Kirstie Whitaker

Address Alan Turing Institute, Phone +44 7583 53 53 07

British Library, Email kwhitaker@turing.ac.uk 96 Euston Road, Website whitakerlab.github.io

London, NW1 2DB, UK **Twitter** @kirstie_j

Nationality British GitHub @KirstieJane

Research and Education

July 2017 - Alan Turing Institute

present Research fellow

Reproducible research at the Turing

Oct 2012 - Brain Mapping Unit, Department of Psychiatry, University of Cambridge

present Postdoctoral fellow / Research associate From Sept 2017: Senior research associate

UCHANGE: Understanding and Characterising Healthy Adolescent-to-Adult Neurodevelop-

mental Growth Effects

OpenNSPN: Sharing NSPN data with the wider academic community

MR-IMPACT: MRI arm of the Improving Mood with Psychoanalytic and Cognitive Therapies

clinical trial

Aug 2007 - Helen Wills Neuroscience Institute, University of California at Berkeley

Sep 2012 Doctor of Philosophy in Neuroscience

Thesis: Individual differences in white matter integrity: Linking brain structure to cognition in

children and adults.

Sept 2004 - Department of Physics, University of British Columbia

Aug 2007 Master of Science in Medical Physics

Thesis: Quantifying development: A novel analysis technique investigating myelination of the

corpus callosum in preadolescents.

Sept 2001 - Department of Physics, University of Bristol

May 2004 Bachelor of Science in Physics

Dissertation: Do information effects cause cancer?

1st class honours.

Scholarships & Prizes

Alan Turing Institute Seed Funding Reproducible research at the Turing	August 2017 - July 2018	£ 36,000
Alan Turing Institute Research Fellowship	July 2017 - June 2020	£ 187,000
OHBM Hackathon Travel Award	June 2017	\$ 500 (US)
Foreign Policy 2016 Global Thinker	December 2016	
Mozilla Science Fellowship	September 2016 - June 2017	\$ 63,000 (US)
OHBM Hackathon Travel Award	June 2016	\$ 500 (US)
Rosalind Franklin Appathon Runner Up Prize for STEMM Role Models	February 2016	£ 500
Elizabeth Roboz Einstein Fellowship	January 2011 - June 2011	\$3,000 (US)
T.I. Liu Fellowship	August 2009 - July 2010	\$ 30,000 (US)
Fulbright Scholarship	August 2007 - July 2008	\$ 100,000 (US)
Commonwealth Scholarship	September 2004 - August 2006	\$ 80,000 (CAD)

Teaching

- Affiliated Lecturer, Department of Psychology, University of Cambridge (2013 date)
- Academic Supervisor, Department of Psychology, University of Cambridge (2013 2016)
- Guest Lecturer, Department of Psychology, University of Cambridge (2013 2015)
- Laboratory Instructor, Summer Institute in Cognitive Neurosciences (July 2011)
- Graduate Student Instructor, Department of Molecular and Cellular Biology, University of California at Berkeley (Fall 2008, Spring 2010)
- Teaching Assistant, Department of Physics, University of British Columbia (2005 & 2006)

Select Publications

- 2018 Seidlitz, J., Váša, F., Shinn, M., Romero-Garcia, R., Whitaker, K. J., Vértes, P. E., Wagstyl, K., Kirkpatrick Reardon, P., Clasen, L., Liu, S., Messinger, A., Leopold, D. A., Fonagy, P., Dolan, R. J., Jones, P. B., Goodyer, I. M., Raznahan, A., Bullmore, E. T., & Bullmore, E. T. (2018). Morphometric Similarity Networks Detect Microscale Cortical Organization and Predict Inter-Individual Cognitive Variation. *Neuron*, 97(1), 231–247.e7. doi:10.1016/j.neuron.2017.11.039
 - Váša, F., Seidlitz, J., Romero-Garcia, R., **Whitaker, K. J.**, Rosenthal, G., Vértes, P. E., Shinn, M., Alexander-Bloch, A., Fonagy, P., Dolan, R. J., Jones, P. B., Goodyer, I. M., consortium, N., Sporns, O., & Bullmore, E. T. (2018). Adolescent Tuning of Association Cortex in Human Structural Brain Networks. *Cerebral cortex*, *28*(1), 281–294. doi:10.1093/cercor/bhx249
- 2017 Kiddle, B., Inkster, B., Prabhu, G., Moutoussis, M., Whitaker, K. J., Bullmore, E. T., Dolan, R. J., Fonagy, P., Goodyer, I. M., & Jones, P. B. (2017). Cohort profile: The NSPN 2400 Cohort: a developmental sample supporting the Wellcome Trust NeuroScience in Psychiatry Network. *International Journal of Epidemiology*. doi:10.1093/ije/dyx117
 - **Whitaker, K. J.***, Vendetti, M. S.*, Wendelken, C., & Bunge, S. A. (2017). Neuroscientific insights into the development of analogical reasoning. *Developmental science*. doi:10.1111/desc.12531
 - Leonard, J., Flournoy, J., Lewis-de los Angeles, C. P., & **Whitaker, K. J.** (2017). How much motion is too much motion? Determining motion thresholds by sample size for reproducibility in developmental resting-state MRI. *Research Ideas and Outcomes*, 3. doi:10.3897/rio.3.e12569
- Vértes, P. E., Rittman, T., Whitaker, K. J., Romero-Garcia, R., Váša, F., Kitzbichler, M. G., Wagstyl, K., Fonagy, P., Dolan, R. J., Jones, P. B., Goodyer, I. M., NSPN Consortium, & Bullmore, E. T. (2016). Gene transcription profiles associated with inter-modular hubs and connection distance in human functional magnetic resonance imaging networks. *Philosophical transactions of the Royal Society. Series B, Biological sciences*, 371(1705), 20150362. doi:10.1098/rstb.2015.0362
 - Pre-processed and quality controlled structural MRI; managed MRI data for research team.
 - **Whitaker, K. J.***, Vértes, P. E.*, Romero-Garcia, R., Váša, F., Moutoussis, M., Prabhu, G., Weiskopf, N., Callaghan, M. F., Wagstyl, K., Rittman, T., Tait, R., Ooi, C., Suckling, J., Inkster, B., Fonagy, P., Dolan, R. J., Jones, P. B., Goodyer, I. M., NSPN Consortium, & Bullmore, E. T. (2016). Adolescence is associated with transcriptionally patterned consolidation of the hubs of the human brain connectome. *Proceedings of the National Academy of Sciences*. doi:10.1073/PNAS.1601745113
- **2014 Whitaker, K. J.**, Kang, X., Herron, T. J., Woods, D. L., Robertson, L. C., & Alvarez, B. D. (2014). White matter microstructure throughout the brain correlates with visual imagery in grapheme-color synesthesia. *NeuroImage*, *90*, 52–9. doi:10.1016/j.neuroimage.2013.12.054
- **2013** Ferrer, E.*, **Whitaker, K. J.***, Steele, J. S., Green, C. T., Wendelken, C., & Bunge, S. A. (2013). White matter maturation supports the development of reasoning ability through its influence on processing speed. *Developmental science*, *16*(6), 941–51. doi:10.1111/desc.12088
- **2010** Bunge, S. A., Mackey, A. P., & **Whitaker, K. J.** (2010). Brain changes underlying the development of cognitive control and reasoning. In M. Gazzaniga (Ed.), *The cognitive neurosciences* (4th). MIT Press
 - Wrote book chapter (with SB and AM).
- **2008 Whitaker, K. J.**, Kolind, S. H., MacKay, A. L., & Clark, C. M. (2008). Quantifying development: Investigating highly myelinated voxels in preadolescent corpus callosum. *NeuroImage*, *43*(4), 731–5. doi:10.1016/j.neuroimage.2008.07.038