

## Currículum Vitae

# María Jesús Maraver Romero

e-mail: [mjmaraver@ugr.es](mailto:mjmaraver@ugr.es)

website: <http://memory.ugr.es/node/39>

ORCID: [0000-0001-9831-6238](https://orcid.org/0000-0001-9831-6238)

Researcher ID: [H-1638-2015](https://orcid.org/H-1638-2015)

### Current affiliation

---

PhD Student  
Memory and Language Research Group  
Research Center for Mind, Brain and Behavior (CIMCYC)  
University of Granada  
C/ Profesor Clavera s/n (Campus Cartuja)  
18071 Granada (Spain)

### Summary

---

My research interests include the study of individual differences in cognitive control. In particular, my thesis project aims to study the modulation of mechanisms of interference control in memory and language. I am approaching this interesting research issue by using behavioral experimental techniques and recording brain activity (EEG). My goal is to study, not only at the behavioral but also at the neural level, how memory, cognitive control and language processes are modulated by individual differences in relation to age, alertness level, reading difficulty or performance in cognitive training programs.

### Academic Background

---

- 2014 - present** PhD student, Doctorate program in Psychology. *Provisional thesis title:* The Enhancement of Executive Control: Evidence from Cognitive Training and Alertness. *Thesis supervisors:* M<sup>a</sup> Teresa Bajo Molina (University of Granada) and Carlos J. Gómez-Ariza (University of Jaén).
- 2013** Master of Science (M.Sc.) in Neuroscience. Department of Anatomy, Histology and Neuroscience. School of Medicine, Autónoma University of Madrid (Spain). *M.Sc. Thesis Title:* Effects of endocannabinoids on synaptic plasticity regulation in somatosensory cortex. *Supervisors:* David Fernández de Sevilla (Autónoma University of Madrid).
- 2011** Degree in Psychology. University of Jaén (Spain).

### Research Grants

---

- 2014** Short stay grant for FPI grant holders founded by the Spanish Ministry of Economy and Competitiveness (EEBB-I-10156). Receptor Center: University of California, Irvine.
- 2014 – 2017** Grant holder of the University Research Training (Formación de Personal Investigador, FPI, BES-2013-066842) funded by the Spanish Ministry of Economy and Competitiveness.

- 2011 – 2013** Grant holder of the Introduction to Research Training funded by the Autónoma University of Madrid (October 2011 – October 2013).
- 2011** Grant holder of the Introduction to Research Training funded by the University of Jaén (March 2011 – July 2011).

## Publications

---

Maglio, L.E., Noriega-Prieto, J.A., **Maraver, M.J.** & Fernández de Sevilla, D. (2017) Endocannabinoid-Dependent Long-Term Potentiation of Synaptic Transmission at Rat Barrel Cortex. *Cerebral Cortex*, 1-14.  
doi: <https://doi.org/10.1093/cercor/bhx053>

**Maraver, M.J.**, Gómez-Ariza, C.J. & Bajo, M.T. (2016) Training on Working Memory and Inhibitory Control in Young Adults. *Frontiers in Human Neuroscience*. 10:588. doi: <https://doi.org/10.3389/fnhum.2016.00588>

### Working Papers

Ferreira, C.S., **Maraver, M.J.**, Hanslmayr, S. & Bajo, M.T. Theta oscillations show impaired interference detection in the elderly during selective memory retrieval. *Submitted to NeuroImage*.

Jones, M. – **Maraver, M.J.**, Bajo, M.T., Gómez-Ariza, C.J., Parlett, C., Buschkuhl, M. & Jaeggi, S.M. Working Memory Training and Reading Comprehension.

**Maraver, M.J.**, Gómez-Ariza, C.J., Borella, E., Cerutti, C., Franzese, E. & Bajo, M.T. Executive Control Training and Transfer to Selective Retrieval during Healthy Aging.

**Maraver, M.J.**, Borella, E., Gómez-Ariza, C.J., Cerutti, C., Franzese, E. & Bajo, M.T. Training Executive Control during Healthy Aging.

## Contributions to Scientific Conferences

---

**Maraver, M.J.**, Gómez-Ariza, C.J., Borella, E., Cerutti, C., Franzese, E. & Bajo, M.T. (2017, September). *Executive Control Training and Transfer to Selective Retrieval during Healthy Aging*. . Presentation in the Satellite Event “Cognitive Enhancement” celebrated during the 20<sup>th</sup> Conference of the European Society for Cognitive Psychology, Potsdam, Germany.

Bajo, M.T., **Maraver, M.J.** Cerutti, C., Franzese, E., Borella, E. & Gómez-Ariza, C.J. (2017, March). *Training Working Memory and Executive Control in the Aging*. Presentation in the Symposium “Working Memory Training in the Lifespan” at the International Convention for Psychological Science, Vienna, Austria.

**Maraver, M.J.**, Aguirre, C., Gómez-Ariza, C.J. & Bajo, M.T. (2016, November) *Retrieval-Induced Forgetting is Modulated by Alertness*. Poster presented at the Psychonomic Society's 57th Annual Meeting. Boston, MA. United States.

**Maraver, M.J.**, Bajo, M.T. & Gómez-Ariza, C.J. (2016, May). *Entrenamiento en Control Ejecutivo: Efectos de Transferencia en Adultos Jóvenes*. Oral communication presented at the I Jornadas de Investigadores en Formación Fomentando la Interdisciplinariedad (JIFFI), University of Granada. Granada, Spain. \* Presentation awarded with the best communication of the Doctoral School of Health Sciences of the University of Granada.

**Maraver, M.J.**, Bajo, M.T. & Gómez-Ariza, C.J. (2016, May). *The Role of Working Memory and Inhibitory Control in Executive Control Training and Transfer in Young Healthy Adults*. Poster presented at the Psychonomic Society's 2<sup>nd</sup> International Meeting. Granada, Spain.

**Maraver, M.J.**, Jones, M.R., Bajo, M.T., Gómez-Ariza, C.J., Au, J., Parlett, C.M., Buschkuhl, M. & Jaeggi, S.M. (2016, May). *Individual Differences in Motivation, Attention and Supervision during Working Memory Training in Elementary School Children*. Poster presented at the Psychonomic Society's 2<sup>nd</sup> International Meeting. Granada, Spain.

Ferreira, C.S., **Maraver, M.J.**, Hanslmayr, S. & Bajo, M.T. (2016, May). *Impaired interference detection in the elderly is traced by medial frontal theta oscillations*. Oral communication presented at the Psychonomic Society's 2<sup>nd</sup> International Meeting. Granada, Spain.

Jones, M.R., **Maraver, M.J.**, Bajo, M.T., Gómez-Ariza, C.J., Parlett, C.M., Au, J., Buschkuhl, M. & Jaeggi, S.M. (2016, May). *Working Memory Training for Low- and High- Ability Readers*. Poster presented at the Psychonomic Society's 2<sup>nd</sup> International Meeting. Granada, Spain.

**Maraver, M.J.**, Olivencia, N., Rueda, M.R., Bajo, M.T. & Gómez-Ariza, C.J. (2015, November). *Executive Control Training and Transfer: Individual Differences in Young Healthy Adults*. Poster presented at the Psychonomic Society's 56th Annual Meeting. Chicago, IL. United States.

**Maraver, M.J.** (2015, April). Participation at the "Round Table Session on Doctoral Student Experiences at the University of Granada". UZDOC project meeting "Enhancing Quality of Doctoral Education at Higher Education Institutions in Uzbekistan". Granada, Spain.

**Maraver, M.J.**, Olivencia, N., Rueda, M.R., Bajo, M.T. & Gómez-Ariza, C.J. (2014, October). *Entrenamiento y control cognitivo: efectos de transferencia en memoria de trabajo e inteligencia*. Poster presented at the X Congress of the Spanish Society of Experimental Psychology (SEPEX-SEPNECA). Murcia, Spain.

Sanches-Ferreira, C., Marful, A., **Maraver, M.J.** & Bajo, M.T. (2014, October). *Correlatos neurales del efecto de Olvido Inducido por la Recuperación en el envejecimiento normal*. Oral communication presented at the X Congress of the Spanish Society of Experimental Psychology (SEPEX-SEPNECA). Murcia, Spain.

**Maraver, M.J.**, Togato, G., Pérez, A.I., Macizo, P., Rueda, M.R., Gómez-Ariza, C.J. & Bajo, M.T. (2014, September). *Discourse comprehension and training executive control*. Poster presented at the Opening Conferences of the Mind, Brain and Behavior Research Center. Granada, Spain.

Maglio, L.E., Díez, A., **Maraver, M.J.**, Núñez, A., Buño, W. & Fernández de Sevilla, D. (2013, September). *Los endocannabinoides facilitan la generación espigas de calcio en la corteza de barriles*. Poster presented at the XV Congress of the Spanish Society of Neuroscience (SENC). Oviedo, Spain.

Díez, A., Maglio, L.E., **Maraver, M.J.**, Núñez, A., Buño, W. & Fernández de Sevilla, D. (2013, September). *Potenciación a largo plazo inducida por espigas de calcio en neuronas piramidales de capa v de la corteza de barriles*. Poster presented at the XV Congress of the Spanish Society of Neuroscience (SENC). Oviedo, Spain.

Díez, A., **Maraver, M.J.**, Núñez, A., Buño, W. & Fernández de Sevilla, D. (2012, July). *Spike timing-dependent plasticity-like long-term potentiation induced by calcium spikes in layer v pyramidal neurons of rat barrel cortex*. Poster presented at the 8th Federation of European Neuroscience Societies Forum in Neurosciences. Barcelona, Spain.

**Maraver, M.J.** & Escarabajal, M.D. (2011, October). *Executive Functions, Gender and Cannabis Use*. Oral communication presented at the Conferences on Cannabis, Youth and Gender. Granada, Spain.

## Participation in Funded Projects

---

- 2016 – 2019** Proactive and reactive control over memory interference. (PSI2015-65502-C2-1-P). Spanish Ministry of Economy and Competitiveness. Head researcher: M<sup>a</sup> Teresa Bajo.
- 2016 – 2019** Proactive and reactive control over memory interference. Effects of training and neuromodulation by means of tDCS (PSI2015-65502-C2-2-P). Spanish Ministry of Economy and Competitiveness. Head researcher: Carlos J. Gómez-Ariza.
- 2013 – 2016** Individual differences in interference control on memory (PSI2012-33625). Spanish Ministry of Economy and Competitiveness. Head researcher: M<sup>a</sup> Teresa Bajo.
- 2013 – 2016** Training and Control of Memory (PSI2011-2597). Spanish Ministry of Science and Innovation. Head Researcher: Carlos J. Gómez Ariza.
- 2011 – 2013** Synaptic plasticity regulation. Spanish Ministry of Science and Innovation. Head Researcher: David Fernández de Sevilla.
- 2011** Drug use. Head Researcher: M<sup>a</sup> Dolores Escarabajal.

## Stays in Private or Public Centers

---

- 2015** School of Education, University of California-Irvine (Irvine, CA, United States). From 07/08/2015 to 10/12/2015. Supervisor: Susanne M. Jaeggi.

## Teaching Experience

---

### Academic year 2016-2017

Conference about *Cognitive Training by means of Online Informatics Programs*, in the Master on Informatics Engineering of the University of Jaen. January, 2017.

*Teacher of subject "Memory and Knowledge Representation"* (Psychology Degree, University of Granada). 6 units ECTS.

*Undergraduate project supervisor*. Student: Laura Trujillo (University of Granada). Project on the effects of executive control training in older adults: changes in behavior and brain activity.

### Academic year 2015-2016

*Teacher of subject "Basic Psychological Processes"* (Speech Therapy Degree, University of Granada). 3 units ECTS.

*Undergraduate project supervisor*. Student: Ana Sierra (University of Granada). Project on the effects of alertness on interference control of memory.

*Erasmus master thesis supervisor.* Students: Claudia Cerutti and Eugenio Franzese (University of Padova, Italy). Projects on the effects of executive control training in older adults: changes in behavior and brain activity.

## Other Professional Experience

---

### Events organization

**2016** Participation in the organization of the 2<sup>nd</sup> International Meeting of the Psychonomic Society. Granada, Spain.

### University Accreditation and Evaluation

**2015 – 2016** Vocal representative of students on the University Accreditation and Evaluation Area, Andalusian Knowledge Agency (Economy, Innovation and Science Regional Ministry of Andalusia, Spain).

### 3 Minute Thesis Competition

**2016 - 2017** Second Prize Award at the University level, on the first edition of the “3 Minute Thesis Competition” organized by the University of Granada in collaboration with University Members of the Coimbra Group. Presentation entitled: “Motivated Brain Plasticity”.  
Presentation: <https://www.youtube.com/watch?v=qsnrvPZU2kM>  
Press release at UGRDivulga:  
<http://escuelaposgrado.ugr.es/doctorado/escuelas/3minthesis/2016-17>