

Summary

Research fellow in cognitive neuroscience investigating psychological features of the microbiome-gut-brain axis using neuroimaging, interventions and developing populations.

Employment

2018-23	Research Fellow, Psychology, University of Surrey, UK
2019-20	Teaching Fellow, Psychology, University of Surrey, UK
2018	Research Associate, Experimental Psychology, University of Oxford, UK
2017-18	Research Associate, Psychology, University of Surrey, UK
2014-18	Graduate Teaching Assistant, Psychology, University of Surrey, UK
2012- 13	Research Assistant, Psychology, Glasgow Caledonian University, UK

Education

2017	PhD in Psychology, University of Surrey, UK Experimental mobile EEG assessments in natural settings. Thesis
2012	MSc Psychological Research, University of Edinburgh, UK
2011	BA (Hons) Psychology with Sociology (2:1), Edinburgh Napier University, UK

Peer reviewed publications

- Johnstone, N.**, Dart, S., Knytl, P., Nauta, A., Hart, K., & Cohen Kadosh, K. (2021). Nutrient Intake and Gut Microbial Genera Changes after a 4-Week Placebo Controlled Galacto-Oligosaccharides Intervention in Young Females. *Nutrients*, 13(12) 4384. <https://doi.org/10.3390/nu13124384>
- Ng-Knight, T., Gilligan-Lee, K. A., Massonnié, J., Gaspard, H., Gooch, D., Querstret, D., & **Johnstone, N.** (2021). Does Taekwondo Improve Children's Self-Regulation? If so, how? A Randomised Field Experiment. *Developmental Psychology* Accepted.
- Cohen Kadosh, K., Basso, M., Knytl, P., **Johnstone, N.**, Lau, J. Y. F., & Gibson, G. R. (2021). Psychobiotic interventions for anxiety in young people: a systematic review and meta-analysis, with youth consultation. *Translational Psychiatry*, 11(1), 352. <https://doi.org/10.1038/s41398-021-01422-7>
- Johnstone, N.**, Milesi, C., Burn, O., van den Bogert, B., Nauta, A., Hart, K., Sowden, P., Burnet, P. W. J., & Cohen Kadosh, K. (2021). Anxiolytic effects of a galacto-oligosaccharides prebiotic in healthy females (18–25 years) with corresponding changes in gut bacterial composition. *Scientific Reports*, 11(1), 8302. <https://doi.org/10.1038/s41598-021-87865-w>
- Zich, C., **Johnstone, N.**, Lührs, M., Lisk, S., Haller, S. P. W., Lipp, A., Lau, J. Y. F., & Kadosh, K. C. (2020). Modulatory effects of dynamic fMRI-based neurofeedback on emotion regulation networks in adolescent females. *NeuroImage*, 220(January), 117053. <https://doi.org/10.1016/j.neuroimage.2020.117053>

Johnstone, N., & Cohen Kadosh, K. (2019). Why a developmental cognitive neuroscience approach may be key for future-proofing microbiota-gut-brain research. *Behavioral and Brain Sciences*, 42, e73. <https://doi.org/10.1017/S0140525X18002753>

Preprints/ under review

Basso, M., **Johnstone, N.**, Knytl, P., Nauta, A., Groeneveld, A., & Cohen Kadosh, K. (2021). A systematic review of psychobiotic interventions in children and adolescents to enhance cognition functioning and emotional behaviour. In revision.

Johnstone, N., Pilarova, V., Tenenbaum, H. R., & Cohen Kadosh, K. (2021). Nature vs nurture: successful school transitions in children depend more on parental emotion behavior than brain maturational factors. Under Review.

Research funding

2020-23 Prebiotics and mental health in children and adolescents; Royal FrieslandCampina N.V., The Netherlands to Kathrin Cohen Kadosh (PI) and **Nicola Johnstone (Co-I)**

2019 Microbiome Grant Initiative. Support for microbiome analysis. UBiome, USA (Co-applicant)

Awards & Grants

2019 Guarantors of Brain Travel award for OHBM attendance, Rome.

2015 BACN student travel bursary for annual meeting attendance, Essex, UK.

2015 PsyPag travel grant for BNA conference attendance, Edinburgh, UK.

2014 BACN student travel bursary for annual meeting attendance, York, UK.

Talks

Johnstone, N., *et al.* (2021). Nature vs nurture: successful school transitions in children depend more on parental emotion behaviour than brain maturational factors. Virtual Annual Combined Universities Brain Imaging Centre meeting, host: University of Surrey, UK

Johnstone, N., *et al.* (2021). Anxiolytic effects of a galacto-oligosaccharides prebiotic in healthy females (18–25 years) with corresponding changes in gut bacterial composition. Virtual REDD lab meeting, host: Jennifer Lau, Kings College London, UK

Conference presentations

Johnstone, N., & Sterr, A. (2017). Cortical activity underpinning natural walking is robust to effects of physical load carriage. Poster presentation at the annual meeting of the British Association of Cognitive Neuroscience, Plymouth, UK. [Poster](#) | [Abstract](#)

Johnstone, N., Debener, S., De Vos, M., & Sterr, A. (2017). Attentional capture in real life settings: assessment of the MMN in everyday activities using mobile EEG. Poster presentation at the International Conference for Cognitive Neuroscience, Amsterdam, Netherlands. [Poster](#) | [Abstract](#)

- Johnstone, N. (2017). Perceptual load influences attentional function in everyday activities. Oral presentation at the Psychology PhD conference, University of Surrey, UK.
- Johnstone, N., Debener, S., De Vos, M., & Sterr, A. (2015). Auditory target detection in real life settings: insights from mobile electroencephalography recordings. Poster presented at the annual meeting of the British Association of Cognitive Neuroscience, Essex, UK. [Poster](#) | [Abstract](#)
- Johnstone, N., Debener, S., De Vos, M., & Sterr, A. (2015). Event related potential correlates of auditory attention in real-life settings. Poster presented at the British Neuroscience Association conference, Edinburgh, UK. [Poster](#) | [Abstract](#)
- Johnstone, N., & Gherri, E. (2014). Look left but attend right: an ERP investigation of the effects of covert attention and saccadic eye movement on visual processing. Poster presented at the annual meeting of the British Association of Cognitive Neuroscience, York, UK. [Poster](#) | [Abstract](#)
- Johnstone, N., Sauseng, P., & Sterr, A. (2014). Increasing ecological validity in cognitive neuroscience research: mobile EEG, Poster presented at the Postgraduate Research conference, University of Surrey, UK.
- Johnstone, N. (2011). Anticipatory emotion as an attentional process from the result of making decisions: Is trait anxiety involved in a rule plus exception task? Oral presentation at the British Psychological Society undergraduate conference, Dundee, UK.

Outreach & Scientific Service

Peer review (Ad Hoc): Nature Human Behaviour, Journal of Neuropsychopharmacology, Journal of Psychopharmacology, Maternal and Child Nutrition

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| 2020 | Mental elf blog co-contributor: 'Probiotics and prebiotics for youth anxiety #ActiveIngredientsMH' https://tinyurl.com/y3ks9nw5 |
| 2019 | Competitor in June Mental Health Zone 'I'm a Scientist, Get me out of here', https://mentalhealthj19.imascientist.org.uk/psychologists/ |
| 2019 | OHBM abstract reviewer |
| 2018 | STEM ambassador Southeast Hub, UK |