

**NAME:** Pablo Ripollés  
**DATE AND PLACE OF BIRTH:** 09/08/1986, Castellón, Spain

**ACADEMIC QUALIFICATIONS:**

July, 2016. **Ph.D. in Biomedicine**, emphasis in Neuroscience. University of Barcelona, Barcelona, Spain. Cum Laude qualification.

December, 2010. **M.S. in Biomedical Engineering**. University of Navarra, Spain.

June, 2009. **B.Sc. in Computer Engineering and B.Sc. in Technical Engineering in Telecommunications**. University of València, València, Spain.

**EMPLOYMENT HISTORY:**

From: March 2017  
To: December 2019 **Post-doctoral researcher** Department of Psychology and Center for Language, Memory and Emotion (CLaME). New York University.

From: August, 2016  
To: December 2016 **Post-doctoral researcher** *Brain Mechanisms of Language Learning* group, Dr. Ruth de Diego-Balaguer (European Research Council grant 313841 TuningLang). Department of Cognition, Development and Educational Psychology. University of Barcelona.

From: September 2012  
To: April 2013 **Visiting pre-doctoral researcher** *Biological Psychology* group, Dr. Toemme Noesselt. Institute of Psychology, Otto-von-Guericke University, Magdeburg, Germany.

From: January 2012  
To: July 2016 **Pre-doctoral researcher** *Cognition and Brain Plasticity Unit*, Dr. Antoni Rodríguez-Fornells. Department of Basic Psychology, University of Barcelona.

From: January 2011  
To: December 2011 **Research assistant** *Cognition and Brain Plasticity Unit*, Dr. Antoni Rodríguez-Fornells. Department of Basic Psychology, University of Barcelona.

**HONORS AND AWARDS:**

July, 2016. **Ph.D. Cum Laude**. Top qualification for a Ph.D. thesis in the Spanish educational system. University of Barcelona, Barcelona, Spain.

December, 2011 **Formación Profesorado Universitario (FPU) PhD Fellowship**, Ministerio Educación y Ciencia, Spain.

July, 2009 **“La Caixa” Foundation Postgraduate Scholarship**, Obra Social “La Caixa”, Barcelona, Spain

June 2009. **Best grade student award**, B.Sc. in Computer Engineering. Award granted to the student with the highest qualifications among all graduates. University of València, València, Spain.

June, 2009. **Best grade student award**, B.Sc. in Technical Engineering in Telecommunications. Award granted to the student with the highest qualifications among all graduates. University of València, València, Spain.

**PUBLICATIONS:**

**Total career publications:** 38 journal articles. **Career citations:** 1047 (google scholar). **H-index:** 18. **Accumulated impact factor:** 214.

1. **Ripollés, P.**, Ferreri, L., Mas-Herrero, E., Alicart, H., Gomez-Andres, A., Marco-Pallares, J., Antonijoan, R.M., Noesselt, T., Valle, M., Riba, J., & Rodriguez-Fornells, A. (2018). Intrinsically regulated learning is modulated by synaptic dopamine signaling. **eLife**, 7.
2. **Ripollés, P.**, Biel, D., Penaloza, C., Kaufmann, J., Marco-Pallares, J., Noesselt, T., and Rodriguez-Fornells, A. (2017). *Strength of Temporal White Matter Pathways Predicts Semantic Learning*. **Journal of Neuroscience**. 37, 11101-11113.
3. **Ripollés, P.**, Marco-Pallarés, J., Alicart, H., Tempelmann, C., Rodríguez-Fornells, A., and Noesselt, T. (2016). *Intrinsic monitoring of learning success facilitates memory encoding via the activation of the SN/VTA-Hippocampal loop*. **eLife**, 5.
4. **Ripollés, P.**, Rojo, N., Grau-Sanchez, J., Amengual, J.L., Camara, E., Marco-Pallares, J., Juncadella, M., Vaquero, L., Rubio, F., Duarte, E., Garrido, C., Altenmuller, E., Munte, T.F., and Rodriguez-Fornells, A. (2015). *Music supported therapy promotes motor plasticity in individuals with chronic stroke*. **Brain, Imaging, and Behavior**. 10, 1289-1307.
5. **Ripollés, P.**, Marco-Pallares, J., Hielscher, U., Mestres-Misse, A., Tempelmann, C., Heinze, H.J., Rodriguez-Fornells, A., and Noesselt, T. (2014). *The Role of Reward in Word Learning and Its Implications for Language Acquisition*. **Current Biology**. 24, 2606-2611.
6. **Ripollés, P.**, Marco-Pallares, J., de Diego-Balaguer, R., Miro, J., Falip, M., Juncadella, M., Rubio, F., and Rodriguez-Fornells, A. (2012). *Analysis of automated methods for spatial normalization of lesioned brains*. **Neuroimage**. 60, 1296-1306.
7. François, C., **Ripollés, P.**, Ferreri, L., Muchart, J., Sierpowska, J., Fons, C., Solé, J., Rebollo, M., Zatorre, R., Alix, A., Bosch, L., Rodriguez-Fornells, A. (2019). *Right structural and functional reorganization in 4-year-old children with perinatal arterial ischemic stroke predict language production*. **eNeuro**, (in press) **(shared first authorship)**
8. Assaneo, M.F., **Ripollés, P.**, Orpella, J., Min Lin, W., De Diego-Balaguer, R., Poeppel, D. (2018) *Spontaneous synchronization to speech reveals neural mechanisms facilitating language learning*. **Nature Neuroscience**, (in press) **(shared first authorship)**.
9. Lopez-Barroso, D., **Ripollés, P.**, Marco-Pallares, J., Mohammadi, B., Munte, T.F., Bachoud-Levi, A.C., Rodriguez-Fornells, A., and de Diego-Balaguer, R. (2015). *Multiple brain networks underpinning word learning from fluent speech revealed by independent component analysis*. **Neuroimage**. 110, 182-193 **(shared first authorship)**.
10. Mas-Herrero, E., **Ripollés, P.**, HajiHosseini, A., Rodriguez-Fornells, A., and Marco-Pallares, J. (2015). *Beta oscillations and reward processing: Coupling oscillatory activity and hemodynamic responses*. **Neuroimage**. 119, 13-19 **(shared first authorship)**.

11. Miro, J., **Ripollés, P.**, Lopez-Barroso, D., Vila-Ballo, A., Juncadella, M., de Diego-Balaguer, R., Marco-Pallares, J., Rodriguez-Fornells, A., and Falip, M. (2014). *Atypical language organization in temporal lobe epilepsy revealed by a passive semantic paradigm*. **BMC Neurology**. 14, 98 (shared first authorship).
12. Miro, J., **Ripollés, P.**, Sierpowska, J., Santurino, M., Juncadella, M., Falip, M., & Rodriguez-Fornells, A. (2019). *Autobiographical memory in epileptic patients after temporal lobe resection or bitemporal hippocampal sclerosis*. **Brain Imaging Behavior** (in press).
13. Sihvonen, A. J., **Ripollés, P.**, Rodriguez-Fornells, A., Soimila, S., and Sarkamo, T. (2017). *Revisiting the Neural Basis of Acquired Amusia: Lesion Patterns and Structural Changes Underlying Amusia Recovery*. **Frontiers in Neuroscience**. 11, 426.
14. Sihvonen, A. J., **Ripollés, P.**, Sarkamo, T., Leo, V., Rodriguez-Fornells, A., Saunavaara, J., Parkkola, R., and Soimila, S. (2017). *Tracting the neural basis of music: Deficient structural connectivity underlying acquired amusia*. **Cortex**. 97, 255-273.
15. Vega, D., **Ripollés, P.**, Soto, A., Torrubia, R., Ribas, J., Monreal, J. A., Pascual, J. C., Salvador, R., Pomarol-Clotet, E., Rodriguez-Fornells, A., and Marco-Pallares, J. (2017). *Orbitofrontal overactivation in reward processing in borderline personality disorder: the role of non-suicidal self-injury*. **Brain Imaging and Behavior**. 12, 217-228
16. Sihvonen, A. J., **Ripollés, P.**, Leo, V., Rodriguez-Fornells, A., Soimila, S., and Sarkamo, T. (2016). *Neural Basis of Acquired Amusia and Its Recovery after Stroke*. **Journal of Neuroscience**. 36 (34): 8872-8881.
17. François, C., **Ripollés, P.**, Bosch, L., Garcia-Alix, A., Muchart, J., Sierpowska, J., Fons, C., Solé, J., Rebollo, M., Gaitán, H. Rodriguez-Fornells, A. (2016). *Language Learning and Brain Reorganization In a 3.5-Year-Old Child With Left Perinatal Stroke Revealed Using Structural and Functional Connectivity*. **Cortex**. 77: 95-118.
18. Simo, M., **Ripollés, P.**, Fuentemilla, L., Vaquero, L., Bruna, J., and Rodriguez-Fornells, A. (2015). *Studying memory encoding to promote reliable engagement of the medial temporal lobe at the single-subject level*. **PLoS. One**. 10, e0119159.
19. Sarkamo, T., **Ripollés, P.**, Vepsäläinen, H., Autti, T., Silvennoinen, H. M., Salli, E., Laitinen, S., Forsblom, A., Soimila, S., and Rodriguez-Fornells, A. (2014). *Structural changes induced by daily music listening in the recovering brain after middle cerebral artery stroke: a voxel-based morphometry study*. **Frontiers in Human Neuroscience**. 8, 245.
20. Molinuevo, J. L., **Ripollés, P.**, Simo, M., Llado, A., Olives, J., Balasa, M., Antonell, A., Rodriguez-Fornells, A., and Rami, L. (2014). *White matter changes in preclinical Alzheimer's disease: a magnetic resonance imaging-diffusion tensor imaging study on cognitively normal older people with positive amyloid beta protein 42 levels*. **Neurobiology of Aging**. 35, 2671-2680.
21. Forn, C., **Ripollés, P.**, Cruz-Gomez, A. J., Belenguer, A., Gonzalez-Torre, J. A., and Avila, C. (2013). *Task-load manipulation in the Symbol Digit Modalities Test: an alternative measure of information processing speed*. **Brain and Cognition**. 82, 152-160.
22. Gonzalez, M. J., Rebollo, M., **Ripollés, P.**, Gassió, R., Ormazabal, A., Sierra, C., Colomé, R., Artuch, R., Campistol, J. (2018). *White matter microstructural damage in early treated phenylketonuric patients*. **Orphanet Journal of Rare Diseases** (in press).
23. Vila-Ballo, A., Mas-Herrero, E., **Ripollés, P.**, Simo, M., Miro, J., Cucurell, D., Lopez-Barroso, D., Juncadella, M., Marco-Pallares, J., Falip, M., & Rodriguez-Fornells, A. (2017). *Unravelling the role of the hippocampus in reversal learning*. **Journal of Neuroscience**. 37, 6686-6697.
24. Sihvonen, A. J., Sarkamo, T., **Ripollés, P.**, Leo, V., Saunavaara, J., Parkkola, R., Rodriguez-Fornells, A., and Soimila, S. (2017) *Functional neural changes associated with acquired amusia across different stages of recovery after stroke*. **Scientific Reports**. 7, 11390.
25. Vaquero, L., Hartmann, K., **Ripollés, P.**, Rojo, N., Sierpowska, J., Francois, C., Camara, E., van Vugt, F. T., Mohammadi, B., Samii, A., Munte, T. F., Rodriguez-Fornells, A., and Altenmüller, E. (2016). *Structural neuroplasticity in expert pianists depends on the age of musical training onset*. **Neuroimage**. 126, 106-119.
26. Simo, M., Vaquero, L., **Ripollés, P.**, Guturbay, A., Jove, J., Navarro, A., Cardenal, F., Bruna, J., and Rodriguez-Fornells, A. (2016). *Longitudinal Brain Changes Associated with Prophylactic Cranial Irradiation in Lung Cancer*. **J. Thorac. Oncol**. 11, 475-486
27. Simo, M., Vaquero, L., **Ripollés, P.**, Jove, J., Fuentes, R., Cardenal, F., Rodriguez-Fornells, A., and Bruna, J. (2016). *Brain damage following prophylactic cranial irradiation in lung cancer survivors*. **Brain Imaging and Behavior**. 10, 283-295.
28. Miro, J., Gurtubay-Antolin, A., **Ripollés, P.**, Sierpowska, J., Juncadella, M., Fuentemilla, L., Sanchez, V., Falip, M., and Rodriguez-Fornells, A. (2015). *Interhemispheric microstructural connectivity in bitemporal lobe epilepsy with hippocampal sclerosis*. **Cortex**. 67, 106-121.
29. Fuentemilla, L., Miro, J., **Ripollés, P.**, Vila-Ballo, A., Juncadella, M., Castaner, S., Salord, N., Monasterio, C., Falip, M., and Rodriguez-Fornells, A. (2013). *Hippocampus-dependent strengthening of targeted memories via reactivation during sleep in humans*. **Current Biology**. 23, 1769-1775.
30. Lopez-Barroso, D., Catani, M., **Ripollés, P.**, Dell'Acqua, F., Rodriguez-Fornells, A., and de Diego-Balaguer, R. (2013). *Word learning is mediated by the left arcuate fasciculus*. **PNAS**. 110, 13168-13173.
31. Sierpowska, J., Gabarros, A., **Ripollés, P.**, Juncadella, M., Castaner, S., Camins, A., Plans, G., and Rodriguez-Fornells, A. (2013). *Intraoperative electrical stimulation of language switching in two bilingual patients*. **Neuropsychologia** 51, 2882-2892.
32. Ferreri L, Mas-Herrero E, Zatorre RJ, **Ripollés P**, Gomez-Andres A, Alicart H, Olive G, Marco-Pallares J, Antonijoan RM, Valle M, et al. *Dopamine modulates the reward experiences elicited by music*. **PNAS**. 2019 Jan 22.
33. Cayuela, N., Simo, M., Majos, C., Rifa-Ros, X., Gallego Perez-Larraya, J., **Ripollés, P.**, Vidal, N., Miro, J., Gil, F., Gil-Gil, M., Plans, G., Graus, F., and Bruna, J. (2018). *Seizure-susceptible brain regions in glioblastoma: identification of patients at risk*. **European Journal of Neurology**. 25, 387-394.

34. Simo, M., Rifa-Ros, X., Vaquero, L., **Ripollés, P.**, Cayuela, N., Jove, J., Navarro, A., Cardenal, F., Bruna, J., and Rodríguez-Fornells, A. (2017). *Brain functional connectivity in lung cancer population: an exploratory study*. **Brain Imaging and Behavior** (in press).
35. Simo, M., Root, J.C., Vaquero, L., **Ripollés, P.**, Jove, J., Ahles, T., Navarro, A., Cardenal, F., Bruna, J., and Rodríguez-Fornells, A. (2015). *Cognitive and brain structural changes in a lung cancer population*. **J. Thorac. Oncol.** 10, 38-45.
36. Tuomiranta, L.M., Camara, E., Froudust, W.S., **Ripollés, P.**, Saunavaara, J.P., Parkkola, R., Martin, N., Rodríguez-Fornells, A., and Laine, M. (2014). *Hidden word learning capacity through orthography in aphasia*. **Cortex** 50, 174-191.
37. Rodríguez-Fornells, A., Rojo, N., Amengual, J.L., **Ripollés, P.**, Altenmüller, E., and Munte, T.F. (2012). *The involvement of audio-motor coupling in the music-supported therapy applied to stroke patients*. **Ann. N. Y. Acad. Sci.** 1252, 282-293.
38. Amengual, J.L., Valero-Cabré, A., de las Heras, M.V., Rojo, N., Froudust-Walsh, S., **Ripollés, P.**, Bodammer, N., Mohammadi, B., Montero, J., Grau, C., Munte, T.F., and Rodríguez-Fornells, A. (2012). *Prognostic value of cortically induced motor evoked activity by TMS in chronic stroke: caveats from a revealing single clinical case*.

#### PRESENTATIONS AND POSTERS:

- 2019 **Perception and Evaluation: The Case of Music (CLaME opening workshop)**. Invited Speaker. New York, USA.
- 2018 **Society for Neuroscience**. San Diego, EEUU. Poster Presentation.
- 2017 **The Neurosciences and Music VI**. Boston, EEUU. Poster Presentation.
- 2016 **Beyond Language Learning workshop**. Invited Speaker. Barcelona, Spain.
- 2014 **Human Brain Mapping**. Hamburg, Germany. Poster Presentation.
- 2012 **Biomag**. Paris, France. Poster Presentation.
- 2012 **Neurobiology of Language conference**. San Sebastián, Spain. Poster Presentation.
- 2011 **Human Brain Mapping**. Quebec, Canada. Poster Presentation.

#### EXTRAMURAL FUNDING

Principal investigator:

- *Funding Agency*: GRAMMY Museum Grant Program (2018). *Title*: Enhancing memory via music-evoked pleasure and novelty. *Reference*: A18-0410. *Institution*: New York University. *Amount of money*: 20,000 \$.

As a collaborator:

- *Funding Agency*: Spanish Institute of Economy and Competitiveness. *Title*: Conscious detection or errors in normal and pathological populations. *Reference*: PSI2015-69178-P. *Institution*: Bellvitge Biomedical Research Institute (IDIBELL). *Main researcher*: Dr. Antoni Rodríguez Fornells. *Amount of money*: 87,500 €.
- *Funding Agency*: Bial Fundação. Bursaries for Scientific Research (01/01/2015 - 31/12/2016). *Title*: Induced brain plasticity after perinatal stroke: structural and functional connectivity. *Institution*: University of Barcelona. *Reference*: 244/14. *Main researcher*: Dr. Antoni Rodríguez-Fornells. *Amount of money*: 48,000 €.
- *Funding Agency*: Catalan Agency for University and Research Grants (AGAUR). Awarded Research Group, Grup Consolidat Generalitat de Catalunya. *Reference*: 2014 SGR 1413. *Institution*: University of Barcelona. *Main researcher*: Dr. Antoni Rodríguez Fornells. *Amount of money*: 30,000 €.
- *Funding Agency*: Spanish Ministry of Science and Innovation (MICINN, I+D+i, 2012-2014). A multimodal neuroimaging approach to delineate emotional, motor and cognitive cortico-striatal pathways. *Reference*: PSI2011-23624. *Main researcher*: Dr. Ruth de Diego-Balaguer. *Amount of money*: 102,850 €.

#### SERVICE

Ad hoc peer reviewer: Nature Human Behavior, Journal of Neuroscience, NeuroImage, NeuroImage Clinical, Scientific Reports, Plos One, Journal of Neuroscience Methods, Frontiers in Psychology, BMC Neurology, Brain Research and Neuroradiology.

#### MENTORING AND RESEARCH TRAINING

During my pre-doctoral years at the Cognition and Brain Plasticity Unit (University of Barcelona), I mentored several students and clinicians in regards to fMRI and DW-MRI analysis. In addition, I have supervised two master students:

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|-----------------------------|---|
| <i>From</i> : April, 2013   | <i>Neuroanatomical substrates of individual differences in language learning: a morphometric study</i> .      |
| <i>To</i> : September, 2013 | Student: Omar Ferrús. Master in Biomedical Engineering, University of València, Spain.                        |
| <i>From</i> : January, 2016 | <i>Dorsal and ventral white matter pathways and their relationship to language learning</i> . Student: Davina |
| <i>To</i> : September, 2016 | Biel. Master in Neurosciences, University of Bremen, Germany.   |

During my post-doctoral years I have supervised two research assistants: Anna Kasdan (fMRI analysis) now a grad student at Vanderbilt, and Wy Ming Lin (MTurk testing and MEG analysis), now a grad student at University of Tubingen.

#### TEACHING

Teaching Assistant for the *Analytical thinking and problem solving* course at the Basic Psychology Department of the University of Barcelona, during 2014 and 2015 (45 teaching hours per year to 4 groups of 30 students). This course is taught to 3<sup>rd</sup> year students of a 4 year grade in Psychology.