

CURRICULUM VITAE

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Nationality: New Zealand, South Africa
Current Position: Research Associate and Affiliated Lecturer
 Department of Psychology, University Cambridge
 Postdoctoral research affiliate,
 Darwin College, Cambridge

I. 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 scene analysis and pitch analysis*
 2004 **Postgraduate Diploma in Science**, University of Auckland
 Psychology and Philosophy
 2000–2003 **Bachelor of Science**, University of Auckland
 Major in Psychology

II. EMPLOYMENT HISTORY

2015— Postdoctoral Research Associate, Centre for Neuroscience in Education, Department of Psychology, University of Cambridge
 2015–2015 Senior Research Officer, ARC Centre of Excellence in Cognition and its Disorders, Macquarie University
 2014–2015 Lecturer in Psychology, School of Psychology, Australian Catholic University
 2013–2014 Senior Research Officer, ARC Centre of Excellence in Cognition and its Disorders, Macquarie University
 2013–2013 Visiting Researcher, Department of Cognitive Science, Central European University
 2012–2013 Postdoctoral Research Fellow, Donders Institute for Brain, Cognition and Behaviour, Radboud University Nijmegen

III. TEACHING ACTIVITIES

Lecturer

2018 **PBS2 Psychology methods**, University of Cambridge (module: Introduction to scientific computing)
 2018 **PBS3 Developmental and Social Psychology**, University of Cambridge (module: Numerical

cognition and Educational neuroscience)

- 2016 **PBS6 Research Skills Project**, University of Cambridge (module: Reaction time methods)
- 2015 **COGS701 Critical Issues in Research in Cognitive Science**, Macquarie University (module: MEG research methods)
- 2014 **PSYC204 Biopsychology**, Australian Catholic University (full course)
- 2014 **PSYC426 Advanced Topics in Cognition**, Australian Catholic University (full course)
- 2014 **PSYC653 Research Methods for Practitioners**, Australian Catholic University (full course)
- 2014 **COUN637 Research Methods for Counselling**, Australian Catholic University (full course)
- 2012–2013 **SOW-BPSBR43 Actie en Sport (Action and Sport)**, Radboud University Nijmegen (module: Joint action in sport)
- 2012–2013 **SOW-BPSBR31 Toegepaste Onderzoeksmethoden Brein (Applied Research Methods – Brain)**, Radboud University Nijmegen (module: Reaction time methodology)

Supervisor

- 2017–2018 **PBS4 Cognitive Neuroscience**, University of Cambridge
- 2016–2017 **NST1A Evolution and Behaviour**, University of Cambridge

Teaching Assistant

- 2018 **PBS2 Psychology methods**, University of Cambridge (EEG methods)
- 2011 **Psy247: Perception I**, Macquarie University
- 2010–2011 **Psy246: Cognitive Processes I**, Macquarie University
- 2010 **FOHS301: Special Interest Unit I**, Macquarie University
- 2008 **Psy104: Introduction to Psychology I**, Macquarie University
- 2006–2007 **Psych202: Biopsychology**, University of Auckland
- 2005–2007 **Psych109: Mind, Brain, and Behaviour**, University of Auckland
- 2005–2007 **Psych108: Individual, Social, and Applied Psychology**, University of Auckland
- 2006 **Psych303: Cognitive Science**, University of Auckland
- 2005–2006 **Psych201: Perception and Cognition**, University of Auckland

Teaching achievements

- 2016 Effective Undergraduate Supervision (Life Sciences), University of Cambridge
- 2008 Division of Linguistics and Psychology Good teaching practice and professional communication skills, Macquarie University
- 2006 Faculty of Science certificate of competence in tutoring, University of Auckland

I. PROFESSIONAL AND ACADEMIC SERVICE

University committees and department roles

- 2014 Department statistics advisor, Australian Catholic University
- 2014 Research facilities manager, Australian Catholic University
- 2014 Research participation administrator (SONA), Australian Catholic University

2010 Faculty of Human Sciences Research Sub-committee (alternate student representative),
Macquarie University

Conference organisation

2011 Member of the organizing committee for Agent Tracking and its Disorders (Sydney, Australia)

2009 Volunteer assistant for the Australasian Society for Cognitive Science meeting (Sydney, Australia)

IV. SUPERVISION AND MENTORING

Supervision

2017–2018 **Master intern**, Mitali Poovayya (University of Cambridge)

2017 **Master intern**, Damiano Demarco (University of Cambridge)

2014 **Honours student**, Maxine-Zara Sutherland (Australian Catholic University)

2014 **Honours student**, Craig McVeigh (Australian Catholic University)

2014 **Postgrad Diploma Student**, Kingsley Yu (Australian Catholic University)

2012–2013 **Master student**, Tommaso Dall'Acqua (Radboud University Nijmegen)

Student Mentoring

2011 **4th year student mentoring**, Misha Christian (Macquarie University)

2011 **3rd year student intern**, Dean Coulter (Macquarie University)

V. PUBLICATIONS

- [1] **Colling, L. J.**, Szűcs, D., et al (forthcoming). A multi-lab registered replication of the attentional SNARC effect. *Advances and Methods and Practices in Psychological Science*
- [2] **Colling, L. J.** (forthcoming). Playing together and planning together. In M. Cappuccio (Ed.), *Handbook of embodied cognition and sport psychology*. MIT Press.
- [3] Lakens, D., Adolfs, F. G., Albers, C. J., Anvari, F., A.J. Apps, M., Argamon, S. E., ... **Colling, L. J.***, ... Zwaan, R. A. (in press). Justifying your alpha: A response to “Redefine statistical significance”. *Nature: Human Behavior* (*authors after first listed in alphabetical order)
- [4] **Colling, L. J.**, Noble, H. L., & Goswami, U. (2017). Neural entrainment and sensorimotor synchronization to the beat in children with developmental dyslexia: An EEG study. *Frontiers in Neuroscience*, *11*(260), 1–14. doi: 10.3389/fnins.2017.00360
- [5] Williams, D., & **Colling, L. J.** (2017). From symbols to icons: The return of resemblance in the cognitive neuroscience revolution. *Synthese*, 1–27. doi: 10.1007/s11229-017-1578-6
- [6] **Colling, L. J.**, Thompson, W. F., & Sutton, J. (2016). Mechanisms for action prediction operate differently in observers with motor experience. *bioRxiv*, 1–30. doi: 10.1101/044438
- [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. doi: 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. doi: 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. doi: 10.3389/fnhum.2014.00754

- [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. doi: 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. doi: 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. doi: 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. doi: 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. doi: 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(10), 951–956. doi: 10.1097/WNR.0b013e32832c92bf

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. *Under review at Developmental Science* (* First two authors contributed equally)
- [2] **Colling, L. J.** & Szűcs, D. (Under review). Statistical reform and the replication crisis. *Under review at the Review of Philosophy and Psychology*
- [3] **Colling, L. J.**, Thompson, W. F., & Sutton J. (Under review). Mechanisms for action prediction operate differently in observers with motor experience. *Under review at Quarterly Journal of Experimental Psychology*

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).

VI. CONFERENCE PRESENTATIONS

- [1] Sankaran, N., Carlson, T.A., Carlile, S., **Colling, L.J.**, & Thompson, W.F. (2016, July). Using pattern-classification to uncover the dynamic neural representation of pitch in tonal context. Paper presented at the 14th International Conference for Music Perception and Cognition (ICMPC14), San Francisco, USA.

- [2] Kaplan, D.M. & **Colling, L.J.** (2015, July) Dynamical-mechanistic explanation: Rebutting the challenges from nonlinearity and emergence. Paper presented at the Australasian Association of Philosophy, Sydney, Australia.
- [3] **Colling, L.J.** (2014, December). The radical embodied approach to explanation. Paper presented at the meeting of the Australasian Society for Cognitive Science, Melbourne, Australia.
- [4] **Colling, L.J.** & Dall'Acqua, T. (2014, April). Biomechanical constraints on production also influence predictions of observed actions. Paper presented at the Australasian Experimental Psychology Conference, Brisbane, Australia.
- [5] **Colling, L.J.**, Knoblich, G., & Sebanz, N. (2013, July). Parallel or joint processing of multiple simultaneously observed actions? Poster presented at the Joint Action Meeting, Berlin, Germany.
- [6] **Colling, L.J.**, & Sebanz, N. (2012, August). Joint task representations. Paper presented at European Society for Philosophy and Psychology, London, United Kingdom.
- [7] **Colling, L.J.**, Thompson, W.F., Sutton, J., & Williams, M.A. (2011, July). Functional equivalence between acting alone and acting together. Paper presented at the 4th Joint Action Meeting, Vienna, Austria.
- [8] **Colling, L.J.** (2010, December). Levels of explanation in cognitive science. Paper presented at the Australasian Association of Philosophy (NZ) Conference, University of Waikato, New Zealand.
- [9] **Colling, L.J.** (2010, December). From action control to joint action. Presentation given to the cognitive neuroscience research group colloquium, University of Auckland, New Zealand.
- [10] **Colling, L. J.**, Thompson, W. F., & Sutton J. (2009, December). The influence of limb and joint information on action synchronisation. Paper presented at the 2nd International Conference on Music Communication Science, Sydney, Australia.
- [11] **Colling, L.J.** & Roberts R.P. (2009, September). Cognitive Psychology does not reduce to neuroscience. Paper presented at the 9th meeting of the Australasian Society for Cognitive Science, Sydney, Australia.
- [12] **Colling, L.J.**, Thompson, W.F., & Sutton J. (2009, September). Action synchronisation with biological motion. Paper presented at the 9th meeting of the Australasian Society for Cognitive Science, Sydney, Australia.
- [13] **Colling, L. J.**, Thompson, W. F., & Sutton J. (2009, September). The effect of movement similarity on interpersonal synchronisation: A motion capture study. Paper presented at the HCSNet Workshop on Movement and Motion Capture, Sydney, Australia.
- [14] **Colling, L.J.** (2009, August). Enhanced mu-rhythm during self-observation: Directions for research. Paper presented at HCSNet Perception and Action Workshop, Brisbane, Australia.
- [15] **Colling, L.J.** & Thompson W. F. (2008, December). Action coordination with visually presented stimuli. Paper presented at HCSNet Summerfest, Sydney, Australia.
- [16] **Colling, L.J.** & Johnson, B.W. (2008, June). Neuromagnetic correlates of mental rotation of hands. Poster presented and Human Brain Mapping, Melbourne, Australia.
- [17] **Colling, L.J.** (2007, November). Neural mechanisms of auditory scene analysis. Presentation given to the National Acoustics Laboratory colloquium, Sydney, Australia
- [18] **Colling, L.J.**, Johnson, B.W., & Hautus, M.J. (2007, July). Neural response correlates of interaural time differences and spectral cues to pitch. Poster presented at The Auditory Brain—Satellite Conference to International Brain Research Organization Conference, Lorne, Australia

VII. GRANTS

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| 2014 | Australian Catholic University Faculty of Health Sciences Grant (\$10,000) |
| 2011 | Macquarie University Postgraduate Research Fund (\$5,000) |
| 2011 | MACCS Postgraduate Grant (\$260) |
| 2010 | MACCS Postgraduate Grant (\$1,735) |
| 2009 | MACCS Postgraduate Grant (\$2,256) |
| 2008 | MACCS Postgraduate Grant (\$1,233) |
| 2007 | MACCS Postgraduate Grant (\$1,480) |
| 2006 | Centre for Advanced MRI Pilot Study Grant (\$4,000) |

VIII. SCHOLARSHIPS AND AWARDS

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

IX. PROGRAMMING AND RESEARCH METHOD SKILLS

- [1] Matlab, Psychtoolbox, Presentation, Labview, Python, and R
- [2] Statistical analysis: SPSS, R
- [3] Bayesian modelling languages: Stan, Jags
- [4] Experience in motion capture recording (Vicon system, Optotrack) and analysis
- [5] Experience in eye tracker recording (Eyelink-1000) and analysis.
- [6] Behavioural methods such as reaction times and psychophysical methods
- [7] Experience in EMG/EEG/MEG recording and analysis including machine learning and pattern classifier techniques
- [8] RMarkdown, LaTeX, and Knitr for reproducible manuscript preparation
- [9] OSF and GitHub for open science (data, methods, and analysis code).

X. OUTREACH

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| 2016–2017 | Psychological and Behavioural Sciences Tripos representative at the Oxford/Cambridge student recruitment conferences |
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XI. REFERENCES

Prof John Sutton
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Department of Cognitive Science
Macquarie University

Prof Natalie Sebanz
sebanzn@ceu.hu
Department of Cognitive Science
Central European University

Dr Dénes Szűcs
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Department of Psychology
University of Cambridge

Prof Bill Thompson
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