

# Hao-Ting Wang, PhD

## Research Fellow

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### RESEARCH POSITIONS

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<b>Research Fellow</b> <i>Brighton and Sussex Medical School, University of Sussex</i> PI: Prof Hugo Critchley	2019 – Present <i>Brighton, United Kingdom</i>
<b>Postdoctoral Research Associate</b> <i>University of York</i> Working on the ERC grant project—Wandering Minds	2018 – 2019 <i>York, United Kingdom</i>
<b>Research Administrator</b> <i>University of York</i> Experiment design, project management, neuroimaging analysis pipeline development	2015 – 2018 <i>York, United Kingdom</i>
<b>Research Assistant</b> <i>National Taiwan University</i> Project: Attention regulation in children with Tourette syndrome Experiment design, data collection and analysis	2015 <i>Taipei, Taiwan</i>

### EDUCATION

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<b>PhD in Cognitive Neuroscience and Neuroimaging</b> <i>University of York</i> Prof. Jonathan Smallwood and Prof. Elizabeth Jefferies Thesis: “ <i>Towards an Ontology of Ongoing Thought</i> ”	2015 – 2018 <i>York, United Kingdom</i>
<b>Master of Research in Psychology</b> <i>University of York</i>	2013 – 2014 <i>York, United Kingdom</i>
<b>BSc in Psychology</b> <i>National Chengchi University</i>	2009 – 2013 <i>Taipei, Taiwan</i>

### AWARDS

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2017	Travel Award	Guarantors of Brain	£600
2016	Travel Award	Brainhack Vienna	\$500
2014	Department Summer Bursary Award	University of York	£1000

### PUBLICATIONS

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#### Preprints

- [1] H.-T. **Wang**, J. Smallwood, J. Mourao-Miranda, C. H. Xia, T. D. Satterthwaite, D. S. Bassett, and D. Bzdok, “Finding the needle in a high-dimensional haystack: A tutorial on canonical correlation analysis,” *arXiv:1812.02598*, 2018.

#### Peer-Reviewed Journals

- [1] C. Murphy, H.-T. **Wang**, D. Konu, R. Lowndes, D. S. Margulies, E. Jefferies, and J. Smallwood, “Modes of operation: A topographic neural gradient supporting stimulus dependent and independent cognition,” *NeuroImage*, vol. 186, pp. 487–496, 2019.

- [2] A. Turnbull, H.-T. **Wang**, J. W. Schooler, E. Jefferies, D. S. Margulies, and J. Smallwood, "The ebb and flow of attention: Between-subject variation in intrinsic connectivity and cognition associated with the dynamics of ongoing experience," *NeuroImage*, vol. 185, pp. 286–299, 2019.
- [3] M. Sormaz, C. Murphy, H.-T. **Wang**, M. Hymers, T. Karapanagiotidis, G. Poerio, D. Margulies, E. Jefferies, and J. Smallwood, "The default mode network can support the level of detail in experience during active task states," *Proceedings of the National Academy of Sciences*, 8 2018.
- [4] H.-T. **Wang**, D. Bzdok, D. Margulies, C. Craddock, M. Milham, E. Jefferies, and J. Smallwood, "Patterns of thought: population variation in the associations between large-scale network organisation and self-reported experiences at rest," *Neuroimage*, vol. 176, pp. 518–527, 8 2018.
- [5] C. Murphy, E. Jefferies, S.-A. Rueschemeyer, M. Sormaz, H.-T. **Wang**, D. Margulies, and J. Smallwood, "Distant from input: Evidence of regions within the default mode network supporting perceptually-decoupled and conceptually-guided cognition," *NeuroImage*, vol. 171, pp. 393–401, 5 2018.
- [6] M. Villena-Gonzalez, H.-T. **Wang**, M. Sormaz, G. Mollo, D. Margulies, E. Jefferies, and J. Smallwood, "Individual variation in the propensity for prospective thought is associated with functional integration between visual and retrosplenial cortex," *Cortex*, vol. 99, pp. 224 – 234, 2 2018.
- [7] H.-T. **Wang**, G. L. Poerio, C. Murphy, D. Bzdok, E. Jefferies, and J. Smallwood, "Dimensions of Experience: Exploring the Heterogeneity of the Wandering Mind," *Psychological Science*, vol. 29, no. 1, pp. 56–71, 1 2018.
- [8] D. Vatansever, D. Bzdok, H.-T. **Wang**, G. Mollo, M. Sormaz, C. Murphy, T. Karapanagiotidis, J. Smallwood, and E. Jefferies, "Varieties of semantic cognition revealed through simultaneous decomposition of intrinsic brain connectivity and behaviour," *NeuroImage*, vol. 158, pp. 1–11, 9 2017.
- [9] G. L. Poerio, M. Sormaz, H.-T. **Wang**, D. Margulies, E. Jefferies, and J. Smallwood, "The role of the default mode network in component processes underlying the wandering mind," *Social Cognitive and Affective Neuroscience*, vol. 12, no. 7, 7 2017.
- [10] J. Sanders, H.-T. **Wang**, J. Schooler, and J. Smallwood, "Can I get me out of my head? Exploring strategies for controlling the self-referential aspects of the mind-wandering state during reading," *The Quarterly Journal of Experimental Psychology*, pp. 1–27, 6 2016.
- [11] J. Smallwood, T. Karapanagiotidis, F. Ruby, B. Medea, I. de Caso, M. Konishi, H.-T. **Wang**, G. Hallam, D. S. Margulies, and E. Jefferies, "Representing representation: Integration between the temporal lobe and the posterior cingulate influences the content and form of spontaneous thought," *PLOS ONE*, vol. 11, no. 4, pp. 1–19, 4 2016.

## Conferences Presentations

- [1] H.-T. Wang, E. Jefferies, and J. Smallwood, "Inhibition of prior mental content contributes to content representation of on-going thoughts." Montreal, Canada: RSBC, 9 2018.
- [2] H.-T. Wang, D. Bzdok, D. Margulies, C. Craddock, M. Milham, E. Jefferies, and J. Smallwood, "Decomposing self-reports of experience at rest with brain connectivity reveals links to intelligence." Singapore: OHBM, 6 2018.
- [3] H.-T. Wang, G. L. Poerio, C. Murphy, D. Bzdok, E. Jefferies, and J. Smallwood, "Dimensions of experience: Exploring the heterogeneity of the wandering mind." Amsterdam, Netherlands: ICON, 8 2017.
- [4] H.-T. Wang, D. Bzdok, C. Murphy, D. Vatansever, G. L. Poerio, J. Smallwood, and E. Jefferies, "Component processes and the wandering mind: Links between spontaneous thought contents, task performance and resting state brain connectivity." Vienna, Austria: RSBC, 9 2016.

## SOFTWARE AND PROGRAMMING SKILLS

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<b>Brain Imaging</b>	FSL, Freesurfer, Connectome Workbench, C-PAC, CONN, nipy
<b>Programming Language</b>	Python, Bash, R, MATLAB
<b>Research Computing</b>	High performance clusters (SGE), version control (git), AWS
<b>Operating Systems</b>	Linux, Windows
<b>Experiment Design</b>	PsychoPy

## MENTORING EXPERIENCE

2019	Bronte McKeown	University of York	Master student
2019	Will Strawson	University of York	Master student
2018	Delali Konu	University of York	Master student, authored one paper
2018	Rebecca Lowndes	University of York	Master student, authored one paper

## TEACHING EXPERIENCE

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### University of York

*Programming in Neuroimaging*

October – March 2016

*York, United Kingdom*

Teaching assistant. Topics covered basic Python, data visualization, PsychoPy, data analysis and shell scripting.

## PROFESSIONAL SERVICE

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### Leadership Positions

Mar. 2017 Organizing committee, Brainhack York, York, UK.

### Ad-hoc Peer Review

NeuroImage, Advances in Methods and Practices in Psychological Science, Brain Imaging and Behavior, Neuroinformatics

### Membership

Open Science Interest Group, University of York

Organization of Human Brain Mapping

## PROFESSIONAL DEVELOPMENT

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Aug. 2019 Neurohackademy, Seattle, USA.

Dec. 2017 Gradient workshop, Leipzig, Germany.

June 2017 Machine Learning Summer School, Tübingen, Germany.

Sep. 2016 Brainhack Vienna, Vienna, Austria.

Feb. 2016 Brainhack@Paris, Paris, France.

Last updated: August 19, 2019