



CURRICULUM VITAE (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

CV date	22/05/2024
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Part A. PERSONAL INFORMATION

First name	José Luis		
Family name	Fuentes Melero		
Gender (*)		Birth date (dd/mm/yyyy)	
ID number			
e-mail			
Open Researcher and Contributor ID (ORCID) (*)			

(*) *Mandatory*

A.1. Current position

Position	Full professor		
Initial date	21/08/2001		
Institution	University of Murcia		
Department/Center	Basic Psychology and Methodology/ Faculty of Psychology		
Country	Spain	Teleph. number	
Key words	Attention, inhibitory control, brain connectivity, NIBS, EEG, sMRI		

A.2. Previous positions (research activity interruptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
1982-1989	Lecturer/Almería University/Spain
1989-2001	Senior lecturer/Almería University/Spain
2001-2006	Full professor/Almería University/Spain
2006- current	Full professor/Murcia University/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD	Granada University/Spain	1987
Graduate	Granada University/Spain	1982

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

I was director of the "Neuropsychology of Attention" (CTS-0135) research group at the University of Almería (1988-2004). During that period, I set up the experimental psychology laboratory and the CERNEP unit to study brain-injured patients. I focused on two main research lines: (1) attention from a neuroscientific perspective; and (2) the differential outcomes procedure (DOP) in human discriminative learning and memory. The first line was reinforced by studying brain-injured patients after my first sabbatical (1992-93) at the University of Birmingham with Professor Glyn Humphreys. I obtained funding from the National Plan I+D+i to strengthen research in the field of attention (project **PB93-0729**), and later in the field of attention deficits in neurological patients (project **PM97-0002**). Regarding the second line of research, I set out to promote learning and memory using DOP in children and people with Down syndrome in collaboration with Bruce Overmier (University of Minnesota, USA). Recently, I have extended the use of the DOP to improve recognition memory in people suffering from memory problems, such as the elderly and patients with neurodegenerative pathologies, as well as promote adherence to medical treatment in those patients. In 2004 I



moved to the University of Murcia and set up the Cognitive Neuroscience lab (<https://www.um.es/web/lab-neurociencia>). I started a collaboration with Carmen Antúnez, head of the Dementia Unit at the Virgen de la Arrixaca Hospital, and Jose María García Santos, director of Radiology service at the Morales Meseguer Hospital. I first approached the study of cognitive deficits associated with hypertension (project **SEJ2005-01223/PSIC**). In subsequent projects funded by the Fundación Seneca, I focused on attentional and learning deficits in people diagnosed with dementia (project **03066/PHCS/05**) and on the study of synesthesia through hypnosis (project **08828/PHCS/08**). In 2008, my research underwent an important change with the achievement of funding within the Consolider Ingenio 2010 program (COEDUCA project **CSD2008-00048**), funded with 4 million Euros, coordinated by Manuel Carreiras (BCBL). The project addressed the study of the factors contributing to academic achievement from an interdisciplinary perspective, collecting data from genetics, fMRI, cognitive testing, and temperament profiles. In 2013, I enjoyed a new sabbatical at the University of Oxford with Glyn Humphreys and Roi Cohen Kadosh. I learned to use NIBS techniques and started a collaboration on children's math anxiety with Roi Cohen. I have obtained several funding for the study of neurological, cognitive, and emotional factors that influence children's math performance. We designed a computer-based training program that produced improvements in inhibitory control, intelligence, reading, and math grades, as well as in brain functional connectivity (projects **PSI2010-09551-E**; **PSI2011-23340**; **PSI2014-53427-P**; **PSI2017-84556-P**, from AEI; and **19267/PI/14** from Fundación Seneca). Currently, I'm leading a project on the effects of electrical brain stimulation on sustained attention and working memory (project **PID2021-125408NB-I00**). I have published in prestigious international journals and have been highly cited (**h index = 32**, **cites: 3.268**, Scopus data). I have supervised **17 doctoral theses**, and **two researchers were granted** a Juan de la Cierva post-doc. All doctorates are working at Spanish universities, and two are in foreign universities (UK and Greece). I am currently supervising the thesis of **four FPU pre-doctoral students** in the field of attention and memory using NIBS. I have collaborated with many researchers around the world (**176 co-authors**): in USA with Bruce Overmier (DOP) and Linda Langley (attention deficits in the elderly); in China with Qi Chen (inhibitory processing in the brain), in France with Muriel Boucart (inhibitory processing in Schizophrenia), in UK with Kim Plunkett (backward inhibition in toddlers), Glyn Humphreys (attention deficits in visual neglect), and Roi Cohen (children's math abilities), in Israel with Roi Cohen and Avishai Henik (hypnosis and synesthesia); in Germany with Bernhard Hommel (unconscious processing); in Italy with Giovanni Galfano (orienting attention), Maria Casagrande (attention disorders in autism), and Alberto Inuggi (children's brain functional connectivity), in Spain with Manuel Carreiras, Nuria Sebastián and Albert Costa (bilingualism); Pío Tudela, Andrés Catena, Juan Lupiáñez, Rosario Rueda, Juan José Ortells, Soledad Ballesteros and Elena Amenedo (attention); and Angeles F. Estévez (DOP). My research has reached the media's interest, e.g., *Le Monde de l'Intelligence*, the SINC agency, Radio 5, Radio Murcia, and local newspapers. I have been a **member of the panel** of AQU, ICREA (Catalonia), ERC-Starting Grants (Brussels), and ANEP coordinator in Psychology. I have given more than **65 invited conferences** around the world.

Part C. RELEVANT MERITS

C.1. Publications

- Martínez-Pérez, V., Sandoval-Lentisco, A., Tortajada, M., Palmero, L. B., Campoy, G., & Fuentes, L. J. (2024). Self-prioritization effect in the attentional blink paradigm: Attention-based or familiarity-based effect? *Consciousness and Cognition*, 117:103607. Doi:10.1016/j.concog.2023.103607.
- Palmero, L. B., Martínez-Pérez, V., Tortajada, M., Campoy, G. & Fuentes, L. J. (2024). Testing the modulation of self-related automatic and others-related controlled processing by chronotype and time-of-day. *Consciousness and Cognition*, 118:103633. Doi:10.1016/j.concog.2023.103633.
- Martínez-Pérez, V., Andreu, A., Sandoval-Lentisco, A., Tortajada, M., Palmero, L. B., Castillo, A., Campoy, G., & Fuentes, L. J. (2023). Vigilance decrement and mind-wandering in sustained attention tasks: Two sides of the same coin? *Frontiers in Neuroscience*, 17:1122406. Doi: 10.3389/fnins.2023.1122406.



- Pina, V., Campello, V. M., Lekadir, K., Seguí, S., García Santos, J. M., & Fuentes, L. J. (CA) (2022). Mathematical abilities in school-aged children: A structural magnetic resonance imaging analysis with radiomics. *Frontiers in Neuroscience*, 819069. Doi: 10.3389/fnins.2022.819069
- Palmero, L. B., Martínez-Pérez, V., Tortajada, M., Campoy, G., & Fuentes, L. J. (CA) (2022). Mid-luteal phase progesterone effects on vigilance tasks are modulated by women's chronotype. *Psychoneuroendocrinology*, 140:105722. Doi: 10.1016/j.psyneuen.2022.105722
- Martínez-Pérez, V., Tortajada, M., Palmero, L. B., Campoy, G., & Fuentes, L. J. (CA) (2022). Effects of transcranial alternating current stimulation over the right-DLPFC on vigilance tasks depend on the arousal level. *Scientific Reports*, 12:547. Doi:10.1038/s41598-021-04607-8
- Martínez-Pérez, V., Baños, D., Andreu, A., Tortajada, M., Palmero, L. B., Campoy, G., & Fuentes, L. J. (CA) (2021). Propensity to intentional and unintentional mind-wandering differs in arousal and executive vigilance tasks. *Plos One*, 16(10): e0258734. Doi: 10.1371/journal.pone.0258734
- Martínez-Pérez, V., Palmero, L. B., Campoy, G., & Fuentes, L. J. (CA) (2020). The role of chronotype in the interaction between the alerting and the executive control networks. *Scientific Reports*, 10:11901, 1-10. Doi: 10.1038/s41598-020-68755-z
- Martínez-Pérez, V., Castillo, A., Sánchez-Pérez, N., Vivas, A. B., Campoy, G., & Fuentes, L. J. (CA) (2019). Time course of the inhibitory tagging effect in ongoing emotional processing. A HD-tDCS study. *Neuropsychologia*, 135:107242. Doi: 10.1016/j.neuropsychologia.2019.107242
- Chow, J., Aimola Davies, A. M., Fuentes, L. J., & Plunkett, K. (2016). Backward semantic inhibition in toddlers. *Psychological Science*, 27, 1312-1320. Doi: 10.1177/0956797616659766
- Fuentes, L. J. (CA), Sui, J., Estévez, A. F., & Humphreys, G. W. (2016). The differential outcomes procedure can overcome self-bias in perceptual matching. *Psychonomic Bulletin and Review*, 23, 451-458. Doi: 10.3758/s13423-015-0895-3
- Fuentes, L. J., Vivas, A. B., Langley, L. K., Chen, Q., & González-Salinas, C. (2012). Inhibitory mechanisms in the attentional networks: A multidisciplinary approach. In M. I. Posner (Ed.) *Cognitive neuroscience of attention*, 2^a ed. (pp. 76-88). New York: Guilford Press.
- Cohen-Kadosh, R., Henik, A., Catena, A., Walsh, V., & Fuentes, L. J. (CA) (2009). Induced cross-modal synaesthetic experience without abnormal neuronal connections. *Psychological Science*, 20, 258-265. Doi: 10.1111/j.1467-9280.2009.02286.x

C.2. Congress

- Martínez-Pérez, V., Andreu, A., Tortajada, M., Palmero, L. B., Sandoval, A., Campoy, G., & Fuentes, L. J. Dissociating the effects of task demands and non-invasive brain stimulation on both vigilance decrement and propensity to mind wandering in sustained attention tasks. APPE-SEPEX Meeting. Faro (Portugal), 5-7 May, 2022. Oral communication.
- Sánchez-Pérez, N., Inuggi, A., Castillo, A., Campoy, G., González-Salinas, C., & Fuentes, L. J. Academic and brain functional connectivity effects after training schoolchildren in working memory. 18th Biennial EARLI Conference. Aachen (Germany), 12-16 August, 2019. Oral communication.
- Martínez-Pérez, V., Castillo, A., Sánchez-Pérez, N., Vivas, A. B., Campoy, G., & Fuentes, L. J. The causal role of the left dorsolateral prefrontal cortex in the inhibitory tagging effect: Evidence from high definition transcranial direct current stimulation. 21st Conference of the European Society for Cognitive Psychology. Tenerife, 25-28 September, 2019. Oral communication.
- Sánchez-Pérez, N., Inuggi, A., García-Santos, J. M., Fuentes, L. J., González-Salinas, C. Functional brain connectivity study in children who differ in temperamental self-regulation. The 6th Annual Flux Congress. Berlin, 30 August – 1 September, 2018. Oral communication
- Sánchez-Pérez, N., Castillo, A., Campoy, G., López J., González-Salinas, C., & Fuentes, L. J. Improving children's academic and cognitive skills: Evaluation of a school-based training.



- 18th European Conference on Developmental Psychology. Utrecht, 29 August-1 September, 2017. Oral communication.
- Fuentes, L. J. Executive control and academic achievement in primary school children. Symposium in honour of Gaia Scerif. EPS/SEPEX Joint Meeting. Oxford, 8-10 July, 2016. Invited speaker.
- Chow, J., Aimola Davies, A., Fuentes, L. J., & Plunkett, K. The emergence of backward semantic inhibition in toddlers (best poster award). EPS/SEPEX Joint Meeting. Oxford, 8-10 July, 2016. Prize to the best poster.
- Fuentes, L. J., & Bruce J. Overmier. Linking basic and applied science: The case of the differential outcomes effect. Symposium in International Meeting of the Psychonomic Society. Granada, 5-8 May, 2016. Symposium organizer and speaker.
- Sánchez-Pérez, N., Fuentes, L. J., Jolliffe, D., & González-Salinas, C. Cognitive empathy mediates the association between family climate and children's social competence in boys. 24th Biennial Meeting of the International Society for the Study of Behavioral Development. Vilnius (Lithuania), 10-14 July, 2016. Oral communication.
- Fuentes, L. J. Hypnosis, attention and synaesthesia: A cognitive neuroscience approach. IV Jornadas AAHEA (Asociación para el Avance de la Hipnosis Experimental y Aplicada. Valencia, 2014. Invited speaker.

C.3. Research projects

- Individual determinants that modulate the effects of non-invasive brain stimulation (NIBS) on cognitive enhancement (STIMCOGENHANCE). (PID2021-125408NB-I00). Ministerio de Ciencia e Innovación/AEI. From 01/09/2022 to 31/08/2025. PI: FUENTES MELERO LUIS J. Funding: € 92.800
- Musical training program to improve mathematics and cognitive competences in children with and without learning difficulties: A neurocognitive approach (MUSICTRAINING). (PSI2017-84556-P). Ministerio de Economía, Industria y Competitividad. From 01/01/2018 to 31/12/2021. PI: FUENTES MELERO, LUIS J. Funding: € 99.600
- Training program in executive functions in children of primary school (19267/PI/14). Fundación Seneca. From 01/07/2015 to 31/12/2018. PI: FUENTES MELERO, LUIS J. Funding: € 47.340
- Brain functional connectivity in children that differ in self-regulation abilities (BRAINCONNECT) (PSI2014-53427-P). Ministerio de Economía y Competitividad. From 01/01/2015 to 31/12/2017. PI: FUENTES MELERO, LUIS J. Funding: € 76.400
- Underlying mechanisms of children's mathematical abilities: Cognitive, motivational and emotional factors. (PSI2011-23340). Ministerio de Ciencia e Innovación. From 01/01/2012 to 31/12/2014. PI: FUENTES MELERO, LUIS J. Funding: € 120.000
- Cognition and Education (COEDUCA) (CSD2008-00048). Programa Consolider-Ingenio 2010. From 15/10/2008 to 15/10/2013. Coordinator: MANUEL CARREIRAS VALIÑA. PI Attention group: FUENTES MELERO, LUIS J. Funding: € 4 million
- Inhibitory Mechanisms in Orienting and Executive Attentional Networks: A Multidisciplinary Approach. (PSI2008-00464/PSIC). Ministerio de Ciencia e Innovación. From 01/01/2009 to 31/12/2011. PI: FUENTES MELERO LUIS J. Funding: € 194.810.
- Hypnosis, attention and synesthesia (08828/PHCS/08). Fundación Seneca. From 01/01/2009 to 31/12/2011. PI: FUENTES MELERO, LUIS J. Funding: € 28.400
- Cognitive deficits in ageing: Effects of hypertension and age on inhibitory control (SEJ2005-01223/PSIC). Ministerio de Educación y Ciencia. From 31/12/2005 to 31/12/2008. PI: FUENTES MELERO, LUIS J. Funding: € 51.170.