

PERSONAL INFORMATION

Scott Laurence Fairhall

Date of birth: 10/04/1976

Citizenship: United Kingdom. New Zealand.

Researcher unique identifier: 0000-0002-8035-4751

EDUCATION

- 2001 – 2006 The University of Auckland - PhD (Department of Psychology)
2000 The University of Auckland - Bachelor Of Arts (Honours) 1st Class Honours
1998-1999 The University of Auckland - Bachelor of Science (Major: Physiology)
1994-1996 The University of Auckland - Bachelor of Arts (Major: Psychology)

CURRENT POSITION

- 2017 - Associate Professor,
Center for Mind/Brain Sciences, University of Trento, Italy.

PREVIOUS POSITIONS

- 2015 - 2017 Assistant Professor (RTD-A/B),
Center for Mind/Brain Sciences, University of Trento, Italy.
2013 - 2015 Postdoctoral Fellow,
Center for Mind/Brain Sciences, University of Trento, Italy.
2009 - 2012 Postdoctoral Fellow
Department of Psychology, Harvard University, Cambridge, MA
Center for Mind/Brain Sciences, University of Trento, Italy (dual affiliation)
2007 - 2008 Postdoctoral Fellow
Neuroimaging Laboratory, Fondazione Santa Lucia, Rome, Italy.
2006 Visiting Scientist
Institute of Neuroradiology, University of Zurich. (*February to August*)

PEER-REVIEWED PUBLICATIONS

Leonardelli E, Fait E, **Fairhall SL** (2019). Temporal dynamics of access to amodal representations of category-level conceptual information. *Scientific Reports*, 9(1), 239.

Fairhall SL, Porter KB, Bellucci C, Mazzetti M, Cipolli C, Gobbini MI (2017) Plastic reorganization of neural systems for perception of others in the congenitally blind. *NeuroImage*, 158:126-135.

Fairhall SL, Schwarzbach, J, Lingnau, A, Van Koningsbruggen MG, Melcher, D (2017) Spatiotopic updating across saccades revealed by spatially-specific fMRI adaptation. *NeuroImage*, 147, 339-345.

Fairhall SL, Albi A, Melcher D. (2014) Temporal Integration Windows for Naturalistic Visual Sequences. *PLOS One*, 9 (7), e102248.

Fairhall SL, Anzellotti S, Ubaldi S, Caramazza A. (2014) Person and Place Selective Neural Substrates for Entity-Specific Semantic Access. *Cerebral Cortex*, 24:1687–1696.

Hernandez M, **Fairhall, SL**, Lenci, A, Baroni M & Caramazza A. (2014) Predication Drives Verb Cortical Signatures. *Journal of Cognitive Neuroscience*, 26:1829-1839

- Anzellotti S, **Fairhall SL**, Caramazza A. (2014) Decoding representations of face identity that are tolerant to rotation. *Cerebral Cortex*, 24(8), 1988-1995.
- Fairhall SL** & Caramazza A (2013) Brain regions that represent amodal conceptual knowledge. *The Journal of Neuroscience*, 33:10552-10558.
- Fairhall SL**, Caramazza A. (2013) Category selective neural substrates for person- and place-related concepts. *Cortex* 49:2748-2757.
- Gesierich B, Jovicich J, Riello M, Adriani M, Monti A, Brentari V, Robinson S, Wilson SM, **Fairhall SL**, Gorno-Tempini ML (2012) Distinct neural substrates for semantic knowledge and naming in the temporo-parietal network. *Cerebral Cortex*, 22:2217-2226.
- Fairhall SL**, Anzellotti S, Pajtas, P, Caramazza, A (2011) Concordance between Perceptual and Categorical Repetition Effects in the Ventral Visual Stream, *Journal of Neurophysiology*, 106:398-408.
- Fairhall SL**, Sharma S, Magnusson J, Murphy B (2010) Memory related dysregulation of hippocampal function in major depressive disorder, *Biological Psychology*, 85: 499-503.
- Wu CC, **Fairhall SL**, Hamm JP, Kirk IJ, McNair NA, Cunnington R, Anderson T, Lim VK (2010) Reduced sensorimotor activation in patients with focal hand dystonia using functional magnetic resonance imaging, *Journal of Neurology Neurosurgery and Psychiatry*, 81: 659-665.
- Fairhall SL**, Macaluso E (2009) Spatial attention modulates audiovisual integration at multiple cortical and subcortical sites, *European Journal of Neuroscience*, 29(6): 1247-1257.
- Fairhall SL**, Indovina I, Driver J, Macaluso E (2009) The brain network underlying serial visual search: comparing overt and covert spatial orienting, for activations and for effective connectivity, *Cerebral Cortex*, 19: 2946 - 2958.
- Fairhall SL**, Hamm, J.P, Kirk IJ (2008) Binocular rivalry reveals a dissociation between the subjective experience and induced gamma oscillations, *European Journal of Neuroscience*, 27(1): 213-216.
- Fairhall SL**, Ishai, A (2008) Neural Correlates of Object Indeterminacy in Art Compositions, *Consciousness and Cognition*, 17(3): 923–932
- Fitzgibbon B, **Fairhall SL**, Kirk IJ, Kalev-Zylinska M, Pui K, Dalbeth N, Keelan S, Robinson SE, During M, McQueen FM (2008) Functional MRI in NPSLE patients reveals increased parietal and frontal brain activation during a working memory task compared with controls, *Rheumatology*, 47(1):50-53.
- Ross RM, McNair NA, **Fairhall SL**, Clapp WC, Hamm JP, Teyler TJ, Kirk IJ (2008) Induction of orientation-specific LTP-like changes in visual evoked potentials by rapid sensory stimulation, *Brain Research Bulletin*, 76: 97-101.
- Fairhall SL**, Ishai, A (2007) Effective connectivity within the distributed cortical network for face processing, *Cerebral Cortex*, 19:2400-2406.
- Fairhall SL**, Hamm JP, Kirk IJ (2007) Temporal dynamics of masked word reading. *Consciousness and Cognition*. 16(1):112-23.
- Fairhall SL**, Kirk IJ, Hamm JP (2007) Volition and the idle cortex: beta oscillatory activity preceding planned and spontaneous movement, *Consciousness and Cognition*, 16(2): 221-228.

Ishai A, **Fairhall SL**, Pepperell R (2007) Perception, memory and aesthetics of indeterminate art, *Brain Research Bulletin*, 73: 319–324.

CONFERENCE PROCEEDINGS

Leonardelli E, Fait E, **Fairhall SL**. Temporal evolution of access to category-sensitive supramodal knowledge – an MEG study. *Salzburg Mind Brain Annual Meeting*, Salzburg, Austria. July, 2017

Fairhall SL, Ubaldi S, Aglinskias A. Network Organisation in Core and Extended Face Systems, a cognitive approach. 23rd annual *Meeting of the Organization for Human Brain Mapping*, Vancouver, Canada. June 2017.

Aglinskias A, Ubaldi S, Fait E, **Fairhall SL**. Network level taxonomy of the core/extended person perception system. 17th Annual *Vision Science Society Meeting*, St. Pete's Beach, Florida. May, 2017.

Ubaldi S, Aglinskias A, Fait E, **Fairhall SL**. Temporal dynamics of the core and extended face perception system with fMRI. *17th Annual Vision Science Society Meeting*, St. Pete's Beach, Florida. May, 2017.

Aglinskias A, Fait E, **Fairhall SL**. Network level taxonomy of the core/extended person perception system. *Rovereto workshop on Concepts, Actions, and Objects*, Rovereto, Italy. May, 2017.

Leonardelli E, Fait E, **Fairhall SL**. Category-sensitive supramodal semantic representations – an MEG study. *Rovereto workshop on Concepts, Actions, and Objects*, Rovereto, Italy. May, 2017.

Ubaldi S, Fait E, **Fairhall SL**. Discovering the temporal dynamics of the core and extended face perception system with fMRI. *Rovereto workshop on Concepts, Actions, and Objects*, Rovereto, Italy. May, 2017.

Rubicondo D, **Fairhall SL**. Cortical representations of semantic information generalise across sensory-based and abstract knowledge referred to food. 35th *European Workshop on Cognitive Neuroscience*, Bressanone, Italy. January, 2017.

Aglinskias A, Fait E, **Fairhall SL**. Network level taxonomy of the core/extended person perception system. 35th *European Workshop on Cognitive Neuroscience*, Bressanone, Italy. January, 2017.

Ubaldi S, Fait E, **Fairhall SL**. Discovering the temporal dynamics of the core and extended face perception system with fMRI. 35th *European Workshop on Cognitive Neuroscience*, Bressanone, Italy. January, 2017.

Leonardelli E, Fait E, **Fairhall SL**. Spatio-temporal dynamics of semantic-access in the face-processing network, an MEG study. 35th *European Workshop on Cognitive Neuroscience*, Bressanone, Italy. January, 2017.

Rubicondo D, Fait E, **Fairhall SL**. Neural representations of semantic food knowledge generalise across taste and abstract information. *10th Annual Rovereto Workshop on Concepts Actions and Objects*, Rovereto, Italy. May, 2016.

- Leonardelli E, Fait E, **Fairhall SL**. Temporal and spatial evolution of access to person knowledge – an MEG study. *10th Annual Rovereto Workshop on Concepts Actions and Objects*, Rovereto, Italy. May, 2016.
- Anzellotti S, **Fairhall SL**, Caramazza A, Decoding orientation-invariant information about individual faces in the ventral stream. *Vision Science Society*. Florida, USA. May 2012.
- Fairhall SL**, Anzellotti S, Ubaldi S, Caramazza A. Semantic Representation within Person and Place Selective Brain Regions. *14th annual Meeting of the Organization for Human Brain Mapping*, Beijing, China. June 2012.
- Fairhall SL**, Caramazza A. Core and Extended Systems in the Supramodal Representation of Abstract Object-Knowledge. *Workshop on Concepts, Actions, and Objects*, Rovereto, Italy. May 2011.
- Fairhall SL**, Anzellotti S, Ubaldi S, Caramazza A. Domain Selectivity in Semantic Systems. *Workshop on Concepts, Actions, and Objects*, Rovereto, Italy. May 2010.
- Fairhall SL**, Macaluso E, Attentional Modulation of Multisensory Audiovisual Integration during Speech Perception. *14th annual Meeting of the Organization for Human Brain Mapping*, Melbourne, Australia. June 2008.
- Fairhall SL**, Macaluso E, Attentional Modulation and Cortical Integration during Multisensory Audio-Visual Integration. *Marie Curie School of Neuroscience: Large-scale interactions in brain networks and their breakdown in brain diseases*. Santo Stefano di Sessania, Italy. March 2008.
- Fairhall SL**, Indovina I, Driver J, Macaluso E, Effective Connectivity During Covert and Overt, Tracking and Search. *Rovereto Attention Workshop*. Rovereto, Italy. October 2007.
- Fitzgibbon B, **Fairhall SL**, Kirk IJ, Keelan S, Dalbeth N, Pui K, McQueen FM, Functional MRI In NP-SLE Patients Undertaking A Working Memory Task Reveals Markedly Increased Activation In Parietal Regions Of The Brain Compared With Controls, *American College of Rheumatology Annual Scientific Meeting* Washington, D.C. November 2006
- Ishai A, **Fairhall SL**, Pepperell R, Visual perception and memory of indeterminate art compositions, *European Conference on Visual Perception*, St Petersburg, Russia. August 2006.
- Fairhall SL** Ishai A, Effective Connectivity within the Distributed Cortical Network or Face Perception, *36th Annual Meeting of the Society for Neuroscience*, Atlanta, Georgia. October 2006
- Ishai A., **Fairhall SL**, Pepperell R. Object indeterminacy in art compositions, *36th Annual Meeting of the Society for Neuroscience*, Atlanta, Georgia. October 2006
- Fairhall SL**, Ishai A, Neural correlates of objects indeterminacy in art compositions, *Zentrum für Neurowissenschaften Zürich Symposium*, Zürich, Switzerland, October 2006.
- Ishai A, **Fairhall SL**, Perception, memory and aesthetics of indeterminate art, *Zentrum für Neurowissenschaften Zürich Symposium*, Zürich, Switzerland, October 2006.
- Kirk IJ, Barnett KJ, Bunzeck N, **Fairhall SL**, Morton AC, Badzakova-Trajkov G, Waldie KE, Involvement of Anterior cingulate and Prefrontal Cortices in the Stroop Colour-Word Task: EEG and fMRI. *Proceedings of the 24th International Australasian Winter Conference on Brain Research*, Queenstown, New Zealand, August 2006.

- Ishai A., **Fairhall SL.**, Pepperell R. Visual perception and memory of indeterminate art compositions, *European Conference on Visual Perception*, St Petersburg, Russia, August 2006
- Fairhall SL**, Clapp WC, Teyler TJ, Kirk IJ, Orientation-specific neuronal facilitation in V1 following external photic tetanic stimulation, *12th annual Meeting of the Organization for Human Brain Mapping*, Florence, Italy. June 2006.
- Fairhall SL**, Kirk IJ, Hamm, JP Queenstown, NZ: *Binocular rivalry and the role of induced gamma synchrony in perceptual binding*. Proceedings of the 23st International Australasian Winter Conference on Brain Research, August 2005.
- O'Connor K, Hamm JP, **Fairhall SL**, Corballis MC, Kirk IJ., International Meeting for Autism Research, *The Neurophysiological Correlates of Face Processing in Asperger's Syndrome.*, Boston, MA. May 2005.
- Kirk IJ, Clapp WC, **Fairhall SL**, Hamm JP, Hornsey E, Jackson GD. Neural substrates of recognition memory: A 3T fMRI study, Proceedings of the 31st Australasian Experimental Psychology Conference, Dunedin NZ, April 2004.
- Fairhall SL**, Kirk IJ, Hamm JP, The Neural response to sub-threshold word stimuli. *Proceedings of the 21st International Australasian Winter Conference on Brain Research*, Queenstown, NZ. August 2003
- Kirk IJ, Hamm JP, **Fairhall SL**, Bunzeck N, Clapp WC, Hornsey E, Bishop DF Jackson GD, Perirhinal Cortex and Recognition Memory: A 3T fMRI Study. *Proceedings of the 21st International Australasian Winter Conference on Brain Research*, Queenstown, NZ. August 2003
- Waldie KE, G Badzakovaa, **Fairhall SL**, Milne RD, Kirk IJ, Hornsey E, Bishop DF Jackson GD, Orthographic and phonological processing in the normal and the dyslexic brain: An fMRI study. *Proceedings of the 21st International Australasian Winter Conference on Brain Research*. Queenstown NZ, August 2003
- Fairhall SL**, Differential Topographies Between Subtypes of Nouns and Verbs. *Proceedings of the 20st International Australasian Winter Conference on Brain Research*. Queenstown NZ, August 2002.

TEACHING ACTIVITIES

- 2015 to present – Course Coordinator: Introduction to Computer Programming for Cognitive Science (Matlab).
- 2018 to present – Lecturer: Foundations of Cognitive Science
- 2018 to present – Lecturer: Foundations of Cognitive Neuroscience Science

SUPERVISION OF GRADUATE STUDENTS

- Primary supervision:
 - Aidas Aglinskas (PhD student, CIMeC, ERC-funded)
 - Danilo Rubicondo (PhD student, CIMeC, ERC-funded)
 - Danilo Rubicondo (Masters)
 - Daniel Low (Masters)
 - Giuliano Giari (Masters)
 - Nina Hosseini (Masters)

- Co-supervision/tutorship:
 - Bernadette Fitzgibbons (Graduate Student, University of Auckland)
 - Carolyn Wu (Graduate Student, University of Auckland)
 - Sindra Sharma (Graduate Student, University of Auckland)
 - Beatrice Agostini (Graduate Student, University of Trento). Thesis 'Supramodal responses to people in the distributed 'face' network' won the national State of Mind prize for best junior thesis.
 - Stefano Anzellotti (PhD student, Harvard University)
 - Daniel Low (Masters level internship, CIMeC)
 - Chiara Luna Rivolta (Independent Studies, CIMeC)
 - Corellatore for Damiano Azzalini, Elisa Baccolo.

SCHOLARSHIPS AND GRANTS HELD

2018 – 2020 Framework for the Attraction and Reinforcement of Excellent Research in Italy. *Deep Learning and Semantic Knowledge: from artificial to natural neural networks and back again.*
- €130 000.

2015 – 2020 European Research Council Starting Grant. *Cortical Representation of Abstract Semantic Knowledge.* - €1,472,502.

2006 - Organization for Human Brain Mapping Travel Award US\$ 700

2005 – Doctoral Completion Award \$2000

2003-2004 PhD Scholarship, University of Auckland Vice Chancellor's Early Career Excellence Award (awarded to Jeff Hamm) - \$40 000

2004 – Royal Society of New Zealand Travel Grant recipient – international conference travel - \$1000

2004 – Fellowship grant: The Vivian Smith Advanced Studies Institute of the International Neuropsychological Society Summer Institute - \$2400

2003-2004 Department of Psychology Conference Award - \$1200

2003 – Graduate Research Fund University of Auckland – international conference travel grant award - \$2800

2002-2003 – Faculty of Science Post Graduate Fees Bursary - \$4000

2001 – Faculty of Science Study Award - \$2000

COMMISSIONS OF TRUST

Ad hoc reviewer for: Neuron, Journal of Neuroscience, Cerebral Cortex, NeuroImage, Cortex, European Journal of Neuroscience, Journal of Cognitive Neuroscience, Neuropsychologia, Consciousness and Cognition, Brain and Language.

MAJOR COLLABORATIONS

Ida Gobbini, *Cortical representations of Person Knowledge in congenitally blind individuals.* Haxby Lab, Dartmouth College, USA.
(with Dartmouth University)