



Master Thesis
(Research Paper, TFM)

**Research lines for students in the Psychology
branch**

Universitat de Barcelona (UB)
Universitat Rovira i Virgili (URV)

TEACHERS AND RESEARCH LINES

Cedric Boeckx

cedric.boeckx@ub.edu

<http://cbl.ub.edu>

Research interests: Biological foundations of language

Recent publications: Eusebi, P. G., Sevane, N., O'Rourke, T., Pizarro, M., Boeckx, C., & Dunner, S. (2021). Gene expression profiles underlying aggressive behavior in the prefrontal cortex of cattle. *Bmc genomics*, 22(1), 245. doi:10.1186/s12864-021-07505-5

[BibTeX] [Abstract] [Download PDF]

Theofanopoulou, C., Gedman, G., Cahill, J. A., Boeckx, C., & Jarvis, E. D. (2021). Universal nomenclature for oxytocin–vasotocin ligand and receptor families. *Nature*, 592(7856).

Research group/s: Cognitive Biology of Language Group

Prefers: N/A

Laura Bosch Galceran

laurabosch@ub.edu

<http://www.ub.edu/apal>

Research interests: Development, Infants, Perception of speech, Bilingualism, Cognitive processes, Lexical learning

Recent publications:

François, C., Rodriguez-Fornells, A., Teixidó, M., Agut, T., & Bosch, L. (2021). Attenuated brain responses to speech sounds in moderate preterm infants at term age. *Developmental science*, 24(1), e12990.

François, C., Garcia-Alix, A., Bosch, L., & Rodriguez-Fornells, A. (2021). Signatures of brain plasticity supporting language recovery after perinatal arterial ischemic stroke. *Brain and Language*, 212, 104880.

Research group: Attention, Perception, Acquisition of Language research group (APAL)

Prefers: Experimental MA's thesis

“Research interests focus on the study of infant speech perception abilities (auditory and audiovisual perception), attention development and early language acquisition processes, both in normally developing infants/children (monolingual and bilingual) and in those at risk for language and neurocognitive disorders.

Our methodological approach is mainly behavioural, with procedures that rely on attention, visual fixation and orientation latency measures using video recordings and eye-tracking methods.”

Rumen Manolov

rmenov13@ub.edu

<https://www.webofscience.com/wos/author/record/H-8972-2015>

Research interests: Single-case experimental designs data analysis

Recent publications:

Manolov, R. (2023, January 9). Does the choice of a linear trend-assessment technique matter in the context of single-case data? Behavior Research Methods. Advance online publication. <https://doi.org/10.3758/s13428-022-02013-0>

Manolov, R., & Onghena, P. (2022). Defining and assessing immediacy in single case experimental designs. Journal of the Experimental Analysis of Behavior, 118(3), 462–492. <https://doi.org/10.1002/JEAB.799>

Prefers: Experimental MA’s thesis

“The research focuses on simulation studies on Type I and Type II errors, mean square error; software development; discussing and proposing data analytical procedures and graphical representations for single-case experimental designs.”

Cristina de la Malla

c.delamalla@ub.edu

<http://www.ub.edu/viscagroup/index.php>

Research interests: Vision and action control

Recent publications:

“The role of differential delays in integrating transient visual and proprioceptive information”, Cristina de la Malla et alia, Frontiers in Psychology 5, 50

“Dealing with delays does not transfer across sensorimotor tasks”, Cristina de la Malla et alia, Journal of Vision, 14 (12), 8-8

Research group: Vision and Control of Action Group

Prefers: Experimental MA’s thesis

Maria Isabel Núñez Peña

inunez@ub.edu

<https://www.irsjd.org/es/equipo-humano/67/maribel-nunez-pena>

Research interests: Numerical cognition, Mathematical anxiety, Neuroscience

Recent publications: Núñez-Peña, M.I., Colomé, À., & González-Gómez, B. (2021). The Spatial-Numerical Association of Response Codes (SNARC) effect in highly math-anxious individuals: An ERP study. *Biological Psychology*, 161, 108062.

Núñez-Peña, M.I., González-Gómez, B. & Colomé, À. (2019). Spatial processing in a mental rotation task: Differences between highly and low-math anxious individuals. *Biological Psychology*, 146, 107727.

Research group/s: Grup de Recerca en Neurociència cognitiva

Prefers: Experimental MA's thesis

Ruth de Diego Balaguer

ruth.dediego@ub.edu

<http://brainvitge.org/groups/language-learning/>

Research interests: Cognitive neuroscience

Recent publications: D., Diego-Balaguer et alia. (2022). Differential activation of a frontoparietal network explains population-level differences in statistical learning from speech. *PLOS Biology*, 20(7), e3001712. <https://doi.org/10.1371/journal.pbio.3001712>

D., Diego-Balaguer et alia. (2021). Rethinking attention in time: expectancy violations reconcile contradictory developmental evidence. *Journal of Experimental Child Psychology*.

Research group/s: Brain Mechanisms of Language Learning Group

Prefers: Experimental MA's thesis

"Language is the most amazing skill that humans possess. It allows social interaction, and through that, can make us cry, laugh and communicate our most complex thoughts. Comprehending the cognitive processes involved in language learning is of critical importance to understanding why under certain conditions language learning is impaired. Language learning research has often offered explanations bounded within the language domain, ignoring the importance of other cognitive functions. Our group uses an integrative approach at the edge of different research fields combining information from patients with brain-damage, as well as imaging in healthy individuals to understand the neural and cognitive mechanisms engaged since the earliest stages of contact with a new language. We are particularly interested in (1) the role of the attentional system in the acquisition of different aspects of language; (2) the role of the striatum as a brain structure that could make the interface between language and other cognitive functions necessary in the learning process; (3) how is the acquired information consolidated and modified by additional new information."

Lluís Fuentemilla Garriga

lfuentemilla@ub.edu

http://brainvitge.org/groups/memory_formation/

Research interests: Psychology, Neuroscience

Recent publications: Wu, X., Viñals, X., Ben-Yakov, A., Staresina, B.P., Fuentemilla, Ll. (2022). Post-encoding reactivation is related to learning of episodes in humans. *Journal of Cognitive Neuroscience*

Silva, M., Baldassano, C., Fuentemilla, Ll. (2019). Rapid memory reactivation at movie event boundaries promotes episodic encoding. *Journal of Neuroscience*. 39(43):8538-8548

Research group/s: Dynamics of Memory Formation

Prefers: Experimental MA's thesis

"We want to understand how the process of memory formation works: how memories are encoded, undergo further consolidation and are later retrieved. We use behavioural (including eye movements), psychophysiological (Skin Conductance) and neural (fMRI, EEG, iEEG) measures to help us learn more about the cognitive and neural operations that contribute to episodic memory. We further extend our investigations to neurological patients, particularly those with lesions in medial temporal lobe regions."

Elisabet Tubau Sala

etubau@ub.edu

<https://webgrec.ub.edu/webpages/000014/cat/etubau.ub.edu.html>

Research interests: Problem solving, Executive functions

Recent publications: Tubau, E. (2022). Why can it be so hard to solve Bayesian problems? Moving from number comprehension to relational reasoning demands. *Thinking & Reasoning*, 28(4), 605-624.

Tubau, E., Rodríguez-Ferreiro, J., Barberia, I., & Colomé, À. (2019). From reading numbers to seeing ratios: a benefit of icons for risk comprehension. *Psychological Research*, 83(8), 1808-1816.

Research group/s: [VISCA](#)

Prefers: N/A

"My research focuses on the study of some of the processes involved in problem solving, mainly related to Bayesian reasoning and Analogical reasoning. Among other factors, we compare the impact of the information format (verbal or visual) and study how individual differences affect in different areas, including numerical, visuospace and executive functions."

Pilar Ferré Romeu

mariadelpilar.ferre@urv.cat

<https://psico.fcep.urv.cat/projectes/gip/>

Research interests: Psycholinguistics

Recent publications: Ferré, P. et alia. (2022). Love me in L1, but hate me in L2: How native speakers and bilinguals rate the affectivity of words when feeling or thinking about them.

Bilingualism: Language and Cognition. Advance online publication.

Ferré, P. et alia. (2022). Emoji-SP, the Spanish emoji database: Visual complexity, familiarity, frequency of use, clarity, and emotional valence and arousal norms for 1031 emojis. Behavior Research Methods. Advance online publication.

Research group/s: Grup d'Investigació Psicolingüística

Prefers: Experimental MA's thesis

"I'm interested in the interplay of language and emotion, word processing and representation in bilinguals, development of normative studies including data about semantic and affective variables."

Josep Demestre

josep.demestre@urv.cat

<https://psico.fcep.urv.cat/projectes/gip/perfil?p=4>

Research interests: Sentence comprehension

Recent publications:

Aguilar, M., Ferré, P., Hinojosa, J. A., Gavilán, J. M., & Demestre, J. (2022). Locality and attachment preferences in preverbal versus post-verbal Relative Clauses. Language, Cognition and Neuroscience. Advance online publication. 10.1080/23273798.2022.2066701

Vela-Candelas, J., Català, N., & Demestre, J. (2022). Effects of world knowledge on the prediction of upcoming verbs: an eye-tracking study. Journal of Psycholinguistic Research, 51, 1335–1345. <https://doi.org/10.1007/s10936-022-09900-9>

Research group/s: Grup d'Investigació en Psicolingüística

Prefers: Experimental MA's thesis

Juan Haro Rodríguez

Juan.haro@urv.cat

<https://psico.fcep.urv.cat/projectes/gip/>

Research interests: Processing and representation of mental lexicon, pupillometry, new technologies applied to the study of language

Recent publications:

Ferré, P., Haro, J., Huete-Pérez, D., & Fraga, I. (2021). Emotionality effects in ambiguous word recognition: The crucial role of the affective congruence between distinct meanings of ambiguous words. *Quarterly Journal of Experimental Psychology*, 74, 1234-1243.

Haro, J., Comesaña, M., & Ferré, P. (2019). Is there an orthographic boost for ambiguous words during their processing? *Journal of Psycholinguistic Research*, 48, 679-698.

Research group/s: Grup d'Investigació en Psicolingüística

Prefers: Experimental MA's thesis