

Lincoln John Colling

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Education

2007–2012 **Doctor of Philosophy**, Cognitive Science, Macquarie University.

Thesis title: *Predicting the actions of other agents.*

2005–2006 **Master of Science (with 1st class honours)**, Psychology, University of Auckland.

Thesis title: *Neural activity associated with perceptual segregation of concurrent sounds: Implications for auditory science analysis and pitch analysis.*

2004 **Postgraduate Diploma in Science**, University of Auckland.

Psychology and Philosophy

2000–2003 **Bachelor of Science**, Major in Psychology, University of Auckland.

Employment

2015–current **Research Associate**, Centre for Neuroscience in Education, Department of Psychology, University of Cambridge (PIs: Dr Dénes Szűcs and Prof Usha Goswami)

2015 **Senior Research Officer**, ARC Centre of Excellence in Cognition and its Disorders, Macquarie University (PI: Dr Thomas Carlson)

2014–2015 **Lecturer in Psychology**, School of Psychology, Australian Catholic University (co-director of the Social, Motor, Attention, and Cognition (SMAC) lab)

2013–2014 **Senior Research Officer**, ARC Centre of Excellence in Cognition and its Disorders, Macquarie University (PI: Dr Thomas Carlson)

2013–2013 **Visiting Researcher**, Department of Cognitive Science, Central European University

2012–2013 **Postdoctoral Researcher**, Donders Institute of Brain, Cognition, and Behaviour, Radboud University University Nijmegen (PI: Prof Natalie Sebanz and Prof Günther Knoblich)

Publications

1. **Colling, L. J.**, et al. (forthcoming). A multi-lab registered replication of the attentional SNARC effect. *Advances in Methods and Practices in Psychological Science*.
2. **Colling, L. J.** & Szűcs, D. (in press). Statistical reform and the replication crisis, *Review of Philosophy and Psychology*.
3. **Colling, L. J.** (2018). Planning together and playing together. In M. Cappuccio (Ed.), *Handbook book of embodied cognition and sports psychology*. (pp. 413–441). MIT press.
4. Lakens, D., .. **Colling, L. J.**, et al. (2018). Justifying your alpha: A response to “Redefine statistical significance”. *Nature: Human Behaviour*. 2, 168–171. [10.1038/s41562-018-0311-x](https://doi.org/10.1038/s41562-018-0311-x)
5. Williams, D. & **Colling, L. J.** (2018). From symbols to icons: The return of resemblance in the cognitive neuroscience revolution, *Synthese*. 195, 1941–1967. [10.1007/s11229-017-1578-6](https://doi.org/10.1007/s11229-017-1578-6) (graduate student co-author)
6. **Colling, L. J.**, Noble, H. L., & Goswami, U. (2017) Neural entrainment and sensorimotor synchronisation to the beat in children with developmental dyslexia: An EEG study. *Frontiers in Neuroscience*. 11 (260), 1–14. [10.3389/fnins.2017.00360](https://doi.org/10.3389/fnins.2017.00360)
7. Power, A. J., **Colling, L. J.**, Mead, N., Barnes, L., & Goswami, U. (2016). Neural encoding of the speech envelope by children with developmental dyslexia. *Brain and Language*, 160, 1–10. [10.1016/j.bandl.2016.06.006](https://doi.org/10.1016/j.bandl.2016.06.006)
8. Cumming, R., Wilson, A., Leong, V., **Colling, L. J.**, & Goswami, U. (2015). Awareness of rhythm patterns in speech and music in children with specific language impairments. *Frontiers in Human Neuroscience*, 9(672), 1–21. [10.3389/fnhum.2015.00672](https://doi.org/10.3389/fnhum.2015.00672)
9. **Colling, L. J.**, & Williamson, K. (2014). Entrainment and motor emulation approaches to joint action: Alternatives or complementary approaches? *Frontiers in Human Neuroscience*, 8(754), 1–11. [10.3389/fnhum.2014.00754](https://doi.org/10.3389/fnhum.2014.00754) (graduate student co-author)
10. **Colling, L. J.**, Thompson, W. F., & Sutton, J. (2014). The effect of movement kinematics on predicting the timing of observed actions. *Experimental Brain Research*, 232(4), 1193–1206. [10.1007/s00221-014-3836-x](https://doi.org/10.1007/s00221-014-3836-x)
11. **Colling, L. J.**, & Thompson, W. F. (2013). Music, action, and affect. In T. Cochrane, B. Fantini, & K. R. Scherer (Eds.), *The emotional power of music: Multidisciplinary perspectives on musical arousal, expression, and social control* (pp. 197–212). Oxford University Press. [10.1093/acprof:oso/9780199654888.001.0001](https://doi.org/10.1093/acprof:oso/9780199654888.001.0001)
12. **Colling, L. J.**, Knoblich, G., & Sebanz, N. (2013). How does “mirroring” support joint action? *Cortex*, 49(10), 2964–2965. [10.1016/j.cortex.2013.06.006](https://doi.org/10.1016/j.cortex.2013.06.006)
13. **Colling, L. J.**, Thompson, W. F., & Sutton, J. (2013). Motor experience interacts with effector information during action prediction. In M. Knauff, M. Pauen, & N. Sebanz (Eds.), *Proceedings of the 35th annual conference of the cognitive science society* (pp. 2083–2087). Cognitive Science Society.
14. **Colling, L. J.**, & Roberts, R. P. (2010). Cognitive psychology does not reduce to neuroscience. In W. Christensen, E. Schier, & J. Sutton (Eds.), *ASCS09: Proceedings of the 9th conference of the australasian society for cognitive science* (pp. 41–48). Macquarie Centre for Cognitive Science. [10.5096/ASCS20097](https://doi.org/10.5096/ASCS20097)
15. **Colling, L. J.**, Thompson, W. F., & Sutton, J. (2010). Action synchronisation with biological motion. In W. Christensen, E. Schier, & J. Sutton (Eds.), *ASCS09: Proceedings of the 9th conference of the australasian society for cognitive science* (pp. 49–56). Macquarie Centre for Cognitive Science. [10.5096/ASCS20098](https://doi.org/10.5096/ASCS20098)
16. Hautus, M. J., Johnson, B. W., & **Colling, L. J.** (2009). Event-related potentials for interaural time

differences and spectral cues. *NeuroReport*, 20, 951–956. [10.1097/WNR.0b013e32832c92bf](https://doi.org/10.1097/WNR.0b013e32832c92bf)

Pre-prints

1. **Colling, L. J.**, Thompson, W. F., & Sutton, J. (2016). Mechanisms for action prediction operate differently in observers with motor experience. *bioRxiv*, 1–30. [10.1101/044438](https://doi.org/10.1101/044438)

Papers under review

1. Caviola, S., **Colling, L.J.**, & Szűcs, D. (Under review). Distance effect and math proficiency in primary school children: A Bayesian study. (first two authors contributed equally)

Published abstracts

1. **Colling, L.J.**, Thompson, W.F., & Sutton, J. (2009). The influence of limb and joint information on action synchronisation [Abstract]. *Proceedings of the 2nd International Conference on Music Communication Science (ICoMCS)*.
2. **Colling, L.J.** & Johnson, B.W. (2008). Neuromagnetic correlates of mental rotation of hands [Abstract]. *Neuroimage*, 41 (Suppl. 1).

Technical Experience

Programming Languages

Markdown and LaTeX and Knitr: I have very good knowledge of *Markdown/LaTeX* and *KnitR* for creating reproducible manuscripts that contain both text and code.

SQL/SQLite: I have a good working knowledge of SQL/SQLite for managing databases. In addition, I have experience working with SQLite + R to manage analysis and storage for big data projects.

R: I have very strong programming skills in *R*. I've written several R packages, some of which are available on my [GitHub page](#).

Stan and Jags: I also have some familiarity with *Stan* and *Jags* for Bayesian modelling.

Matlab: I have 10+ years experience with Matlab.

Basic knowledge of **C, perl, python**. I enjoy learning new tools and generally pick them up fairly quickly.

Method and Techniques

EEG / MEG: I have several years of experience designing and running EEG experiments and analysing EEG data, including running EEG experiments with children. I have experience working with *ERPs/ERFs*, *time-frequency data*, and using *machine learning* techniques (e.g., RSA) for analysing M/EEG data.

Eye-tracking: Experience with programming experience and collecting and analysing data from the Eyelink-1000.

Behavioural testing:

Motion capture: Experience with collecting and analysing data using the Vicon and Optotrack systems. I have written my own toolbox for working with native Vicon binary files in Matlab.

Grants and awards

Grants

- 2014** Australian Catholic University Faculty of Health Sciences Grant (AUD \$10,000)
- 2011** Macquarie University Postgraduate Research Fund (AUD \$5,000)
- 2007–2011** MACCS Postgraduate Grant (several grants totalling AUD \$8,197)
- 2006** Centre for Advance MRI Pilot Study Grant (NZD \$4,000)

Scholarships and Awards

- 2007–2011** Macquarie University Research Excellence Scholarship (~ AUD \$70,000)
- 2006** Human Communication Science Network travel award (AUD \$500)
- 2006** Master of Science awarded with First Class Honours

Teaching

Lecturing

- 2018** **PBS2 Psychology Methods**, University of Cambridge (Introduction to Scientific Computing with Matlab)
- 2018** **PBS3 Developmental and Social Psychology**, University of Cambridge (Numerical cognition and Educational Neuroscience)
- 2016** **PBS6 Research Skills Project**, University of Cambridge (Reaction time methods)
- 2015** **COGS701 Critical Issues in Research in Cognitive Science**, Macquarie University (MEG research methods)
- 2014** **PSYC204 Biopsychology**, Australian Catholic University
PSYC426 Advanced Topics in Cognition, Australian Catholic University
PSYC653 Research Methods for Practitioners, Australian Catholic University
COUN637 Research Methods for Counselling, Australian Catholic University
- 2013–2013** **SOW-BPSBR43 Action and Sport**, Radboud University Nijmegen (Joint action in sport)
SOW-BPSBR31 Applied Research Methods: Brain, Radboud University Nijmegen (Reaction time methodology)

Professional and Academic Service

- Reviewing** **Grant reviewing**
Israel Science Foundation.

Journal Reviewing

Cortex, Developmental Cognitive Neuroscience, Neuropsychologia, Quarterly Journal of Experimental Psychology, Frontiers in Human Neuroscience, Acta Psychologica.

Outreach

Psychological and Behavioural Sciences Tripos representative at the Oxford/Cambridge student recruitment conferences (2016–2017).

Department Roles

Department statistics advisor (Australian Catholic University), Research facilities manager (Australian Catholic University), Research Participation Administrator (Australian Catholic University), and Faculty of Human Sciences Research subcommittee (Macquarie University).

References

Prof John Sutton

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