lab (FENNSI). Hospital Nacional de Paraplégicos, SESCAM, Toledo, Spain.
- 2020: *Visiting Trainee*, Ministry of Education and Science, Spanish Government. Dr. Alfonso Araque's Lab at Wallin Medical Bioscience Building, University of Minneapolis, Minnesota, EEUU.
- 2016 - 2017: *Research technician*. Experimental Neurophysiology and Neuronal Circuits Lab (GNEC). Hospital Nacional de Paraplégicos, SESCAM, Toledo, Spain.
- 2015 – 2016: Master student. Internal student and final degree project in experimental research entitled “Efecto del VEGF sobre las neuronas axotomizadas del núcleo motor ocular externo”.
- 2014 – 2015: Undergraduate student trainee. Final Master project in experimental research entitled “Potenciación a largo plazo contralateral y transináptica en el circuito hipocampal. Posible mecanismo de transferencia de memoria”.

**SCIENTIFIC PUBLICATIONS:**

**Zaforas, M\***; Rosa, JM\*; Alonso-Calvino, E; Fernandez-Lopez, E; Miguel-Quesada, C; Oliviero, A; Aguilar, J. (1/7). **2020**. Cortical layer-specific modulation of neuronal activity after sensory deprivation due to spinal cord injury. preprint bioRxiv DOI: 10.1101/2020.12.28.424612.

## **CONGRESS PRESENTATIONS:**

**M. Zaforas-Rodríguez\***, E. Alonso-Calviño, E. Fernández-López, C. Miguel-Quesada, V. Ferrer-Panes, A. Oliviero, J.M. Rosa, J. Aguilar. “Spinal cord injury develops a layer-specific and time-dependent cortical reorganization”. Poster ref.: 530. 12<sup>th</sup> Forum of Federation of European Neuroscience Societies. Virtual Forum. 11-15 July **2020**.

J.M. Rosa\*, C. Miguel-Quesada\*, E. Fernández-López, **M. Zaforas-Rodríguez**, E. Alonso-Calviño, V. Ferrer-Panes, L. Sanchez-Morales, J. Aguilar. “Astrocytes modulate somatosensory L2/3 excitability after sensory deprivation”. Poster ref.: 526. 12<sup>th</sup> Forum of Federation of European Neuroscience Societies. Virtual Forum. 11-15 July **2020**.

**M. Zaforas-Rodríguez\***, E. Alonso-Calviño, E. Fernández-López, C. Miguel-Quesada, V. Ferrer-Panes, A. Oliviero, J. Aguilar. “Understanding cortical reorganization after spinal cord injury”. Poster ref.: PS4-28. 18<sup>th</sup> National Meeting of the Spanish Society of Neuroscience. Santiago de Compostela (Spain). 4-6 September **2019**.

**M. Zaforas-Rodríguez\***, E. Alonso-Calviño, E. Fernández-López, J. Aguilar. “Functional changes in laminar profile of evoked responses in deafferented cortex after spinal cord injury”. CNB-CSIC Symposium: Neurodevelopment disease and brain repair”. Spanish National Centre for Biotechnology (CNB, Madrid, Spain). 15 February **2019**.

**M. Zaforas-Rodríguez\***, E. Alonso-Calviño, E. Fernández-López, J. Aguilar. “Functional changes in laminar profile of evoked responses in deafferented cortex after spinal cord injury”. Poster ref.: D068. 11<sup>th</sup> Forum of Federation of European Neuroscience Societies. Berlin (Germany). 7-11 July **2018**.

## **GRANTED RESEARCH PROJECTS:**

### **Projects as Ph.D. Student**

Estimulación cerebral no invasiva con campos magnéticos estáticos: transfiriendo la estimulación transcraneal desde el laboratorio al paciente. Hospital Nacional de Parapléjicos, Toledo, PI: Antonio Oliviero, Type of participation: PhD student (FPI fellowship) and team member, MICINN-SAF, 2017 – 2022.

### **AWARDS:**

- 2018. Travel grant for assistance and scientific poster presentation to 11th FENS Forum
- 2016. Best Research Project (with Honors) at the final Master project in Neuroscience and Behavioral Biology, University of Pablo de Olavide (Seville, Spain).

### **MEMBERSHIP:**

- Spanish Society of Neuroscience (SENC). Member ID 2390
- Federation of European Neuroscience Societies (FENS). Member ID ES58588

## **ORGANIZATION OF RESEARCH AND ACADEMIC EVENTS:**

- 2021. Co-organizer and member of Brain Awareness Week (BAW), Hospital Nacional de Parapléjicos (Toledo, Spain).
- 2021: Member of Divulcation Committee and Research Personal Committee, Hospital Nacional de Parapléjicos (Toledo, Spain).

- 2020. Member of *Día de la Mujer y la niña en la ciencia*. Hospital Nacional de Paraplégicos (Toledo, Spain).
- 2018 – 2019: Member of Brain Awareness Week (BAW). Hospital Nacional de Paraplégicos (Toledo, Spain).