

Dominika Radziun

Education and Professional Experience

2023–present **Postdoctoral Researcher**

Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, the Netherlands

Understanding the plasticity of spatial body representations – a computational perspective

Advisor: Dr. Luke E. Miller

2018–2023 **PhD in Neuroscience**

Karolinska Institutet, Stockholm, Sweden

Thesis title: *Body perception and brain plasticity in blind and sighted individuals*

Supervisors: Prof. Henrik Ehrsson (KI), Prof. Marcin Szwed (Jagiellonian University),

Prof. Amir Amedi (Reichman University), Dr. Laura Crucianelli (KI)

External examiner: Prof. Brigitte Röder (University of Hamburg)

2013–2018 **MA in Psychology**

Jagiellonian University, Kraków, Poland

Inter-faculty Individual Studies in the Humanities and Social Sciences

Supervisors: Prof. Henrik Ehrsson (Karolinska Institutet) and Prof. Marcin Szwed (JU)

Nov 2016– Jan 2017 **Visiting Student**

University of Cambridge, United Kingdom

Department of Psychology, Behavioural and Clinical Neuroscience Institute

Jan 2016– May 2016 **Visiting Student**

University of Oslo, Norway

Department of Psychology

Department of Philosophy, History of Art and Ideas, Greek and Latin

Journal Articles

- 2024 Stroh, A. L.*, **Radziun, D.***, Korczyk, M., Crucianelli, L., Ehrsson, H. H., & Szwed, M. (2024). Blind individuals' enhanced ability to sense their own heartbeat is related to the thickness of their occipital cortex. *Cerebral Cortex*, 34(8). [\[Link\]](#)
- Radziun, D.**, Korczyk, M., Szwed, M., & Ehrsson, H. H. (2024). Are blind individuals immune to bodily illusions? Somatic rubber hand illusion in the blind revisited. *Behavioural Brain Research*, 460, 114818. [\[Link\]](#)
- Crucianelli, L., **Radziun, D.**, & Ehrsson, H. H. (2024). Thermosensation and emotion: Thermosensory accuracy in a dynamic thermal matching task is linked to depression and anxiety symptomatology. *Physiology & Behavior*, 273, 114407. [\[Link\]](#)
- 2023 **Radziun, D.**, Korczyk, M., Crucianelli, L., Szwed, M., & Ehrsson, H. H. (2023). Heartbeat counting accuracy is enhanced in blind individuals. *Journal of Experimental Psychology: General*, 152(7), 2026–2039. [\[Link\]](#)
- Radziun, D.**, Crucianelli, L., Korczyk, M., Szwed, M., & Ehrsson, H. H. (2023). The perception of affective and discriminative touch in blind individuals. *Behavioural Brain Research*, 444, 114361. [\[Link\]](#)
- 2022 **Radziun, D.**, Crucianelli, L., & Ehrsson, H. H. (2022). Limits of cross-modal plasticity? Short-term visual deprivation does not enhance cardiac interoception, thermosensation, or tactile spatial acuity. *Biological Psychology*, 168, 108248. [\[Link\]](#)
- Ehrsson, H. H., Fotopoulou, A., **Radziun, D.**, Longo, M. R., & Tsakiris, M. (2022). No specific relationship between hypnotic suggestibility and the rubber hand illusion. *Nature Communications*, 13(1). [\[Link\]](#)
- 2018 **Radziun, D.**, & Ehrsson, H. H. (2018). Auditory cues influence the rubber-hand illusion. *Journal of Experimental Psychology: Human Perception and Performance*, 44(7), 1012–1021. [\[Link\]](#)
- Radziun, D.**, & Ehrsson, H. H. (2018). Short-term visual deprivation boosts the flexibility of body representation. *Scientific Reports*, 8(1). [\[Link\]](#)
- 2017 Westerhausen, R., Pöldver, N., Naar, R., **Radziun, D.**, Kaarep, M. S., Kreegipuu, K., ... Kompus, K. (2017). Effect of voicing on perceptual auditory laterality in Estonian and Norwegian native speakers. *Applied Psycholinguistics*, 39(2), 259–273. [\[Link\]](#)
- Bola, Ł., **Radziun, D.**, Siuda-Krzywicka, K., Sowa, J. E., Paplińska, M., Sumera, E., & Szwed, M. (2017). Universal Visual Features Might Be Necessary for Fluent Reading. A Longitudinal Study of Visual Reading in Braille and Cyrillic Alphabets. *Frontiers in Psychology*, 8. [\[Link\]](#)

Awards and Scholarships

- 2024 Glushko Dissertation Prize (\$10,000)
Awarded by the Cognitive Science Society and the Glushko-Samuelson Foundation to recognize outstanding PhD theses in cognitive science that advance interdisciplinary research on minds and intelligent systems
- 2013–2018 Pro Akademika Foundation Scholarship for academic excellence and social involvement (€1100 annually)
- 2017, 2018 Jagiellonian University Chancellor Scholarship for the best students (€1500 annually)
- 2017, 2018 Polish Ministry of Higher Education Scholarship for outstanding students (€3600 annually)
- 2013–2014 The Educational Enterprise Foundation Scholarship for academic excellence (€1200 annually)

Invited and Prize Talks

- July 2024 Body perception and brain plasticity in blind and sighted individuals. Glushko Dissertation Prize talk given at the 46th Annual Meeting of the Cognitive Science Society, 27th of July 2024, Rotterdam, the Netherlands
- April 2024 Body perception and brain plasticity in blind and sighted individuals. Invited talk given at the Department of Psychology, University of Milano-Bicocca, April 29th 2024, Milan, Italy
- Sept 2022 The perception of interoceptive signals in blind individuals. Invited talk given at the Disability Research Division, Linköping University, September 14th 2022, Linköping, Sweden
- June 2022 The perception of interoceptive signals in blind individuals. Invited talk given at the Clinical and Affective Neuroscience Group, University College London, June 9th 2022, London, United Kingdom (remote)

Conference Talks

- Sept 2023 *Body perception and brain plasticity in blind and sighted individuals.* Talk given at the 5th Body Representation Network Conference, September 15th 2023, Palma de Mallorca, Spain
- Sept 2023 *Enhanced cardiac interoception in blind individuals: unraveling cross-modal plasticity and emotional processing.* Symposium talk given at the 23rd Conference of the European Society for Cognitive Psychology, September 9th 2023, Porto, Portugal
- Sept 2023 *Body perception and brain plasticity in blind and sighted individuals: from heartbeats to rubber hands.* Talk given at the 23rd Conference of the European Society for Cognitive Psychology, September 7th 2023, Porto, Portugal
- June 2023 *Body perception and brain plasticity in blind and sighted individuals: from heartbeats to rubber hands.* Talk given at the 21st International Multisensory Research Forum, June 30th 2023, Brussels, Belgium
- Oct 2022 *The perception of interoceptive signals in blind individuals.* Talk given at the Neuronus Neuroscience Forum, October 17th 2022, Kraków, Poland
- July 2022 *The perception of interoceptive signals in blind individuals.* Talk given at the 6th European Society for Cognitive and Affective Neuroscience conference, July 19th 2022, Vienna, Austria
- March 2022 *Cardiac interoception and affective touch sensitivity are enhanced in the blind.* Talk given at the 9th Mind, Brain and Body Symposium, March 16th 2022, online
- June 2021 *Physiologically implausible warmth, but not cold, suppresses the feeling of limb ownership in the somatic rubber hand illusion.* Short talk presented at the 24th Annual Meeting of the Association for the Scientific Study of Consciousness, June 15th 2021, online
- March 2016 *Diagnoza inteligencji u osób niewidomych. Możliwości i ograniczenia* [Intelligence testing in blind individuals. Possibilities and limitations]. Talk given at the 8th Cracow Cognitive Science Conference, March 19–20th 2016, Kraków, Poland

Poster Presentations

- March 2025 *The influence of using finger-extending exoskeletons on tactile and proprioceptive localization.* Poster presented at the 12th Mind, Brain and Body Symposium, March 11th 2025, Berlin, Germany
- Sept 2024 *The influence of using finger-extending exoskeletons on tactile localization.* Poster presented at the 6th Body Representation Network Conference, September 13th 2024, Verona, Italy
- July 2023 *The perception of affective and discriminative touch in blind individuals.* Poster presented at the Festival of Touch Conference, July 4–7th 2023, Marseille, France | **Poster Prize**

- July 2022 *The perception of interoceptive signals in blind individuals.* Poster presented at the 25th Annual Meeting of the Association for the Scientific Study of Consciousness conference, July 12–15th 2022, Amsterdam, The Netherlands
- March 2022 *Cardiac interoception and affective touch sensitivity are enhanced in the blind. Emotional and mental health implications of increased sensory acuity.* Poster presented at the Society for Affective Science Interoception Preconference, March 30th 2022, online
- Feb 2022 *Cardiac interoception and affective touch sensitivity are enhanced in blind individuals.* Poster presented at The Brain Conference 2022, February 24–25th 2022, online
- Oct 2018 *Short-term visual deprivation boosts the flexibility of body representation.* Poster presented at the Blind Brain Workshop, October 11–13th 2018, Lucca, Italy
- June 2018 *Short-term visual deprivation boosts the flexibility of body representation.* Poster presented at the 22nd Annual Meeting of the Association for the Scientific Study of Consciousness, June 26–29th 2018, Kraków, Poland
- April 2018 *The influence of short-term visual deprivation on body representation.* Poster presented at the Neuronus IBRO&IRUN Neuroscience Forum, April 20–22nd 2018, Kraków, Poland
- June 2017 *Auditory Cues Influence the Rubber-Hand Illusion.* Poster presented at the 2nd Nordic Neuroscience Meeting, June 7–9th 2017, Stockholm, Sweden
- March 2017 *The role of visual deprivation in bodily awareness.* Poster presented at the 5th Mind, Brain and Body Symposium, March 16–17th 2017, Berlin, Germany
- April 2016 *Are universal visual features necessary for reading? Preliminary results of a longitudinal study of visual Braille and Cyrillic alphabets' learners.* Poster presented at the Neuronus IBRO&IRUN Neuroscience Forum, April 22–24th 2016, Kraków, Poland
- April 2015 *Age-related alterations in attentional set-shifting.* Poster presented at the Neuronus IBRO & IRUN Neuroscience Forum, April 17–19th 2015, Kraków, Poland

Pre-doctoral Research and Clinical Experiences

- 2017–2018 **Clinical Psychology Intern, Dr. Józef Babiński Clinical Hospital, Kraków, Poland**
Assisted in psychological assessments and patient observations under supervision.
Took part in therapeutic sessions and group activities.
Gained experience in case documentation and interdisciplinary team collaboration.
Observed the application of psychiatric treatments, including pharmacotherapy and psychotherapy.
- 2015–2018 **Research Intern, Jagiellonian University, Kraków, Poland**
Supervisor: Prof. Marcin Szwed
Project: Are universal visual features necessary for fluent reading? Longitudinal study of visual reading in Braille and Cyrillic alphabets
- 2017 **Research Intern (thesis internship), Karolinska Institutet, Stockholm, Sweden**
Supervisor: Prof. Henrik Ehrsson
Project: The influence of short-term visual deprivation on body representation
- 2016–2017 **Research Intern, University of Cambridge, United Kingdom**
Supervisors: Dr. Maria Niedernhuber, Prof. Tristan Bekishtein
Project: Investigating conscious processes underlying the prediction of sensory inputs in the somatosensory and auditory domain – an EEG study
- 2016 **Research Intern, Karolinska Institutet, Stockholm, Sweden**
Supervisor: Dr. Björn van der Hoort, Prof. Henrik Ehrsson
Project: Body-ownership and visual awareness – a continuous flash suppression study
- 2016 **Research Intern, University of Oslo, Norway**
Supervisor: Prof. René Westerhausen
Project: Effect of voicing on perceptual auditory laterality in Estonian and Norwegian native speakers

Supervision

- May 2025–
present **Eleni Manias**
Master's in Cognitive Neuroscience, Radboud University (thesis)
- Sept 2024–
March 2025 **David Teulings**
Master's in Artificial Intelligence, Radboud University (thesis)

Sept 2024– **Arina Schippers**
March 2025 Master's in Artificial Intelligence, Radboud University (internship)

March 2024– **Siebe Geurts**
Dec 2024 Master's in Artificial Intelligence, Radboud University (thesis)

Teaching

May 2025 **Guest Lecturer**
Guest lecturer on the *Sensorimotor Neurotechnology* course (lectures on Body Augmentation and Embodiment) for Artificial Intelligence and Cognitive Neuroscience students at Radboud University

Oct 2020– **Teaching Assistant**
March 2022 TA on the neuroanatomy workshop for medical students at Karolinska Institutet

Reviewing

Journal Consciousness & Cognition, Cortex, Disability and Rehabilitation: Assistive Technology, Frontiers in Psychology, Heliyon, Human Brain Mapping, Journal of Behavior Therapy and Experimental Psychiatry, Journal of Experimental Psychology: Human Perception and Performance, Journal of Psychiatric Research, Nature Human Behaviour, Perception, Psychophysiology, PLOS ONE, Scientific Reports, Translational Psychiatry, Virtual Reality

Grant National Science Centre (Poland)

Community Service

Sept 2024– **Postdoc Representative, Donders Postdoc Council**
present As a postdoctoral representative at the Donders Centre for Cognition, I work to support early-career researchers by fostering collaboration, addressing concerns, and advocating for policies that enhance professional development and inclusivity.

April 2024– **Member, Donders Sessions and Lectures Committee**
present Co-organized the institute-wide session "Bridging Science and Climate Activism" with the CNS Green Team; currently preparing a session on feedback with the Donders Diversity and Sustainable Science Committee.

Jan 2024– **Co-Chair, Halkes Women+ Faculty Network**
present The Halkes Women+ Faculty Network strives to make Radboud University a more diverse, inclusive, and fair place. One of our aims is to contribute to the advancement of women and gender minority faculty at the higher ranks of the university.

October 2023– **Conference Co-Organizer, Body Representation Network**
present I assisted in the planning and coordination of the conference, communicate with speakers and participants, and support logistical and organizational aspects of the event.

Dec 2017– **Assistant Director of Communications & Volunteers Coordinator, Association for the Scientific Study of Consciousness**
Dec 2023 Association for the Scientific Study of Consciousness is a professional organization promoting interdisciplinary research on the nature and mechanisms of consciousness.
I managed the ASSC social media presence and newsletter.
I was a coordinator of the volunteers team during the ASSC 22 Conference (June 26–29th 2018, Kraków, Poland).

Oct 2015– **Tutor & Project Coordinator, Collegium Invisibile & Polish Children's Fund**
Sept 2022 I conducted an introductory course in neuroscience and series of weekly supervision for high school students (one student in 2015/2016, two students in 2016/2017, one student in 2017/2018, three students in 2018/2019, three students in 2019/2020, two students in 2020/2021, and two students in 2021/2022).
I coordinated the "First Tutor" program from the academic year 2016/2017 until 2020/2021.
I co-organized two academic summer schools (Wioska Olimpijska in 2018 and Szkoła Letnia in 2019) for gifted high school students, and taught a course on the scientific study of consciousness.