

Dept Cognició, Desenvolupament i Psicologia Educativa  
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## DE DIEGO-BALAGUER, Ruth

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### CURRENT POSITION

From October 2012. ICREA Research Professor at the Departament de Cognició, Desenvolupament i Psicologia Educativa. Universitat de Barcelona.

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### ACADEMIC BACKGROUND

1998	Degree in Psychology – Universitat de Barcelona (1995-1996 at the University of Reading, United Kingdom)
2001	European Diploma in Cognitive and Brain Sciences Hanse-Wissenschaftskolleg and Universidad de La Laguna
2003	PhD in Psychology Universitat de Barcelona (Cognitive Sciences and Language Program, Dept. de Psicología Básica)

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### PREVIOUS POSITIONS

1999-2003	Predoctoral Fellow – Generalitat de Catalunya At the Universitat de Barcelona / Parc Científic
2004-2005	Post-doctoral Fellow – Association Huntington France At the INSERM U955 Equipe 1. Neuropsychologie Interventionnelle, Créteil, France
2005-2006	Research-lecturer – Ecole Normale Supérieure (ENS, Paris) At the Département d'Etudes Cognitives
2006-2007	Post-doctoral Fellow – Université Paris-Est Créteil (UPEC) At the INSERM U955 Equipe 1. Neuropsychologie Interventionnelle, Créteil, France
2006 call	Ramon y Cajal position (Declined for the ICREA Researcher position)
2007-2012	ICREA Researcher
2009-2012	Associate Research-lecturer, Département d'Études Cognitives, École Normale Supérieure, Paris (France)

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### RESEARCH PROJECTS (*last 10 years*)

- As Principal Investigator**
1. Grup de Recerca Consolidat. Generalitat de Catalunya (2022-2025). Brain Dynamics and Structure of Human Cognition (2021SGR352). Amount: 60.000€. PI: Ruth de Diego Balaguer.
  2. Ministerio de Ciencia e Innovación (MICINN, I+D+i, 2022-2025). Temporal predictions in the motor system and its relation with language learning. Reference: PID2021-127146NB-I00. Amount: 151.008€.+ FPI Fellowship. PI: Ruth de Diego Balaguer.
  3. Ministerio de Ciencia, Innovación y Universidades (MICINN, I+D+i, 2018-2021). Attending to rhythm: temporal prediction and selective attention in language learning. Reference: BFU2017-87109-P. Amount: 133.100€. PI: Ruth de Diego Balaguer.
  4. ERC Starting Grant. (2013-2018). Tuning attention during language learning. Amount: 1.485.600€. PI: Ruth de Diego Balaguer.

5. Ministerio de Ciencia e Innovación (MICINN, I+D+i, 2012-2015). A multimodal neuroimaging approach to delineate emotional, motor and cognitive cortico-striatal pathways. Ref.: PSI2011-2014. IDIBELL. Amount: 84.700€. PI: Ruth de Diego-Balaguer.

**As research collaborator:**

6. Mención de Excelencia Maria de Maetzu al Institut de Neurociències de la Universitat de Barcelona (UBNEURO) (2022-2026). PI: Jordi Alberch Vie. 2.000.000,00 €. Ministerio de Ciencia e Innovación
7. Research Council of Norway (2021-2024). Linguistic Economy through transfer Source Selectivity (LESS): A neurocognitive investigation of linguistic transfer in multilingualism. 326487-FORSKER21. Amount: 6,974,000 NOK (~720,000 €). PI: Jorge Gonzalez Alonso.
8. Mención de Excelencia Maria de Maetzu al Institut de Neurociències de la Universitat de Barcelona (UBNEURO) (2018-2022). MDM-2017-0729. PI: Jordi Alberch Vie. 2.000.000,00 €. MEICO - Ministerio de Economía, Industria y Competitividad
9. Ministerio de Ciencia, Innovación y Universidades (MICINN, I+D+i, 2020-2022). Rutas hacia la cognición cuando el lenguaje falla. PID2019-105241GB-I00. Amount: 84,700 €. PI: Wolfram Hinzen.
10. Grup de Recerca Consolidat, Generalitat de Catalunya (2017-2020). CBP (2017SGR1573). Amount: 62.000€. PI: Antonio Rodriguez Fornells.
11. Grup de Recerca Consolidat, Generalitat de Catalunya (2014-2016). CBP (2014SGR1413). Amount: 30.000€. PI: Antoni Rodriguez-Fornells.

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**AWARDS, HONOURS AND FELLOWSHIPS**

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**Fellowships**

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| 1999      | Research fellowship for Graduate students (Ministerio de Educación y Ciencia)                                      |
| 2000      | Batista y Roca fellowship in the Cognition and Brain Unit (MRC) in Cambridge, UK (2 months)                        |
| 2000-2003 | FI PhD Fellowship (AGAUR, Generalitat de Catalunya)  |
| 2005-2006 | Post-doctoral fellowship from the Association Huntington France, Paris, France                                     |
| 2006-2007 | Post-doctoral Fellowship from the Ministerio de Educación y Ciencia at the Ecole Normale Supérieure, Paris, France |
| 2007      | Ramon y Cajal fellowship, Ministerio de Educación y Ciencia, (declined)  |
| 2008-2012 | ICREA Junior fellowship  |
| 2011      | Travelling fellowship BE-SDR (2011). 3 months, Ecole Normale Supérieure, Paris (France).                           |

**Awards**

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| 2005 | Ph.D Dissertation Extraordinary Award   |
| 2007 | José Manuel Blecua Award in Humanities and Social Sciences (best article derived from a UB Ph.D thesis)           |
| 2008 | Research Certification of the Agency for Quality in the University System of Catalunya (AQU) (professor Agregat). |
| 2014 | Award of the Spanish Society of Experimental Psychology (SEPEX) to the best article 2013.                         |
| 2017 | Award of the Spanish Society of Experimental Psychology (SEPEX) to the best article 2016.                         |

**Honours and responsibilities**

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| 2018-2022 | President of the Spanish Society for Experimental Psychology                                       |
| From 2016 | Member of the Internal Scientific Committee of Bellvitge Biomedical Research Institute (IDIBELL).  |
| From 2021 | Doctoral commission member for the Brain, Cognition and Behaviour Doctoral program (UB)            |
| From 2022 | Scientific Advisory Board, Fundación GADEA por la ciencia.   |
| 2022      | Within the first published ranking of the best 5000 Spanish women researchers in Spain and abroad. |

Inclusion in the platform “Científicas e Innovadoras”, Unidad de Mujeres y Ciencia, Ministry of Science and Innovation: <https://cientificasinnovadoras.fecyt.es/cientificas/ruth-de-diego-balaguer>.

## PUBLICATIONS

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### Preprints

Bikou, V., de Vicente, I., De Paepe, A.E., Garcia-Gorro, C., Rodriguez-Dechicha, N., Vaquer, I., Calopa, M., de Diego-Balaguer, R. Camara, E. (2024) Investigating altered limbic reward system in Huntington's Disease: Implications for apathy. doi: BioRxiv, 2024.02.13.580195

Pérez-Bellido, A. Duato, D., Giannelli, F., de Diego-Balaguer, R. (2023) Predictable Modality Transitions and Amodal Representations Enable Crossmodal Statistical Learning. BioRxiv, 2023.05. 12.540508

### Peer-reviewed articles published

De Paepe A, Plana-Alcaide Y, Clara Garcia-Gorro C, Nadia Rodriguez-Dechicha N, Vaquer I, Calopa M, de Diego-Balaguer R, Camara E. (2024) Cognitive engagement may slow clinical progression and brain atrophy in Huntington's disease. *Scientific Reports* 14 (1), 1-16

Pardina-Torner, H., De Paepe, A.E., García-Gorro, C., Rodríguez-Dechichá, N., Vaquer, I., Calopa, M., Ruiz-Idiago, J., Mareca, C., de Diego-Balaguer, R., Càmara, E. (2024). Disentangling the neurobiological bases of temporal impulsivity in Huntington's disease. *Brain and Behavior*. 14(3): e3335

Martinez-Alvarez, A., Gervain, J., Koulaguina, E., Pons, F., & de Diego-Balaguer, R. (2023). Prosodic cues enhance infants' sensitivity to non-adjacent regularities. *Science Advances*, 9(15), eade4083.

Orpella, J., Assaneo, M.F., Ripollés, P., Noeiovich, L., López-Barroso, D., Diego-Balaguer, R., et al. (2022). Differential activation of a frontoparietal network explains population-level differences in statistical learning from speech. *PLoS Biol* 20(7): e3001712. <https://doi.org/10.1371/journal.pbio.3001712>

De Paepe, A.E., García-Gorro, C., Martínez-Horta, S., Pérez-Pérez, J., Kulisevsky, J., Rodríguez-Dechichá, N., Vaquer, I., Subirà, S., Calopa, M., Santacruz, P., Muñoz, E., Mareca, C., Ruiz-Idiago, J., de Diego-Balaguer, R., Càmara, E. (2022). Delineating apathy profiles in Huntington's disease with the short-Lille Apathy Rating Scale. *Parkinsonism & Related Disorders*. 105:83-89

Birulés J.\*, Martinez-Alvarez A.\* , Lewkowitz D., de Diego-Balaguer R., Pons, F. (2022) Violation of non-adjacent rule dependencies elicits greater attention to a talker's mouth in 15-month-old infants. *Infancy*. 27(5):963-971

E Mas-Herrero, D Adrover-Roig, M Ruz, R de Diego-Balaguer. (2021). Do bilinguals outperform monolinguals in switching tasks? Contrary evidence for nonlinguistic and linguistic switching tasks. *Neurobiology of Language*, 2 (4), 586-604

Orpella J., Mas-Herrero E., Ripollés P., Marco-Pallarés J., de Diego-Balaguer R. (2021). Language statistical learning responds to reinforcement learning principles rooted in the striatum. *PLoS Biol* 19(9): e3001119. <https://doi.org/10.1371/journal.pbio.3001119>.

De Paepe A.E., Ara A., Garcia-Gorro G., Martinez-Horta S., Perez-Perez J., Kulisevsky J., Rodriguez-Dechicha N., Vaquer I., Subira S., Calopa M., Muñoz E., Santacruz P., Ruiz-Idiago J., Mareca C., de Diego-Balaguer R., Camara E. (2021) Gray matter vulnerabilities predict longitudinal development of apathy in Huntington's disease. *Movement disorders*. <https://doi.org/10.1002/mds.28638>

Martinez-Alvarez A, Sanz-Torrent M., Pons F, de Diego-Balaguer R. (2021). Rethinking attention in time: expectancy violations reconcile contradictory developmental evidence. *Journal of Experimental Child Psychology*. 206:105070. doi: 10.1016/j.jecp.2020.105070

Borragan M, de Bruin A, Havas V, de Diego-Balaguer R, Vulchanova MD, Vulchanov V, Duñabeitia JA. Differences in word learning in children: bilingualism or linguistic experience? (2020). *Applied Psycholinguistics*. DOI: <https://doi.org/10.1017/S0142716420000594>

Orpella J, Ripolles P, Ruzzoli M, Amengual JL, Callejas A, Martinez-Alvarez A, Soto-Faraco S, de Diego-Balaguer R. (2020). Integrating When and What Information in the Left Parietal Lobe Allows Language Rule Generalization. *PLoS Biology*. 18: e3000895. doi:10.1371/journal.pbio.3000895

O'Rourke T and de Diego-Balaguer R. (2020) Names and their meanings: A dual-process account of proper-name encoding and retrieval. *Neuroscience and Biobehavioural Reviews*. 108, 341-357.

Assaneo MF, Rimmele JM, Orpella J, Ripollés P, de Diego-Balaguer R, Poeppel D. (2019) The Lateralization of Speech-Brain Coupling Is Differentially Modulated by Intrinsic Auditory and Top-Down Mechanisms. *Frontiers in Integrative Neuroscience*. 13:28. doi: 10.3389/fnint.2019.00028. eCollection 2019

Garcia-Gorro C, Llera A, Martinez-Horta S, Perez-Perez J, Kulisevsky J, Rodriguez-Dechicha N, Vaquer I, Subira S, Calopa M, Muñoz E, Santacruz P, Ruiz-Idiago J, Mareca C, Beckmann CF, de Diego-Balaguer R<sup>+</sup>, Camara E.<sup>+</sup> (2019) Specific patterns of brain alterations underlie distinct clinical profiles in Huntington's disease. *Neuroimage Clinical*. 23:101900. doi: 10.1016/j.nicl.2019.101900. (\*joint supervision)

De Paepe AE; Sierpowska J; Garcia-Gorro C; Martinez-Horta S; Pérez J; Kulisevsky J; Rodriguez-Dechicha N; Vaquer N; Subira S; Calopa M; Muñoz E; Santacruz P; Ruiz-Idiago J; Mareca C; de Diego-Balaguer R; Camara E. (2019). White matter cortico-striatal tracts predict apathy subtypes in Huntington's disease. *Neuroimage Clinical*. 24:101965. doi: 10.1016/j.nicl.2019.101965.

Assaneo F.\*, Ripollés P.\*, Orpella J.\*., Ming Lin W., de Diego-Balaguer R.<sup>+</sup>, Poeppel D.<sup>+</sup> (2019). Spontaneous synchronization to speech reveals neural mechanisms facilitating language learning. *Nature Neuroscience*. 22(4):627-632. (\*equally contributed; \*joint supervision)

Garcia-Gorro C., Garau-Rolandi M., Esrichs A., Rodríguez-Dechicha N., Vaquer I., Subira S., Calopa M., Martínez-Horta S., Pérez-Pérez J., Kulisevsky J., Muñoz E., Santacruz P., Ruiz-Idiago J., Mareca C., de Diego-Balaguer R., Camara E. (2019). An active cognitive lifestyle as a potential neuroprotective factor in Huntington's disease. *Neuropsychologia*. 122:116-124.

Oyarzún J, Camara E, Kouider S, Fuentemilla LL, de Diego-Balaguer R., (2019) Implicit but not explicit exposure to threat conditioned stimulus prevents spontaneous recovery of threat potentiated startle responses in humans. *Brain and Behaviour*. 9(1):e01157. <https://doi.org/10.1002/brb3.1157>

Giavazzi M, Sambin S., de Diego-Balaguer R., Le Stanc L., Bachoud-Lévi AC, Jacquemot C. (2018). Structural Priming in Sentence Comprehension: a single prime is enough. *PLoS One*. 13(4): e0194959. <https://doi.org/10.1371/journal.pone.0194959>

Garcia-Gorro, C., de Diego-Balaguer, R., Martínez-Horta, S., Pérez-Pérez, J., Kulisevsky, J., Rodríguez-Dechicha, N., Vaquer, I., Subira, S., Calopa, M., Muñoz, E., et al. (2018). Reduced striato-cortical and inhibitory transcallosal connectivity in the motor circuit of Huntington's disease patients. *Hum. Brain Mapp.* 39(1):54-71. doi:10.1002/hbm.23813.

López-Barroso, D., and de Diego-Balaguer, R. (2017). Language Learning Variability within the Dorsal and Ventral Streams as a Cue for Compensatory Mechanisms in Aphasia Recovery. *Front. Hum. Neurosci.* 11, 1–7. doi:10.3389/fnhum.2017.00476.

Hinzen, W., Rosselló, J., Morey, C., Camara, E., Garcia-Gorro, C., Salvador, R., and de Diego-Balaguer, R. (2018). A systematic linguistic profile of spontaneous narrative speech in pre-symptomatic and early stage Huntington's disease. *Cortex*. 100:71-83.doi:10.1016/j.cortex.2017.07.022.

Martinez-Alvarez, A., Pons, F., and De Diego-Balaguer, R. (2017). Endogenous temporal attention in the absence of stimulus-driven cues emerges in the second year of life. *PLoS One* 12. doi:10.1371/journal.pone.0184698.

Oyarzún, J. P., Morís, J., Luque, D., de Diego-Balaguer, R., and Fuentemilla, L. (2017). Targeted memory reactivation during sleep adaptively promotes the strengthening or weakening of overlapping memories. *J. Neurosci.* 37. doi:10.1523/JNEUROSCI.3537-16.2017

Garcia-Gorro, C., Camara, E., and de Diego-Balaguer, R. (2017). Neuroimaging as a tool to study the sources of phenotypic heterogeneity in Huntington's disease. *Curr. Opin. Neurol.* 30, 398–404.

Havas, V., Taylor, J., Vaquero, L., de Diego-Balaguer, R., Rodríguez-Fornells, A., Davis, M.H. (2017). Semantic and phonological schema influence spoken word learning and overnight consolidation. *Quarterly Journal of Experimental Psychology*.

Packard P., Rodríguez-Fornells A., Bunzeck N., Nicolás B., de Diego-Balaguer R., and Fuentemilla L. (2017). Semantic congruence accelerates the onset of the neural signals of successful memory encoding. *Journal of Neuroscience*, 37(2):291-301

González-García C, Mas-Herrero E, de Diego-Balaguer R, Ruz M. Task-specific preparatory neural activations in low-interference contexts. *Brain Struct Funct*. 2016;221: 1–10. doi:10.1007/s00429-015-1141-5

De Diego-Balaguer R., Schramm C., et al. (2016) COMT Val<sup>158</sup>Met Polymorphism Modulates Huntington's Disease Progression. *PLoS One*. 11(9): e0161106. doi:10.1371/journal.pone.0161106

Oyarzun J., Packard P., de Diego-Balaguer R., Fuentemilla Ll. (2016) Motivated encoding selectively enhances memory for future inconsequential semantically related events. *Neurobiology of Learning and Memory*. 133:1-6

López-Barroso D., Cucurell D., Rodriguez-Fornells A., de Diego-Balaguer R. (2016). Attentional effects on rule extraction and consolidation from speech. *Cognition*, 152: 61-69

De Diego-Balaguer R., Martinez-Alvarez A., Pons F. (2016). Temporal attention as a scaffold for language development. *Frontiers in Psychology*, 7: 1664. <http://dx.doi.org/10.3389/fpsyg.2016.00044>

De Diego-Balaguer R., Rodriguez-Fornells A., Bachoud-Lévi AC (2015). Prosodic cues enhance rule-learning by changing speech segmentation mechanisms. *Frontiers in Psychology*, 6: 1478. <http://dx.doi.org/10.3389/fpsyg.2015.01478>

De Diego-Balaguer R. (2015). Dorsal and Ventral Streams in Relation to Language Learning Abilities. In Horne M., Lindgren M, Nilsson M, Roll M, Shtyrov Y, Ståhlberg F, Topgaard D. Microstructures of learning: novel methods and approaches for structural and functional changes underlying knowledge in the brain. *Frontiers Extended Abstract Book*. <http://frontiersin.org/books/b/990>

Havas V., Gabarrós A., Juncadella M., Rifa-Ros X., Plans G., Acebes J.J., de Diego Balaguer R., Rodríguez-Fornells A. (2015). Electrical stimulation mapping of nouns and verbs in Broca's area. *Brain and Language*. 145-146C:53-63

Sierpowska J., Gabarrós A., Fernández-Coello A., Camins A., Castañer S., Juncadella M., de Diego-Balaguer R., Rodriguez-Fornells A. (2015). Morphological derivation overflow as a result of disruptions of the frontal aslant white matter tract. *Brain and Language*. 142:54-64

López-Barroso D., Ripollés P., Marco-Pallarés J., Mohammadi B., Münte T., Bachoud-Lévi AC. Rodriguez-Fornells A., de Diego-Balaguer R. (2015). Multiple brain networks underpinning word learning from fluent speech revealed by independent component analysis. *Neuroimage*, 110: 182-193

Biau E., Torralba M., Fuentemilla L., de Diego-Balaguer R., Soto-Faraco S. (2015). Speaker's hand gestures modulate speech perception through phase resetting of ongoing neural oscillations. *Cortex*. 68:76-85

Miró, J., Ripollés, P., López-Barroso, D., Vilà-Balló, A., Juncadella, M., de Diego-Balaguer, R., Marco-Pallarés, J., Rodríguez-Fornells, A., Falip, M. (2014). Atypical language organization in temporal lobe epilepsy revealed by a passive semantic paradigm. *BMC Neurology*. 14:98

Padrão, G., Penhune, V., de Diego-Balaguer, R., Marco-Pallares, R., Rodriguez-Fornells, A. (2014). ERP evidence of adaptive changes in error processing and attentional control during rhythm synchronization learning. *Neuroimage*. 100:460–470

López-Barroso, D., Catani, M., Ripollés, P., Dell'Acqua, F., Rodríguez-Fornells, A., De Diego-Balaguer, R. (2013). Word learning is mediated by the left arcuate fasciculus. *Proceedings of the National Academy of Sciences*, 110(32):13168-73

Sambin S., Teichmann M., de Diego-Balaguer R., Giavazzi M., Sportiche D., Shlenker P., Bachoud-Lévi A.C. (2012). The role of the striatum in sentence processing: disentangling syntax from working memory in Huntington's disease. *Neuropsychologia*, 50(11):2625-2635

Oyarzún JP, Lopez-Barroso D, Fuentemilla L, Cucurell D, Pedraza C, Rodriguez-Fornells A, De Diego-Balaguer R. (2012) Updating Fearful Memories with Extinction Training during Reconsolidation: a Human Study Using Auditory Aversive Stimuli. *PLoS One*, 7(6): e38849.

Ripollés P, Marco-Pallarés J, Miró J, de Diego-Balaguer R, Falip M, Juncadella M, Rubio F, Rodríguez-Fornells A. (2012). Analysis of automated methods for spatial normalisation of lesioned brains. *Neuroimage*, 60(2): 1296-1306.

López-Barroso D., De Diego-Balaguer R.\* Cunillera T., Camara E., Münte T.F., Rodríguez-Fornells A. (2011) Language Learning under Working Memory Constraints Correlates with Microstructural Differences in the Ventral Language Pathway. *Cerebral Cortex*, 21(12): 2742-2750. \*corresponding author

De Diego-Balaguer R., Fuentemilla L., Rodríguez-Fornells A. (2011) Brain dynamics sustaining rapid rule-extraction from speech. *Journal of Cognitive Neuroscience*. 23(10): 3105-20.

De Diego-Balaguer R. and Lopez-Barroso D. (2010) Cognitive and Neural Mechanisms Sustaining Rule Learning from Speech. *Language Learning*, 60 (Suppl 2), 151-181

De Diego-Balaguer R., Rodriguez-Fornells, A. (2010) Contributions to the functional neuroanatomy of morphosyntactic processing in L2. *Language Learning*, 60 (1), 231-259

Rodriguez-Fornells, A., Cunillera, T., Mestres-Missé, A., de Diego-Balaguer, R. Neurophysiological mechanisms involved in language learning in adults. (2009) *Philosophical Transactions of the Royal Society B-Biological Sciences*, 364, 3711-3735.

De Diego-Balaguer R., Couette M., Dolbeau G., Dürr A., Yousov K., Bachoud-Lévi A.-C. (2008) Striatal Degeneration impairs Language Learning: Evidence from Huntington's Disease. *Brain*, 131 (11), 2870-2881.

De Gelder B., Van den Stock J., De Diego-Balaguer R., Bachoud-Lévi A.-C. (2008) Huntington's disease impairs recognition of angry and instrumental body language. *Neuropsychologia*, 46 , 369–373

De Diego-Balaguer R, Toro JM, Rodríguez-Fornells A, Bachoud-Lévi A (2007) Different Neurophysiological Mechanisms Underlying Word and Rule Extraction from Speech. *PLoS ONE* 2(11): e1175.

De Diego-Balaguer R., Rodríguez-Fornells A., Rotte M., Bahlmann J., Heinze H.J. & Münte T.F (2006) Neural circuits subserving the retrieval of stems and grammatical features in regular and irregular verbs. *Human Brain Mapping*, 11 (27), 878-888.

Sebastián-Gallés N., Rodríguez-Fornells A., de Diego-Balaguer R., Díaz B. (2006) First and second language phonological representations in the mental lexicon. *Journal of Cognitive Neuroscience*, 18, 1277-1291.

Rodríguez-Fornells A., de Diego-Balaguer R., Münte T.F. (2006) Executive control in bilingual language processing. *Language Learning*, 56, 133-190

De Diego-Balaguer R., Sebastián-Gallés N., Díaz B., Rodríguez-Fornells A. (2005) Morphological processing in early bilinguals: An ERP study of regular and irregular verb processing. *Cognitive Brain Research*, 25 (1), 312-327

De Diego-Balaguer R., Costa A., Sebastián-Galles N., Juncadella M. & Caramazza, A. (2004) Regular and Irregular morphology and its relationship with agrammatism: Evidence from two Spanish/Catalan bilinguals. *Brain and Language*, 91, 212-222

De Diego-Balaguer R., Costa A., Sebastián Gallés N., Juncadella M. & Caramazza, A. (2004) Regular and Irregular morphology and its relationship with agrammatism: Evidence from Spanish and Catalan. *Cortex*, 40 (1). 157-158.

Rodríguez-Fornells A., de Diego-Balaguer R. (2004) Comentario acerca de la definición y líneas de investigación propias de la Neurociencia Cognitiva. *Cognitiva*, 16 (2), 219-225

### **Book Chapters**

De Diego-Balaguer R. Lopez-Barroso D. (2010) Cognitive and Neural Mechanisms Sustaining Rule Learning from Speech. In Gullberg, M. & Indefrey, P. (Eds). *The earliest stages of language learning*. Oxford: Blackwell Publishers.

Rodríguez-Fornells A., Cunillera T., Mestres A., de Diego-Balaguer R. (2007). Event-related brain potentials applied to the study of language and second-language learning. In T. Cabré Monné (ed.). *Lingüística Teòrica: anàlisi i perspectives II* (Col·lecció: Monografies de Catalan Journal of Linguistics). Bellaterra

De Diego-Balaguer R. & Bachoud-Lévi, A.-C.(2006) Aspects cliniques et neuropsychologiques de la maladie de Huntington. In Belin, C., Ergis, A.M. & Moreaud, O. (Eds.) Actualités sur les Démences: Aspects Cliniques et Neuropsychologiques. Solal, Marseille.

Rodríguez-Fornells A., de Diego-Balaguer R., Münte T.F. (2006) Executive control in bilingual language processing. In Gullberg, M. & Indefrey, P. (Eds). The cognitive neuroscience of second language acquisition. Oxford: Blackwell Publishers

### ***Handbook Chapter***

Bosch L, Colomé A, de Diego-Balaguer R, Rodriguez-Fornells A. (2013). El Lenguaje. In D. Redolar Ripoll & A. Valero-Cabré (Eds.). Neurociencia Cognitiva (Chapter 19). Madrid, Editorial Médica Panamericana.

Bosch L, Colomé A, de Diego-Balaguer R, Rodriguez-Fornells A. (2023). El Lenguaje. In D. Redolar Ripoll & A. Valero-Cabré (Eds.). Neurociencia Cognitiva (Chapter 16). Madrid, Editorial Médica Panamericana.

### ***Science outreach publications***

Orpella, J., Assaneo, F., Ripollés, P., De Diego-Balaguer, R. (2019). Repita la sílaba “ta” y le diremos cómo funciona su cerebro. The Conversation, 19 agosto 2019 (<http://theconversation.com/repita-la-silaba-ta-y-le-diremos-como-funciona-su-cerebro-118880>)

López-Barroso, D., De Diego-Balaguer, R. (2017). Aprendiendo sin prestar atención: ¿Qué aprendemos realmente? Ciencia Cognitiva. (<http://www.cienciacognitiva.org/?p=1538>)

López-Barroso, D., De Diego-Balaguer, R. (2014). Conexiones en el hemisferio izquierdo cerebral relacionadas con el aprendizaje de palabras. Mente y Cerebro.

López-Barroso, D., Rodríguez-Fornells, A., De Diego-Balaguer, R. (2013). El aprendizaje de palabras depende de una buena conexión entre regiones del hemisferio izquierdo. Ciencia Cognitiva. (<http://medina-psicologia.ugr.es/cienciacognitiva/?p=785>)

De Diego-Balaguer R. (2005). Maladie de Huntington et langage. Bulletin de l'Association Huntington France, 55. Special Issue.

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### **CONFERENCES AND WORKSHOPS (last 5 years)**

#### ***International Events***

Soberats Garau, C., de Diego-Balaguer, R., Hinzen, W. (2024, July 8-11). Neurotypical and Williams syndrome ERP evidence of sentential meaning integration. Language in Interaction. Highlights in the Language Sciences., Donders Institute, Nijmegen, The Netherlands.

V Bikou, I de Vicente, AE De Paepe, et al. (2024) Investigating altered limbic reward system in Huntington's disease: implications for apathy. European Huntington's Disease Network Plenary Meeting, Strasbourg, France. doi: 10.1136/jnnp-2024-EHDN.105 AE

De Paepe, E Turan, C García-Gorro, et al. (2024). Potential for stereotactic targets in Huntington's disease: distinct clinical profiles associated with unique functional connectivity signatures. XX World Congress for Stereotactic and Functional Neurosurgery, Chicago, USA. doi: karger.com/sfn/article-pdf/102/Suppl.%203/1/4271340/000540478.pdf

Sanahuja, N., de Diego-Balaguer, R., & Erdocia, K. (2024). The facilitative role of cognates in adults' initial acquisition of cross-linguistically similar and dissimilar L2 structures [oral communication]. LII Symposium of the Spanish Society of Linguistics. Madrid, 22nd - 25th of January.

Franzoia, B. & De Diego-Balaguer, R. Beat perception: a window on the mechanisms underlying non-adjacent dependencies learning. 2nd International Multi-Brain Barcelona Congress, 13th- 14th November 2024.

Franzoia, B. & De Diego-Balaguer, R. (Jul 2024). Beat perception: a window on the mechanisms underlying non-adjacent dependencies learning. HILS24, Highlights in Language Sciences (HILS) workshop. Nijmegen, Netherlands.

Quintero-Manes, B, Càmara Estela, De Diego-Balaguer, R. (Jul 2024). Learning rules with more or less attention involves overlapping and distinct brain networks. Highlights in the Language Sciences (HILS), Nijmegen, Netherlands. July 8-11, 2024.

Franzoia, B. & De Diego-Balaguer, R. (Jun 2024). Beat perception in speech: a facilitating factor in statistical learning of grammar. SL24, 10th Statistical Learning Conference. San Sebastian, Spain.

Quintero-Manes B, Chica A, Camara E., de Diego-Balaguer R. (Nov 2023). Understanding offline statistical learning: Consolidation of information in short waking rest periods after task. Society for Neuroscience, Washington DC, USA

Vicky Bikou, Iñigo de Vicente, Audrey E. De Paepe, Clara Garcia-Gorro, Nadia Rodriguez-Dechicha, Irene Vaquer, Matil Calopa, Ruth de Diego-Balaguer, Estela Camara. (Nov 2023). Investigating altered limbic reward system in Huntington's Disease: Implications for apathy. Society for Neuroscience, Washington DC, USA

Franzoia, B. & De Diego-Balaguer, R. (Oct 2023) Rhythm in speech: a bridge to morpho-syntax acquisition. Cutting Gardens 2023, EEG and MEG methods multi-hub meeting. San Sebastian, Spain.

Quintero-Manes B, Chica A, Camara E., de Diego-Balaguer R. (Oct 2023). Disentangling the specific networks related to statistical learning from those for rule generalization. Neurobiology of Language Conference. Marseille, France.

Sierpowska, J. & Lizarazo, D., de Diego-Balaguer, R., Càmara, E. (Oct 2023). Exploring the role of the (pre)Supplementary Motor Area white matter system in cognitive control. Neurobiology of Language, Marseille, France.

Sanahuja, N., de Diego-Balaguer R., Erdozia K. (June 2023). The facilitative role of cognates and cross-linguistic syntactic similarity in initial L2 syntax learning. International Symposium of Psycholinguistics. Vitoria, Spain.

De Paepe, A.E., Plana-Alcaide, Y., Garcia-Gorro, C., Rodriguez-Dechicha, N., Vaquer, I., Calopa, M., de Diego-Balaguer, R., Camara, E. (March 29 2023). Cognitive engagement may slow Huntington's disease progression and brain atrophy: a longitudinal study. Columbia University Vagelos College of Physicians & Surgeons Student Research Day, Columbia University. New York, United States of America.

López-Martos, D., de Diego-Balaguer, R. (March 2023) Linguistic selection alteration in Huntington's Disease: ecological oral language production reveals evidence through lexical diversity algorithms. Mind, Brain, Body Symposium, Nijmegen. The Netherlands.

Sierpowska, J. & Lizarazo, D., de Diego-Balaguer, R., Càmara, E. (November 2022) Cognitive control and pre(SMA) white matter in Huntington's Disease -Left frontal aslant tract (FAT) preliminary results. International Multi-brain Barcelona Conference, Barcelona. Spain.

Quintero-Manes, B., Chica, A.B., Càmara, E., de Diego-Balaguer, R. (October 2022) Temporal attention and the role of left frontoparietal network in the generalization of linguistic rules: a combined fMRI-TBS investigation. REUNIÓN CIENTÍFICA SOBRE ATENCIÓN, RECA XIII, Granada. Spain.

Domingo-Ayllón, M., Garcia-Gorro, C. Martínez-Horta, S., Pérez-Pérez, J., Kulisevsky, J., Rodriguez-Dechichá, N., Vaquer, I., Subirá, S., Calopa, M., Muñoz, E., Santacruz, P., Ruiz-Idiago, J., Mareca, C., de Diego-Balaguer, R., Càmara, E. (September 2022) Temporo-spatial structural characterization of deep white matter tracts across the spectrum of Huntington's disease. EHDN Plenary Meeting, Bologna. Italy.

Giannelli, F., Duato, D., de Diego-Balaguer, R., Pérez-Bellido, A. (June 2022) Crossmodal statistical learning is facilitated by modality predictability. Statistical Learning Conference, San Sebastian. Spain.

Quintero-Manes, B., Chica, A.B., Càmara, E., de Diego-Balaguer, R. (May 2022) Atendiendo al ritmo: predicción temporal y atención selectiva para el aprendizaje del lenguaje. V Jornadas de Investigación CIMCYC, Granada. Spain.

Orpella, J., Assaneo, M.F., Ripollés, P., Noejovich, L., López-Barroso, D., Poeppel, D., de Diego-Balaguer, R. (2022). Attention Boosts Audio-motor Synchronization. SEPEX-APPE Meeting, Porto, Portugal. (Talk)

Soberats-Garau, C.; Cucurell, D., Hinzen, W., de Diego-Balaguer, R. (October 2021) Grammatical meaning configuration: an ERP study with neurotypical and Williams syndrome population. CuttingEEG 2021 Aix-en-Provence. France.

Domingo-Ayllón, M., Garcia-Gorro, C. Martínez-Horta, S., Pérez-Pérez, J., Kulisevsky, J., Rodriguez-Dechichá, N., Vaquer, I., Subirá, S., Calopa, M., Muñoz, E., Santacruz, P., Ruiz-Idiago, J., Mareca, C., de Diego-Balaguer, R., Càmara, E. (September 2021) Tracking the neurodegeneration pattern of the anterior thalamic radiations in HD: a focus on brain iron, white matter integrity and metabolites. EHDN 2021 - European Huntington's Disease Network. Germany.

Audrey E De Paepe, Alexia Giannoula, Ferran Sanz, Laura Furlong, Clara Garcia-Gorro, Saül Martinez-Horta, Jesus Perez-Perez, Jaime Kulisevsky, Nadia Rodriguez-Dechicha, Irene Vaquer, Susana Subira, Matilde Calopa, Esteban Muñoz, Pilar Santacruz, Jesus Ruiz-Idiago, Celia Mareca, Ruth de Diego-Balaguer, Estela Camara (2021) Unsupervised clustering reveals longitudinal psychiatric signatures in HD. EHDN Meeting.

Montserrat Domingo Ayllón, Clara Garcia-Gorro, Saül Martinez-Horta, Jesus Perez-Perez, Jaime Kulisevsky, Nadia Rodriguez-Dechicha, Irene Vaquer, Susana Subira, Matilde Calopa, Esteban Muñoz, Pilar Santacruz, Jesus Ruiz-Idiago, Celia Mareca, Ruth de Diego-Balaguer, Estela Camara (2021) Tracking the neurodegeneration pattern of the anterior thalamic radiations in HD: a focus on brain iron, white matter integrity and metabolites. EHDN Meeting.

Joan Birulés, Anna Martínez, David Lewkowicz, Ruth de Diego-Balaguer and Ferran Pons (2021) Selective attention to a talker's mouth facilitates non-adjacent dependency learning in 15-month-old infants. LCICD 2021 (The 6th Lancaster Conference on Infant and Child Development).

De Paepe, A.E.; Garcia-Gorro, C.; Martinez-Horta, S.; Perez-Perez, J.; Kulisevsky, J.; Rodriguez-Dechicha, N.; Vaquer, I.; Subira, S.; Calopa, M.; Santacruz, P.; Muñoz, E.; Mareca, C.; Ruiz-Idiago, J.; de Diego-Balaguer, R.; Camara, E. (May 2021) Decoupled and disengaged: Distinct functional cortico-striatal circuits underlie apathy domains in Huntington's disease. International Society for Magnetic Resonance in Medicine. USA.

Martínez-Alvarez A, Koulagina E, Gervain J, de Diego-Balaguer R. (Jan 2020). Pitch cues boost non-adjacent rule learning in infancy. Conference on Cognitive Development, Budapest, Hungary.

Assaneo MF, Ripolles P, Orpella J, de Diego-Balaguer R & Poeppel D. (2019) Spontaneous speech synchronization predicts the engagement of a fronto-parietal network that supports word-learning and reflects individual differences. 25th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, USA.

Martinez-Alvarez, A., Gervain, J., Koulaguina, E., Pons, F. & de Diego-Balaguer, R. (2019). Neural networks of non-adjacent rule learning in infancy. Society for the Neurobiology of Language (SNL) 9th Annual Meeting, August 20-22, Helsinki, Finland. (Talk)

Martinez-Alvarez, A., Gervain, J., Koulaguina, E., Pons, F. & de Diego-Balaguer, R. (2019). Neural basis of prosodic cues supporting non-adjacent rule learning in infancy. Brain, Language and Learning (BLL) Conference, September 26-28, Siena, Italy. (Talk)

Giannelli, F., de Diego Balaguer R. (2019). Prediction through multimodal rhythm in artificial language learning. Brain, Language and Learning Conference, Siena, Italy, September, 26th-28th, 2019.

Martinez-Alvarez, A., Gervain, J., Koulaguina, E., Pons, F. & de Diego-Balaguer, R. (2019). Prosodic cues enhance non-adjacent rule learning in infancy. Boston University Conference on Language Development (BUCLD), November 7-10, Boston, USA.(Poster)

### ***Organization of Scientific Events***

2<sup>nd</sup> International Multi-Brain Barcelona Congress. 13-14 Nov 2024. Barcelona, Spain

International SEPEX-APPE Meeting. 5-7 May 2022. Faro, Portugal.

Jornadas Virtuales SEPEX 2021. (April 2021)(online).

Prediction Workshop. (December 2018), Max-Planck Institute for Psycholinguistics Nijmegen, The Netherlands.

Bridging Attention and Prediction International Workshop (February 2018). Barcelona, Spain.

Beyond Language Learning International Workshop (September 2016). Barcelona, Spain

Symposium "Timing and Language" at the congress of the European Society of Cognitive Psychology (ESCoP) co-organised with Sonja Kotz. (2011). San Sebastian, Spain.

## **TEACHING**

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2005-2006	Introduction to Cognitive Psychology: Preparation of the new course for the Département d'Etudes Cognitives (ENS, Paris): 28 hours
2005-2006	Cognitive Science Seminars: Mechanisms of Rule learning. Département d'Etudes Cognitives (ENS, Paris): 28 hours
From 2006	Introduction to Neuropsychology and Cognitive Sciences. Fac. of Medicine, University Paris XII (1 module: 3 hours)
2007-2010	The Role of the Basal ganglia in language processing: 1 module in the course Cognitive Neuroscience Seminars. Fac. Psicologia, Universitat de Barcelona (2 hours)
2007-2009	Introduction to Cognitive Neuropsychology. Cogmaster. Ecole Normale Supérieure. (6 hours)
2007-2009	Communication et Culture Scientifique Cognition et Société. Ecole Normale Supérieure. (2 hours)
2008	Cognitive and neural mechanisms underlying rule-learning from speech. Master de Neurociències. Universitat de Barcelona. (2 hours)
April 2014	Neurocognition of Language. Master in Linguistics. Universidad del País Vasco (20 hours).
2010-2014	Cognitive Neuroscience Course. Research Master in Cognition and Behaviour, Universitat de Barcelona (6 hours)
August 2018.	Language Learning in interaction: Working memory and Attention contributions. Cold Spring Harbor. New York, USA. Summerschool.
From 2009	Minds, Brains and Machines (Master in Artificial Intelligence). Universitat Politècnica de Catalunya. (4.5 hours and coordination of the course).
From 2010	Cognitive Neuroscience Course. Research Master in Cognition and Behaviour, Universitat de Barcelona (6 hours)
From 2013	Advances in Memory and Language. Research Master in Cognition and Behaviour. Universitat de Barcelona (12 hours).
From 2020	Topics in Psychology, Language and Cognition. Research Master Cognitive Science and Language. Universitat de Barcelona (12 hours).

## **SUPERVISIONS**

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### ***Post-doctoral supervisions***

Francesco Giannelli, Elena Kulagina, Julià Amengual, Pablo Ripollés, Alicia Callejas, Gemma Monté, Joanna Sierpowska (MSCF), Beatriz de Diego-Lázaro (Junior Leader, LaCaixa INPhINIT Retaining).

### ***PhD Thesis supervised***

2011	Sara Sambin (Université Paris-Est Créteil, France). Co-supervised with AC Bachoud-Lévi
2013	Diana Lopez-Barroso (Doctorat de Neurociencia. Dept Psicología Básica. Universitat de Barcelona). – <i>National Award Clara Campoamor 2023</i>
2017	Javiera Oyarzún (Doctoral Program in Personality and Behaviour. Dept of Cognition, Development and Educational Psychology. Universitat de Barcelona). Co-supervision with Dr. Lluís Fuentemilla, UB). – <i>Ph.D Dissertation Extraordinary Award</i>
2018	Anna Martínez-Alvarez (Doctoral Program in Brain, Cognition and Behaviour. D Dept of Cognition, Development and Educational Psychology. Universitat de Barcelona). Co-supervised with Dr. Ferran Pons, UB.
2019	Clara García-Gorro (Doctoral Program in Neuroscience. Dept of Cognition, Development and Educational Psychology, University of Barcelona). Co-supervised with Dr. Estela Càmara, IDIBELL. – <i>Ph.D Dissertation Extraordinary Award</i>
	Joan Orpella (Doctoral Program in Brain, Cognition and Behaviour. Dept of Cognition, Development and Educational Psychology. Universitat de Barcelona).
2023	Clara Soberats. Universitat Pompeu Fabra (co-supervision with Wolfram Hinzen, UPF)

### **Ongoing PhD Thesis**

From 2022	Brian Quintero Manes. University of Barcelona (co-supervised with Estela Camara, IDIBELL) – Beca predocs UB
From 2023	Bianca Franzoia. University of Barcelona. – INPhINIT Incoming La Caixa
From 2024	Alba Nuez. University of Barcelona – FPI Mineco
From 2024	Oscar Borja Salvans Alejo. University of Barcelona
From 2024	Mar Dominguez. University of Barcelona (co-supervised with Lluis Fuentemilla, UB). - FI AGAUR

### **Master's Thesis**

2006	Mathilde André (Master in Neurosciences, Paris XII, Créteil).
2008	Elisângela Teixeira (Master in Cognitive Neuroscience, Ecole Normale Supérieure, Paris, France).
2009	Diana Lopez-Barroso (Dep. Psicologia Básica, Universitat de Barcelona)
2010	Ernest Mas (Master de Investigación en Personalidad y comportamiento, Universitat de Barcelona)
2010	Sébastien Isère (Master de Neuropsychologie, Paris V, France)
	François Le Corre (Master in Cognitive Sciences, ENS, Paris)
2011	Javiera Oyarzún (Research Master in Cognition and Behaviour, Universitat de Barcelona)
2013	Patricia Pastoriza (Master in Language and Cognitive Science, UB)
2015	Thomas O'Rourke (Master in Language and Cognitive Science, UB)
	Joan Orpella (Research Master in Cognition and Behaviour, UB)
2017	Ivonne Heidemann (Vrije Universiteit Amsterdam. The Netherlands)(Erasmus+)
	Zainab Abbas (Université de Strasbourg, France)(Erasmus+)
	Tabinda Mohammad (Université de Caen, France)(Erasmus+)
2018	Dounia Droubi (Université Polytechnique de Lausanne, Switzerland)
	Mireille Mohamad (University of Bordeaux, France)(Erasmus+)
2019	Laura Fornari (University of Pisa, Italy)(Erasmus+)
2022	Dimitri Prica (Universitat de Barcelona)
	Alicia Macià Mendiola (Universitat de Barcelona)
2023	David López Martos (Universitat de Barcelona)
2024	Oscar Borja Salvans Alejo (University of Barcelona)

### **Visiting students**

Post-Graduate	
2020	Audrey DePaepe, Pomona College, (USA) (2 months). Fulbright Fellowship
2022	Bianca Franzoia (University of Padova, Italy)(4 months).
Graduate	
2020	Irene Acero, Universitat Politècnica de Catalunya (Treball final de Grau, supervised by Estela Camara)
2017	Erim Kizildere, Koç University, Istanbul (Turkey) (2 months)
Undergraduate	
2017	Patricia Stumpfe, University of Vienna (Austria) (2 months) Deirdre Lanski, The Royal College of Surgeons (Ireland) (2 month) Audrey DePaepe, Pomona College, (USA) (2 months). Fulbright Fellowship.

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## **INVITED TALKS (last 10 years)**

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February 2015. Brain Connectivity Related to Working Memory and Attention during Language Learning. Rice University, Houston, Texas

June 2015. Learning What and When to Attend in Language Learning. Workshop on Second Language Processing. Barcelona, Spain

December 2015. Prediction and Attention in Language Learning. Basque Center on Cognition, Brain and Language. San Sebastian, Spain

February 2016. Prediction and Attention in Language Learning. Biolinguistics Initiative. Department of Linguistics. University of Barcelona

February 2016. Dissociating Prediction and Attention Components in Language Learning. Laboratoire de Psychologie Cognitive, CNRS/Aix-Marseille Université.

June 2017. Attention through Prediction: a Two-stage Language Learning Mechanism. University of Utrecht, The Netherlands.

December 2017. Tuning of Attention as a Language Learning Mechanism. University of Aarhus. Denmark.

September 2018. Attention through Prediction: A Two-Stage Language Learning Mechanism. MPI Colloquium Series, Max Planck Institute, Nijmegen. The Netherlands.

August 2018. Language Learning in interaction: Working memory and Attention contributions. Cold Spring Harbor. New York, USA

November 2018. The role of temporal orienting development in language acquisition. Language Development Group. Max Plank Institute, Nijmegen. The Netherlands

September 2019. Mechanisms of Prediction when Learning Language. The Predictive Brain Conference. Institut de Neuroscience des Systèmes. Marseille. France

June 2021. Workshop on Statistical Learning. University of Amsterdam. The Netherlands.

July 2021. From Input Statistics to Abstract Knowledge Learning from Speech. BARCCYN Conference, Barcelona. Spain.

November 2021. From statistical relations to abstract rule learning. The Arctic University of Norway.

July 2021. From Input Statistics to Abstract Knowledge Learning from Speech. BARCCSYN Conference. Barcelona

May 2022. Attention Boosts Audio-Motor Synchronisation. SEPEX-APPE conference, Faro. Portugal.

December 2022. In the right place, at the right time: temporal expectations modulate language learning. Center for Brain and Cognition, Universitat Pompeu Fabra, Barcelona. Spain.

April 2022. A Multimodal Approach to the Study of Language Learning. EMLAR XVIII workshop, Utrecht. The Netherlands (online)

August 2023. Cerebro y conducta: la ventana a nuestra esencia como humanos. Aula Blas Cablera. Universidad Internacional Menéndez Pelayo. Santander, Spain.

October 2023. Implications of neuro-cognitive maturation for learning and education. I Jornada d'Educació Lingüística Basada en l'Evidència Científica. Barcelona, Spain

September 2023. Love at first sound: the tight relationship between auditory attention and Language learning. Universidad de Granada

October 2024. In the right place, at the right time: temporal expectations modulate language learning. Université Aix-Marseille, France.

April 2024. Acredació ICREA. Dels Inicis a la consolidació de la carrera investigadora. Sessió Científica CCNIEC 2024. Barcelona, Spain.

#### **Keynote Speaker**

May 2014. Brain structural and functional differences associated to language learning abilities. MicroL (Microstructures of Learning: Novel methods and approaches for assessing structural and functional changes underlying knowledge acquisition in the brain). Lund, Sweden.

July 2015. Cognitive and Brain Mechanisms in the Early Stages of Language Learning. 12th International Symposium of Psycholinguistics. Valencia, Spain

October 2017. Temporal Attention in Language Learning. Reunión Científica sobre Atención (RECA). Baeza, Spain.

September 2018. Audio-motor Integration Sustains Learning of New Word Forms. BrainCom Summerschool. Barcelona.

June 2021. Mechanisms of Audio-motor Integration in Language Learning. 40th Anniversary of the Max Planck Institute for Psycholinguistics, Nijmegen. The Netherlands.

June 2023. In the right place, at the right time: temporal expectations modulate language learning. Mind and Matter Conference. 6-8 June, University of Helsinki, Finland.

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#### **PATENTS**

De Diego Balaguer, Dupoux E, Bachoud-Lévi AC. CogRT-kit: Brief test for complete cognitive neuropsychological assessment 20/08/2008 French APP deposit (IDDN.FR.001.340011.000.S.P.2008.000.31230).

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#### **REVIEW ACTIVITIES**

**Coaching:** coaching session for ICREA's ERC Grant applications; coaching session for AGAUR for ERC Grant applications, AGAUR and MINECO (FECYT) for ERC-StG and ERC-Advanced applications; ERC applications mentoring for the Institute of Neuroscience.

**Scientific Boards:** Ramon y Cajal scientific board (2009 call); Scientific board for the I+D projects of the Ministerio de Ciencia e Innovacion (2010, 2014); Member for the committee for the Award of the Societat Catalana de Neuropsicologia (2016), Panel Member of the ERC-Starting Grant committee SH4 and Chair in 2023 call.

**Referee for:** Research Foundation – Flanders (FWO); Wallenberg academy fellowship (Sweden); Fundació “La Caixa” Post-graduate Fellowships. ANECA project reviewer for I+D and Health: FIS projects, Ad-hoc reviewer for ERC Starting, Consolidator and Advanced Grants; Agencia Andaluza del Conocimiento, PRIN Italy; ANR France, Ikerbasque.

**Journal reviewer for:** PNAS, Scientific Reports, Brain, Cerebral Cortex, Cortex, Neuroimage, Movement Disorders, PLoS One, Brain Research, Applied Psycholinguistics, Psychophysiology, Language and Cognitive Processes, J of Experimental Psychology: HPP; Journal of Cognitive Psychology; Brain Structure and Function, Language Learning and Development; Frontiers in Human Neuroscience, Frontiers in Psychology, etc.

**Editorial Board:** eLife, PLoS Biology, PLoS One, Bilingualism: Language and Cognition; Frontiers in Psychology; Frontiers in Human Neuroscience.

#### **PhD Thesis committees (last 5 years)**

2018      Julia Monte, Departament de Tecnologies de la Informació, Universitat Pompeu Fabra;  
              Alejandro Coello, University of Barcelona, Fac Medecine;

- Lydia Viñals-Castonguay, Lucy Cavendish College, Department of Theoretical and Applied Linguistics, University of Cambridge, UK
- 2019 Irene Torres, Departament de Tecnologies de la Informació, Universitat Pompeu Fabra;
- Clara Sanches. Institut de Cerveau et de la Moelle Épinière (ICM), INSERM / Paris 5 Sorbonne, Paris, France
- 2020 Imme Lammertink, Amsterdam Center for Language and Communication, University of Amsterdam, The Netherlands
- 2024 Sonia Arenillas-Alcón, University of Barcelona, Spain;  
 Josué Rico Picó, Universidad de Granada, Spain;  
 Noelia Sanahuja, Universidad del País Vasco, Spain;  
 Estelle Hervé, Université Aix-Marseille, France

Doctoral Thesis Advisor for Saara Kaskivuo (University of Helsinki), Natalia Lopez Rojas (Universitat Internacional de Catalunya), Flora Chartier Guillaume (Universitat Pompeu Fabra).

#### ***Committees for university positions***

2023 Assistant Professor Position at the Departament de Cognició, Desenvolupament i Psicologia de l'Educació

2024 Habilitation à Diriger la Recherche (HDR), Clément François. Université Aix-Marseille.

2025 Chair position for the Faculty of Arts, University of Groningen

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#### **OUTREACH ACTIVITIES (last 5 years)**

- 2018 Advisor for the itinerant Exposition *Talking Brains* (CosmoCaixa Science Museum, Barcelona)
- 11/02/2019 Round Table organised by The Institute of Neuroscience of the University of Barcelona for the International Day of Women and Girls in Science
- 23/02/2019 sLHam talk for the International Day of Women and Girls in Science organised by IDIBELL and CMRB
- 09/01/2020 Radio interview in “la Tarde en la COPE”
- 14/10/2021 Talk for the Jornada de Sociedades de la COSCE (Confederación de Sociedades Científicas Españolas). “Aplicaciones de la inteligencia artificial al estudio de la dinámica cerebral y sus alteraciones”.
- 2021 Talk in the Mentoring workshop organized by the Institute of Neurosciences of the University of Barcelona
- 19/01/2022 Collaboration with the study Women in Science (Ajuntament de Barcelona)
- 08/04/2022 Collaboration for the development of a mentoring program from the Unidad de Mujeres y Ciencia (UMyC, Ministerio de Ciencia e Innovación)
- 10/02/2023 #100tífiques (Women Scientists at schools) initiative (organised by FCRI and BIST, in collaboration with the Dept d'Educació de la Generalitat de Catalunya). Talk in Escola
- 08/05/2023 Radio interview in Radio Clásica, Programa Longitud de onda.
- 24/05/2023 Talk for “Pint of Science”
- 16/02/2024 Activity for 4–5-year-old children related to the Day of Women and Girls in Science. Escola La Serreta.

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#### **SHORT STAYS IN OTHER LABORATORIES**

Max Planck Institute of Psycholinguistics, Nijmegen hosted by Peter Hagoort // Donders Center for Cognition and Neuroimaging hosted by Floris de Lange (September-December 2018)

Dept of Linguistics, New York University, New York (USA) hosted by Lisa Davidson (May-June 2011).

Dept. of Neuropsychology at the Otto-Von-Guericke Universität, Magdeburg (Germany) hosted by Prof. T. Münte (March-April 2006).

*During the PhD*

Dept. of Neuropsychology at the Otto-Von-Guericke Universität, Magdeburg (Germany) hosted by Prof. T. Münte (January – May 2003).

Dept. of Cognitive Sciences Johns Hopkins University, Baltimore (United States) hosted by Dr. Brenda Rapp (Sept. 2001- Dec. 2001).

MRC - Cognition and Brain Sciences Unit, Cambridge (UK) hosted by Prof. W. Marslen-Wilson (Sept. 1999 – Dec. 1999)