Lina Teichmann, PhD

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EDUCATION

Macquarie University, Department of Cognitive Science, Sydney, Australia

02/2016 – 02/2019 Ph.D.: Cognitive Science.
Supervisors: Prof. Anina Rich, Dr. Thomas Carlson.

01/2015 – 01/2016 Master of Research: Cognitive Science.
Supervisors: Prof. Anina Rich, Dr. Mark Nieuwenstein, Dr. Thomas Carlson

University of Groningen, Faculty of Behavioural and Social Sciences, Groningen, Netherlands

09/2013 – 09/2014 Master of Science: Psychology.
Supervisors: Dr. Mark Nieuwenstein, Prof. Anina Rich

09/2010 – 09/2013 Bachelor of Science: Psychology.
Supervisor: Dr. Mark Nieuwenstein

PROFESSIONAL APPOINTMENTS

01/2020 – Present **National Institute of Mental Health, Laboratory of Brain and Cognition, Bethesda, MD, USA**
Post-doctoral Visiting Fellow
PI: Dr. Chris Baker

02/2019 – 10/2019 **Macquarie University, Department of Cognitive Science, Sydney, Australia**
Research Assistant [part-time]; PIs: Prof. Anina Rich, Dr. Matthew Crossley

Macquarie University, Department of Psychology, Sydney, Australia
Research Assistant [part-time]; PI: Dr. Kim Curby

PEER-REVIEWED PUBLICATIONS & PREPRINTS

(* = equal contribution)

1. Jackson, J. B., Rich, A. N., Moerel, D., **Teichmann, L.**, Duncan, J., & Woolgar, A. (2024). Domain general frontoparietal regions show modality-dependent coding of auditory and visual rules. *bioRxiv*, https://doi.org/10.1101/2024.03.04.583318.
2. **Teichmann, L.,** Hebart, M. N., Baker, C. I. (2023). Dynamic representation of multidimensional object properties in the human brain. *bioRxiv*. https://doi.org/10.1101/2023.09.08.
3. Curby, K. M., **Teichmann, L.,** Peterson, M. A., Shomstein, S. S. (2023). Holistic processing is modulated by the probability that parts contain task-congruent information. *Attention, Perception, & Psychophysics.*
4. Hebart, M. N.*, Contier, O.*, **Teichmann, L.*,** Rockter, A. H., Zheng, C. Y., Kidder, A., Corriveau, A., Vaziri-Pashkam, M., & Baker, C. I. (2023). THINGS-data, a multimodal collection of large-scale datasets for investigating object representations in human brain and behavior. *Elife*, *12*, e82580.
5. Corriveau, A.*, Kidder, A.*, **Teichmann, L**., Wardle, S., Baker, C. I. (2023). Sustained neural representations of personally familiar people and places during cued recall. *Cortex*, 158, 71-82.
6. **Teichmann, L.***, Moerel, D.*, Rich, A. N., Baker, C. I. (2022). The nature of neural object representations during dynamic occlusion. *Cortex*, 153, 66-86.
7. **Teichmann, L.**, Moerel, D., Baker, C. I., Grootswagers, T. (2022). An empirically-driven guide on using Bayes Factors for M/EEG decoding. *Aperture Neuro*, 1(8) 1-10.
8. Curby, K. M., & **Teichmann, L.** (2022). The time course of holistic processing is similar for face and non-face Gestalt stimuli. *Attention, Perception, & Psychophysics*, 84, 1234-1247.

9. **Teichmann, L.,** Edwards, G., Baker, C. I. (2021). Resolving visual motion through perceptual gaps. *Trends in Cognitive Science,* 25(11), 978-991.
10. **Teichmann, L.**, Grootswagers, T., Moerel, D., Carlson, T. A., & Rich, A. N. (2021). Temporal dissocation of neural activity underlying synaesthetic and perceptual colours. *Proceedings of the National Academy of Sciences,* 118(6).
11. **Teichmann, L.**, Quek, G. L., Robinson, A. K., Grootswagers, T., Carlson, T. A., & Rich, A. N. (2020). The influence of object-color knowledge on emerging object representations in the brain. *Journal of Neuroscience, 40*(35), 6779-6789.
12. Wardle, S. G., Taubert, J., **Teichmann, L.**, Baker, C. I. (2020). Rapid and dynamic processing of face pareidolia in the human brain. *Nature Communications, 11*(1), 1-14.
13. **Teichmann, L.**, Grootswagers, T., Carlson, T. A., & Rich, A. N. (2019). Seeing versus knowing: The temporal dynamics of real and implied colour processing in the human brain. *NeuroImage 200*, 373-381.
14. **Teichmann, L.,** Grootswagers, T., Carlson, T. A., & Rich, A. N. (2018). Decoding digits and dice with Magnetoencephalography: Evidence for a shared representation of magnitude. *Journal of Cognitive Neuroscience*, *30*(7), 999-1010.
15. Coltheart, M., Cox, R., Sowman, P., Morgan, H., Barnier, A., Langdon, R, Connaughton, E., **Teichmann, L.,** Williams, N., & Polito, V., (2018). Belief, delusion, hypnosis, and the right dorsolateral prefrontal cortex: A transcranial magnetic stimulation study. *Cortex*, *101*, 234-248.
16. **Teichmann, A. L.**, Nieuwenstein, M. R., & Rich, A. N. (2017). Digit-colour synaesthesia only enhances memory for colours in a specific context: A new method of duration thresholds to measure serial recall. *Journal of Experimental Psychology: Human Perception and Performance*, 43(8), 1494-1503.
17. de Wit, B., Badcock,N. A., Grootswagers,T., Hardwick, K., **Teichmann, L.,** Wehrman,J., Williams, M., & Kaplan, D. M. (2017). Neurogaming Technology Meets Neuroscience Education: A Cost-Effective, Scalable, and Highly Portable Undergraduate Teaching Laboratory for Neuroscience. *Journal of Undergraduate Neuroscience Education (JUNE). 15(2): A104-A109.*
18. **Teichmann, A. L**., Nieuwenstein, M. R., & Rich, A. N. (2015). Red, green, blue equals 1, 2, 3: Digit-color synesthetes can use structured digit information to boost recall of color sequences. *Cognitive Neuroscience*, *6*(2-3), 100-110.

CONFERENCE PRESENTATIONS

1. **Teichmann, L.,** Garside, D., Benitez-Andonegui, A., Montesions, S., Conway, B.*, Baker, C.*. (2023). The emergence of individual colour-space geometries in the human brain. *Society for Neuroscience, Washington D.C., USA*. [Poster].
2. **Teichmann, L.**, Hebart, M., Baker, C. I. (2023). Temporal signatures of multidimensional object properties in the human brain. *MEG North America, Bethesda, USA.* [Talk]
3. **Teichmann, L.,** Garside, D., Benitez-Andonegui, A., Montesions, S., Conway, B.*, Baker, C.*. (2023). The temporal evolution of colour-space geometries in the human brain. *Organization for Human Brain Mapping, Montreal, Canada*. [Poster].
4. **Teichmann, L.**, Hebart, M., Baker, C. I. (2022). How behaviorally-relevant object dimensions unfold over time during visual processing. *Society for Neuroscience Meeting, San Diego, USA* [Talk].
5. **Teichmann, L**., Behel, A. K., Edwards, G., Baker, C. I. (2022). Visual integration plays a critical role when processing motion through periods of occlusion. *European Conference on Visual Perception, Nijmegen, The Netherlands.* [Talk].
6. **Teichmann, L.**, Hebart, M., Baker, C. I. (2022). The temporal dynamics underlying behaviorally-relevant object properties during visual perception. *Organization for Human Brain Mapping, Glasgow, Scotland*. [Talk & Poster].
7. **Teichmann, L.*,** Moerel, D.*, Rich, A. N., Baker, C. I. (2022). The temporal dynamics of object representation during dynamic occlusion. *Vision Science Society Annual Meeting, St Pete, FL, USA.* [Talk].
8. **Teichmann, L.***, Moerel, D.*, Rich, A. N., Baker, C. I. (2021). How are objects represented during dynamic occlusion? *Vision Science Society Annual Meeting, virtual event* [Poster].
9. **Teichmann, L.,** Quek, G., Robinson, A., Grootswagers, T., Carlson, T., Rich, A. (2018). Yellow strawberries and red bananas: Examining the temporal dynamics of object-colour knowledge. *8th Australasian Cognitive Neuroscience Conference, Melbourne, Australia* [Talk].

10. **Teichmann, L.**, Grootswagers, T., Carlson, T., Rich, A. (2018). Tomatoes are red, cucumbers are green: Decoding the temporal dynamics of object-colour knowledge using Magnetoencephalography. *Vision Science Society Annual Meeting, St Pete, FL, USA* [Poster].
11. **Teichmann, L.**, Grootswagers, T., Carlson, T., Rich, A. (2017). Seeing colour where there is none: Decoding the implied colour of grey-scale objects using MEG. *40th European Conference on Visual Perception (ECVP), Berlin, Germany* [Talk].
12. **Teichmann, L.**, Grootswagers, T., Carlson, T., Rich, A. (2017). Decoding digits and dice with Magnetoencephalography: Evidence for a shared representation of magnitude. *13th International Conference on Cognitive Neuroscience (ICON-XIII), Amsterdam, The Netherlands* [Poster].
13. **Teichmann, L.**, Grootswagers, T., Carlson, T., & Rich, A. (2017). Decoding Digits and Dice – Evidence for a format-independent representation of magnitude. *Brain and Mind Centre Symposium, University of Sydney, Sydney* [Poster].
14. **Teichmann, L.**, Grootswagers, T., Carlson, T., & Rich, A. (2017). Seeing colour where there is none: Decoding the implied colour of grey-scale objects using MEG. *Neuroscience Workshop Saclay: Neural Circuits and Behaviour - from cells to connectivity and function, Paris, France* [Talk].
15. **Teichmann, L.** (2017). The temporal dynamics of real and implied colour processing in the human brain: An MEG decoding study. *ARC Centre of Excellence in Cognition and its Disorders-KIT MEG Workshop, Macquarie University, Sydney, Australia* [Talk].
16. **Teichmann, L.**, Grootswagers, T., Carlson, T., & Rich, A. (2017). Seeing colour where there is none: Decoding the implied colour of grey-scale objects using MEG. *ARC Centre of Excellence in Cognition and its Disorders Annual Workshop, Hunter Valley, Australia* [Talk].
17. **Teichmann, L.**, Carlson, T., & Rich, A.N. (2016). Decoding digits and dice: How long does it take to access magnitude? *ARC Centre of Excellence in Cognition and its Disorders Annual Workshop, Leura, Australia* [Poster].
18. **Teichmann, L.**, Grootswagers, T., Carlson, T., Rich, A. (2016). Decoding dice and digits with Magnetoencephalography: How long does it take to access magnitude? *6th Australasian Cognitive Neuroscience Conference, Shoal Bay, Australia* [Talk].
19. Teichmann L., Nieuwenstein M., Rich A. (2015). Red, green, blue equals 1, 2, 3: Investigating the bidirectionality of digit-colour synaesthesia. *12th International Conference on Cognitive Neuroscience (ICON-XII), Brisbane, Australia* [Poster].
20. **Teichmann, L.**, Nieuwenstein, M., & Rich, A. (2015). Long term associations and serial recall: Using synaesthesia to probe memory for sequences. *ARC Centre of Excellence in Cognition and its Disorders Annual Workshop, Macquarie University, Sydney* [Poster].

INVITED TALKS

08/2022	MRC Cognition and Brain Sciences Unit, University of Cambridge, UK
08/2022	Department of Cognitive Neuroscience, University of Maastricht, the Netherlands
06/2022	Visual and Cognitive Neuroscience Lab, University of Fribourg, Switzerland
06/2022	Brain Mind Institute, Swiss Federal Institute of Technology, Lausanne, Switzerland
06/2022	Applied Face Cognition Lab, University of Lausanne, Switzerland
06/2022	Vision and Cognition Lab, University of Tubingen, Germany
12/2021	Brain Dynamics Lab, University of Salzburg, Salzburg, Austria
03/2021	Fellows Afternoon Neuroscience Seminar, NIMH, Bethesda, USA
11/2018	Donders Institute for Brain, Cognition, and Behaviour, Nijmegen, the Netherlands
06/2018	Parvizi Lab, Stanford University, Palo Alto, USA
05/2018	Kanwisher Lab, the Massachusetts Institute of Technology (MIT), Cambridge, USA
05/2018	Harvard Vision Lab, Harvard University, Cambridge, USA
01/2017	French National Institute for Health and Medical Research (INSERM), Saclay, France
01/2017	Department of Experimental Psychology, University of Groningen, the Netherlands

SCHOLARSHIPS & FUNDING

2020 - present	Intramural Visiting Research Fellowship. National Institute of Mental Health.
2018	Postgraduate Research Fund Faculty of Human Sciences, Macquarie University.
2017	Australian Research Council Centre of Excellence in Cognition and its Disorders Student Exchange Scheme 2017 *[funded 3-months visit to French National Institute for Health and Medical Research, INSERM, NeuroSpin Research Centre, Saclay, France]*.
2015	International Macquarie University Research Training Program Scholarship (Masters and PhD).
2012/13	Marco Polo Travel Grant, University of Groningen.

AWARDS

2024	National Institute of Mental Health IRP Julius Axelrod Memorial Fellowship Award
2022	Merit Award Organization for Human Brain Mapping
2019	Macquarie University Research Excellence Award (Finalist)
2018	Macquarie University Higher Degree Research Excellence Award (Winner)
2018	Australasian Cognitive Neuroscience Society (ACNS) Student Travel Award (2018)
2017	ARC Centre of Excellence in Cognition and its Disorders Annual Workshop Poster Award
2016	CCD Annual Workshop Highly Commended Poster Award
2016	CCD Excellence in Research Student Award: Outstanding 2015 Publication
2015	CCD Annual Workshop Best Postgrad Poster Award

TEACHING EXPERIENCE

2021	Teaching assistant for *Deep Learning Summer School*. Neuromatch, Academy global & virtual initiative.
2016 – 2019	Teaching assistant for *COGS100 Introduction to Cognitive and Brain Sciences,* Macquarie University, Sydney, Australia. Course convenor: Prof. Mark Williams
2016	Teaching assistant for *COGS101 Delusions and Disorders of the Mind and Brain*, Macquarie University. Sydney, Australia. Course convenor: Prof. Anne Castles
2015 – 2016	Teaching assistant for *PSYC352 Appetite – The Psychology of Eating and Drinking,* Macquarie University, Sydney, Australia. Course convenor: Prof. Richard Stevenson

SELECTED SCIENCE VOLUNTEERING ROLES

2021 – 2023	BrainPost Neuroscience Blog writer. Summarising recent scientific papers for the general public.
2020	Neuromatch Academy Computational Neuroscience Summer School. Content reviewer and outreach volunteer.

ACADEMIC REFERENCES

Dr Christopher Baker, National Institute of Mental Health, USA
bakerchris@mail.nih.gov

Dr Bevil Conway, National Eye Institute, USA
bevil.conway@nih.gov

Prof. Anina Rich, Macquarie University, Australia
anina.rich@mq.edu.au