

Pablo Barttfeld

CONTACTO	Grupo de Ciencias Cognitivas. Instituto de Investigaciones Psicológicas. CONICET Email: pbarttfeld@unc.edu.ar	
POSICIÓN ACTUAL	Investigador Independiente CONICET Argentina	desde 2016
EDUCACIÓN	Diplomatura en Ciencia de Datos y Aprendizaje Automático Universidad Nacional de Córdoba, Argentina	2024
	Postdoctorado Inserm's Cognitive Neuroimaging Unit Neurospin Center, CEA-Saclay, Francia Directores: Stanislas Dehaene and Ghislaine Dehaene-Lambertz	2013 - 2015
	Postdoctorado Laboratorio de Neurociencia Integrativa Departamento de Física, UBA, Argentina Director: Mariano Sigman	2011 - 2013
	Doctorado, Área Ingeniería Universidad de Buenos Aires, UBA, Argentina Director: Mariano Sigman	2004 - 2010
	Licenciatura en Biología Universidad Nacional de Córdoba (UNC), Argentina	1997 - 2002
ESTANCIAS BREVES DE INVESTIGACIÓN	Estancia de 3 meses Institut du Cerveau et de la Moelle Épinière París, Francia	2019
	Estancia de 2 meses Addenbrooke's Hospital Universidad de Cambridge, Reino Unido	2012
	Estancia de 2 meses Institut de Neurosciences Cognitives de la Méditerranée Marsella, Francia	2009
SUBSIDIOS Y BECAS	PICT 2022. Director STIC-AmSud Program. Director Center for Open Science - Templeton Foundation. Director PICT 2021 Argentina innovadora 2020. Director PICT 2018 Investigador Proyectos de grupos de reciente formación. Director Beca de viaje de CONICET para investigadores Subsidio Primar. Co-Director PICT de joven investigador. 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

Last updated: September 30, 2025

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. **Barttfeld, P**, Comay N, Embon I, Solovey G. Pre- and post-decision signals of certainty in changing minds. *Trends in Neurosciences*. (2025).
2. Aguirre J, **Barttfeld, P**, Martín-Arévalo E, Lupiáñez J, Luna F. Testing thought-probe frequency for measuring mind-wandering along with vigilance and cognitive control loss. A study with the ANTI-Vea task. *Behavioral Research Methods*. (2025).
3. Hazelton J, Migeot J, Gonzalez-Gomez R, Altschule F, Duran-Aniotz C, Wen O, Galván Rial S, **Barttfeld, P**, Medel V, González Campo C, Castro-Laguardia A, Hernández H, Gonzalez-Silva C, Castaner O, Hu K, Li P, Behrens M, Bruno M, Cardona J, Custodio N, Santamaria-Garcia H, Garcia A, Godoy E, Avila-Funes J, Maito M, Matallana D, Miller B, Lopera F, Okada de Oliveira M, Pina-Escudero S, Possin K, Resende E, Reyes P, Slachevsky A, Sosa A, Takada L, Yokoyama J, Ibanez A. Cardiovascular risk factors and the allostatic interoceptive network in dementia. *Cardiovascular Research*. (2025).
4. Comay N, Solovey G*, **Barttfeld, P.***. Decisions are based on less information than metacognitive judgments in multi-alternative contexts. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. (2025). * igual contribución.
5. Della Bella G*, Zang D*, Gui P*, Mateos D, Sitt J, Bekinschtein T, Manasova D, Sartori B, Ferre F, Silva S, Lamberti W. Wu X, Mao Y, Wang L*, **Barttfeld, P.***. Detection of EEG dynamic complex patterns in disorders of consciousness. *Communications Biology*. (2025). * igual contribución.
6. Cardeña E, Berkovich-Ohana A, Valli K, **Barttfeld, P**, Gómez-Marín A, Greyson B, Kumar V, Laureys S, Luhrmann T, Newberg A, Preller K, Putnam F, Tagliazucchi E, Walsh R, Carter O, Yaden D. Bringing Order to Disarray: A Consensus Taxonomy of Altered (Non-Ordinary) States of Consciousness. *Psychology of Consciousness*. (2025).
7. Gonzalez-Gomez R, Cruzat J, Hernández H, Migeot J, Legaz A, Santamaria-García H, Fittipaldi S, Maito M, Medel V, Tagliazucchi E, **Barttfeld, P**, O’Byrne D, Castro Laguardia A, Borquez P, Avila-Funes J, Behrens M, Custodio N, Farombi T, García A, Garcia-Cordero I, Godoy M, Gonzalez Campo C, Hu K, Lawlor B, Matallana D, Miller B, Okada de Oliveira M, Pina-Escudero S, França Resende E, Reyes P, Slachevsky A, Takada L, Yener G, Coronel Oliveros C, Ibañez A. Qualitative and quantitative educational disparities and brain signatures in healthy aging and dementia across global settings. *eClinicalMedicine*. (2025).
8. 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.
9. 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).
10. 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).

11. 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.
12. 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).
13. 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).
14. 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).
15. 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).
16. 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.
17. 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).
18. 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.
19. Luna, F., **Barttfeld, P.**, Martín-Arévalo, E., Lupiáñez, J. Cognitive load mitigates the executive but not the arousal vigilance decrement. *Consciousness and Cognition*. (2021).
20. 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)
21. 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).
22. 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).
23. 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).
24. 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”](#).
25. **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.

26. Ais, J., Zylberberg, A., **Barttfeld, P.**, Sigman, M. Individual differences in the shape, bias and precision of confidence distributions across perceptual decisions. *Cognition* (2016).
27. **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).
28. **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.
29. 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).
30. **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.
31. 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).
32. **Barttfeld, P.**, Amoruso, 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).
33. **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).
34. 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).
35. Zylberberg, A., **Barttfeld, P.**, Sigman, M. The construction of confidence in a perceptual decision. *Frontiers in Integrative Neuroscience* (2012).
36. **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).
37. **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"](#).
38. 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).

39. Yorio, A., Tabullo, A., Wainseboim, 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).
40. 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).

CAPÍTULOS DE LIBROS

1. Fogliatti E, Galván Rial S, Della Bella G, **Barttfeld, P.**. Del ritual al protocolo: el conflicto en torno a los psicodélicos. En: A. Pamela Paz García (Ed.), *Drogas y bien público. Aportes desde las ciencias del comportamiento* (pp. 139–155). Instituto de Investigaciones Psicológicas, Córdoba. (2025). ISBN 978-987-47803-5-5

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., Yorrio, A., Zanutto, B., Seitz, A. Reward driven learning of associative rules in the absence of awareness. *Society For Neuroscience 38^o 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 Psychiatric Research, Autonomic Neuroscience, Translational Psychiatry, Journal of Neurophysiology, Learning and Individual Differences, Eye and Vision, Journal of Biological Physics, Developmental Psychology.

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

María Laura Noguera. Medicina, Universidad Católica de Cuyo	2025
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 20 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.)
Julieta Zapata. Psicología, UNC	2025 (est.)
Iair Embon. Neurociencia, UNC	2026 (est.)
Julieta Aguirre. Psicología, UNC	2026 (est.)
Nicolás Comay. Neurociencia, UNC	2026 (est.)
Gabriel Della Bella. Física, UNC	2025
Renato Paredes. Neurociencia, UNC	2025
Matías Palmucci. Neurociencia, UNC	2025
Leticia Sarli. Neurociencia, UNC	2025
Federico Cavana. Neurociencia, UNC	2025
Fernando Luna. Psicología, UNC	2019

Estudiantes licenciatura

Julieta Irazuzta. Psicología, UNC	2025
Vera Candusso. Psicología, UNC	2025
Sebastián Galván Rial. Psicología, UNC	2025
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

Curso de Sistemas Biológicos, Ingeniería Electrónica	2005–2018
Ayudante de primera	
Departamento de Ingeniería Electrónica	
Universidad de Buenos Aires, Argentina	
Introducción a la investigación en Cs. Cognitivas	2019–2024
Carrera de Psicología, UNC, Argentina	
Una introducción Práctica a las Ciencias Cognitivas	2023
curso de posgrado	
Psicología, UNC, Argentina	

POSICIONES

Miembro del comité científico	2025–2026
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ADMINISTRATIVAS

29th Annual Meeting
Association for the Scientific Study of Consciousness, Chile (ASSC)

Miembro del Consejo Directivo	desde 2022
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Instituto de Investigaciones Psicológicas - CONICET
Miembro del Comité de Ética
Instituto de Investigaciones Psicológicas - CONICET

2021–2024