

PERSONAL DETAILS

Family name, First name(s): Rademaker, Rosanne Lynn
Nationality: Dutch
Researcher unique identifier: [ORCID 0000-0002-2804-8095](https://orcid.org/0000-0002-2804-8095)
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Academic positions & experience

2021 – 2026 **Max Planck Group Leader**, Ernst Strüngmann Institute in cooperation with the Max Planck Society, Frankfurt, Germany
2020 – 2021 Marie Curie Individual Fellow (with Prof. Janneke Jehee)
Donders Institute, Nijmegen, the Netherlands
2016 – 2020 Post-doctoral researcher & Marie Curie Individual Fellow (with Prof. John Serences)
Psychology department, University of California San Diego, USA
2009 – 2010 Pre-doctoral researcher (with Prof. Frank Tong)
Psychology Department, Vanderbilt University, Nashville, USA

Education & key qualifications

2015.12 PhD in Cognitive Neuroscience
Cognitive Neuroscience department, Maastricht University, the Netherlands
Supervisors: Prof. Alexander Sack & Prof. Peter De Weerd

- Collaboration & 2-month stay at Vanderbilt University (Prof. Frank Tong)
- 1-year collaboration (twice-weekly visits) at the Donders Institute (Prof. Janneke Jehee)

2009.08 Research MSc in Neuropsychology (cum laude, GPA 9.1 on 1–10 scale)
Faculty of Psychology & Neuroscience, Maastricht University, the Netherlands
2006.08 BSc in Psychology
Faculty of Behavioral and Social Sciences, University of Groningen, the Netherlands

RESEARCH ACHIEVEMENTS & PEER RECOGNITION

List of publications

Preprints:

- Krause NN, Compte A, & Rademaker RL (2025). Top-down feedback can explain the existence of working memory traces in early visual cortex. *BioRxiv*
- Giorjiani GM, Rawal A, & **Rademaker RL** (2025). Better performance when recalling speed from high-level compared to low-level motion. *PsyArXiv*
- Servetnik MS, Wolff MJ, Chunharas C, & **Rademaker RL** (2025). Visual representations in the human brain rely on a reference frame that is in between allocentric and retinocentric coordinates. *bioRxiv*
- **Rademaker RL** & Serences JT (2024). Manipulating attentional priority creates a trade-off between memory and sensory representations in human visual cortex. *bioRxiv*

Published:

- Wolff MJ & **Rademaker RL** (2025). Model mimicry limits conclusions about neural tuning and can mistakenly imply unlikely priors. *Nature Communications*, 16: 5427
- Chunharas C, Hettwer MD, Wolff MJ, & **Rademaker RL** (2025). A gradual transition toward categorical representations along the visual hierarchy during working memory, but not perception. *eLife*, 14:RP103347
- Adam KCS, **Rademaker RL** & Serences JT (2022) Evidence for, and challenges to, sensory recruitment models of working memory. *Routledge book on Visual Memory, Chapter 1*
- Henderson MM, **Rademaker RL** & Serences JT. (2022) Flexible utilization of spatial- and motor-based codes for the storage of visuo-spatial information. *eLife*, 11, e75688
- Chunharas, C, **Rademaker, RL**, Brady, TF*, & Serences, JT* (2022) Adaptive distortions in visual working memory. *Journal of Experimental Psychology: General*, 151(10): 2300–2323
- Adam, KCS, **Rademaker, RL**, & Serences, JT (2022). Dynamics are the only constant in working memory.

Journal of Cognitive Neuroscience, 35(1): 24–26

- Iamshchinina P, Christophel TB, Gayet S, & **Rademaker RL** (2021) Essential considerations for exploring visual working memory storage in the human brain. *Visual Cognition*, 29(7): 425–436
- **Rademaker RL**, Chunharas C, & Serences JT (2019). Simultaneous representation of sensory and mnemonic information in human visual cortex. *Nature Neuroscience*, 22: 1336–1344
- Engelen T*, **Rademaker RL***, & Sack AT (2019) Faded visual afterimages reappear after TMS over early visual cortex. *Journal of Cognitive Neuroscience*, 31(9), 1368–1379.
- Chunharas, C, **Rademaker, RL**, Sprague, TC, Brady, TF, & Serences, JT (2019) Separating memoranda in depth increases visual working memory precision and capacity. *Journal of Vision*, 19(1):4, 1–16
- **Rademaker RL***, Park Y*, Sack AT, & Tong F (2018). Evidence of gradual loss of precision for simple features and complex objects in visual working memory. *Journal of Experimental Psychology: Human Perception and Performance*, 44(6): 925–940
- **Rademaker, RL**, & Serences, JT (2017) Pinging the brain to reveal hidden memories. *Nature Neuroscience*, 20(6): 767–769
- **Rademaker, RL**, van de Ven, VG, Tong, F, & Sack, AT (2017) The impact of early visual cortex transcranial magnetic stimulation on visual working memory precision and guess rate. *Plos One*, 12(4): e0175230
- Pratte, MS, Park, Y, **Rademaker, RL**, & Tong, F (2017) Accounting for stimulus-specific variation in precision reveals a discrete capacity limit in visual working memory. *Journal of Experimental Psychology: Human Perception and Performance*, 43(1): 6–17
- Ester, E*, **Rademaker, RL***, & Sprague, T* (2016) How do visual and parietal cortex contribute to visual short-term memory? *eNeuro*, 3(2), e0041-16: 1–3
- **Rademaker RL**, Bloem IM, De Weerd P, & Sack AT (2015) The impact of interference on working memory for visual orientation. *Journal of Experimental Psychology: Human Perception and Performance*, 41(6): 1650–1665
- **Rademaker, RL**, Wu D-A, Bloem, IM, & Sack, AT (2014) Intensive tool-practice and skillfulness facilitate the extension of body representations in humans. *Neuropsychologia*, 56: 196–203
- **Rademaker, RL**, Tredway, C, & Tong, F (2012) Introspective judgments predict the precision and likelihood of successful maintenance of visual working memory. *Journal of Vision*, 12(13): 1–13
- **Rademaker, RL**, & Pearson, J, (2012) Training visual imagery: Improvements of metacognition, but not imagery strength. *Frontiers in Perception Science*, 3(224): 1–11
- Pearson, J, **Rademaker, RL**, & Tong, F (2011) Evaluating the mind’s eye: The metacognition of visual imagery. *Psychological Science*, 22: 1535–1542

Fellowships, grants & other awards

2025	YAVIS teaching prize for “best lectures”, for the course “Introduction to Cognitive Psychology” at the Psychology faculty, Goethe University, Frankfurt, Germany
2018 – 2021	Marie Skłodowska-Curie Individual Fellowship (H2020-MSCA-IF-2016), European Union (role: postdoc, €260,929.80), start date 01.01.2018 (3 years)
2019	Travel award Organization for Computational Neuroscience (OCNS), Barcelona (€700)
2019	Dependent Care Professional Travel Grant for postdoctoral scholars, UCSD (\$1200)
2018	Principal nominating postdoctoral scholar (Chancellor’s award for Excellence in Postdoctoral Scholar Mentoring), UCSD (\$500)
2017	Dependent Care Professional Travel Grant for postdoctoral scholars, UCSD (\$1000)
2016	Elsevier / Vision Research travel award, VSS meeting (\$500) (20 awarded, 200+ applicants)
2015	Student initiated activities grant, University Fund Limburg (Maastricht University) (€500)
2015	Student travel grant, 7 th Bernstein Sparks Workshop, Berlin (€200)
2012	Marble++ grant with IM Bloem, Maastricht University (120 research assistant hrs paid research assistance)
2009	Women’s travel award, Berlin school of Mind and Brain (travel expenses Nashville–Berlin)

Mentee awards

2025	Prince Mahidol Award for excellence in Medical Research for Kanathip Jongmekwamsuk. Funding for 1-year period in my lab at the ESI in Frankfurt
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2025.05	FoVea travel and networking award for Giuliana Giorjiani to go to VSS in Florida (\$1000)
2024.08	Poster award for Amit Rawal, ECVP 2024 in Aberdeen
2024.08	Tom Troscianko Memorial award for Giuliana Giorjiani & Amit Rawal (£2000)
2023	“Junior Clinician Scientist”-program award from the Goethe University department of medicine to Mishal Qubad to join my group for a 1-year period
2022.08	GUF-100 prize to Noa Krause for best student (including MSc thesis work done in my group) of the Science & Engineering department, Groningen University, the Netherlands
2022.03	EMBO scholarship to Nicolás Pollan-Hauer for a 3-month research stay in my group

Invited talks (past 4 years)

2026.02	Neuroscience seminar talk at the Frankfurt Institute for Advanced Studies (FIAS), Germany
2025.10	Colloquium talk at Ludwig-Maximilians-Universität (LMU) Munich, Germany
2025.09	Symposium talk at the British Association for Cognitive Neuroscience, Edinburgh, Scotland
2025.09	Guest speaker at Bernstein Center for Computational Neuroscience (BCCN) retreat, Germany
2025.08	2x symposium talk at the European Conference on Visual Perception, Mainz, Germany
2024.11	Brain meeting at the FIL, University College London, UK
2024.10	Keynote speaker at NeNa Conference, Frankfurt, Germany
2024.05	Symposium talk at “Psychologie und Gehirn” (PuG) conference, Hamburg, Germany
2024.05	Colloquium talk at Johannes Gutenberg University, Mainz, Germany
2023.12	Colloquium talk at Vrije Universiteit Amsterdam, the Netherlands
2023.08	Conference talk at the European Conference on Visual Perception, Paphos, Cyprus
2023.07	Speaker at Salzburg Mind Brain Annual Meeting (SAMBA), Salzburg, Austria
2022.11	Colloquium talk at Biopsychology/Neuroergonomics department, TU Berlin, Germany
2022.08	Symposium talk at the European Conference on Visual Perception, Nijmegen, the Netherlands
2022.07	Colloquium series at the Center for Cognitive Science, TU Darmstadt, Germany
2022.05	Talk at the Scene Grammar lab meeting, Goethe University, Frankfurt, Germany
2022.05	Talk at the Annual Max Planck Research Group Leader Symposium, Cologne, Germany
2021.11	Speaker at the Psychology seminar series, Justus Liebig University, Giessen
2021.03	Speaker at the Virtual Psychology Brownbag, Michigan State University
2021.02	Speaker at the Virtual colloquium series, Leibniz Research Centre for Working Environment and Human Factors

LEADERSHIP IN COGNITIVE NEUROSCIENCE

Supervision & leadership

2021 – present	Advisor to 6 PhD students, 1 postdoc, and 4 MSc thesis students
2023 – present	Associated faculty in the LOEWE-center initiative on dynamical networks (DYNAMIC)
2025.06	Safe labs workshop on starting fair, equitable, and successful labs, Barcelona, Spain
2025.05	MPG leadership training (2 days) with focus on conflict management, communication, etc.
2025.04	Leadership training (1 day) with emphasis on “Code of conduct”, Frankfurt, Germany

Teaching activities

2022 – present	Module for the Interdisciplinary Neuroscience (INS) Master’s program, Interdisciplinary Center for Neuroscience Frankfurt (ICNF). 2x yearly, two students join our lab for 6-weeks
2024 – 2025	Lecturer 1 st year course “Introduction to Cognitive Psychology” (150+ students, winter semester), Department of Psychology, Goethe University, Frankfurt, Germany
2024.06	Seminar (6-weeks) on the “Neurobiology of Stress”, Department of Psychology, Goethe University, Frankfurt, Germany
2023.07	Lecturer at Riken CBS Summer Program on Learning and Imagination, Tokyo, Japan
2022.08	Lecturer at the European Summer School on Visual Neuroscience “From spikes to awareness”, Rauischholzhausen, Germany
2022.07	Multivariate analyses lecture & workshop at the Max Planck Academy, Dresden, Germany
2022.06	Lecture on Figure & Poster making, ESI writing workshop, Frankfurt, Germany
2022.02	Lecturer, Modern Topics in Neuroscience by the MPI Brain & ESI, Frankfurt
2021.02	Multivariate analyses: lecture, workshop, & consulting for the “Swiss Memdecoder” initiative, University of Zurich, Switzerland
2020.07	Neuro Match Academy (NMA) mentor (team 160 – resolute dragon)

- 2019.06 Masterclass on encoding models, Royal Netherlands Academy of Arts & Sciences, Amsterdam, the Netherlands
- 2016 – 2019 Supervisor to undergraduates for Psych 199, a course to gain research experience, UCSD
- 2016 – 2018 Freshman mentoring for the Regents Scholars Research Initiative (RSRI), providing early research opportunities to talented undergraduates, UCSD
- 2017 Summer Training Academy for Research Success (STARS) program mentor, UCSD
- 2014 Tutor for 1st year BSc course “Introduction to Psychology”, University College Maastricht
- 2012 – 2013 Bachelor thesis advisor of M. van Tetering. Thesis: “Mechanisms underlying real-world visual search”, Maastricht University
- 2012 Lab tour & demonstration of TMS facilities for graduate-level course “From Human Neuroanatomy to Psychopathology”, Maastricht University
- 2012 Lecture 1st year BSc course “Psychological Perspectives”, theme “Future Research”, Maastricht University
- 2012 MSc course “Interdisciplinary Research”: On writing and presenting a research proposal, Maastricht University
- 2012 Course planning committee, 3rd year BSc course “Theoretical perspectives”, Maastricht University (topics such as consciousness, object based attention, multisensory processing, etc.)
- 2012 Bachelor thesis advisor of I.M. Bloem. Thesis: “Mental imagery and eye-movements”, Maastricht University
- 2011 – 2013 Supervisor “Research practical” (BSc 2nd year): Designing, conducting, analyzing, and presenting an experiment, Maastricht University
- 2010 – 2012 Tutor “Theoretical perspectives” (3rd year Neuroscience course), Maastricht University
- 2010 – 2011 Yearly 1-hour lectures for Arts & Culture students: “A glimpse at Cognitive Neuroscience”. Including discussion on the relevance of the sciences in society, Maastricht University
- 2007 Remedial classes in biology and statistics at a senior secondary school in Ghana for non-profit organisation OCEP
- 2007 Teaching Assistant at the Medical Sciences Department, University of Groningen. Second year med-school course in communication and conversational techniques
- 2005 – 2006 Teaching Assistant at the Department of Psychology, University of Groningen. First year psychology course in research and interview techniques

Major collaborators

- Current **Germany:** Wolf Singer (ESI), Thomas Christophel (HU), Robert Bittner (GU)
USA: John Serences (UCSD)
Canada: Keisuke Fukuda (UofT)
Spain: Albert Compte (IDIBAPS)
Thailand: Chaipat Chunharas & Kanathip Jongmeksuksak (both Chulalongkorn)
- Past **USA:** Maggie Henderson (Carnegie Mellon), Kirsten Adam (Rice), Timothy Brady (UCSD), Polina Iamshchinina (Princeton), Tommy Sprague (UCSB), Frank Tong (Vanderbilt), Sam Ling (BU), Eddie Ester (UNR), Mike Pratte (MSU)
the Netherlands: Janneke Jehee (Donders), Surya Gayet (UU), Ilona Bloem (VU), Vincent v/d Ven (UM)
Australia: Joel Pearson (UNSW)

Scientific & institutional organization*

- 2025 – present Coordinator & organizer for “ESI talks”, local lecture series at my research institute
- 2025.08 Symposium organizer for ECVP Mainz. Speakers: Bradley Postle, Clayton Curtis, Maria Servetnik, Thomas Christophel & Rosanne Rademaker
- 2025.05 Organizer for the yearly ESI retreat at Schloss Ringberg, in charge of e.g., keynotes, main events on career planning, scientific communication, etc.
- 2021 – present Faculty member ESI for Neuroscience, attend bi-weekly faculty meetings
- 2021.09 Career trajectory discussion at the postdoc meeting of the Bernstein Conference for Computational Neuroscience
- 2017 – 2020 Member of the UCSD Psychology Department Climate Committee
- 2017.08 Symposium organizer for ECVP Trieste. Speakers: Albert Compte, Julio Martinez-Trujillo, Thomas Christophel, Diego Mendoza-Halliday & Rosanne Rademaker
- 2018.08 Symposium organizer for ECVP Berlin. Speakers: Matteo Carandini, Tom Bullock, Andreas Keil, Surya Gayet & Rosanne Rademaker

ADDITIONAL INFORMATION

Scientific outreach*

2026	Chapter author for the book “Growing up in Science” by Princeton Press (ed. Weiji Ma)
2025 – present	Mentor for the Max Planck mentoring program Minerva-FemmeNet
2023 – present	“Mentoring Hessen”, a joint project of 11 Hessian universities aimed to support female students in the transition phase to the next (academic) professional level
2022.08	Organizer of “Social aspects of Science” at Rauschholzhausen summer school – a workshop about academic culture
2022.05	Organizer of “A more perfect ESI” at the Schloss Ringberg institute retreat – a workshop about academic culture
2021 – 2023	University of Potsdam “Mentoring Plus” program – Six total meetings with one graduate student to have targeted discussions about different life-in-academia related themes
2021.09	Career trajectory discussion at the postdoc meeting of the Bernstein Conference for Computational Neuroscience
2021.04	“Growing up in Academia” guest (online), interviewed by Lucia Melloni from the MPI:EA
2017.08	Symposium organizer for ECVP Trieste. Speakers: Albert Compte, Julio Martinez-Trujillo, Thomas Christophel, Diego Mendoza-Halliday, & Rosanne Rademaker
2018.08	Symposium organizer for ECVP Berlin. Speakers: Matteo Carandini, Tom Bullock, Andreas Keil, Surya Gayet, & Rosanne Rademaker

Public outreach*

2025.03	“Parents working in STEM” presentation at the Carl-Schurz-Schule in Frankfurt
2024.04	“Deutsche Wissenschaften Olympiade” (DNO) – Volunteer for “Meet the scientists” & judge of the competition finale
2024.02	“ESI meets Magic” talk & performance together with magician Thomas Fraps
2023 – 2024	Yearly “Girls Day” event at the ESI, Frankfurt – I initiated the first event, and got others involved. Each year, I organized lab tours and gave a lecture to ~24 girls
2023.03	“Parents working in STEM” presentation at the Carl-Schurz-Schule in Frankfurt
2016 – 2019	Volunteer for the Salk mobile lab, San Diego, USA – Visits to local high schools to teach small groups of students about DNA extraction (day 1) and gel electrophoresis (day 2)
2017 – 2018	Rolemodel for “SciTech for girls” – Visiting schools around San Diego for the Fleet Science Center after-school program, giving talks, EEG demo’s, and discussing a career in STEM

* Only selected & recent contributions are highlighted here for brevity

Peer & thesis review

- Peer review of manuscripts at a wide range of journals including: Nature Neuroscience, Nature Human Behavior, PNAS, Nature Communications, eLife, Journal of Neuroscience, PLOS (Computational) Biology, Journal of Cognitive Neuroscience, various outlets of the Journal of Experimental Psychology (i.e., JEP:GEN, JEP:HPP, JEP:LMC), Journal of Vision, etc.
- Grant review for the Polish national science center, and the Paris Sciences Lettres (PSL) University
- Abstract review for the annual Vision Sciences Society (VSS) meeting, and the European Conference on Visual Perception (ECVP) meeting (2023-2025)
- Thesis review & committee member: Universitat de Barcelona, Spain | Oxford University, UK | New York University, USA | Donders Institute, Nijmegen, the Netherlands | Institut de Neurosciences de la Timone, Lyon, France | Vrije Universiteit Amsterdam, the Netherlands

Career breaks & impact on productivity

Pandemic-related impact on productivity:

- From 03.2020 until 09.2020 (7 months) I had no access to childcare and functioned as a single caregiver for my two kids (then 0 and 6 years old), which drastically reduced my ability to work full stop
- From 09.2020 until 09.2022 (2 years) I only had access to part-time childcare (also due to typical childcare shortages in Germany), which reduced my typical working hours by about half
- From 03.2020 until 03.2022 (2 years) human subject data collection was hampered, meaning that for the entire first year of setting up my lab (most of 2021 + early 2022) we could run only one fMRI scan per week

Infrastructure-related impact on productivity:

- From *10.2023 until 03.2024* (**6 months**) a hacker-attack of the University clinic prevented us from accessing any of our fMRI and MEG data
- From *03.2024 until 11.2024* (**9 months**) a move of the fMRI scanner center (with unforeseen delays), caused a complete stop in fMRI data collection for all projects in my lab