

# Pablo Barttfeld

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POSICIÓN ACTUAL	<b>Investigador Independiente</b> CONICET Argentina	desde 2016
EDUCACIÓN	<b>Diplomatura en Ciencia de Datos y Aprendizaje Automático</b> Universidad Nacional de Córdoba, Argentina	2024
	<b>Postdoctorado</b> Inserm's Cognitive Neuroimaging Unit Neurospin Center, CEA-Saclay, Francia Directores: Stanislas Dehaene and Ghislaine Dehaene-Lambertz	2013 - 2015
	<b>Postdoctorado</b> Laboratorio de Neurociencia Integrativa Departamento de Física, UBA, Argentina Director: Mariano Sigman	2011 - 2013
	<b>Doctorado, Área Ingeniería</b> Universidad de Buenos Aires, UBA, Argentina Director: Mariano Sigman	2004 - 2010
	<b>Licenciatura en Biología</b> Universidad Nacional de Córdoba (UNC), Argentina	1997 - 2002
ESTANCIAS BREVES DE INVESTIGACIÓN	<b>Estancia de 3 meses</b> Institut du Cerveau et de la Moelle Épinière París, Francia	2019
	<b>Estancia de 2 meses</b> Addenbrooke's Hospital Universidad de Cambridge, Reino Unido	2012
	<b>Estancia de 2 meses</b> Institut de Neurosciences Cognitives de la Méditerranée Marsella, Francia	2009
SUBSIDIOS Y BECAS	<a href="#">PICT 2022.</a> Director <a href="#">STIC-AmSud Program.</a> Director <a href="#">Center for Open Science - Templeton Foundation.</a> Director <a href="#">PICT 2021 Argentina innovadora 2020.</a> Director <a href="#">PICT 2018</a> Investigador <a href="#">Proyectos de grupos de reciente formación.</a> Director Beca de viaje de CONICET para investigadores <a href="#">Subsidio Primar.</a> Co-Director <a href="#">PICT de joven investigador.</a> Director Subsidio de retorno RAÍCES INSERM beca postdoctoral Beca James S. McDonnell Foundation para asistir a la II Latin American School for Education, Cognitive and Neural Sciences	2024 2023 2023 2021 2018 2018 2018 2018 2015 2015 2013 2012

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Beca de viaje de CONICET	2012
Beca de postdoctorado, CONICET	2011
Beca Raul Carrea de postdoctorado	2010
Beca de viaje (proyecto ECOS)	2009
Beca de doctorado. UBA	2004
Beca completa para escuela de verano del Instituto Santa Fe. Qingdao, China	2004

#### PUBLICACIONES EN REVISTAS

1. Hazelton J\*, Della Bella G\*, **Barttfeld, P**, Dottori M, Gonzalez-Gomez R, Migeot J, Moguilner S, Legaz A, Hernandez H, Prado P, Cuadros J, Maito M, Fraile-Vazques M, González Gadea M, Çatal Y, Miller B , Piguet O, Northoff G, Ibanez A. Altered spatiotemporal brain dynamics of interoception in behavioural-variant frontotemporal dementia. *eBioMedicine*. (2025). \* igual contribución.
2. Zapata J, Comay N, **Barttfeld, P**, Solovey G, Saal A, Ahumada, J. Metacognitive sensitivity on the Iowa Gambling Task reveals awareness as a necessary condition for advantageous performance. *Experimental Psychology*. (2025).
3. Legaz A, Altschuler F, Gonzalez-Gomez R, ..., **Barttfeld, P** ..., Yokoyama J, Miller B, Ibañez A. Structural inequality linked to brain volume and network dynamics in aging and dementia across the Americas. *Nature Aging*. (2024).
4. Embon I, Gerbaudo, MA, Ramos Usaj, A, Iorio A, **Barttfeld, P\***, Solovey G\*. Exploring the Relationship between Dysfunctional Personality Traits with Metacognition and Confidence. *Current Psychology*. (2024). \* igual contribución.
5. Ibanez A, Moguilner S, Sandra Baez S, ... **Barttfeld, P** ..., Valcour V, Yokoyama J, Miller B. Brain clocks capture diversity and disparities in aging and dementia across geographically diverse populations. *Nature Medicine*. (2024).
6. Teitelbaum Dorfman F, Kogan B, **Barttfeld, P**, García A. Bilinguals on the footbridge: The role of foreign-language proficiency in moral decision making. *Bilingualism: Language and Cognition*. (2024).
7. Legaz A, Prado P, Moguilner S, Báez S, Santamaría-García H, Birba A , **Barttfeld, P**, García A, Fittipaldi S, Ibañez A. Social and non-social working memory in neurodegeneration. *Neurobiology of Disease*. (2023).
8. Luna F, Aguirre J, Martín-Arévalo E, Lupiáñez J, **Barttfeld, P.** Different oscillatory rhythms anticipate failures in executive and arousal vigilance. *Frontiers in Cognition*. (2023).
9. Embon I, Cukier S, Iorio A, **Barttfeld, P.\***, Solovey, G\*. Is visual metacognition associated with ASD traits? A regression analysis shows no link between visual metacognition and AQ scores. *Consciousness and Cognition*. (2023). \* igual contribución.
10. Luna, F., Aguirre, J., Ibañez, A., Martín-Arévalo, E. Lupiáñez, J., **Barttfeld, P.\***. Event-related potentials associated with attentional networks evidence changes in executive and arousal vigilance. *Psychophysiology*. (2023).
11. Comay, N., Della Bella, G., Lamberti, W., Sigman, M., Solovey, G\*, **Barttfeld, P.\***. The presence of irrelevant alternatives paradoxically increases confidence in perceptual decisions. *Cognition*. (2023). \* igual contribución.
12. Della Bella G\*, Zang D\*, Gui P\*, Mateos D, Sitt J, Bekinschtein T, Manasova D, Sarton B, Ferre F, Silva S, Lamberti W. Wu X, Mao Y, Wang L\*, **Barttfeld, P.\***. EEG brain states for real-time detection of covert cognition in disorders of consciousness. *Preprint, psyarxiv*. (2022). \* igual contribución.

13. Luna, F., **Barttfeld, P.**, Martín-Arévalo, E., Lupiáñez, J. Cognitive load mitigates the executive but not the arousal vigilance decrement. *Consciousness and Cognition*. (2021).
14. Alcaide, S., Sitt, J., Horikawa T., Romano, A., Maldonado, A., Ibañez, A., Sigman M., Kamitani, Y., **Barttfeld, P.** fMRI lag structure during waking up from early sleep stages. *Cortex*. (2021)
15. Luna, F., **Barttfeld, P.**, Martín-Arévalo, Lupiáñez, J. The ANTI-Vea task: analyzing the executive and arousal vigilance decrements while measuring the three attentional networks. *Psicologica* (2021).
16. Luna, F., Román-Caballero, R., Lupiáñez, J., **Barttfeld, P.**, Martín-Arévalo, E. Online High-Definition tDCS over the right fronto-parietal network improves phasic alertness and reduces the executive vigilance decrement. *Neuropsychologia* (2020).
17. Demertzi, A., Tagliazucchi, E., Dehaene, S., Deco, G., **Barttfeld, P.**, Raimondo, F., Rohaut, B., Schiff, N., Owen, A., Laureys, S., Naccache, L., Sitt, J. Human consciousness is supported by dynamic complex patterns of brain signal coordination. *Science Advances* (2019).
18. Uhrig L., Sitt J., Jacob A., Tasserie J., **Barttfeld, P.**, Dupont M., Dehaene S., Jarraya B. Resting-state dynamics as a cortical signature of anesthesia in monkeys. *Anesthesiology*(2018). [Comentario en “Highways of the Brain, Traffic of the Mind”](#).
19. **Barttfeld\*, P.**, Abboud\* S, Lagercrantz H, Adén U, Padilla N, Edwards AD, Cohen L, Sigman M, Dehaene S, Dehaene-Lambertz G. A lateral-to-mesial organization of human ventral visual cortex at birth. *Brain Structure and Function* (2018). \* igual contribución.
20. Ais, J., Zylberberg, A., **Barttfeld, P.**, Sigman, M. Individual differences in the shape, bias and precision of confidence distributions across perceptual decisions. *Cognition* (2016).
21. **Barttfeld, P.**, Bekinschtein, T., Salles, A., Stamatakis, A., Adapa, R., Menon, T., Sigman, M. Frontoparietal connectivity predicts anaesthetic concentration but thalamic networks index conscious report. *Neuroimage Clinical* (2015).
22. **Barttfeld\*, P.**, Uhrig\*, L., Sitt\*, J., Sigman, M., Jarraya, B., Dehaene, S. A signature of consciousness in the dynamics of resting-state brain activity. *Proceedings of the National Academy of Sciences* (2015). \* igual contribución.
23. Sedeño, L., Couto, B., Melloni, M., Canales-Johnson, A., Yoris, A., Baez, S., Estevez, S., Velasquez, M., **Barttfeld, P.**, Sigman, M., Kichic, R., Chialvo, D., Manes, F., Bekinschtein, T., Ibañez, A. How do you feel when you can't feel your body?: Interoception, functional, connectivity and emotional processing in Depersonalization-Derealization Disorder. *PLoS One* (2014).
24. **Barttfeld\*, P.**, Petroni\*, P., Baez, S., Urquina, H., Sigman, M., Cetkovich, M., Torralva, T., Torrente, F., Lischinsky, A., Manes, F., Ibañez, A. Functional Connectivity and Temporal Variability of Brain Connections in Adults with ADHD or Bipolar Disorder: A Default Mode Network Analysis. *Neuropsychobiology* (2014). \* igual contribución.
25. Couto, B., Salles, A., Sedeño, L., Pederajordi, M., **Barttfeld, P.**, Canales-Johnson, A., Vidal Dos Santos, Y., Huepe, D., Bekinschtein, T., Sigman, M., Favaloro, R., Manes, F., Ibañez, A. The man who feels two hearts: The different pathways of interoception. *Social Cognitive and Affective Neuroscience* (2013).

26. **Barttfeld, P.**, Amoroso, L., Ais, J., Cukier, S., Bavassi, L., Tomio, A., Manes, F., Ibañez, A. Organization of brain networks governed by long-range connections index autistic traits in the general population. *Journal of Neurodevelopmental Disorders* (2013).
27. **Barttfeld, P.**, Wicker, B., Graziano, M., Leiguarda, R., Sigman, M., Distinct patterns of functional brain connectivity correlate with objective performance and subjective beliefs. *Proceedings of the National Academy of Sciences* (2013).
28. Gallos, L., **Barttfeld, P.**, Havlin, S., Sigman, M., Makse, H. Collective behavior and critical fluctuations in the spatial spreading of obesity, diabetes and cancer. *Scientific Reports* (2012).
29. Zylberberg, A., **Barttfeld, P.**, Sigman, M. The construction of confidence in a perceptual decision. *Frontiers in Integrative Neuroscience* (2012).
30. **Barttfeld, P.**, Wicker, B., Cukier, S., Navarta, S., Leiguarda, R., Sigman, M. State-dependent changes of connectivity patterns and functional brain network topology in Autism Spectrum Disorder. *Neuropsychologia* (2012).
31. **Barttfeld, P.**, Wicker, B., Cukier, S., Navarta, S., Lew, S., Sigman, M. A big world network in ASD: Dynamical connectivity analysis reflects a deficit in long-range connections and an excess of short-range connections. *Neuropsychologia* (2011).  
[Comentario en el blog "Cracking the enigma"](#).
32. Jourdan, I., **Barttfeld, P.**, Zanuto, BS. A Theory about a Role of the Hyperdirect Pathway in Pattern Expression by the Basal Ganglia. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Buenos Aires, Argentina* (2010).
33. Yorio, A., Tabullo, A., Wainelboim, A., **Barttfeld, P.**, Segura, E. Event-related potential correlates of perceptual and functional categories: Comparison between stimuli matching by identity and equivalence. *Neuroscience Letters* (2008).
34. Abril, A., **Barttfeld, P.**, Bucher, E. The effect of fire and overgrazing disturbs on soil carbon balance in the Dry Chaco forest. *Forest Ecology and Management* (2005).

PRESENTACIONES  
SELECCIONADAS

1. Clase en la [Behavioral Neuroscience and Behavioral Disorders School](#), Montevideo, Uruguay (2024).
2. Charla en el [Workshop of Sleep, Dreams, and Consciousness](#), Buenos Aires, Argentina (2023).
3. Event-related potentials associated with attentional and vigilance components. Luna F, Aguirre, M, Martín-Arévalo, E., Lupiáñez, J.**Barttfeld P.**, [Jornadas virtuales SEPEX](#), España (2021).
4. Charla en el [Instituto de Matemática Aplicada](#), Santa Fe, Argentina (2019).
5. Mola D, **Barttfeld P**, Ibañez A, Godoy J, Reyna C. The effect of self and other social status in behavior and neural responses during Ultimatum Game. Second Latin-American Workshop on Experimental and Behavioural Social Sciences, Santiago, Chile (2018).
6. Charla en la conferencia *Mind, Society and Behavior*. CONICET, Buenos Aires, Argentina (2018).

7. Luna F, Barttfeld P, Roca J, Lupiáñez J. Measuring attentional networks together with executive and arousal vigilance: the ANTI-Vea task. Poster en el XII Congreso de la Sociedad Española de Psicología Experimental, Madrid, Spain (2018).
8. Demertzi A, Tagliazucchi E, Dehaene S, Deco G, **Barttfeld, P.**, Raimondo F, Rohaut B, Schiff N, Owen A, Laureys S, Naccache L, Sitt J. Human consciousness is supported by specific dynamic coordination patterns. Poster en la conferencia Human Brain Project, Barcelona, Spain (2018).
9. Demertzi A, Tagliazucchi E, Dehaene S, Deco G, **Barttfeld, P.**, Raimondo F, Rohaut B, Schiff N, Owen A, Laureys S, Naccache L, Sitt J. Human consciousness is supported by temporally evolving brain processes. eSession en la cuarta EAN Congress en Lisboa, Portugal (2018).
10. Charla en la segunda Latin American Brain Mapping Network Meeting. Buenos Aires, Argentina (2017).
11. Charla en el International Symposium INECO “New tendencies in neurodev. and cognition”, Buenos Aires, Argentina (2015).
12. Charla en la conferencia “Brain dynamics in the primate brain”, Neurospin, Saclay, Francia (2015).
13. Vidal Dos Santos, Y., **Barttfeld, P.**, Marno, H., Sigman, M., Mehler, J., Dehaene, S., Dehaene-Lambertz, G. Metacognition in 15-month-old infants. *Budapest Conference on Cognitive Development* (2015).
14. Charla en el “First Theory-Cognitive workshop”, European Institute for Theoretical Neuroscience, Paris, Francia (2014).
15. **Barttfeld, P.**, Calvar, J., Cukier, S., Deriche, R., Leiguarda, R., Navarta, S., Sigman, M., Wassermann, D., Wicker, B. Large-scale network analysis reflects big-world characteristics in Autism Spectrum Disorders. *17th Annual Meeting of the Organization for Human Brain Mapping. Quebec* (2011).
16. **Barttfeld, P.**, Petroni, A., Urquina, H., Sigman, M., Cetkovich, M., Torralva, T., Torrente, F., Báez, S., Lischinsky, A., Manes, F., Ibañez, A. Default mode network (DMN) impairments in adults with ADHD and Bipolar Disorder: Connectivity and Variability. *3rd International Congress on ADHD, Berlin* (2011).
17. **Barttfeld, P.**, Sigman, M., Cukier, S., Navarta, S., Calvar, J., Leiguarda, R., Wicker, B. Intrinsic brain connectivity in Autism Spectrum Disorders. *16th Annual Meeting of the Organization for Human Brain Mapping, Barcelona* (2010).
18. **Barttfeld, P.**, Jourdan, I., Yorio, A., Zanutto, B., Seitz, A. Reward driven learning of associative rules in the absence of awareness. *Society For Neuroscience 38° Annual Meeting. USA* (2007).

## EXPERIENCIA

### COMO REVISOR **Experiencia Editorial y como Revisor**

#### **Roles editoriales**

Editor asociado de la revista <i>Imaging Neuroscience</i>	desde 2023
Editor asociado de la revista <i>Neuroimage: Reports</i>	desde 2024

#### **Revisión de pares para revistas**

*Nature Communications, Communications Psychology, Communications Biology, Journal of Neuroscience, Frontiers in Human Neuroscience, Frontiers in Aging Neuroscience, Neuroimage, Cerebral Cortex, Cognitive Affective and Behavioral Neuroscience, Human Brain Mapping, Journal of Psychiatry Research, Autonomic Neuroscience, Translational*

## Experiencia como Evaluador de Subsidios y Tesis

### Revisión de subsidios

Fédération pour la Recherche sur le Cerveau (France)	2024
Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Argentina	2019–2024
Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Argentina	2017

### Tesis de doctorado evaluadas

Raúl González Gómez. Neurociencia, Universidad Adolfo Ibáñez, Chile	2024
Agustina Legaz. Psicología, UNC	2024
Fabrizio Baglivo. Ingeniería, UBA	2024
Marcos Pietto. Psicología, UNC	2020
Noelia Calvo. Psicología, UNC	2019
Débora Mola. Psicología, UNC	2019
Soledad Picco. Biología, UBA	2018
Santiago Redondo. Psicología, UNC	2018
Lucas Sedeño. Medicina, Universidad Favaloro	2018
María González Gadea. Neurociencia, UNC	2015

### Tesis de licenciatura evaluadas

Más de 15 tesis de Psicología, de la Universidad Nacional de Córdoba, Universidad de Buenos Aires y Universidad Favaloro.

## FORMACIÓN DE RECURSOS HUMANOS

### Estudiantes de Postdoctorado

Santiago Redondo. Psicología, UNC	2024–2026
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### Estudiantes de Doctorado

Sebastián Galván Rial. Neurociencia, UNC	2029 (est.)
Lorenzo Fuchs Herrera. Neurociencia, UNC	2029 (est.)
Julietta Zapata. Psicología, UNC	2025 (est.)
Iair Embon. Neurociencia, UNC	2026 (est.)
Julietta Aguirre. Psicología, UNC	2026 (est.)
Nicolás Comay. Neurociencia, UNC	2026 (est.)
Gabriel Della Bella. Física, UNC	2025 (est.)
Renato Paredes. Neurociencia, UNC	2024
Matías Palmucci. Neurociencia, UNC	2024
Leticia Sarli. Neurociencia, UNC	2024
Federico Cavana. Neurociencia, UNC	2024
Fernando Luna. Psicología, UNC	2019

### Estudiantes licenciatura

Florencia López. Psicología, UNC	2024 (est.)
Florencia Pereyra. Psicología, UNC	2024 (est.)
María Victoria Bidondo. Psicología, UNC	2024 (est.)
Sebastián Galván Rial. Psicología, UNC	2024 (est.)
Federico Teitelbaum Dorfman. Psicología, UNC	2022
Rocío Rodríguez. Psicología, UNC	2021
Nicolás Comay. Psicología, UNC	2020

Julieta Aguirre. Psicología, UNC	2019
Santiago Alcaide. Ingeniería Biomédica, UNC	2018
Álvaro Romano. Ingeniería Biomédica, UNC	2018
Marcos Grillo. Psicología, Universidad Favaloro	2018
Joaquín Ais (co-supervisión). Biología, UBA	2016

EXPERIENCIA DOCENTE	<b>Curso de Sistemas Biológicos, Ingeniería Electrónica</b> Ayudante de primera Departamento de Ingeniería Electrónica Universidad de Buenos Aires, Argentina	2005–2018
	<b>Introducción a la investigación en Cs. Cognitivas</b> Carrera de Psicología, UNC, Argentina	2019–2024
	<b>Una introducción Práctica a las Ciencias Cognitivas</b> curso de posgrado Psicología, UNC, Argentina	2023
POSICIONES ADMINISTRATIVAS	<b>Miembro del Consejo Directivo</b> Instituto de Investigaciones Psicológicas - CONICET	desde 2022
	<b>Miembro del Comité de Ética</b> Instituto de Investigaciones Psicológicas - CONICET	2021–2024