

Rodrigo M. Braga

t. +447717822554
w. [about.me/rodrigobraga](https://www.about.me/rodrigobraga)
e. rodrigo.braga09@imperial.ac.uk

About

I am a Sir Henry Wellcome Postdoctoral Fellow at Imperial College London and Harvard University. I am researching how individual differences in local-scale functional architecture determine differences in cognitive ability and health.

Qualifications

Imperial College London, 2010 – 2014

PhD in Cognitive Neuroimaging. Thesis title: *Evidence for separable networks for visual and auditory attention.*

Imperial College London, 2009 - 2010

Bioimaging MRes with distinction. Awarded prize for Best End of Year Presentation.

The University of Edinburgh, 2002 - 2006

Neuroscience BSc with first class honours. Awarded prize for Best Science Student at graduation. Dissertation grade: 83%.

Christ's College, Finchley, 1995 - 2001

A-Levels: Chemistry (A), Physics (A), Maths (B) & Portuguese (A). GCSEs: A* A* A* A* AAAAAC

Research Experience

Postdoctoral Fellow with Prof. Randy Buckner, Dr. Hesheng Liu & Dr. Adam Hampshire – Harvard University & Imperial College London – Investigating individual differences in local scale functional architecture and its relationship to cognition.

Ph.D with Prof. Richard Wise – Imperial College London, MRC Clinical Sciences Centre, 2010-14.

Using fMRI to investigate whole-brain network dynamics during rest and cognitive tasks with uni- and multivariate techniques.

MRes with Prof. David Edwards & Prof. Serena Counsell – Imperial College London, Robert Steiner MR Unit, 2009-10.

Included a 9-month research project wherein I used DTI-tractography to create a white matter atlas for premature babies.

Research Assistant with Dr. Emma Wood – The University of Edinburgh, Centre for Cognitive and Neural Systems, 2006-07

Studying head direction cells in the rat entorhinal cortex and their role in path integration using a behavioural paradigm.

Internship with Dr. Vania Braga – Imperial College London, National Heart & Lung Institute, 2005

In this summer project I carried out point mutations on a novel scaffolding protein in order to identify its functional domains.

Publications

S.R. Jilka, G. Scott, T. Ham, A. Pickering, V. Bonnelle, **R.M. Braga**, R. Leech, D.J. Sharp (2014) Damage to the salience network and interactions with the default mode network. **The Journal of Neuroscience**.

R. Wise & **R.M. Braga** (2013) Default mode network: the seat of literary creativity? **Trends in Cognitive Sciences**

R.M. Braga, D.J. Sharp, C. Leeson, R.J.S. Wise & R. Leech (2013) *Echoes of the brain within default mode, association and heteromodal cortices.* **The Journal of Neuroscience**. 2 citations.

R.M. Braga, L.R. Wilson, R.J.S. Wise, D.J. Sharp & R. Leech (2013) *Separable networks for top down attention to auditory nonspatial and visuospatial modalities.* **NeuroImage**. 3 Citations.

R. Leech, **R.M. Braga** & D.J. Sharp (2012) *Echoes of the brain within the posterior cingulate cortex.* **The Journal of Neuroscience**. 51 Citations.

E. Rose, P. Harris, G. Ball, L.Z. Elorza, **R.M. Braga**, J.M. Allsop, N. Merchant, E. Porter, T. Arichi, A.D. Edwards, M.A. Rutherford, F.M. Cowan & S.J. Counsell (2012) *Tractography of the corticospinal tracts in infants with focal perinatal injury: comparison with normal controls and to motor development.* **Neuroradiology**. 7 Citations.

M.A.A. van der Meer, Z. Richmond, **R.M. Braga**, P.A. Dudchenko & E.R. Wood (2010) *Evidence for the use of an internal sense of direction in homing.* **Behavioral Neuroscience**. 9 Citations.

Funding

Sir Henry Wellcome Postdoctoral Fellowship 2014
MRC Clinical Sciences Centre 3.5 year PhD Scholarship 2010
MRC fully-funded MRes Scholarship 2009
Roche Continents Travel Scholarship 2012
British Science Festival Student Bursary 2012
Guarantors of Brain Travel Grant 2013

Prizes

Best Science Student in Neuroscience BSc course, The University of Edinburgh, 2006.
Best End of Year Presentation in Bioimaging MRes, Imperial College London, 2010
US-UK Fulbright Scholarship 2014 (finalist)

Conference Proceedings

Speaker platforms:

R.M. Braga, R.J.S. Wise & R. Leech. **Society for Neuroscience**, Washington D.C. (2011) *Levels of attention in competing auditory environments*.

Posters:

R.M. Braga, R. Fu, R.J.S. Wise & R. Leech. **Society for Neuroscience**, San Diego (2013) *Inadvertent ocular control during auditory attention leads to activation of visual attention regions*.

R.M. Braga, R. Fu, R.J.S. Wise & R. Leech. **Organisation for Human Brain Mapping**, Seattle (2013) *Separating auditory and visual attention networks using fMRI and eye tracking*.

S. Kamourieh, **R.M. Braga**, P.J. Hellyer, R. Leech & R. Wise, **Society for Neuroscience**, San Diego (2013) *An fMRI study of auditory attention during listening to competing speakers*.

S.R. Jilka, T. Ham, G. Scott, A. Pickering, **R.M. Braga**, R. Leech, D.J. Sharp. **Society for Neuroscience**, San Diego (2013) *Right Anterior Insula and network interactions involved in cognitive control*.

R.M. Braga, R. Fu, R.J.S. Wise & R. Leech. **British Neuroscience Association**, London (2013) *The visual components of auditory top-down attention*.

R.M. Braga, D.J. Sharp & R. Leech. **Society for Neuroscience**, New Orleans (2012) *Mapping the echoes of intrinsic connectivity networks across the whole brain*.

R.M. Braga, L.R. Wilson, D.J. Sharp, R.J.S. Wise & R. Leech. **Organization for Human Brain Mapping**, Beijing (2012). *Separable networks for auditory and visual top down attention*.

M.A.A. Van der Meer, **R.M Braga**, Z.E.G. Richmond, P.A. Dudchenko & E.R. Wood. **Society for Neuroscience**, San Diego (2007) *Neural compass of epiphenomenon: lesion evidence for a role of the rodent head direction system in navigation*.

Invited Talks

Department of Psychological Sciences, Birkbeck University of London – September 2013.

Software & Supervision

I am confident coding in **Shell** and **Matlab**, including **Psychophysics Toolbox**, and am confident using **graphic design** software such as Illustrator, Photoshop, and Fireworks, and with **html** web design. I have attended training courses for the use of **SPSS** (statistics package), **FSL** (FMRIB's Software Library) and **Matlab**. I have co-supervised four masters students during my PhD. Three are/will be on published papers and gained distinctions.

Outreach

I was shortlisted for the national **Max Perutz Science Writing Prize** (2012) and have written for the CSC internal newspaper the **CSCeye** four times. I enjoy writing and host my own blog (see about.me/rodrigobraga). I was an exhibitor at the **Royal Society Summer of Science** (2014) and the **British Neuroscience Association Festival of Science** (2013). I was a student representative at the **British Science Festival** (2012). I have lectured to senior citizens at the **University of the Third Age** (2012) and to teenagers at the **CSC Open Day** (2011). I was a panel member at the Imperial College **Science Debating Competition** (2012), which encouraged teenagers to engage with scientific issues.

References

Richard Wise – Professor of Neurology. Cognitive Neuroimaging Group, C3NL, Burlington Danes Building, Imperial College, Hammersmith Hospital Campus, Du Cane Road, London W12 0NN. p: +442075947994 e: richard.wise@imperial.ac.uk

David Edwards – Professor of Perinatal Imaging. Division of Imaging Sciences & Biomedical Engineering, Kings College London, 1st Floor South Wing, St Thomas' Hospital, London SE1 7EH. p: +442071889145 e: ad.edwards@kcl.ac.uk

