

Jonathan Smallwood

Professor in Psychology and Neuroscience, Department of Psychology, Queen's University, Canada.

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
University Strathclyde, Glasgow	BA (Hons)	08/1996	Psychology
University Strathclyde, Glasgow	Ph.D.	05/2001	Psychology
University of British Columbia, Vancouver	Postdoctoral	08/2006	Psychology

Personal Statement

Over the last two decades my scientific work has been at the fore front of the development of the theoretical and empirical methods that are the foundation of a mature neurocognitive account of internal states of mind (see Ref 1). This work has included the development of state-of-the-art techniques for the measurement of ongoing thought patterns, novel methods for the analysis of brain imaging data, and the methods for analyzing the intersection of both of these descriptions of cognition. My work has been highly influential bringing in more \$3,000,000 USD in external support and through the publication of more that 250 peer reviewed papers many of which are in internationally recognized journals including Nature Reviews Neuroscience, Annual Review of Psychology, Psychological Bulletin, Proceedings of the National Academy of Science and Nature Communications. My current *h*-index is 88.

Contribution to Science

1. The development of experience sampling as a tool for understanding human cognition

One of my most core scientific contributions is the pioneering development of experience sampling as a viable technique for understanding the mechanisms underpinning cognition. My early work in the domain of psychology explored the concept of 'mind-wandering and demonstrated that the covert shifts of attention that occur when our minds wander from the task being performed are important contributory factor to well validated measures of a participants health, well-being and happiness, and can be important in understanding features of cognition such as executive control and memory. My contribution to psychology is highlighted by an invitation to write an Annual Review of Psychology on the topic of mind-wandering in 2015 (along with Professor Jonathan Schooler). In recent years, I have extended this work using experience sampling to include a focus on cognitive neuroscience. These studies have demonstrated that patterns of thought as determined through experience sampling show robust and reliable correlations with patterns of brain activity and these studies have revealed important features of the functional correlates of large-scale brain systems, including a project that the default mode network can be related to a detailed focus on task relevant information during certain task states (such as working memory or reading). They also help bridge the gap between the lab and the real world and have allowed us to understand how the COVID pandemic elicited change in our thinking in daily life.

2. The development of connectivity gradients as a tool for understanding the organization of brain activity.

In the field of neuroscience my world leading work on connectivity gradients has highlighted the importance of contextualizing brain systems in a whole brain context. In 2016 in a paper that I was the senior author on was

published in the Proceedings of the National Academy of Sciences which established that the application of advanced machine learning techniques to data describing brain activity helps explain the functional role that the default mode network in human cognition. In particular, we demonstrated that this large-scale network can be understood as the apex of a functional hierarchy that is anchored at one end by unimodal systems such as visual, motor and auditory cortex, and at the other by transmodal systems including the default mode network. In the short time since it has been published it has already been highly influential: It has already been cited more than 400 times. My continuing work in this area has helped detail the significance of this observation for both normal cognition and for abnormal states such as autism, and has been well received by the scientific community leading to multiple publications in high impact journals including Nature Communications, Proceedings of the National Academy of Science, Science Advances, PLOS Biology, ELife and Scientific Reports. I was recently invited to write a review for Nature Reviews Neuroscience that summarized how this work has influenced our views of the role of the default mode network in human cognition.

3. Development of theoretical frameworks for understanding different features higher order cognition

My work has also been influential in developing common theoretical frameworks in which apparently antagonistic states, such as task based and self-generated cognition can be conceptualised. Although there are important features of human cognition that are modular, there are also multiple examples of systems that play a more general role in cognition (such as the default mode network or the executive control system). My theoretical work has been influential in explaining how broadly similar systems can contribute to apparently opposing states, and also by establishing conceptual frameworks in which these can be understood. Empirically, my work has shown important domain features of cognition, such as the evidence that the default mode network can contribute to both task relevant and task irrelevant states, or that features of task processing (such as semantic processing) also contribute to patterns of self-generated thought. Perhaps more importantly, my work has provided conceptual frameworks that allow these apparently contrasting features to be accommodated. These frameworks, such as the process-occurrence framework (published in Psychological Bulletin in 2013) explains how by understanding these apparently opposing states in terms of the underlying processes, allows the underlying similarities in these states to be identified. For example, by establishing that during states of self-generated thought cognition becomes decoupled from the input, my work explains why there are similarities in the neural patterns seen during tasks that rely on memory as is seen during patterns of self-generated thoughts that rely on similar features of cognition (i.e. semantic memory). Our recent work in the field of cognitive neuroscience has gone on to formalise these in a series of papers led by individuals from my group and published in journals including Nature Communications and Psychological Science.

Ongoing and completed research funding

- Schooler, J. and Smallwood, J. 2006-2010, 'Mind-wandering, meta-awareness, & ADHD', *Canadian Institute of Health Research*, \$225,219.
- Schooler, J. and Smallwood, J. 2011-2014, 'Mind-wandering during reading', *Department of Education: Institute of Education Sciences*, \$1,750,000.
- Smallwood, J. 2013-2016, 'Reading the wandering mind in the eyes', *Defense Science and Technology Laboratory*, £107,605.
- Smallwood, J. 2014-2016, 'Towards an understanding of the uniqueness of prospective thought', *John Templeton Foundation*, \$150,000.
- Smallwood, J. Callard F. & Margulies, D., 2015-2017, 'Wandering minds: Interdisciplinary experiments on self-generated thought', *VolkswagenStiftung*, € 395,000.
- Smallwood, J. 2015-2020, 'Wandering minds', *European Research Council*, €1,800 000.

- Smallwood J. & Jefferies E., 2016-2017, 'Understanding the significance of age related declines in self-generated thought', *Dunhill Medical Trust*, £30,000.
- Smallwood, J. & Wammes, J.D.W., 2022-2024, "Sampling patterns of ongoing thought in the real world and describing their links to mental health". HFRF, \$250,000 CAD.
- Smallwood, J. 2023-2028. States of Mind and Brain. NSERC Discovery Grant. \$295,000 CAD.
- Smallwood, J. 2023-2025. Sub-contract with Child Mind Institute. \$170,000 CAD.

Published papers (in alphabetical order)

- Adams, N. E., Teige, C., Mollo, G., Karapanagiotidis, T., Cornelissen, P. L., Smallwood, J., Traub, R. D., Jefferies, E., & Whittington, M. A. (2019). Theta/delta coupling across cortical laminae contributes to semantic cognition. *Journal of neurophysiology*, *121*(4), 1150-1161.
- Alam, T. G., Murphy, C., Smallwood, J., & Jefferies, E. (2018). Meaningful inhibition: Exploring the role of meaning and modality in response inhibition. *NeuroImage*, *181*, 108-119.
- Alam, T. R. d. J. G., Karapanagiotidis, T., Smallwood, J., & Jefferies, E. (2019). Degrees of lateralisation in semantic cognition: Evidence from intrinsic connectivity. *NeuroImage*, *202*, 116089.
- Alam, T. R. G., Krieger-Redwood, K., Evans, M., Rice, G. E., Smallwood, J., & Jefferies, E. (2020). Individual Differences in the Connectivity of Left and Right Anterior Temporal Lobes Relate to Modality and Category Effects in Semantic Categorisation. *BioRxiv*, 2020.2006. 2022.140509.
- Alam, T. R. G., Krieger-Redwood, K., Evans, M., Rice, G. E., Smallwood, J., & Jefferies, E. (2021). Intrinsic connectivity of anterior temporal lobe relates to individual differences in semantic retrieval for landmarks. *CORTEX*, *134*, 76-91.
- Alcalá-López, D., Smallwood, J., Jefferies, E., Van Overwalle, F., Vogeley, K., Mars, R. B., Turetsky, B. I., Laird, A. R., Fox, P. T., & Eickhoff, S. B. (2018). Computing the social brain connectome across systems and states. *Cerebral Cortex*, *28*(7), 2207-2232.
- Allen, M., Smallwood, J., Christensen, J., Gramm, D., Rasmussen, B., Jensen, C. G., Roepstorff, A., & Lutz, A. (2013). The balanced mind: the variability of task-unrelated thoughts predicts error monitoring. *Frontiers in Human Neuroscience*, *7*, 743.
- Andrews-Hanna, J. R., Smallwood, J., & Spreng, R. N. (2014). The default network and self-generated thought: Component processes, dynamic control, and clinical relevance. *Annals of the new York Academy of Sciences*, *1316*(1), 29-52.
- Baird, B., Cieslak, M., Smallwood, J., Grafton, S. T., & Schooler, J. W. (2015). Regional white matter variation associated with domain-specific metacognitive accuracy. *Journal of Cognitive Neuroscience*, *27*(3), 440-452.
- Baird, B., Smallwood, J., Fishman, D. J., Mrazek, M. D., & Schooler, J. W. (2013). Unnoticed intrusions: Dissociations of meta-consciousness in thought suppression. *Consciousness and cognition*, *22*(3), 1003-1012.
- Baird, B., Smallwood, J., Gorgolewski, K. J., & Margulies, D. S. (2013). Medial and lateral networks in anterior prefrontal cortex support metacognitive ability for memory and perception. *Journal of Neuroscience*, *33*(42), 16657-16665.
- Baird, B., Smallwood, J., Lutz, A., & Schooler, J. W. (2014). The decoupled mind: mind-wandering disrupts cortical phase-locking to perceptual events. *Journal of Cognitive Neuroscience*, *26*(11), 2596-2607.
- Baird, B., Smallwood, J., Mrazek, M. D., Kam, J. W., Franklin, M. S., & Schooler, J. W. (2012). Inspired by distraction: Mind wandering facilitates creative incubation. *Psychological science*, *23*(10), 1117-1122.
- Baird, B., Smallwood, J., & Schooler, J. W. (2011). Back to the future: Autobiographical planning and the functionality of mind-wandering. *Consciousness and cognition*, *20*(4), 1604-1611.
- Baker, D. H., Karapanagiotidis, T., Coggan, D. D., Wailes-Newson, K., & Smallwood, J. (2015). Brain networks underlying bistable perception. *NeuroImage*, *119*, 229-234.

- Barron, E., Riby, L. M., Greer, J., & Smallwood, J. (2011). Absorbed in thought: The effect of mind wandering on the processing of relevant and irrelevant events. *Psychological science*, *22*(5), 596-601.
- Benedek, M., Daxberger, D., Annerer-Walcher, S., & Smallwood, J. (2018). Are you with me? Probing the human capacity to recognize external/internal attention in others' faces. *Visual cognition*, *26*(7), 511-517.
- Bernhardt, B. C., Fadaie, F., Liu, M., Caldairou, B., Gu, S., Jefferies, E., Smallwood, J., Bassett, D. S., Bernasconi, A., & Bernasconi, N. (2019). Temporal lobe epilepsy: Hippocampal pathology modulates connectome topology and controllability. *Neurology*, *92*(19), e2209-e2220.
- Bernhardt, B. C., Smallwood, J., Keilholz, S., & Margulies, D. S. (2022). Gradients in brain organization. In (Vol. 251, pp. 118987): Academic Press.
- Bernhardt, B. C., Smallwood, J., Tusche, A., Ruby, F. J., Engen, H. G., Steinbeis, N., & Singer, T. (2014). Medial prefrontal and anterior cingulate cortical thickness predicts shared individual differences in self-generated thought and temporal discounting. *NeuroImage*, *90*, 290-297.
- Birnie, L., Smallwood, J., Reay, J., & Riby, L. (2015). Glucose and the wandering mind: not paying attention or simply out of fuel? *Psychopharmacology*, *232*, 2903-2910.
- Callard, F., Smallwood, J., Golchert, J., & Margulies, D. S. (2013). The era of the wandering mind? Twenty-first century research on self-generated mental activity. *Frontiers in Psychology*, *4*, 891.
- Callard, F., Smallwood, J., & Margulies, D. S. (2012). Default positions: how neuroscience's historical legacy has hampered investigation of the resting mind. *Frontiers in Psychology*, *3*, 321.
- Christoff, K., Gordon, A. M., Smallwood, J., Smith, R., & Schooler, J. W. (2009). Experience sampling during fMRI reveals default network and executive system contributions to mind wandering. *Proceedings of the National Academy of Sciences*, *106*(21), 8719-8724.
- Christoff, K., Keramian, K., Luus, B., Schoner, J., Smallwood, J., & Smith, R. (2006). Mind-wandering with and without awareness: An fMRI study of spontaneous thought processes. Proceedings of the Annual Meeting of the Cognitive Science Society,
- Dafflon, J., F. Da Costa, P., Váša, F., Monti, R. P., Bzdok, D., Hellyer, P. J., Turkheimer, F., Smallwood, J., Jones, E., & Leech, R. (2022). A guided multiverse study of neuroimaging analyses. *Nature Communications*, *13*(1), 3758.
- Davey, J., Cornelissen, P. L., Thompson, H. E., Sonkusare, S., Hallam, G., Smallwood, J., & Jefferies, E. (2015). Automatic and controlled semantic retrieval: TMS reveals distinct contributions of posterior middle temporal gyrus and angular gyrus. *Journal of Neuroscience*, *35*(46), 15230-15239.
- Davey, J., Thompson, H. E., Hallam, G., Karapanagiotidis, T., Murphy, C., De Caso, I., Krieger-Redwood, K., Bernhardt, B. C., Smallwood, J., & Jefferies, E. (2016). Exploring the role of the posterior middle temporal gyrus in semantic cognition: Integration of anterior temporal lobe with executive processes. *NeuroImage*, *137*, 165-177.
- de Caso, I., Karapanagiotidis, T., Aggius-Vella, E., Konishi, M., Margulies, D. S., Jefferies, E., & Smallwood, J. (2017). Knowing me, knowing you: Resting-state functional connectivity of ventromedial prefrontal cortex dissociates memory related to self from a familiar other. *Brain and Cognition*, *113*, 65-75.
- de Caso, I., Poerio, G., Jefferies, E., & Smallwood, J. (2017). That's me in the spotlight: neural basis of individual differences in self-consciousness. *Social cognitive and affective neuroscience*, *12*(9), 1384-1393.
- Dezhina, Z., Smallwood, J., Xu, T., Turkheimer, F. E., Moran, R. J., Friston, K. J., Leech, R., & Fagerholm, E. D. (2023). Establishing brain states in neuroimaging data. *PLOS Computational Biology*, *19*(10), e1011571.
- Eisenhauer, S., Gonzalez Alam, T. R. d. J., Cornelissen, P. L., Smallwood, J., & Jefferies, E. (2023). Individual word representations dissociate from linguistic context along a cortical unimodal to heteromodal gradient. *BioRxiv*, 2023.2004. 2025.538257.
- Engen, H. G., Smallwood, J., & Singer, T. (2017). Differential impact of emotional task relevance on three indices of prioritised processing for fearful and angry facial expressions. *Cognition and Emotion*, *31*(1), 175-184.

- Engert, V., Smallwood, J., & Singer, T. (2014). Mind your thoughts: Associations between self-generated thoughts and stress-induced and baseline levels of cortisol and alpha-amylase. *Biological psychology*, *103*, 283-291.
- Evans, M., Krieger-Redwood, K., Alam, T. R. G., Smallwood, J., & Jefferies, E. (2020). Controlled semantic summation correlates with intrinsic connectivity between default mode and control networks. *CORTEX*, *129*, 356-375.
- Finnigan, F., Schulze, D., & Smallwood, J. (2007). Alcohol and the wandering mind: A new direction in the study of alcohol on attentional lapses. *International Journal on Disability and Human Development*, *6*(2), 189-200.
- Finnigan, F., Schulze, D., Smallwood, J., & Helander, A. (2005). The effects of self-administered alcohol-induced 'hangover' in a naturalistic setting on psychomotor and cognitive performance and subjective state. *Addiction*, *100*(11), 1680-1689.
- Franklin, M. S., Broadway, J. M., Mrazek, M. D., Smallwood, J., & Schooler, J. W. (2013). Window to the wandering mind: Pupillometry of spontaneous thought while reading. In: SAGE Publications Sage UK: London, England.
- Franklin, M. S., Mrazek, M. D., Anderson, C. L., Johnston, C., Smallwood, J., Kingstone, A., & Schooler, J. W. (2017). Tracking distraction: The relationship between mind-wandering, meta-awareness, and ADHD symptomatology. *Journal of attention disorders*, *21*(6), 475-486.
- Franklin, M. S., Mrazek, M. D., Anderson, C. L., Smallwood, J., Kingstone, A., & Schooler, J. W. (2013). The silver lining of a mind in the clouds: Interesting musings are associated with positive mood while mind-wandering. *Frontiers in Psychology*, *4*, 583.
- Franklin, M. S., Smallwood, J., & Schooler, J. W. (2011). Catching the mind in flight: Using behavioral indices to detect mindless reading in real time. *Psychonomic Bulletin & Review*, *18*, 992-997.
- Franklin, M. S., Smallwood, J., Zedelius, C. M., Broadway, J. M., & Schooler, J. W. (2016). Unaware yet reliant on attention: Experience sampling reveals that mind-wandering impedes implicit learning. *Psychonomic Bulletin & Review*, *23*, 223-229.
- Fritz, T. H., Brummerloh, B., Urquijo, M., Wegner, K., Reimer, E., Gutekunst, S., Schneider, L., Smallwood, J., & Villringer, A. (2017). Blame it on the bossa nova: Transfer of perceived sexiness from music to touch. *Journal of Experimental Psychology: General*, *146*(9), 1360.
- Gale, D. J., Areshenkoff, C. N., Standage, D. I., Nashed, J. Y., Markello, R. D., Flanagan, J. R., Smallwood, J., & Gallivan, J. P. (2022). Distinct patterns of cortical manifold expansion and contraction underlie human sensorimotor adaptation. *Proceedings of the National Academy of Sciences*, *119*(52), e2209960119.
- Gao, Z., Zheng, L., Chiou, R., Gouws, A., Krieger-Redwood, K., Wang, X., Varga, D., Ralph, M. A. L., Smallwood, J., & Jefferies, E. (2021). Distinct and common neural coding of semantic and non-semantic control demands. *NeuroImage*, *236*, 118230.
- Gao, Z., Zheng, L., Gouws, A., Krieger-Redwood, K., Wang, X., Varga, D., Smallwood, J., & Jefferies, E. (2021). Context Free and Context-Dependent Conceptual Representation in the Temporal Lobes. *BioRxiv*, 2021.2005.2003.442424.
- Gao, Z., Zheng, L., Gouws, A., Krieger-Redwood, K., Wang, X., Varga, D., Smallwood, J., & Jefferies, E. (2023). Context free and context-dependent conceptual representation in the brain. *Cerebral Cortex*, *33*(1), 152-166.
- Gao, Z., Zheng, L., Krieger-Redwood, K., Halai, A., Margulies, D. S., Smallwood, J., & Jefferies, E. (2022). Flexing the principal gradient of the cerebral cortex to suit changing semantic task demands. *Elife*, *11*, e80368.
- Geffen, T., Smallwood, J., Finke, C., Olbrich, S., Sjoerds, Z., & Schlagenhauf, F. (2022). Functional connectivity alterations between default mode network and occipital cortex in patients with obsessive-compulsive disorder (OCD). *NeuroImage: Clinical*, *33*, 102915.
- Girn, M., Roseman, L., Bernhardt, B., Smallwood, J., Carhart-Harris, R., & Spreng, R. N. (2022). Serotonergic psychedelic drugs LSD and psilocybin reduce the hierarchical differentiation of unimodal and transmodal cortex. *NeuroImage*, *256*, 119220.

- Golchert, J., Smallwood, J., Jefferies, E., Liem, F., Huntenburg, J. M., Falkiewicz, M., Lauckner, M. E., Oligschläger, S., Villringer, A., & Margulies, D. S. (2017). In need of constraint: Understanding the role of the cingulate cortex in the impulsive mind. *NeuroImage*, *146*, 804-813.
- Golchert, J., Smallwood, J., Jefferies, E., Seli, P., Huntenburg, J. M., Liem, F., Lauckner, M. E., Oligschläger, S., Bernhardt, B. C., & Villringer, A. (2017). Individual variation in intentionality in the mind-wandering state is reflected in the integration of the default-mode, fronto-parietal, and limbic networks. *NeuroImage*, *146*, 226-235.
- Gonzalez Alam, T. R., Cruz Arias, J., Jefferies, E., Smallwood, J., Leemans, A., & Marino Davolos, J. (2023). Ventral and dorsal aspects of the inferior frontal-occipital fasciculus support verbal semantic access and visually-guided behavioural control. *Brain Structure and Function*, 1-15.
- Gonzalez Alam, T. R. d. J., Mckeown, B. L., Gao, Z., Bernhardt, B., Vos de Wael, R., Margulies, D. S., Smallwood, J., & Jefferies, E. (2022). A tale of two gradients: differences between the left and right hemispheres predict semantic cognition. *Brain Structure and Function*, *227*(2), 631-654.
- Gordon, A., Smith, R., Keramatian, K., Luus, B., Weinberg, A., Smallwood, J., Schooler, J., & Christoff, K. (2007). Mind-wandering, awareness, and task performance: an fMRI study. *Canadian Journal of Experimental Psychology-Revue Canadienne De Psychologie Experimentale*,
- Gorgolewski, K. J., Lurie, D., Urchs, S., Kipping, J. A., Craddock, R. C., Milham, M. P., Margulies, D. S., & Smallwood, J. (2014). A correspondence between individual differences in the brain's intrinsic functional architecture and the content and form of self-generated thoughts. *PloS one*, *9*(5), e97176.
- Gorgolewski, K. J., Mendes, N., Wilfling, D., Wladimirow, E., Gauthier, C. J., Bonnen, T., Ruby, F. J., Trampel, R., Bazin, P.-L., & Cozatl, R. (2015). A high resolution 7-Tesla resting-state fMRI test-retest dataset with cognitive and physiological measures. *Scientific Data*, *2*(1), 1-13.
- Hallam, G. P., Thompson, H. E., Hymers, M., Millman, R. E., Rodd, J. M., Ralph, M. A. L., Smallwood, J., & Jefferies, E. (2018). Task-based and resting-state fMRI reveal compensatory network changes following damage to left inferior frontal gyrus. *CORTEX*, *99*, 150-165.
- Hardikar, S., Mckeown, B., Schaare, H. L., Xu, T., Lauckner, M. E., Valk, S. L., Margulies, D. S., Turnbull, A., Bernhardt, B., & Vos de Wael, R. (2022). Macro-scale patterns in functional connectivity associated with ongoing thought patterns and dispositional traits. *Elife*, *2024*.
- Heim, D., Davies, J. B., Cheyne, B., & Smallwood, J. (2001). Addiction as a functional representation. *Journal of Community & Applied Social Psychology*, *11*(1), 57-62.
- Heim, D., Smallwood, J., & Davies, J. B. (2005). Variability in lay perceptions of depression: A vignette study. *Psychology and Psychotherapy: Theory, Research and Practice*, *78*(3), 315-325.
- Ho, N. S. P., Baker, D., Karapanagiotidis, T., Seli, P., Wang, H. T., Leech, R., Bernhardt, B., Margulies, D., Jefferies, E., & Smallwood, J. (2020). Missing the forest because of the trees: slower alternations during binocular rivalry are associated with lower levels of visual detail during ongoing thought. *Neuroscience of consciousness*, *2020*(1), niaa020.
- Ho, N. S. P., Poerio, G., Konu, D., Turnbull, A., Sormaz, M., Leech, R., Bernhardt, B., Jefferies, E., & Smallwood, J. (2020). Facing up to the wandering mind: Patterns of off-task laboratory thought are associated with stronger neural recruitment of right fusiform cortex while processing facial stimuli. *NeuroImage*, *214*, 116765.
- Ho, N. S. P., Wang, X., Vatansever, D., Margulies, D. S., Bernhardt, B., Jefferies, E., & Smallwood, J. (2019). Individual variation in patterns of task focused, and detailed, thought are uniquely associated within the architecture of the medial temporal lobe. *NeuroImage*, *202*, 116045.
- Hong, S.-J., Vos de Wael, R., Bethlehem, R. A., Lariviere, S., Paquola, C., Valk, S. L., Milham, M. P., Di Martino, A., Margulies, D. S., & Smallwood, J. (2019). Atypical functional connectome hierarchy in autism. *Nature Communications*, *10*(1), 1022.
- Hong, S.-J., Xu, T., Nikolaidis, A., Smallwood, J., Margulies, D. S., Bernhardt, B., Vogelstein, J., & Milham, M. P. (2020). Toward a connectivity gradient-based framework for reproducible biomarker discovery. *NeuroImage*, *223*, 117322.

- Jefferies, E., Thompson, H., Cornelissen, P., & Smallwood, J. (2020). The neurocognitive basis of knowledge about object identity and events: dissociations reflect opposing effects of semantic coherence and control. *Philosophical Transactions of the Royal Society B*, *375*(1791), 20190300.
- Kajimura, S., Margulies, D., & Smallwood, J. (2023). Frequency-specific brain network architecture in resting-state fMRI. *Scientific Reports*, *13*(1), 2964.
- Kajimura, S., Nozaki, Y., Goto, T., & Smallwood, J. (2022). Not All Daydreaming Is Equal: A Longitudinal Investigation of Social and General Daydreaming and Marital Relationship Quality. *Frontiers in Psychology*, *13*, 904025.
- Kam, J. W., Dao, E., Farley, J., Fitzpatrick, K., Smallwood, J., Schooler, J. W., & Handy, T. C. (2011). Slow fluctuations in attentional control of sensory cortex. *Journal of Cognitive Neuroscience*, *23*(2), 460-470.
- Kanske, P., Sharifi, M., Smallwood, J., Dziobek, I., & Singer, T. (2017). Where the narcissistic mind wanders: Increased self-related thoughts are more positive and future oriented. *Journal of Personality Disorders*, *31*(4), 553-566.
- Karapanagiotidis, T., Bernhardt, B. C., Jefferies, E., & Smallwood, J. (2017). Tracking thoughts: Exploring the neural architecture of mental time travel during mind-wandering. *NeuroImage*, *147*, 272-281.
- Karapanagiotidis, T., Jefferies, E., & Smallwood, J. (2021). Interactions between the neural correlates of dispositional internally directed thought and visual imagery. *Philosophical Transactions of the Royal Society B*, *376*(1817), 20190691.
- Karapanagiotidis, T., Vidaurre, D., Quinn, A. J., Vatansever, D., Poerio, G. L., Turnbull, A., Ho, N. S. P., Leech, R., Bernhardt, B. C., & Jefferies, E. (2020). The psychological correlates of distinct neural states occurring during wakeful rest. *Scientific Reports*, *10*(1), 21121.
- Kernbach, J. M., Satterthwaite, T. D., Bassett, D. S., Smallwood, J., Margulies, D., Krall, S., Shaw, P., Varoquaux, G., Thirion, B., & Konrad, K. (2018). Shared endo-phenotypes of default mode dysfunction in attention deficit/hyperactivity disorder and autism spectrum disorder. *Translational psychiatry*, *8*(1), 133.
- Kernbach, J. M., Yeo, B. T., Smallwood, J., Margulies, D. S., Thiebaut de Schotten, M., Walter, H., Sabuncu, M. R., Holmes, A. J., Gramfort, A., & Varoquaux, G. (2018). Subspecialization within default mode nodes characterized in 10,000 UK Biobank participants. *Proceedings of the National Academy of Sciences*, *115*(48), 12295-12300.
- Konishi, M., Brown, K., Battaglini, L., & Smallwood, J. (2017). When attention wanders: Pupillometric signatures of fluctuations in external attention. *Cognition*, *168*, 16-26.
- Konishi, M., McLaren, D. G., Engen, H., & Smallwood, J. (2015). Shaped by the past: the default mode network supports cognition that is independent of immediate perceptual input. *PLoS one*, *10*(6), e0132209.
- Konishi, M., & Smallwood, J. (2016). Shadowing the wandering mind: How understanding the mind-wandering state can inform our appreciation of conscious experience. *Wiley Interdisciplinary Reviews: Cognitive Science*, *7*(4), 233-246.
- Konu, D., Mckeown, B., Turnbull, A., Ho, N. S. P., Karapanagiotidis, T., Vanderwal, T., McCall, C., Tipper, S. P., Jefferies, E., & Smallwood, J. (2021). Exploring patterns of ongoing thought under naturalistic and conventional task-based conditions. *Consciousness and cognition*, *93*, 103139.
- Konu, D., Turnbull, A., Karapanagiotidis, T., Wang, H.-T., Brown, L. R., Jefferies, E., & Smallwood, J. (2020). A role for the ventromedial prefrontal cortex in self-generated episodic social cognition. *NeuroImage*, *218*, 116977.
- Krieger-Redwood, K., Jefferies, E., Karapanagiotidis, T., Seymour, R., Nunes, A., Ang, J. W. A., Majernikova, V., Mollo, G., & Smallwood, J. (2016). Down but not out in posterior cingulate cortex: Deactivation yet functional coupling with prefrontal cortex during demanding semantic cognition. *NeuroImage*, *141*, 366-377.
- Krieger-Redwood, K., Steward, A., Gao, Z., Wang, X., Halai, A., Smallwood, J., & Jefferies, E. (2023). Creativity in verbal associations is linked to semantic control. *Cerebral Cortex*, *33*(9), 5135-5147.

- Krieger-Redwood, K., Wang, H.-T., Poerio, G., Martinon, L. M., Riby, L. M., Smallwood, J., & Jefferies, E. (2019). Reduced semantic control in older adults is linked to intrinsic DMN connectivity. *Neuropsychologia*, *132*, 107133.
- Kulaga-Yoskovitz, J., Bernhardt, B. C., Hong, S.-J., Mansi, T., Liang, K. E., Van Der Kouwe, A. J., Smallwood, J., Bernasconi, A., & Bernasconi, N. (2015). Multi-contrast submillimetric 3 Tesla hippocampal subfield segmentation protocol and dataset. *Scientific Data*, *2*(1), 1-9.
- Lanzoni, L., Ravasio, D., Thompson, H., Vatansever, D., Margulies, D., Smallwood, J., & Jefferies, E. (2020). The role of default mode network in semantic cue integration. *NeuroImage*, *219*, 117019.
- Lanzoni, L., Thompson, H., Beintari, D., Berwick, K., Demnitz-King, H., Raspin, H., Taha, M., Stampacchia, S., Smallwood, J., & Jefferies, E. (2019). Emotion and location cues bias conceptual retrieval in people with deficient semantic control. *Neuropsychologia*, *131*, 294-305.
- Lanzoni, L., Thompson, H., Beintari, D., Berwick, K., Demnitz-King, H., Raspin, H., Taha, M., Stampacchia, S., Smallwood, J., & Jefferies, E. (2021). Corrigendum to “Emotion and location cues bias conceptual retrieval in people with deficient semantic control” [*Neuropsychologia* 131 (2019) 294–305]. *Neuropsychologia*, *152*.
- Leech, R., & Smallwood, J. (2019). The posterior cingulate cortex: Insights from structure and function. *Handbook of clinical neurology*, *166*, 73-85.
- Leech, R., Vos De Wael, R., Váša, F., Xu, T., Austin Benn, R., Scholz, R., Braga, R. M., Milham, M. P., Royer, J., & Bernhardt, B. C. (2023). Variation in spatial dependencies across the cortical mantle discriminates the functional behaviour of primary and association cortex. *Nature Communications*, *14*(1), 5656.
- Lefort-Besnard, J., Bassett, D. S., Smallwood, J., Margulies, D. S., Derntl, B., Gruber, O., Aleman, A., Jardri, R., Varoquaux, G., & Thirion, B. (2018). Different shades of default mode disturbance in schizophrenia: Subnodal covariance estimation in structure and function. *Human brain mapping*, *39*(2), 644-661.
- Levinson, D. B., Smallwood, J., & Davidson, R. J. (2012). The persistence of thought: Evidence for a role of working memory in the maintenance of task-unrelated thinking. *Psychological science*, *23*(4), 375-380.
- Li, Q., Tavakol, S., Royer, J., Larivière, S., Vos De Wael, R., Park, B.-y., Paquola, C., Zeng, D., Caldirou, B., & Bassett, D. S. (2021). Atypical neural topographies underpin dysfunctional pattern separation in temporal lobe epilepsy. *Brain*, *144*(8), 2486-2498.
- Linz, R., Pauly, R., Smallwood, J., & Engert, V. (2021). Mind-wandering content differentially translates from lab to daily life and relates to subjective stress experience. *Psychological research*, *85*, 649-659.
- Makovac, E., Fagioli, S., Watson, D. R., Meeten, F., Smallwood, J., Critchley, H. D., & Ottaviani, C. (2019). Response time as a proxy of ongoing mental state: A combined fMRI and pupillometry study in generalized anxiety disorder. *NeuroImage*, *191*, 380-391.
- Makovac, E., Smallwood, J., Watson, D. R., Meeten, F., Critchley, H. D., & Ottaviani, C. (2018). The verbal nature of worry in generalized anxiety: Insights from the brain. *NeuroImage: Clinical*, *17*, 882-892.
- Margulies, D. S., Ghosh, S. S., Goulas, A., Falkiewicz, M., Huntenburg, J. M., Langs, G., Bezgin, G., Eickhoff, S. B., Castellanos, F. X., & Petrides, M. (2016). Situating the default-mode network along a principal gradient of macroscale cortical organization. *Proceedings of the National Academy of Sciences*, *113*(44), 12574-12579.
- Margulies, D. S., Ovadia-Caro, S., Saadon-Grosman, N., Bernhardt, B., Jefferies, B., & Smallwood, J. (2022). Cortical Gradients and Their Role in Cognition.
- Margulies, D. S., & Smallwood, J. (2017). Converging evidence for the role of transmodal cortex in cognition. *Proceedings of the National Academy of Sciences*, *114*(48), 12641-12643.
- Martinon, L. M., Riby, L. M., Poerio, G., Wang, H.-T., Jefferies, E., & Smallwood, J. (2019). Patterns of on-task thought in older age are associated with changes in functional connectivity between temporal and prefrontal regions. *Brain and Cognition*, *132*, 118-128.
- Martinon, L. M., Smallwood, J., Hamilton, C., & Riby, L. M. (2019). Frogs’ legs versus roast beef: How culture can influence mind-wandering episodes across the lifespan. *Europe’s Journal of Psychology*, *15*(2), 211.

- Martinson, L. M., Smallwood, J., McGann, D., Hamilton, C., & Riby, L. M. (2019). The disentanglement of the neural and experiential complexity of self-generated thoughts: A users guide to combining experience sampling with neuroimaging data. *NeuroImage*, *192*, 15-25.
- Mason, M. F., Brown, K., Mar, R. A., & Smallwood, J. (2013). Driver of discontent or escape vehicle: the affective consequences of mindwandering. *Frontiers in Psychology*, *4*, 477.
- Mckeown, B., Poerio, G. L., Strawson, W. H., Martinon, L. M., Riby, L. M., Jefferies, E., McCall, C., & Smallwood, J. (2021). The impact of social isolation and changes in work patterns on ongoing thought during the first COVID-19 lockdown in the United Kingdom. *Proceedings of the National Academy of Sciences*, *118*(40), e2102565118.
- Mckeown, B., Strawson, W. H., Wang, H.-T., Karapanagiotidis, T., de Wael, R. V., Benkarim, O., Turnbull, A., Margulies, D., Jefferies, E., & McCall, C. (2020). The relationship between individual variation in macroscale functional gradients and distinct aspects of ongoing thought. *NeuroImage*, *220*, 117072.
- Mckeown, B., Strawson, W. H., Zhang, M., Turnbull, A., Konu, D., Karapanagiotidis, T., Wang, H.-T., Leech, R., Xu, T., & Hardikar, S. (2023). Experience sampling reveals the role that covert goal states play in task-relevant behavior. *Scientific Reports*, *13*(1), 21710.
- Medea, B., Karapanagiotidis, T., Konishi, M., Ottaviani, C., Margulies, D., Bernasconi, A., Bernasconi, N., Bernhardt, B. C., Jefferies, E., & Smallwood, J. (2018). How do we decide what to do? Resting-state connectivity patterns and components of self-generated thought linked to the development of more concrete personal goals. *Experimental brain research*, *236*, 2469-2481.
- Mendes, N., Oligschläger, S., Lauckner, M. E., Golchert, J., Huntenburg, J. M., Falkiewicz, M., Ellamil, M., Krause, S., Baczkowski, B. M., & Cozatl, R. (2019). A functional connectome phenotyping dataset including cognitive state and personality measures. *Scientific Data*, *6*(1), 1-19.
- Milham, M., Petkov, C. I., Margulies, D. S., Schroeder, C. E., Basso, M. A., Belin, P., Fair, D. A., Fox, A., Kastner, S., & Mars, R. B. (2020). Accelerating the evolution of nonhuman primate neuroimaging. *Neuron*, *105*(4), 600-603.
- Mollo, G., Karapanagiotidis, T., Bernhardt, B. C., Murphy, C. E., Smallwood, J., & Jefferies, E. (2016). An individual differences analysis of the neurocognitive architecture of the semantic system at rest. *Brain and Cognition*, *109*, 112-123.
- Mrazek, M. D., Chin, J. M., Schmader, T., Hartson, K. A., Smallwood, J., & Schooler, J. W. (2011). Threatened to distraction: Mind-wandering as a consequence of stereotype threat. *Journal of Experimental Social Psychology*, *47*(6), 1243-1248.
- Mrazek, M. D., Smallwood, J., Franklin, M. S., Chin, J. M., Baird, B., & Schooler, J. W. (2012). The role of mind-wandering in measurements of general aptitude. *Journal of Experimental Psychology: General*, *141*(4), 788.
- Mrazek, M. D., Smallwood, J., & Schooler, J. W. (2012). Mindfulness and mind-wandering: finding convergence through opposing constructs. *Emotion*, *12*(3), 442.
- Mulholland, B., Goodall-Halliwell, I., Wallace, R., Chitiz, L., Mckeown, B., Rastan, A., Poerio, G. L., Leech, R., Turnbull, A., & Klein, A. (2023). Patterns of ongoing thought in the real world. *Consciousness and cognition*, *114*, 103530.
- Murphy, C., Jefferies, E., Rueschemeyer, S., Sormaz, M., Wang, H., Margulies, D., & Smallwood, J. (2017). Isolated from input: evidence of default mode network support for perceptually-decoupled and conceptually-guided cognition.
- Murphy, C., Jefferies, E., Rueschemeyer, S.-A., Sormaz, M., Wang, H.-t., Margulies, D. S., & Smallwood, J. (2018). Distant from input: Evidence of regions within the default mode network supporting perceptually-decoupled and conceptually-guided cognition. *NeuroImage*, *171*, 393-401.
- Murphy, C., Ping Ho, N. S., Bernhardt, B., Macrae, C. N., Sormaz, M., Vatansever, D., Jefferies, E., & Smallwood, J. (2019). Salient images: Evidence for a component process architecture for visual imagination. *BioRxiv*, 739953.

- Murphy, C., Poerio, G., Sormaz, M., Wang, H.-T., Vatansever, D., Allen, M., Margulies, D. S., Jefferies, E., & Smallwood, J. (2019). Hello, is that me you are looking for? A re-examination of the role of the DMN in social and self relevant aspects of off-task thought. *PLoS one*, *14*(11), e0216182.
- Murphy, C., Rueschemeyer, S.-A., Smallwood, J., & Jefferies, E. (2019). Imagining sounds and images: Decoding the contribution of unimodal and transmodal brain regions to semantic retrieval in the absence of meaningful input. *Journal of Cognitive Neuroscience*, *31*(11), 1599-1616.
- Murphy, C., Rueschemeyer, S.-A., Watson, D., Karapanagiotidis, T., Smallwood, J., & Jefferies, E. (2016). F a tio ati g the a te io te po al lo e: MVPA e eals diffe e tial espo ses to i put ado eptual odalit.
- Murphy, C., Rueschemeyer, S.-A., Watson, D., Karapanagiotidis, T., Smallwood, J., & Jefferies, E. (2017). Fractionating the anterior temporal lobe: MVPA reveals differential responses to input and conceptual modality. *NeuroImage*, *147*, 19-31.
- Murphy, C., Wang, H.-T., Konu, D., Lowndes, R., Margulies, D. S., Jefferies, E., & Smallwood, J. (2019). Modes of operation: A topographic neural gradient supporting stimulus dependent and independent cognition. *NeuroImage*, *186*, 487-496.
- Nathaniel, U., Thompson, H. E., Davies, E., Arnold, D., Hallam, G., Stampacchia, S., Smallwood, J., & Jefferies, E. (2018). When comprehension elicits incomprehension: Deterioration of semantic categorisation in the absence of stimulus repetition. *Quarterly Journal of Experimental Psychology*, *71*(9), 1817-1843.
- Nenning, K.-H., Xu, T., Franco, A. R., Swallow, K. M., Tambini, A., Margulies, D. S., Smallwood, J., Colcombe, S. J., & Milham, M. P. (2023). Omnipresence of the sensorimotor-association axis topography in the human connectome. *NeuroImage*, *272*, 120059.
- Nenning, K.-H., Xu, T., Schwartz, E., Arroyo, J., Woehrer, A., Franco, A. R., Vogelstein, J. T., Margulies, D. S., Liu, H., & Smallwood, J. (2020). Joint embedding: A scalable alignment to compare individuals in a connectivity space. *NeuroImage*, *222*, 117232.
- O'Connor, R., O'Connor, D., O'Connor, S., Smallwood, J., & Miles, J. (2004). Hopelessness, stress, and perfectionism: The moderating effects of future thinking. *Cognition & Emotion*, *18*(8), 1099-1120.
- Paquola, C., Amunts, K., Evans, A., Smallwood, J., & Bernhardt, B. (2022). Closing the mechanistic gap: the value of microarchitecture in understanding cognitive networks. *Trends in Cognitive Sciences*.
- Paquola, C., Benkarim, O., DeKraker, J., Larivière, S., Frässle, S., Royer, J., Tavakol, S., Valk, S., Bernasconi, A., & Bernasconi, N. (2020a). Convergence of cortical types and functional motifs in the human mesiotemporal lobe. *Elife*, *9*, e60673.
- Paquola, C., Seidlitz, J., Benkarim, O., Royer, J., Klimes, P., Bethlehem, R. A., Larivière, S., Vos de Wael, R., Rodríguez-Cruces, R., & Hall, J. A. (2020). A multi-scale cortical wiring space links cellular architecture and functional dynamics in the human brain. *PLoS biology*, *18*(11), e3000979.
- Paquola, C., Vos De Wael, R., Wagstyl, K., Bethlehem, R. A., Hong, S.-J., Seidlitz, J., Bullmore, E. T., Evans, A. C., Misic, B., & Margulies, D. S. (2019). Microstructural and functional gradients are increasingly dissociated in transmodal cortices. *PLoS biology*, *17*(5), e3000284.
- Park, B.-y., de Wael, R. V., Paquola, C., Larivière, S., Benkarim, O., Royer, J., Tavakol, S., Cruces, R. R., Li, Q., & Valk, S. L. (2021). Signal diffusion along connectome gradients and inter-hub routing differentially contribute to dynamic human brain function. *NeuroImage*, *224*, 117429.
- Park, B.-y., Hong, S.-J., Valk, S., Paquola, C., Benkarim, O., Bethlehem, R. A., Di Martino, A., Milham, M. P., Gozzi, A., & Yeo, B. T. (2020). Connectome and microcircuit models implicate atypical subcortico-cortical interactions in autism pathophysiology. *BioRxiv*, 2020.2005.2008.077289.
- Park, B.-y., Hong, S.-J., Valk, S. L., Paquola, C., Benkarim, O., Bethlehem, R. A., Di Martino, A., Milham, M. P., Gozzi, A., & Yeo, B. T. (2021). Differences in subcortico-cortical interactions identified from connectome and microcircuit models in autism. *Nature Communications*, *12*(1), 2225.
- Park, B.-y., Paquola, C., Bethlehem, R. A., Benkarim, O., Consortium, N. i. P. N., Mišić, B., Smallwood, J., Bullmore, E. T., & Bernhardt, B. C. (2022). Adolescent development of multiscale structural wiring and functional interactions in the human connectome. *Proceedings of the National Academy of Sciences*, *119*(27), e2116673119.

- Perkins, A. M., Arnone, D., Smallwood, J., & Mobbs, D. (2015). Thinking too much: Self-generated thought as the engine of neuroticism. *Trends in Cognitive Sciences*, *19*(9), 492-498.
- Perkins, A. M., Arnone, D., Smallwood, J., & Mobbs, D. (2016). Response to Pickering et al. *Trends in Cognitive Sciences*, *20*(1), 2-3.
- Poerio, G. L., & Smallwood, J. (2016). Daydreaming to navigate the social world: What we know, what we don't know, and why it matters. *Social and Personality Psychology Compass*, *10*(11), 605-618.
- Poerio, G. L., Sormaz, M., Wang, H.-T., Margulies, D., Jefferies, E., & Smallwood, J. (2017). The role of the default mode network in component processes underlying the wandering mind. *Social cognitive and affective neuroscience*, *12*(7), 1047-1062.
- Przyrembel, M., Smallwood, J., Pauen, M., & Singer, T. (2012). Illuminating the dark matter of social neuroscience: considering the problem of social interaction from philosophical, psychological, and neuroscientific perspectives. *Frontiers in Human Neuroscience*, *6*, 190.
- Riby, L., Marriott, A., Bullock, R., Hancock, J., Smallwood, J., & McLaughlin, J. (2009). The effects of glucose ingestion and glucose regulation on memory performance in older adults with mild cognitive impairment. *European journal of clinical nutrition*, *63*(4), 566-571.
- Riby, L., Orme, E., Greer, J., Gillan, A., Griffiths, R., Aspray, T., Scholey, A., & Smallwood, J. (2014). Food for thought: The efficiency of glucose metabolism predicts the self-generation of temporally distant cognition. *Research in Psychology and Behavioral Sciences*, *2*(3), 54-58.
- Riby, L., Smallwood, J., McMurtrie, H., & Smith, E. (2005). The impact of glucose ingestion, age and task difficulty on retrieval from episodic and semantic memory. *Journal of Cognitive Neuroscience*, *17*(10), 1453-1464.
- Riby, L. M., McMurtrie, H., Smallwood, J., Ballantyne, C., Meikle, A., & Smith, E. (2006). The facilitative effects of glucose ingestion on memory retrieval in younger and older adults: is task difficulty or task domain critical? *British journal of nutrition*, *95*(2), 414-420.
- Riby, L. M., Smallwood, J., & Gunn, V. P. (2008). Mind wandering and retrieval from episodic memory: A pilot event-related potential study. *Psychological Reports*, *102*(3), 805-818.
- Royer, J., Larivière, S., Rodriguez-Cruces, R., Cabalo, D. G., Tavakol, S., Auer, H., Ngo, A., Park, B.-y., Paquola, C., & Smallwood, J. (2023). Cortical microstructural gradients capture memory network reorganization in temporal lobe epilepsy. *Brain*, *146*(9), 3923-3937.
- Royer, J., Paquola, C., Larivière, S., de Wael, R. V., Tavakol, S., Lowe, A. J., Benkarim, O., Evans, A. C., Bzdok, D., & Smallwood, J. (2020). Myeloarchitecture gradients in the human insula: Histological underpinnings and association to intrinsic functional connectivity. *NeuroImage*, *216*, 116859.
- Royer, J., Rodriguez-Cruces, R., Tavakol, S., Larivière, S., Herholz, P., Li, Q., Vos de Wael, R., Paquola, C., Benkarim, O., & Park, B.-y. (2022). An open MRI dataset for multiscale neuroscience. *Scientific Data*, *9*, 3622.
- Ruby, F. J., Smallwood, J., Engen, H., & Singer, T. (2013). How self-generated thought shapes mood—the relation between mind-wandering and mood depends on the socio-temporal content of thoughts. *PLoS one*, *8*(10), e77554.
- Ruby, F. J., Smallwood, J., Sackur, J., & Singer, T. (2013). Is self-generated thought a means of social problem solving? *Frontiers in Psychology*, *4*, 962.
- Sanders, J. G., Wang, H.-T., Schooler, J., & Smallwood, J. (2017). Can I get me out of my head? Exploring strategies for controlling the self-referential aspects of the mind-wandering state during reading. *Quarterly Journal of Experimental Psychology*, *70*(6), 1053-1062.
- Savill, N., Ellis, R., Brooke, E., Koa, T., Ferguson, S., Rojas-Rodriguez, E., Arnold, D., Smallwood, J., & Jefferies, E. (2018). Keeping it together: Semantic coherence stabilizes phonological sequences in short-term memory. *Memory & Cognition*, *46*, 426-437.
- Schaefer, A., Margulies, D. S., Lohmann, G., Gorgolewski, K. J., Smallwood, J., Kiebel, S. J., & Villringer, A. (2014). Dynamic network participation of functional connectivity hubs assessed by resting-state fMRI. *Frontiers in Human Neuroscience*, *8*, 195.

- Schooler, J. W., Smallwood, J., Christoff, K., Handy, T. C., Reichle, E. D., & Sayette, M. A. (2011). Meta-awareness, perceptual decoupling and the wandering mind. *Trends in Cognitive Sciences*, *15*(7), 319-326.
- Seli, P., Kane, M. J., Metzinger, T., Smallwood, J., Schacter, D. L., Maillet, D., Schooler, J. W., & Smilek, D. (2018). The family-resemblances framework for mind-wandering remains well clad. *Trends in Cognitive Sciences*, *22*(11), 959-961.
- Seli, P., Kane, M. J., Smallwood, J., Schacter, D. L., Maillet, D., Schooler, J. W., & Smilek, D. (2018). Mind-wandering as a natural kind: A family-resemblances view. *Trends in Cognitive Sciences*, *22*(6), 479-490.
- Seli, P., Smallwood, J., Cheyne, J. A., & Smilek, D. (2015). On the relation of mind wandering and ADHD symptomatology. *Psychonomic Bulletin & Review*, *22*, 629-636.
- Shao, X., Mckeown, B., Karapanagiotidis, T., de Wael, R. V., Margulies, D. S., Bernhardt, B., Smallwood, J., Krieger-Redwood, K., & Jefferies, E. (2022). Individual differences in gradients of intrinsic connectivity within the semantic network relate to distinct aspects of semantic cognition. *CORTEX*, *150*, 48-60.
- Simola, J., Konishi, M., Palvaa, S., Smallwood, J., & Palvaa, M. (2019). Fluctuations in pupil size reflect lack of external attention. *Journal of Eye Movement Research*, *12*(7).
- Simola, J., Silander, T., Harju, M., Lahti, O., Makkonen, E., Pätssi, L.-M., & Smallwood, J. (2023). Context independent reductions in external processing during self-generated episodic social cognition. *CORTEX*, *159*, 39-53.
- Smallwood, J. (2004). BRIEF REPORT Self-reference, ambiguity, and dysphoria. *Cognition and Emotion*, *18*(7), 999-1007.
- Smallwood, J. (2011a). The footprints of a wandering mind: further examination of the time course of an attentional lapse. *Cognitive neuroscience*, *2*(2), 91-97.
- Smallwood, J. (2011b). Mind-wandering while reading: Attentional decoupling, mindless reading and the cascade model of inattention. *Language and Linguistics Compass*, *5*(2), 63-77.
- Smallwood, J. (2011c). Stimulus independence, social cognition and consciousness. *Cognitive neuroscience*, *2*(2), 122-123.
- Smallwood, J. (2013a). Distinguishing how from why the mind wanders: a process–occurrence framework for self-generated mental activity. *Psychological bulletin*, *139*(3), 519.
- Smallwood, J. (2013b). Penetrating the fog of the decoupled mind: the effects of visual salience in the sustained attention to response task. *Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale*, *67*(1), 32.
- Smallwood, J. (2015). Mind wandering and attention. *The handbook of attention*, 233-255.
- Smallwood, J., & Andrews-Hanna, J. (2013). Not all minds that wander are lost: the importance of a balanced perspective on the mind-wandering state. *Frontiers in Psychology*, *4*, 441.
- Smallwood, J., Beach, E., Schooler, J. W., & Handy, T. C. (2008). Going AWOL in the brain: Mind wandering reduces cortical analysis of external events. *Journal of Cognitive Neuroscience*, *20*(3), 458-469.
- Smallwood, J., Bernhardt, B. C., Leech, R., Bzdok, D., Jefferies, E., & Margulies, D. S. (2021). The default mode network in cognition: a topographical perspective. *Nature reviews neuroscience*, *22*(8), 503-513.
- Smallwood, J., Brown, K., Baird, B., & Schooler, J. W. (2012). Cooperation between the default mode network and the frontal–parietal network in the production of an internal train of thought. *Brain research*, *1428*, 60-70.
- Smallwood, J., Brown, K. S., Baird, B., Mrazek, M. D., Franklin, M. S., & Schooler, J. W. (2012). Insulation for daydreams: A role for tonic norepinephrine in the facilitation of internally guided thought. *PloS one*, *7*(4), e33706.
- Smallwood, J., Brown, K. S., Tipper, C., Giesbrecht, B., Franklin, M. S., Mrazek, M. D., Carlson, J. M., & Schooler, J. W. (2011). Pupillometric evidence for the decoupling of attention from perceptual input during offline thought. *PloS one*, *6*(3), e18298.

- Smallwood, J., Brown, R., Coulter, F., Irvine, E., & Copland, C. (2001). Aromatherapy and behaviour disturbances in dementia: a randomized controlled trial. *International journal of geriatric psychiatry*, *16*(10), 1010-1013.
- Smallwood, J., Davies, J. B., Heim, D., Finnigan, F., Sudberry, M., O'Connor, R., & Obonsawin, M. (2004). Subjective experience and the attentional lapse: Task engagement and disengagement during sustained attention. *Consciousness and cognition*, *13*(4), 657-690.
- Smallwood, J., Fishman, D. J., & Schooler, J. W. (2007). Counting the cost of an absent mind: Mind wandering as an underrecognized influence on educational performance. *Psychonomic Bulletin & Review*, *14*, 230-236.
- Smallwood, J., Fitzgerald, A., Miles, L. K., & Phillips, L. H. (2009). Shifting moods, wandering minds: negative moods lead the mind to wander. *Emotion*, *9*(2), 271.
- Smallwood, J., Gorgolewski, K. J., Golchert, J., Ruby, F. J., Engen, H., Baird, B., Vinski, M. T., Schooler, J. W., & Margulies, D. S. (2013). The default modes of reading: modulation of posterior cingulate and medial prefrontal cortex connectivity associated with comprehension and task focus while reading. *Frontiers in Human Neuroscience*, *7*, 734.
- Smallwood, J., Irvine, E., Coulter, F., & Connery, H. (2001). Psychometric evaluation of a short observational tool for small-scale research projects in dementia. *International journal of geriatric psychiatry*, *16*(3), 288-292.
- Smallwood, J., Karapanagiotidis, T., Ruby, F., Medea, B., De Caso, I., Konishi, M., Wang, H.-T., Hallam, G., Margulies, D. S., & Jefferies, E. (2016). Representing representation: Integration between the temporal lobe and the posterior cingulate influences the content and form of spontaneous thought. *PLoS one*, *11*(4), e0152272.
- Smallwood, J., Margulies, D., Bernhardt, B. C., & Jefferies, E. Investigating the Elements of Thought. In *The Oxford Handbook of Spontaneous Thought*.
- Smallwood, J., Margulies, D., Bernhardt, B. C., & Jefferies, E. (2018). 7 Investigating the Elements of Thought: Toward of Spontaneous Cognition. *The Oxford handbook of spontaneous thought: Mind-wandering, creativity, and dreaming*, 71.
- Smallwood, J., McSpadden, M., Luus, B., & Schooler, J. (2008). Segmenting the stream of consciousness: The psychological correlates of temporal structures in the time series data of a continuous performance task. *Brain and Cognition*, *66*(1), 50-56.
- Smallwood, J., McSpadden, M., & Schooler, J. W. (2007). The lights are on but no one's home: Meta-awareness and the decoupling of attention when the mind wanders. *Psychonomic Bulletin & Review*, *14*, 527-533.
- Smallwood, J., McSpadden, M., & Schooler, J. W. (2008). When attention matters: The curious incident of the wandering mind. *Memory & Cognition*, *36*, 1144-1150.
- Smallwood, J., Mrazek, M. D., & Schooler, J. W. (2011b). Medicine for the wandering mind: mind wandering in medical practice. *Medical Education*, *45*(11), 1072-1080.
- Smallwood, J., Nind, L., & O'Connor, R. C. (2009). When is your head at? An exploration of the factors associated with the temporal focus of the wandering mind. *Consciousness and cognition*, *18*(1), 118-125.
- Smallwood, J., & O'Connor, R. C. (2011). Imprisoned by the past: unhappy moods lead to a retrospective bias to mind wandering. *Cognition & Emotion*, *25*(8), 1481-1490.
- Smallwood, J., O'Connor, R. C., & Heim, D. (2005). Rumination, dysphoria, and subjective experience. *Imagination, cognition and personality*, *24*(4), 355-367.
- Smallwood, J., O'Connor, R. C., Sudberry, M. V., Haskell, C., & Ballantyne, C. (2004). The consequences of encoding information on the maintenance of internally generated images and thoughts: The role of meaning complexes. *Consciousness and cognition*, *13*(4), 789-820.
- Smallwood, J., O'Connor, R. C., Sudberry, M. V., & Obonsawin, M. (2007). Mind-wandering and dysphoria. *Cognition and Emotion*, *21*(4), 816-842.

- Smallwood, J., Obonsawin, M., & Heim, D. (2003). Task unrelated thought: The role of distributed processing. *Consciousness and cognition*, 12(2), 169-189.
- Smallwood, J., Obonsawin, M., Heim, D., & Reid, H. (2002). An investigation into the role of personality and situation in the maintenance of subjective experience in a laboratory. *Imagination, cognition and personality*, 21(4), 319-332.
- Smallwood, J., Obonsawin, M., & Reid, H. (2002). The effects of block duration and task demands on the experience of task unrelated thought. *Imagination, cognition and personality*, 22(1), 13-31.
- Smallwood, J., Obonsawin, M., Baracaia, S. F., Reid, H., O'Connor, R., & Heim, D. (2003). The relationship between rumination, dysphoria, and self-referent thinking: Some preliminary findings. *Imagination, cognition and personality*, 22(4), 317-342.
- Smallwood, J., Riby, L., Heim, D., & Davies, J. B. (2006). Encoding during the attentional lapse: Accuracy of encoding during the semantic sustained attention to response task. *Consciousness and cognition*, 15(1), 218-231.
- Smallwood, J., Ruby, F. J., & Singer, T. (2013). Letting go of the present: Mind-wandering is associated with reduced delay discounting. *Consciousness and cognition*, 22(1), 1-7.
- Smallwood, J., & Schooler, J. W. Mind-wandering: The scientific navigation of the stream of consciousness. *Annual Review of Psychology*.
- Smallwood, J., & Schooler, J. W. (2006). The restless mind. *Psychological bulletin*, 132(6), 946.
- Smallwood, J., & Schooler, J. W. (2015). The science of mind wandering: Empirically navigating the stream of consciousness. *Annual Review of Psychology*, 66, 487-518.
- Smallwood, J., Turnbull, A., Wang, H.-t., Ho, N. S., Poerio, G. L., Karapanagiotidis, T., Konu, D., Mckeown, B., Zhang, M., & Murphy, C. (2021). The neural correlates of ongoing conscious thought. *Isience*, 24(3).
- Smallwood, J. M., Baracaia, S. F., Lowe, M., & Obonsawin, M. (2003). Task unrelated thought whilst encoding information. *Consciousness and cognition*, 12(3), 452-484.
- Sormaz, M., Jefferies, E., Bernhardt, B. C., Karapanagiotidis, T., Mollo, G., Bernasconi, N., Bernasconi, A., Hartley, T., & Smallwood, J. (2017). Knowing what from where: Hippocampal connectivity with temporoparietal cortex at rest is linked to individual differences in semantic and topographic memory. *NeuroImage*, 152, 400-410.
- Sormaz, M., Murphy, C., Wang, H.-t., Hymers, M., Karapanagiotidis, T., Poerio, G., Margulies, D. S., Jefferies, E., & Smallwood, J. (2018). Default mode network can support the level of detail in experience during active task states. *Proceedings of the National Academy of Sciences*, 115(37), 9318-9323.
- Souter, N. E., Stampacchia, S., Hallam, G., Thompson, H., Smallwood, J., & Jefferies, E. (2022). Motivated semantic control: Exploring the effects of extrinsic reward and self-reference on semantic retrieval in semantic aphasia. *Journal of Neuropsychology*, 16(2), 407-433.
- Stampacchia, S., Hallam, G. P., Thompson, H. E., Nathaniel, U., Lanzoni, L., Smallwood, J., Lambon Ralph, M. A., & Jefferies, E. (2022). Training flexible conceptual retrieval in post-stroke aphasia. *Neuropsychological rehabilitation*, 32(7), 1429-1455.
- Stampacchia, S., Pegg, S., Hallam, G., Smallwood, J., Ralph, M. A. L., Thompson, H., & Jefferies, E. (2019). Control the source: Source memory for semantic, spatial and self-related items in patients with LIFG lesions. *CORTEX*, 119, 165-183.
- Stampacchia, S., Thompson, H. E., Ball, E., Nathaniel, U., Hallam, G., Smallwood, J., Ralph, M. A. L., & Jefferies, E. (2018). Shared processes resolve competition within and between episodic and semantic memory: Evidence from patients with LIFG lesions. *CORTEX*, 108, 127-143.
- Steindorf, L., Pink, S., Rummel, J., & Smallwood, J. (2023). When there is noise on Sherlock Holmes: mind wandering increases with perceptual processing difficulty during reading and listening. *Cognitive Research: Principles and Implications*, 8(1), 31.
- Strawson, W. H., Wang, H.-T., Quadt, L., Sherman, M., Larsson, D. E., Davies, G., Mckeown, B. L., Silva, M., Fielding-Smith, S., & Jones, A.-M. (2022). Voice hearing in borderline personality disorder across

- perceptual, subjective, and neural dimensions. *International Journal of Neuropsychopharmacology*, 25(5), 375-386.
- Tavakol, S., Li, Q., Royer, J., Vos de Wael, R., Larivière, S., Lowe, A., Paquola, C., Jefferies, E., Hartley, T., & Bernasconi, A. (2021). A structure–function substrate of memory for spatial configurations in medial and lateral temporal cortices. *Cerebral Cortex*, 31(7), 3213-3225.
- Teige, C., Cornelissen, P. L., Mollo, G., Alam, T. R. d. J. G., McCarty, K., Smallwood, J., & Jefferies, E. (2019). Dissociations in semantic cognition: Oscillatory evidence for opposing effects of semantic control and type of semantic relation in anterior and posterior temporal cortex. *CORTEX*, 120, 308-325.
- Teige, C., Mollo, G., Millman, R., Savill, N., Smallwood, J., Cornelissen, P. L., & Jefferies, E. (2018). Dynamic semantic cognition: Characterising coherent and controlled conceptual retrieval through time using magnetoencephalography and chronometric transcranial magnetic stimulation. *CORTEX*, 103, 329-349.
- Turnbull, A., Garfinkel, S. N., Ho, N. S., Critchley, H. D., Bernhardt, B. C., Jefferies, E., & Smallwood, J. (2020a). Corrigendum to 'Word up-experiential and neurocognitive evidence for associations between autistic symptomology and a preference for thinking in the form of words'[Cortex 128 (2020) 88-106]. *Cortex; a Journal Devoted to the Study of the Nervous System and Behavior*, 131, 305-305.
- Turnbull, A., Garfinkel, S. N., Ho, N. S., Critchley, H. D., Bernhardt, B. C., Jefferies, E., & Smallwood, J. (2020c). Word up–Experiential and neurocognitive evidence for associations between autistic symptomology and a preference for thinking in the form of words. *CORTEX*, 128, 88-106.
- Turnbull, A., Karapanagiotidis, T., Wang, H.-T., Bernhardt, B. C., Leech, R., Margulies, D., Schooler, J., Jefferies, E., & Smallwood, J. (2020). Reductions in task positive neural systems occur with the passage of time and are associated with changes in ongoing thought. *Scientific Reports*, 10(1), 9912.
- Turnbull, A., Poerio, G. L., Ho, N. S., Martinon, L. M., Riby, L. M., Lin, F. V., Jefferies, E., & Smallwood, J. (2021). Age-related changes in ongoing thought relate to external context and individual cognition. *Consciousness and cognition*, 96, 103226.
- Turnbull, A., Wang, H., Murphy, C., Ho, N., Wang, X., Sormaz, M., Karapanagiotidis, T., Leech, R., Bernhardt, B., & Margulies, D. (2019). Left dorsolateral prefrontal cortex supports context-dependent prioritisation of off-task thought. *Nature Communications*, 10(1), 3816.
- Turnbull, A., Wang, H.-T., Schooler, J. W., Jefferies, E., Margulies, D. S., & Smallwood, J. (2019). The ebb and flow of attention: Between-subject variation in intrinsic connectivity and cognition associated with the dynamics of ongoing experience. *NeuroImage*, 185, 286-299.
- Tusche, A., Smallwood, J., Bernhardt, B. C., & Singer, T. (2014). Classifying the wandering mind: revealing the affective content of thoughts during task-free rest periods. *NeuroImage*, 97, 107-116.
- Valk, S. L., Xu, T., Margulies, D. S., Masouleh, S. K., Paquola, C., Goulas, A., Kochunov, P., Smallwood, J., Yeo, B. T., & Bernhardt, B. C. (2020). Shaping brain structure: Genetic and phylogenetic axes of macroscale organization of cortical thickness. *Science Advances*, 6(39), eabb3417.
- Valk, S. L., Xu, T., Paquola, C., Park, B.-y., Bethlehem, R. A., Vos de Wael, R., Royer, J., Masouleh, S. K., Bayrak, Ş., & Kochunov, P. (2022). Genetic and phylogenetic uncoupling of structure and function in human transmodal cortex. *Nature Communications*, 13(1), 2341.
- van der Velden, A. M., Scholl, J., Elmholt, E.-M., Fjorback, L. O., Harmer, C. J., Lazar, S. W., O'toole, M. S., Smallwood, J., Roepstorff, A., & Kuyken, W. (2023). Mindfulness training changes brain dynamics during depressive rumination: A randomized controlled trial. *Biological psychiatry*, 93(3), 233-242.
- Vatanev, D., Bozhilova, N. S., Asherson, P., & Smallwood, J. (2019). The devil is in the detail: exploring the intrinsic neural mechanisms that link attention-deficit/hyperactivity disorder symptomatology to ongoing cognition. *Psychological medicine*, 49(7), 1185-1194.
- Vatanev, D., Bzdok, D., Wang, H.-T., Mollo, G., Sormaz, M., Murphy, C., Karapanagiotidis, T., Smallwood, J., & Jefferies, E. (2017). Varieties of semantic cognition revealed through simultaneous decomposition of intrinsic brain connectivity and behaviour. *NeuroImage*, 158, 1-11.

- Vatansver, D., Karapanagiotidis, T., Margulies, D. S., Jefferies, E., & Smallwood, J. (2020). Distinct patterns of thought mediate the link between brain functional connectomes and well-being. *Network neuroscience*, 4(3), 637-657.
- Vatansver, D., Smallwood, J., & Jefferies, E. (2021). Varying demands for cognitive control reveals shared neural processes supporting semantic and episodic memory retrieval. *Nature Communications*, 12(1), 2134.
- Vidaurre, D., Woolrich, M. W., Winkler, A. M., Karapanagiotidis, T., Smallwood, J., & Nichols, T. E. (2019). Stable between-subject statistical inference from unstable within-subject functional connectivity estimates. *Human brain mapping*, 40(4), 1234-1243.
- Villena-Gonzalez, M., Wang, H.-t., Sormaz, M., Mollo, G., Margulies, D. S., Jefferies, E. A., & Smallwood, J. (2018). Individual variation in the propensity for prospective thought is associated with functional integration between visual and retrosplenial cortex. *CORTEX*, 99, 224-234.
- Vos de Wael, R., Benkarim, O., Paquola, C., Larivière, S., Royer, J., Tavakol, S., Xu, T., Hong, S.-J., Langs, G., & Valk, S. (2020). BrainSpace: a toolbox for the analysis of macroscale gradients in neuroimaging and connectomics datasets. *Communications biology*, 3(1), 103.
- Vos de Wael, R., Larivière, S., Caldaïrou, B., Hong, S.-J., Margulies, D. S., Jefferies, E., Bernasconi, A., Smallwood, J., Bernasconi, N., & Bernhardt, B. C. (2018). Anatomical and microstructural determinants of hippocampal subfield functional connectome embedding. *Proceedings of the National Academy of Sciences*, 115(40), 10154-10159.
- Vos de Wael, R., Royer, J., Tavakol, S., Wang, Y., Paquola, C., Benkarim, O., Eichert, N., Larivière, S., Xu, T., & Misis, B. (2021). Structural connectivity gradients of the temporal lobe serve as multiscale axes of brain organization and cortical evolution. *Cerebral Cortex*, 31(11), 5151-5164.
- Wade, A., McCall, C., Karapanagiotidis, T., Schofield, G., Preston, C., Hartley, T., Kaestner, M., Horner, A., Maloney, R., & Smallwood, J. (2018). A neuroscientific approach to exploring fundamental questions in VR. *Journal of Imaging and Science*.
- Wang, H.-T., Bzdok, D., Margulies, D., Craddock, C., Milham, M., Jefferies, E., & Smallwood, J. (2018). Patterns of thought: Population variation in the associations between large-scale network organisation and self-reported experiences at rest. *NeuroImage*, 176, 518-527.
- Wang, H.-T., Ho, N. S. P., Bzdok, D., Bernhardt, B. C., Margulies, D. S., Jefferies, E., & Smallwood, J. (2020). Neurocognitive patterns dissociating semantic processing from executive control are linked to more detailed off-task mental time travel. *Scientific Reports*, 10(1), 11904.
- Wang, H.-T., Poerio, G., Murphy, C., Bzdok, D., Jefferies, E., & Smallwood, J. (2018). Dimensions of experience: exploring the heterogeneity of the wandering mind. *Psychological science*, 29(1), 56-71.
- Wang, H.-T., Smallwood, J., Mourao-Miranda, J., Xia, C. H., Satterthwaite, T. D., Bassett, D. S., & Bzdok, D. (2020). Finding the needle in a high-dimensional haystack: Canonical correlation analysis for neuroscientists. *NeuroImage*, 216, 116745.
- Wang, X., Bernhardt, B. C., Karapanagiotidis, T., De Caso, I., Alam, T. R. d. J. G., Cotter, Z., Smallwood, J., & Jefferies, E. (2018). The structural basis of semantic control: Evidence from individual differences in cortical thickness. *NeuroImage*, 181, 480-489.
- Wang, X., Gao, Z., Smallwood, J., & Jefferies, E. (2021). Both default and multiple-demand regions represent semantic goal information. *Journal of Neuroscience*, 41(16), 3679-3691.
- Wang, X., Krieger-Redwood, K., Zhang, M., Cui, Z., Wang, X., Karapanagiotidis, T., Du, Y., Leech, R., Bernhardt, B. C., & Margulies, D. S. (2023). Physical distance to sensory-motor landmarks predicts language function. *Cerebral Cortex*, 33(8), 4305-4318.
- Wang, X., Margulies, D. S., Smallwood, J., & Jefferies, E. (2020). A gradient from long-term memory to novel cognition: Transitions through default mode and executive cortex. *NeuroImage*, 220, 117074.
- Wang, Y., Royer, J., Park, B.-y., Vos de Wael, R., Larivière, S., Tavakol, S., Rodriguez-Cruces, R., Paquola, C., Hong, S.-J., & Margulies, D. S. (2023). Long-range functional connections mirror and link microarchitectural and cognitive hierarchies in the human brain. *Cerebral Cortex*, 33(5), 1782-1798.

- Xu, T., Nenning, K.-H., Schwartz, E., Hong, S.-J., Vogelstein, J. T., Goulas, A., Fair, D. A., Schroeder, C. E., Margulies, D. S., & Smallwood, J. (2020). Cross-species functional alignment reveals evolutionary hierarchy within the connectome. *NeuroImage*, *223*, 117346.
- Zanesco, A. P., King, B. G., MacLean, K. A., Jacobs, T. L., Aichele, S. R., Wallace, B. A., Smallwood, J., Schooler, J. W., & Saron, C. D. (2016). Meditation training influences mind wandering and mindless reading. *Psychology of Consciousness: Theory, Research, and Practice*, *3*(1), 12.
- Zhang, M., Bernhardt, B. C., Wang, X., Varga, D., Krieger-Redwood, K., Royer, J., Rodríguez-Cruces, R., de Wael, R. V., Margulies, D. S., & Smallwood, J. (2022). Perceptual coupling and decoupling of the default mode network during mind-wandering and reading. *Elife*, *11*, e74011.
- Zhang, M., McNab, F., Smallwood, J., & Jefferies, E. (2022). Perceptual coupling and decoupling are associated with individual differences in working memory encoding and maintenance. *Cerebral Cortex*, *32*(18), 3959-3974.
- Zhang, M., Nathaniel, U., Savill, N., Smallwood, J., & Jefferies, E. (2022). Intrinsic connectivity of left ventrolateral prefrontal cortex predicts individual differences in controlled semantic retrieval. *NeuroImage*, *246*, 118760.
- Zhang, M., Savill, N., Margulies, D. S., Smallwood, J., & Jefferies, E. (2019). Distinct individual differences in default mode network connectivity relate to off-task thought and text memory during reading. *Scientific Reports*, *9*(1), 16220.
- Zhang, M., Varga, D., Wang, X., Krieger-Redwood, K., Gouws, A., Smallwood, J., & Jefferies, E. (2021). Knowing what you need to know in advance: the neural processes underpinning flexible semantic retrieval of thematic and taxonomic relations. *NeuroImage*, *224*, 117405.

Positions and Employment

- 2020-present Professor in Psychology, *Queen's University, Ontario, Canada*.
- 2013-2020 Professor In Psychology, *University of York, England, UK*.
- 2011–2013 Senior Researcher – *Max Planck Institute, Leipzig, Germany*.
- 2010–2011 Assistant Project Scientist, Step 3 – *University of California, Santa Barbara, USA*.
- 2008–2010 Assistant Project Scientist, Step 1 – *University of California, Santa Barbara, USA*.
- 2006–2008 Lecturer in Psychology – *University of Aberdeen, Aberdeen, UK*.
- 2004–2006 Post Doctoral Researcher – *University of British Columbia, Vancouver, Canada*.

Service & Teaching

Teaching

Social Psychology (Module in Basic Psychology). University of York, UK. 2013-2020
Understanding Self-generated Thought. Final year course. University of York, UK. 2013-2020.
Cognitive Neuroscience. 3rd year Course. (Psyc 320). Queen's University, Canada. 2020-2023.
Understanding spontaneous thought (Psyc 424). Queen's University, Canada. 2020-present.
Experience sampling from lab to daily life (Psyc 398). Queen's University, Canada. 2022-present.

Service

Research Committee. University of York, UK 2013-2020.
Ethics Committee. University of York, UK 2013-2020.
Awards and Grants Committee. Queen's University 2021-present
Ethics Committee. Queens University, 2020-2021.
NSERC Application Reviewer. Faculty of Arts and Studies, Queens University
Editorial Board, Psychological Bulletin, 2014-present

Student Supervision

2008-2013	Mike Mrazek (University of California, Santa Barbara, USA)
2009-2014	Ben Baird (University of California, Santa Barbara, USA)
2011-2016	Haakon Engen (Max Planck Institute, Leipzig, Germany)
2011-2016	Marjan Sharifi (Max Planck Institute, Leipzig, Germany)
2012-2015	Florence Ruby (University of York, UK)
2013-2017	Johannes Golchert (Max Planck Institute, Leipzig, Germany)
2013-2016	Mahiko Konishi (University of York, UK)
2014-2018	Zach Cotter (University of York, UK)
2014-2018	Irene de Caso (University of York, UK)
2015-2018	Hao-ting Wang (University of York, UK)
2015-2019	Theodoros Karapaganatidos (University of York, UK)
2015-2019	Tirso Gonzalez (University of York, UK)
2016-2020	Xiuyi Wang (University of York, UK)
2016-2020	Lucilla Lanzoni (University of York, UK)
2016-2020	Meichao Zang (2016-present)
2016-2020	Adam Turnbull (University of York, UK)
2019-2022	Delali Konu (University of York, UK)
2019-2022	Bronte McKeown (University of York, UK)
2021 – present	Bridget Mulholland (Queen's University, Canada)
2021-2023	Ian Goodal-Halliwell (Queen's University, Canada)
2022-present	Raven Wallace (Queen's University, Canada)
2022-present	Louis Chitiz (Queen's University, Canada)

Talks & Lectures

Keynote Addresses

Current Issues in Mind-wandering Research, Heidelberg, June 2023; 2nd conference for Neuroscience in Education, Abu Dhabi, 2017; Killam Lecture, Montreal Neurological Institute, 2015; Whitehead lecture, Goldsmiths University, 2015; MINDLab Retreat, Sanderburg, Denmark, 2013; Cortex, Lyon, 2013; Towards a Science of Consciousness, Tucson, USA, 2013.

Departmental Seminars

University of Arizona, Nathan Kline Institute, Duke University, University of Helsinki, University of Kyoto, University College London, Kings College London, Imperial College London, University of Hertfordshire, Institute of Psychiatry, University of Sussex, University of Toulouse, MRC Cognition and Brain Unit, Tilburg University, University of Pottsdam, Max Plank Institute for Human Cognitive Brain Science (Leipzig), Central Institute for Mental Health, Ecole Normale Supérieure, University of Hamburg, University of Liege.

Outreach Activities

Public Lectures: Pint of Science: Matters of the mind (2014), YorNight (2015)

Media Coverage: Global Kingston, CBBC, BBC (The One Show, CrowdScience), Daily Telegraph, Daily Mail, New Scientist, New York Times, National Public Radio, Easy Living, Scientific American, Discover Magazine, Psychologist, New Statesmen.