

Janine Bijsterbosch

The FMRIB Centre, Wellcome Centre for Integrative Neuroscience (WIN), Nuffield Department of Clinical Neurosciences, University of Oxford
John Radcliffe Hospital, Oxford, OX3 9DU, United Kingdom
Janine.Bijsterbosch@ndcn.ox.ac.uk, (+44) 01865 610474

Education

2011 PhD Department of Neuroscience, University of Sheffield, UK
2007 MSc Department of Psychology, University of Sheffield, UK
2006 BA University College Maastricht, Maastricht University, The Netherlands
(Major: Biological Psychology)

Professional Employment

Since 2015 Postdoctoral Researcher in Analysis Group
FMRIB Centre, WIN, Nuffield Department of Clinical Neurosciences
University of Oxford, UK
Since 2015 Course Organizer of FMRIB Graduate Course & FSL Course
FMRIB Centre, WIN, Nuffield Department of Clinical Neurosciences
University of Oxford, UK
2011-2015 Postdoctoral Researcher in Cognitive Affective Neuroscience Group
FMRIB Centre, WIN, Nuffield Department of Clinical Neurosciences
University of Oxford, UK
2007-2008 Full Time Research Assistant
Academic Clinical Psychiatry, University of Sheffield

Publications

Peer Reviewed Journal Publications

- 2018 [Bijsterbosch, J.D.](#), Ansari, T.L., Gauld, O., Zika, O., Boessenkool, S., Browning, M., Reinecke, A., Smith, S., Bishop, S.J. (in press). Stratifying patients with affective disorders by resting limbic connectivity predicts cognitive bias. *NeuroImage Clinical*. <https://doi.org/10.1016/j.nicl.2018.04.033>
- 2018 Glasser, M. F., Coalson, T. S., [Bijsterbosch, J. D.](#), Harrison, S. J., Harms, M. P., Anticevic, A., Van Essen, D.C., Smith, S. M. (in press). Using Temporal ICA to Selectively Remove Global Noise While Preserving Global Signal in Functional MRI Data. *NeuroImage*. <https://doi.org/10.1101/193862>
- 2018 [Bijsterbosch, J. D.](#), Woolrich, M. W., Glasser, M. F., Robinson, E. C., Beckmann, C. F., Van Essen, D. C., Harrison, S.J., Smith, S. M. (2018). The relationship between spatial

- configuration and functional connectivity of brain regions. *eLife*, 7. <https://doi.org/10.7554/eLife.32992>
- 2017 [Bijsterbosch, J.D.](#), Harrison, S., Duff, E., Alfaro-Almagro, F., Woolrich, M., Smith, S. (2017). Investigations into within- and between-subject resting-state amplitude variations. *NeuroImage*, 159, 57–69. <https://doi.org/10.1016/j.neuroimage.2017.07.014>
- 2016 Griffanti, L., Douaud, G., [Bijsterbosch, J.](#), Evangelisti, S., Alfaro-Almagro, F., Glasser, M. F., ... Smith, S. M. (2016). Hand classification of fMRI ICA noise components. *NeuroImage*. <https://doi.org/10.1016/j.neuroimage.2016.12.036>
- 2015 [Bijsterbosch, J. D.](#), Smith, S., & Bishop, S. J. (2015). Functional Connectivity under Anticipation of Shock: Correlates of Trait Anxious Affect versus Induced Anxiety. *Journal of Cognitive Neuroscience*, 4, 1–14. https://doi.org/10.1162/jocn_a_00825
- 2014 [Bijsterbosch, J.](#), Smith, S., Forster, S., John, O. P., & Bishop, S. J. (2014). Resting state correlates of subdimensions of anxious affect. *Journal of Cognitive Neuroscience*, 26(4), 914–926. https://doi.org/10.1162/jocn_a_00512
- 2014 Filippini, N., Zsoldos, E., Haapakoski, R., Sexton, C. E., Mahmood, A., Allan, C. L., ... [Bijsterbosch, J.](#), ... Ebmeier, K. P. (2014). Study protocol: The Whitehall II imaging sub-study. *BMC Psychiatry*, 14(1), 159. <https://doi.org/10.1186/1471-244X-14-159>
- 2013 Smith, S. M., Beckmann, C. F., Andersson, J., Auerbach, E. J., [Bijsterbosch, J.](#), Douaud, G., ... WU-Minn HCP Consortium. (2013). Resting-state fMRI in the Human Connectome Project. *NeuroImage*, 80, 144–168. <https://doi.org/10.1016/j.neuroimage.2013.05.039>
- 2013 [Bijsterbosch, J. D.](#), Lee, K.-H., Hunter, M. D., Wilkinson, I. D., Farrow, T., Barker, A. T., & Woodruff, P. W. R. (2013). The effect of head orientation on subarachnoid cerebrospinal fluid distribution and its implications for neurophysiological modulation and recording techniques. *Physiological Measurement*, 34(3), N9–N14. <https://doi.org/10.1088/0967-3334/34/3/N9>
- 2012 [Bijsterbosch, J. D.](#), Barker, A. T., Lee, K.-H., & Woodruff, P. W. R. (2012). Where does transcranial magnetic stimulation (TMS) stimulate? Modelling of induced field maps for some common cortical and cerebellar targets. *Medical & Biological Engineering & Computing*, 50(7), 671–681. <https://doi.org/10.1007/s11517-012-0922-8>
- 2011 [Bijsterbosch, J. D.](#), Lee, K.-H., Dyson-Sutton, W., Barker, A. T., & Woodruff, P. W. R. (2011). Continuous theta burst stimulation over the left pre-motor cortex affects sensorimotor timing accuracy and supraliminal error correction. *Brain Research*, 1410(0), 101–111. <https://doi.org/10.1016/j.brainres.2011.06.062>
- 2011 [Bijsterbosch, J. D.](#), Lee, K.-H., Hunter, M. D., Tsoi, D. T., Lankappa, S., Wilkinson, I. D., ... Woodruff, P. W. R. (2011). The role of the cerebellum in sub- and supraliminal error correction during sensorimotor synchronization: evidence from fMRI and TMS. *Journal of Cognitive Neuroscience*, 23(5), 1100–1112. <https://doi.org/10.1162/jocn.2010.21506>

Manuscripts in Preparation

In Bijsterbosch, J.D., Woolrich, M.W., Jbabdi, S., Beckmann, C.F., Harrison, S.J., Smith, prep S.M. Disambiguating functional connectivity information in temporal and spatial domains.

Books

2017 Bijsterbosch, J.D., Smith, S.M., Beckmann, C.F. Introduction to Resting State fMRI Functional Connectivity. Oxford, United Kingdom: Oxford University Press.

Conference Proceedings

- 2017 Glasser, M.F., Coalson, T.S., Bijsterbosch, J.D., Harrison, S.J., Harms, M.P., Anticevic, A., Van Essen, D.C., Smith, S.M. Using temporal ICA to selectively remove global noise while preserving global signal in functional MRI data. Annual ISMRM meeting.
- 2017 Bijsterbosch, J.D., Harrison, S., Woolrich, M., Smith, S. Functional connectivity estimates are largely driven by spatial configuration, not true connectivity. Organization for Human Brain Mapping.
- 2017 Bijsterbosch, J.D., Harrison, S., Duff, E., Alfaro-Almagro, F., Woolrich, M., Smith, S. Resting-state amplitude: within- and between-subject variations. Organization for Human Brain Mapping.
- 2017 Harrison, S., Bijsterbosch, J., Woolrich, M., Smith, S. A hierarchical probabilistic model for subject-specific parcellations from resting-state fMRI data. Organization for Human Brain Mapping
- 2017 Harrison, S., Bijsterbosch, J., Woolrich, M., Smith, S. PROFUMO - Improved inference of Probabilistic Functional Modes from resting-state fMRI data. Organization for Human Brain Mapping
- 2017 Duff, E., Making, T., Bijsterbosch, J., Harrison, S., Smith, S., Woolrich, M. Disambiguating Brain Functional Connectivity. Organization for Human Brain Mapping.
- 2015 Bijsterbosch, J.D., Smith, S., Bishop S. Individual differences in functional connectivity under sustained threat of shock. Organization for Human Brain Mapping.
- 2015 Habord, R., Costa, L., Smith, J.Q., Bijsterbosch, J.D., Bishop, S., Nichols, T.E. Dynamic effective connectivity modelling of pain with multiregression dynamic models. Organization for Human Brain Mapping.
- 2014 Bijsterbosch, J.D., McKay D.R., Winkler A.M., Smith S., Kent Jr. J.W., Carless M.A., Curran J.E., Dyer T.D., Göring H.H.H., Olvera R., Fox P., Almasy L., Duggirala R., Blangero J., Glahn D.C., Bishop S. Genome- Wide Linkage Analysis of Resting State Functional Connectivity. Organization for Human Brain Mapping.

- 2013 [Bijsterbosch J.D.](#), Smith S., Forster S., John O., Bishop S. Anxiety and Altered Insula Connectivity at Rest. Society For Neuroscience Annual Meeting.
- 2013 [Bijsterbosch J.D.](#), Smith S., Forster S., Bishop S. Quantitative Evaluation of Motion Artifact Reduction Techniques in Resting State fMRI Data. Organization for Human Brain Mapping.
- 2013 Kelly M., Duff E., [Bijsterbosch J.](#), Voets N., Filippini N., Moeller S., Xu J., Yacoub E., Auerbach E., Ugurbil K., Smith S., Miller K. An Assessment of Motion Artefacts in Multiband EPI for High Spatial and Temporal Resolution Resting State FMRI. Annual ISMRM meeting.
- 2012 [Bijsterbosch J.D.](#), Lee K.-H., Hunter M.D., Smith S., Wilkinson I.D., Woodruff P.W.R. Time-Frequency Investigation of Dynamic Coherence and Phase in fMRI Resting State Functional Connectivity Networks. Biennial Conference on Resting State Brain Connectivity.
- 2012 [Bijsterbosch J.D.](#), Smith S., Forster S., John O., Bishop S. Dual clustering analysis of individual differences in resting state connectivity: beyond anxiety. Biennial Conference on Resting State Brain Connectivity
- 2012 [Bijsterbosch J.D.](#), Smith S., Forster S., Bishop S. Dual clustering analysis of individual differences in resting state connectivity: beyond anxiety. Organization for Human Brain Mapping.
- 2011 [Bijsterbosch J.D.](#), Lee K.-H., Hunter M.D., Wilkinson I.D. and Woodruff P.W.R. Time-frequency investigation of fMRI resting state networks with the use of wavelet coherence. Organization for Human Brain Mapping.
- 2011 [Bijsterbosch J.D.](#), Barker A.T., Lee K.-H. and Woodruff P.W.R. Where does Transcranial Magnetic Stimulation stimulate? Organization for Human Brain Mapping.
- 2010 [Bijsterbosch J.D.](#), Lee K.-H., Hunter M.D., Tsoi D.T., Lankappa S., Wilkinson I.D., Barker A.T. and Woodruff P.W.R. The role of the cerebellum in error correction during sensorimotor synchronization. Organization for Human Brain Mapping.
- 2009 [Bijsterbosch J.D.](#), Lee K.-H., Tsoi D.T., Wilkinson I.D. and Woodruff P.W.R. Lateralized cerebellar activation and dissociable functional networks for timing and error correction. NeuroMath.
- 2008 [Bijsterbosch J.D.](#), Lee K.-H., Barker A.T. and Woodruff P.W.R. Contribution of the primary and supplementary motor cortices to sensorimotor synchronization: a TMS study. Conference on Transcranial Magnetic and Direct Current Stimulation.

Awards and Honors

- 2014 Trainee Abstract Travel Award for the 2014 OHBM Annual Meeting
- 2008 First prize for best oral presentation, Neuroscience Away Day, Sheffield, UK
- 2007 First Class Degree MSc, University of Sheffield, UK
- 2006 Cum Laude BA Graduate, Maastricht University, The Netherlands
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Grants and Fellowships

- 2008-2011 Medical Research Council studentship (UK), £43000
2010 Sheffield Undergraduate Research Experience grant,
University of Sheffield, £2080
2008 Excellence Exchange Scheme travel grant, University of Sheffield, £1467
2008 Brain travel grant, £800
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Invited Talks

- 2018 Jülich Institute of Neuroscience and Medicine - Brain and Behaviour, Germany
From connectivity to biomarker
2018 Stanford Department of Psychology Colloquium, Stanford, USA
From connectivity to biomarker
2017 Workshop on large-scale trends in cortical organisation, Leipzig, Germany
Is functional connectivity driven by spatial variability?
2017 Summer School on Brain Connectomics, Verona, Italy
An introduction to resting state fMRI functional connectivity
2016 Neural Dynamics Christmas Forum, Bristol, UK
The three slides of Christmas: Variability, Amplitude, and Connectivity
2012 Neuroscience Seminar Series, University of California Berkeley, USA
Where does Transcranial Magnetic Stimulation (TMS) stimulate?
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Teaching Experience

- Since 2015 Course Organizer, FMRIB Graduate Programme, University of Oxford
Since 2015 Course Organizer, FSL Course, University of Oxford
Since 2013 Lecturer and Tutor, FMRIB Graduate Programme, University of Oxford
Since 2013 Lecturer and Tutor, FSL Course, University of Oxford
2010-2011 Demonstrator, Neuroanatomy Dissection course, University of Sheffield
2010 Guest Lecturer, Neuroimaging Methods, University of Sheffield
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Service to Profession

Ad hoc reviewer for: NeuroImage, NeuroImage Clinical, Journal of Magnetic Resonance Imaging, European Journal of Neuroscience, Biological Psychiatry, Cerebral Cortex, Brain Connectivity, Journal of Neuroscience, eLife, Scientific Reports, Brain Structure and Function, PLOS Computational Biology

Professional Affiliation

Organization for Human Brain Mapping, Society For Neuroscience

References

Available on request