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Academic track

	Assistant Professor of Computational Cognitive Neuroscience
Since 01/2024	Vrije Universiteit Amsterdam, Section of Cognitive Psychology, Amsterdam, NL.
	Postdoctoral Researcher
11/2020 - 12/2023	Humboldt-Foundation Fellow at the National Institute of Mental Health (NIMH), Bethesda, USA. Supervisor: Chris I. Baker
2/2020 - 10/2020	Kavli Institute for Systems Neuroscience (KISN), Norwegian University of Science and Technology (NTNU), Trondheim, Norway. Supervisor: Christian F. Doeller
	Doctor of Philosophy
9/2016 - 1/2020	Doctor of Philosophy (PhD) in Medicine, KISN & NTNU, Trondheim, Norway. Supervisor: Christian F. Doeller, Co-Supervisor: Edvard I. Moser
	Research Assistant
4/2016 - 8/2016	Donders Institute for Brain, Cognition & Behaviour, Nijmegen, The Netherlands Supervisor: Christian F. Doeller
11/2014 - 3/2016	Werner Reichardt Centre for Integrative Neuroscience (CIN), Tübingen, Germany Supervisor: Andreas Bartels
	Master of Science
10/2012 - 11/2014	Master of Science in Neurobiology, University of Tübingen, CIN. Supervisor: Andreas Bartels
	Guest Researcher
04/2019 - 01/2023	Max-Planck-Institute for Human Cognitive & Brain Sciences, Leipzig, Germany
11/2014 - 03/2016	Max-Planck-Institute for Biological Cybernetics, Tübingen, Germany

Awards, Grants & Fellowships

06/2025	• Early Career Recognition of Excellence Award. Institute of Brain & Behavior Amsterdam, €500.
06/2025	• Open Science Community Award. Open Science Community Amsterdam, €400, Link .
11/2024	• VU Startpremie 2025. Early career talent award, Vrije Universiteit Amsterdam. €30.000, Link .
02/2024	• Research Support Fund. Institute for Brain & Behavior Amsterdam. €9000, Link .
10/2023-10/2025	• AAPG Research Grant. AAPG Foundation, corecipient with M.Szinte & T.Knapen. €377.000, Link
01/2023-07/2024	• Fyssen Research Grant. Fyssen foundation, corecipient with M.Szinte & T.Knapen. €67.200, Link
06/2021	• Otto Hahn Medal. Max-Planck-Society. €7500, Link
05/2021 - 04/2023	• Feodor Lynen Research Fellowship. Two years postdoc funding by the Humboldt Foundation, Link
11/2020 - 11/2023	• NIH Visiting Fellowship. Three years postdoc funding by the National Institutes of Health, Link
2021	• Trainee Professional Development Award Travel award - Society for Neuroscience, Link
2020	• Elsevier/Vision Research Award. Travel award - Vision Science Society, Link

Peer-reviewed publications

**Shared-first author* †*Shared-senior author*

- Park J., Ke J., Gollapudi K., **Nau M.**, Pappas I., Leong Y.C. Emotional arousal enhances narrative memories through functional integration of large-scale brain networks. *Nature Human Behavior* (in press), [Link to bioRxiv](#)
- **Nau M.**, Greene A., Tarder-Stoll H., Lossio-Ventura J.A., Pereira F., Chen J., Baldassano C., Baker C.I. Neural and behavioral reinstatement jointly reflect retrieval of narrative events. *Nature Communications* (2025), [Link](#)
- Kidder A.* & Silson E.H.*, **Nau M.**, Baker C.I. Distributed cortical regions for the recall of people, places and objects. *eNeuro* (2025), [Link](#)
- **Nau M.**, Schmid A.C., Kaplan S., Baker C.I., Kravitz D.J. Centering cognitive neuroscience on task demands and generalization. *Nature Neuroscience* (2024), [Link](#)
- Polti I.* & **Nau M.***, Kaplan R., Van Wassenhove V., Doeller C.F. Rapid encoding of task regularities in the human hippocampus guides sensorimotor timing. *eLife* (2022), [Link](#)

- Allen E.J., St-Yves G., Wu Y., Breedlove J.L., Dowdle L.T., **Nau M.**, Caron B., Pestilli F., Charest I., Hutchinson J.B., Naselaris T., Kay K. A massive 7T fMRI dataset to bridge cognitive and artificial intelligence. *Nature Neuroscience* (2022), [Link](#)
- Frey M.* & **Nau M.*†**, Doeller C.F.†. Magnetic resonance-based eye tracking using deep neural networks. *Nature Neuroscience* (2021), [Link](#)
- Levitis E.*, Gould van Praag C.D.*, Gau R.*, Heunis S.* ... **Nau M.**, ... Maumet C. Centering inclusivity in the design of online conferences - An OHBM–Open Science perspective. *GigaScience* (2021 - Shortened authorlist, n = 110). [Link](#)
- Frey M., Tanni S., Perrodin C., O’Leary A., **Nau M.**, Kelly J., Banino A., Bendor, D., Lefort, J., Doeller C.F., Barry C. Interpreting wide-band neural activity using convolutional neural networks. *eLife* (2021), [Link](#)
- **Nau M.**, Navarro Schröder T., Frey M., Doeller C.F. Behavior-dependent directional tuning in the human visual-navigation network. *Nature Communications* 11, 3247 (2020), [Link](#)
- Frey M., **Nau M.**, Memory efficient brain tumor segmentation using an autoencoder-regularized U-Net. *Lecture Notes in Computer Science* 11992, Springer (2020), [Link](#)
- Bellmund J.L.S., de Cothi W., Ruiter T.A., **Nau M.**, Barry C., Doeller C.F. Deforming the metric of cognitive maps distorts memory. *Nature Human Behavior* 4, 177–188 (2020), [Link](#)
- **Nau M.*** & Julian J.B.*, Doeller C.F. How the brain’s navigation system shapes our visual experience. *Trends in Cognitive Sciences* 22, 810–825 (2018), featured cover article, [Link](#)
- **Nau M.**, Navarro Schröder T., Bellmund J.L.S., Doeller C.F. Hexadirectional coding of visual space in human entorhinal cortex. *Nature Neuroscience* 21, 188–190 (2018), [Link](#)
- **Nau M.**, Schindler A., Bartels A. Real-motion signals in human early visual cortex. *NeuroImage* 175, 379–387 (2018), [Link](#)

Invited Talks & Conference Talks

- 2025 • **Amsterdam University Medical Center**. National Open Science Week (NL)
- 2025 • **Technical University Berlin**. Science of Intelligence Excellence Cluster (DE)
- 2025 • **Radboud University**. Donders Institute for Brain, Cognition, and Behaviour (NL)
- 2025 • **University of Amsterdam**. Bèta Break (NL)
- 2024 • **University of Düsseldorf**. Department of Psychology (DE)
- 2024 • **University of Regensburg**. Institute of Psychology (DE)
- 2024 • **University of Amsterdam**. Programme group Brain & Cognition (NL)
- 2024 • **Vrije Universiteit Amsterdam**. Department of Human Movement Sciences (NL)
- 2024 • **Norwegian University of Science and Technology**. Kavli Institute for Systems Neuroscience (NO)
- 2024 • **University of Hamburg**. Institute of Psychology (DE)
- 2024 • **Vrije Universiteit Amsterdam**. Institute of Brain and Behavior Amsterdam (NL)
- 2024 • **University of Trento**. Department of Psychology & Cognitive Neuroscience (IT)
- 2024 • **University of Newcastle**. School of Psychological Sciences (AU)
- 2024 • **Spinoza Centre for Neuroimaging**. Spinoza User Meeting (NL)
- 2023 • **National Institutes of Health**. Fellows Afternoon Neuroscience Seminar (US)
- 2023 • **Vrije Universiteit Amsterdam**. Department of Experimental and Applied Psychology (NL)
- 2022 • **Society for Neuroscience**. Annual meeting (US)
- 2022 • **Johns Hopkins University**. Department of Psychological & Brain Sciences (US)
- 2022 • **Dartmouth College**. Department of Psychological & Brain Sciences (US)
- 2022 • **University of Pittsburgh**. Department of Psychiatry (US)
- 2021 • **Western University BrainsCAN**. COMP Methods Lunch (CA)
- 2021 • **University of Chicago**. Department of Psychology (US)
- 2021 • **German Center for Neurodegenerative Diseases** (DE)
- 2020 • **Medical University of South Carolina**. MUSC Center for Biomedical Imaging (US)
- 2020 • **Paris Institut de la Vision**. Department of Visual Information Processing (FR)
- 2020 • **University Medical Center Hamburg-Eppendorf**. Institute of Systems Neuroscience (DE)
- 2020 • **Ludwig-Maximilians-University Munich**. Department of Psychology (DE)
- 2020 • **Donders Institute for Brain & Behavior**. Donders discussions conference (NL)
- 2015 • **German Neuroscience Society**, Annual Göttingen meeting (DE)

Teaching & Mentorship

Teaching at the Vrije Universiteit Amsterdam

- since 2025 • "Research Toolbox" (P_BRESTBX, Coordinator & Lecturer, 10 Lectures, 10 Practicals, 65 Students)
- since 2024 • "Brain Imaging" (P_MBRIMAG, Coordinator & Lecturer, 12 Lectures, 3 Practicals, 35 Students)
- since 2024 • "Programming for Psychologists" (P_MPROPSY, Coordinator & Lecturer, 7 Lectures, 14 Practicals, 35 Students)
- since 2024 • "Brain Imaging AI" (P_MBRIMAG_AI, Lecturer, 6 Lectures, 3 Practicals, 130 Students)

Teaching at the Norwegian University of Science & Technology

- 2020 • "Behavioral and Cognitive Neuroscience" (NEVR3003, Lecturer, 2 Lectures, 25 Students)
- 2017 • "Neural Circuits & Behavior" Summer School, Lecturer, 1 Lecture, 25 Students

Other teaching-related experience

- Since 2024 • Bachelor Thesis Coordinator Psychology, Vrije Universiteit Amsterdam.
- Since 2024 • Member of the Mentoring & Counselling program for MSc students, Vrije Universiteit Amsterdam.
- 2022 • "Scientists Teaching Science", 9-week intensive training course at the National Institutes of Health (NIH).
- 2020 • PhD Trial Lecture at NTNU on "The Role of the Hippocampus in Imagination and Dreaming"
- 2017 • Institute Seminars on "Brain imaging" at the Norwegian University of Science & Technology, and NIH.

Student supervision

- 2016-25 2 Doctoral students, 6 Master of Science students, 2 Medical students, 2 Postbaccalaureate trainees.

Open Science

- Developing & maintaining **open-source community tools** to advance research on brain-behavior relationships.
 - **DeepMReye**: camera-less eye tracking with **deep learning** for MRI research & clinical applications ([Link](#)).
 - **HMMeye**: eye voxel-based event segmentations using Hidden Markov Models ([Link](#)).
 - **Behavioral encoding & decoding models** for neural data analysis across species & techniques ([Link 1](#), [Link 2](#)).
- **Curating open educational materials**, incl. fMRI guides with >350 downloads ([Link](#)) & Eye tracking: Tips & Tricks ([Link](#)).
- **Routinely sharing experimental code & data** alongside published research articles (e.g. [Link 1](#), [Link 2](#), [Link 3](#), [Link 4](#)).

Science Communication

- Active promotion & communication of science on my **personal website** ([Link](#)), and on several **professional & social-network platforms** (e.g. [Bluesky](#), [Mastodon](#), [Twitter](#), [ResearchGate](#)).
- **Science communicator host** at 'RealScientists' (one week, 9/2019, [Link](#)) as well as at the OHBM2020 Hackathon "BrainHack" on Twitter (06/2020, [Link](#)) & guest speaker at the bjks-podcast (10/2020, [Link](#)).
- **Newspaper articles** in the Trouw (12/2024, [Link](#)), and the Telegraaf (03/2025, [Link](#)).
- **Co-organizer of public science events** (e.g., 'Trondheim Research Fair' (10/2016)), and lab demonstrations for journalists & visiting students (e.g. during the 'Kavli Prize Week 2018').

Professional & Extracurricular Activities

- **Management Team Member**: Cognitive Neuropsychology Research Master, Vrije Universiteit Amsterdam (since 01/2024).
- **Thesis Committee Member**: Sapienza University of Rome (PhD, 2021), NTNU (MSc, 2022), University of Oslo (MSc, 2024), Vrije Universiteit Amsterdam (PhD, MSc, BSc since 2024).
- **Ad-hoc Reviewer**: *Cerebral Cortex*, *Cerebral Cortex Communications*, *Cognition*, *Communications Biology*, *Current Biology*, *eLife*, *Imaging Neuroscience*, *Nature Neuroscience*, *NeuroImage*, *PLOS Biology*, *PNAS*.
- **Grant Reviewer**: European Research Council (ERC) *Starting grants* (2025) & *Consolidator grants* (2025).
- **Treasurer & Event Organizer**: Young Researcher Organization at the Kavli Institute for Systems Neuroscience (09/2016–04/2019), as well as at the Institute for Brain and Behavior Amsterdam (05/2024–05/2025).
- **Society Member**: Society for Neuroscience (SFN), Vision Science Society (VSS), Federation of European Neuroscience Societies (FENS), German Neuroscience Society.

References

Prof. Dr. Heleen Slagter Vrije Universiteit Amsterdam. Department of Experimental & Applied Psychology, Section of Cognitive Psychology. Amsterdam. Netherlands.
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Dr. Chris I. Baker National Institutes of Health. Laboratory of Brain & Cognition. Bethesda. USA.
Email: bakerchris@mail.nih.gov