

# Pablo Bartfeld

Investigador Independiente, CONICET  
Instituto de Investigaciones Psicológicas  
Universidad Nacional de Córdoba, Argentina

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Google Scholar: [\[link\]](#)

## PERFIL DE INVESTIGACIÓN

Neurocientífico cognitivo que trabaja en la intersección de **conciencia, metacognición y dinámica cerebral**. Mi investigación combina neuroimágenes (fMRI, EEG), modelado computacional y paradigmas comportamentales para estudiar cómo el cerebro sostiene la conciencia y la toma de decisiones bajo incertidumbre. Dirijo el **Grupo de Ciencias Cognitivas** en CONICET-UNC.

## CARGO ACTUAL

### Investigador Independiente, CONICET

*Instituto de Investigaciones Psicológicas · Universidad Nacional de Córdoba, Argentina*

2016–presente

## FORMACIÓN ACADÉMICA

### Diploma en Ciencia de Datos y Machine Learning

*Universidad Nacional de Córdoba, Argentina*

2024

### Posdoctorado

*Unidad de Neuroimagen Cognitiva Inserm, NeuroSpin / CEA-Saclay, Francia*

Directores: Stanislas Dehaene & Ghislaine Dehaene-Lambertz

2013–2015

### Posdoctorado

*Laboratorio de Neurociencia Integrativa, Dto. de Física, UBA, Argentina*

Director: Mariano Sigman

2011–2013

### Doctorado en Ingeniería

*Universidad de Buenos Aires (UBA), Argentina*

Director: Mariano Sigman

2004–2010

### Licenciatura en Biología

*Universidad Nacional de Córdoba (UNC), Argentina*

1997–2002

## ESTADÍAS DE INVESTIGACIÓN

- **Institut du Cerveau et de la Moelle Épinière**, París, Francia 2019 · 3 meses
- **Addenbrooke's Hospital**, Universidad de Cambridge, Reino Unido 2012 · 2 meses
- **Institut de Neurosciences Cognitives de la Méditerranée**, Marsella, Francia 2009 · 2 meses

## SUBSIDIOS Y FINANCIAMIENTO

Nota: los montos en ARS/EUR no son públicos para subsidios PICT; las duraciones son estándar para cada esquema (PICT: 3 años; STIC-AmSud: 2 años).

- **PICT 2022** (Director) — ANPCyT, Argentina 2024–2026
- **Programa STIC-AmSud** (Director) — ANID, Chile 2023–2024
- **Center for Open Science / Templeton Foundation** (Director) — Investigación en conciencia 2023
- **PICT 2021 Argentina Innovadora 2020** (Director) — ANPCyT 2021–2024
- **PICT 2018** (Investigador) — ANPCyT 2018–2021
- **Grupos de Reciente Formación** (Director) — MinCyT Córdoba 2018
- **Beca CONICET para estadías cortas de investigadores jóvenes** 2018
- **Subsidio Primar** (Codirector) — UNC 2018
- **PICT Jóvenes Investigadores** (Director) — ANPCyT 2015–2018
- **Beca de retorno Raíces** — MinCyT Argentina 2015
- **Beca posdoctoral INSERM** — INSERM, Francia 2013–2015
- **James S. McDonnell Foundation** — II Escuela Latinoamericana de Ciencias Cognitivas y Neurales 2012
- **Beca de viaje CONICET** — Universidad de Cambridge, Reino Unido 2012
- **Beca posdoctoral** — CONICET 2011–2013

• <b>Beca Raúl Carrea</b> — posgrado	2010
• <b>Beca de viaje CNRS</b> (proyecto ECOS) — Francia	2009
• <b>Beca doctoral</b> — Universidad de Buenos Aires	2004–2010
• <b>Escuela de Verano del Santa Fe Institute</b> — Qingdao, China	2004

## PUBLICACIONES

\* igual contribución

### Artículos con referato

1. Della Bella G, Vélez Picatto A, Galván Rial S, Cukier S, Foa Torres G, Catanzariti M, Mateos D, Lamberti P, Cardeña E\*, **Barttfeld P\***. The Neurophenomenology of a Self-Induced Transcendental Visionary State: A Case Study. *NeuroImage*. 2026.
2. Legaz A, Moguilner S, **Barttfeld P\***, et al., Hernández H, Ibañez A. Global compound physical and social exposome and brain clocks in aging and dementia. *Nature Medicine*. 2026.
3. Della Bella G, Sarton B, Mattia G, Peran P, Lamberti W, **Barttfeld P\***, Silva S\*. Brain dynamic organization at the acute stage of severe brain injury. *NeuroImage*. 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: LMC*. 2025.
5. Comay N, Della Bella G, **Barttfeld P**. Iconic vs. working memory metacognition to evaluate the richness of perception: a registered report. *Royal Society Open Science*. 2025.
6. **Barttfeld P**, Comay N, Embon I, Solovey G. Pre- and post-decision signals of certainty in changing minds. *Trends in Neurosciences*. 2025.
7. 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. *Behavioral Research Methods*. 2025.
8. Hazelton J, Migeot J, Gonzalez-Gomez R, et al., **Barttfeld P**, Ibanez A. Cardiovascular risk factors and the allostatic interoceptive network in dementia. *Cardiovascular Research*. 2025.
9. Della Bella G\*, Zang D\*, Gui P\*, Mateos D, Sitt J, Bekinschtein T, et al., **Barttfeld P\***. Detection of EEG dynamic complex patterns in disorders of consciousness. *Communications Biology*. 2025.
10. Cardeña E, Berkovich-Ohana A, Valli K, **Barttfeld P**, et al. Bringing Order to Disarray: A Consensus Taxonomy of Altered States of Consciousness. *Psychology of Consciousness*. 2025.
11. Gonzalez-Gomez R, Cruzat J, Hernández H, et al., **Barttfeld P**, Ibañez A. Qualitative and quantitative educational disparities and brain signatures in aging and dementia. *eClinicalMedicine*. 2025.
12. Hazelton J\*, Della Bella G\*, **Barttfeld P**, et al. Altered spatiotemporal brain dynamics of interoception in behavioural-variant frontotemporal dementia. *eBioMedicine*. 2025.
13. 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.
14. Legaz A, Altschuler F, Gonzalez-Gomez R, et al., **Barttfeld P**, Ibañez A. Structural inequality linked to brain volume and network dynamics in aging and dementia across the Americas. *Nature Aging*. 2024.
15. 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.

16. Ibanez A, Moguilner S, Baez S, *et al.*, **Barttfeld P**, Miller B. Brain clocks capture diversity and disparities in aging and dementia across geographically diverse populations. *Nature Medicine*. 2024.
17. 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.
18. Legaz A, Prado P, Moguilner S, *et al.*, **Barttfeld P**, Ibañez A. Social and non-social working memory in neurodegeneration. *Neurobiology of Disease*. 2023.
19. 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.
20. Embon I, Cukier S, Iorio A, **Barttfeld P\***, Solovey G\*. Is visual metacognition associated with ASD traits? *Consciousness and Cognition*. 2023.
21. 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.
22. 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.
23. Luna F, **Barttfeld P**, Martín-Arévalo E, Lupiáñez J. Cognitive load mitigates the executive but not the arousal vigilance decrement. *Consciousness and Cognition*. 2021.
24. 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.
25. Luna F, **Barttfeld P**, Martín-Arévalo E, Lupiáñez J. The ANTI-Vea task: analyzing the executive and arousal vigilance decrements while measuring the three attentional networks. *Psicológica*. 2021.
26. 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.
27. Demertzis 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.
28. 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.
29. **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.
30. Ais J, Zylberberg A, **Barttfeld P**, Sigman M. Individual differences in the shape, bias and precision of confidence distributions across perceptual decisions. *Cognition*. 2016.
31. **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.
32. **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.
33. Sedeño L, Couto B, Melloni M, *et al.*, **Barttfeld P**, Ibañez A. How do you feel when you can't feel your body? Interception, functional connectivity and emotional processing in Depersonalization-Derealization Disorder. *PLoS One*. 2014.

34. **Barttfeld P\***, Petroni A\*, Baez S, et al. Functional Connectivity and Temporal Variability of Brain Connections in Adults with ADHD or Bipolar Disorder: A Default Mode Network Analysis. *Neuropsychobiology*. 2014.
35. Couto B, Salles A, Sedeño L, et al., **Barttfeld P**, Ibañez A. The man who feels two hearts: The different pathways of interoception. *Social Cognitive and Affective Neuroscience*. 2013.
36. **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.
37. **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.
38. 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.
39. Zylberberg A, **Barttfeld P**, Sigman M. The construction of confidence in a perceptual decision. *Frontiers in Integrative Neuroscience*. 2012.
40. **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.
41. **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.
42. Yorio A, Tabullo A, Wainselboim A, **Barttfeld P**, Segura E. Event-related potential correlates of perceptual and functional categories. *Neuroscience Letters*. 2008.
43. Abril A, **Barttfeld P**, Bucher E. The effect of fire and overgrazing disturbances on soil carbon balance in the Dry Chaco forest. *Forest Ecology and Management*. 2005.

#### Preprints

1. Comay N, Solovey G\*, **Barttfeld P\***. Confidence phenotypes: A unified computational account of value and decision certainty in reinforcement learning. *PsyArXiv*. 2026.

#### 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*. Instituto de Investigaciones Psicológicas, Córdoba. 2025. ISBN 978-987-47803-5-5.

#### ACTIVIDAD EDITORIAL Y REVISIÓN

##### Roles Editoriales

- |  |               |
|--|---------------|
| <ul style="list-style-type: none"><li>• <b>Editor Asociado</b>, <i>Imaging Neuroscience</i></li><li>• <b>Editor Asociado</b>, <i>NeuroImage: Reports</i></li></ul> | 2023–presente |
|  | 2024–presente |

##### Revisor Ad hoc

*Nature Communications*, *Communications Psychology*, *Communications Biology*, *Journal of Neuroscience*, *NeuroImage*, *Cerebral Cortex*, *Human Brain Mapping*, *Frontiers in Human Neuroscience*, *Frontiers in Aging Neuroscience*, *Brain and Cognition*, *CABN*, *Translational Psychiatry*, *Journal of Neurophysiology*, *Journal of Psychiatric Research*, *Developmental Psychology*, entre otras.

##### Revisión Experta Invitada

- |   |      |
|---|------|
| <ul style="list-style-type: none"><li>• Metascience Novelty Indicators Challenge, Universidad de Sussex</li></ul> | 2026 |
|---|------|

**Paneles de Evaluación de Subsidios**

- |  |                 |
|--|-----------------|
| • <b>NWO Talent Programme Vici</b> , Consejo de Investigación de Holanda | 2025            |
| • <b>Fédération pour la Recherche sur le Cerveau</b> , Francia           | 2024            |
| • <b>CONICET</b> , Argentina   | 2017, 2019–2024 |

**Tesis Doctorales Evaluadas (jurado externo)**

- |  |      |
|--|------|
| • María Laura Noguera — Medicina, Universidad Católica de Cuyo         | 2025 |
| • Raúl González Gómez — Neurociencia, Universidad Adolfo Ibáñez, Chile | 2024 |
| • Agustina Legaz — Psicología, UNC                                     | 2024 |
| • Fabricio 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 |

También evaluó >20 tesis de Maestría en UNC, UBA y Universidad Favaloro.

**Investigadores Posdoctorales**

- |                                      |           |
|--------------------------------------|-----------|
| • Santiago Redondo (Psicología, UNC) | 2024–2026 |
|--------------------------------------|-----------|

**Estudiantes de Doctorado**

- |   |                 |
|---|-----------------|
| • Sebastián Galván Rial (Neurociencia, UNC) | est. 2029       |
| • Julieta Zapata (Psicología, UNC)          | est. 2025       |
| • Julieta Aguirre (Psicología, UNC)         | est. 2026       |
| • Iair Embon (Neurociencia, UNC)            | est. 2026       |
| • Nicolás Comay (Neurociencia, UNC)         | est. 2026       |
| • Gabriel Della Bella (Física, UNC)         | finalizado 2025 |
| • Renato Paredes (Neurociencia, UNC)        | finalizado 2025 |
| • Matías Palmucci (Neurociencia, UNC)       | finalizado 2025 |
| • Leticia Sarli (Neurociencia, UNC)         | finalizado 2025 |
| • Federico Cavana (Neurociencia, UNC)       | finalizado 2025 |
| • Fernando Luna (Psicología, UNC)           | finalizado 2019 |

**Estudiantes de Maestría**

- |  |      |
|--|------|
| • Julieta Irazuzta, Vera Candusso, 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, Álvaro Romano (Ingeniería Biomédica, UNC)              | 2018 |
| • Marcos Grillo (Psicología, Universidad Favaloro)                         | 2018 |
| • Joaquín Ais — codirección (Biología, UBA)                                | 2016 |

**Introducción a las Prácticas en Ciencias Cognitivas**

*Facultad de Psicología, UNC, Argentina*

2019–2024

PRESENTACIONES  
SELECCIONADAS

- **Charla invitada**, Escuela de Neurociencia y Trastornos del Comportamiento, Montevideo, Uruguay 2024
- **Charla invitada**, Workshop de Sueño, Ensueños y Conciencia, Buenos Aires, Argentina 2023
- **Charla invitada**, Instituto de Matemática Aplicada (IMAL), Santa Fe, Argentina 2019
- **Charla invitada**, Conferencia *Mind, Society and Behavior*, CONICET, Buenos Aires 2018
- **Charla invitada**, 2da Reunión de la Red Latinoamericana de Mapeo Cerebral, Buenos Aires 2017
- **Charla invitada**, Simposio Internacional INECO “Nuevas tendencias en neurodesarrollo y cognición”, Buenos Aires 2015
- **Charla invitada**, Conferencia “Brain Dynamics in the Primate Brain”, NeuroSpin, Saclay, Francia 2015
- **Charla invitada**, Primer Workshop Teoría-Cognitiva, Instituto Europeo de Neurociencia Teórica, París 2014

GESTIÓN Y SERVICIO

- **Miembro del Comité Científico**, 29na Reunión Anual de la Association for the Scientific Study of Consciousness (ASSC), Chile 2025–2026
- **Miembro del Consejo Directivo**, Instituto de Investigaciones Psicológicas – CONICET 2025
- **Miembro del Comité de Ética**, Instituto de Investigaciones Psicológicas – CONICET 2021–2024