

## EXPERIENCE

- 2021 –** **Northeastern University | Experiential AI Research Associate**  
*Institute for Experiential AI; Department of Psychology*  
Team: Drs Ajay Satpute, Jennifer Dy, Sarah Ostadabbas  
Project: Computational approaches to multiple solutions and degeneracy in functional neuroanatomy
- 2017 – 2021** **Boston College | Postdoctoral Researcher**  
*Department of Psychology and Neuroscience*  
Supervisor: Dr Maureen Ritchey
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## EDUCATION

- 2013 – 2017** **University of Cambridge | PhD Psychology**  
*Department of Psychology*  
Supervisor: Professor Jon Simons  
Thesis: The neurocognitive basis of recollection in autism
- 2012 – 2013** **University College London | MSc Cognitive & Decision Sciences**  
*Department of Experimental Psychology*  
Award: Distinction
- 2009 – 2012** **University of Nottingham | BSc (Hons) Psychology**  
*Department of Psychology*  
Award: First Class
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## AWARDS AND FUNDING

- 2021** Experiential AI Postdoctoral Research Fellowship, Northeastern University
- 2021** Boston College Postdoctoral Association Knowledge Dissemination Award
- 2019** Kavli Summer Institute in Cognitive Neuroscience (SICN) Fellow
- 2019** Boston College Department of Psychology Trainee Education Grant
- 2019** Frith Prize, Experimental Psychology Society: *Exceptional PhD thesis*
- 2018** eLife Early Career Travel Award
- 2018** Boston College Postdoctoral Association Knowledge Dissemination Award
- 2017** Methods in Neuroscience at Dartmouth (MIND) Fellow

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| 2016    | Guarantors of Brain Travel Grant   |
| 2013-16 | UK Economic and Social Research Council (ESRC) Doctoral Studentship      |
| 2013-16 | St John's College, Cambridge Benefactors' Scholarship                    |
| 2012    | British Psychological Society Undergraduate Award: <i>Highest degree</i> |
| 2012    | University of Nottingham Psychology Prize: <i>Highest grades</i>         |
| 2011    | University of Nottingham Psychology Prize: <i>Highest grades</i>         |

## PUBLICATIONS

see [Google Scholar](#)

1. **Cooper, R. A.**, Kurkela, K. A., Davis, S. W., & Ritchey, M. (2021). Mapping the organization and dynamics of the posterior medial network during movie watching. *NeuroImage*, 236, 118075.
2. Ritchey, M.\* & **Cooper, R. A.\*** (2020). Deconstructing the posterior medial episodic network. *Trends in Cognitive Sciences*, 24(6), 451-465.
3. **Cooper, R. A.** & Ritchey, M. (2020). Progression from feature-specific brain activity to hippocampal binding during episodic encoding. *Journal of Neuroscience*, 40(8), 1701-1709.
4. Samide, R., **Cooper, R. A.**, & Ritchey, M. (2020). A database of news videos for investigating the dynamics of emotion and memory. *Behavior Research Methods*, 52, 1469-1479.
5. **Cooper, R. A.** & Ritchey, M. (2019). Cortico-hippocampal network connections support the multidimensional quality of episodic memory. *eLife*, 8:e45591.
6. **Cooper, R. A.**, Kensinger, E. A., & Ritchey, M. (2019). Memories fade: The relationship between memory vividness and remembered visual salience. *Psychological Science*, 30(5), 657-668.
7. Lazzaro, S. C., Weidinger, L., **Cooper, R. A.**, Baron-Cohen, S., Moutsiana, C., & Sharot, T. (2019). Social conformity in autism. *Journal of Autism and Developmental Disorders*, 49, 1304-1315.
8. **Cooper, R. A.** & Simons, J. S. (2019). Exploring the neurocognitive basis of episodic recollection in autism. *Psychonomic Bulletin & Review*, 26, 163-181.
9. **Cooper, R. A.**, Richter, F. R., Bays, P. M., Plaisted-Grant, K. C., Baron-Cohen, S., & Simons, J. S. (2017). Reduced hippocampal functional connectivity during episodic memory retrieval in autism. *Cerebral Cortex*, 27, 888-902.
10. **Cooper, R. A.**, Plaisted-Grant, K. C., Baron-Cohen, S., & Simons, J. S. (2017). Eye movements reveal a dissociation between memory encoding and retrieval in adults with autism. *Cognition*, 159, 127-138.
11. Richter, F. R.\*, **Cooper, R. A.\***, Bays, P. M., & Simons, J. S. (2016). Distinct neural mechanisms underlie the success, precision, and vividness of episodic memory. *eLife*, 5:e18260.
12. **Cooper, R. A.**, Plaisted-Grant, K. C., Baron-Cohen, S., & Simons, J. S. (2016). Reality monitoring and metamemory in adults with autism spectrum conditions. *Journal of Autism and Developmental Disorders*, 46, 2186-98.
13. **Cooper, R. A.**, Plaisted-Grant, K. C., Hannula, D. E., Ranganath, C., Baron-Cohen, S., & Simons, J. S. (2015). Impaired recollection of visual scene details in adults with autism spectrum conditions. *Journal of Abnormal Psychology*, 124, 565-575. **\*equal contribution**

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## PROFESSIONAL SERVICE

### Ad Hoc Reviewer

*Ann. N. Y. Acad. Sci* – *Autism* – *Autism Research* – *Biological Psychiatry*: CNI – *Cerebral Cortex* – *Consciousness & Cognition* – *Cortex* – *Hippocampus* – *Human Brain Mapping* – *Journal of Abnormal Psychology* – *Journal of Autism and Developmental Disorders* – *Journal of Experimental Psychology: General* – *Journal of Gerontology: Psychological Sciences* – *Journal of Neuroscience* – *Learning and Memory* – *Molecular Autism* – *Network Neuroscience* – *NeuroImage* – *Neuropsychologia* – *Research in Autism Spectrum Disorders* – *Royal Society Open Science* – *Science Advances* – *Social Cognitive and Affective Neuroscience*

See: <https://publons.com/author/1531130/rose-cooper#profile>

### Memberships

- Cognitive Neuroscience Society
- Society for Neuroscience

### Other Duties

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| March 2021 | Organizer & Chair of a Cognitive Neuroscience Society symposium – <i>The Network Structure of Episodic Thought</i> |
| 2018-2019  | Co-organizer, Memory Messabout Meeting, Boston University  |
| 2017-2018  | Co-organizer, BC Neuroscience Data Club, Boston College  |

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## RESEARCH

### Technical Skills

- Experimental design, quantitative statistics, hierarchical linear modelling, machine learning (e.g. classification, clustering), neuroimaging (fMRI + EEG), eye-tracking
- Proficient in R, Python, and Matlab for data analysis and visualisation
- Coursera IBM [Data Science](#) and [Machine Learning](#) specializations
- Version control using Github

### Experiment Data & Code

Publicly available fMRI analysis guide  
Cooper et al. (2020), *bioRxiv*:  
Cooper & Ritchey (2019), *J Neurosci*:  
Samide et al. (2019), *Beh Res Meth*:  
Cooper & Ritchey (2019), *eLife*:  
Cooper et al. (2019), *Psych Sci*:

*GitHub*: [rose-cooper](#)

<https://github.com/rose-cooper/fmri-functions>  
[thememolab.org/paper-camcan-pmn/](https://thememolab.org/paper-camcan-pmn/)  
[thememolab.org/paper-bindingfmri/](https://thememolab.org/paper-bindingfmri/)  
[thememolab.org/paper-videonorming/](https://thememolab.org/paper-videonorming/)  
[thememolab.org/paper-orbitfmri/](https://thememolab.org/paper-orbitfmri/)  
[osf.io/cuz8g/](https://osf.io/cuz8g/)

## MENTORING AND TEACHING

### Undergraduate Research Assistants

2017-21 Cayley Bliss; Emily Iannazzi; Emily Janin; Elizabeth Judge; Samantha Murphy; Mary Nanna; Julia Napoli; Jenna Phelan; Rebecca Suthard; Zoe Ting

### Senior Thesis Students

2019-20 Natale Schmitz, Boston College

2018-19 Maria Khoudary, Boston College

### Additional Mentoring Roles

2019-20 Advisor to neuroscience undergraduate students within the international Action Potential Advising Program (APAP) from <https://www.simplyneuroscience.org/>

### Seminar Teaching

2014-16 University of Cambridge:

- Statistics
- Psychological Enquiry and Methods
- Cognitive and Experimental Psychology
- Cognitive Psychology, Practical Classes

### Training Courses

2019-20 Teaching in the U.S. classroom (Boston College, Center for Teaching Excellence)

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## MEDIA

Article on Richter\*, Cooper\* et al. (2016; eLife): “Memory lane has a three-way fork”  
[theatlantic.com/science/archive/2016/10/memory-lane-has-a-three-way-fork/505250/](http://theatlantic.com/science/archive/2016/10/memory-lane-has-a-three-way-fork/505250/)

Article on Cooper, Kensinger, & Ritchey (2019, Psychological Science): “Like old photographs, memories fade over time” [sciencedaily.com/releases/2019/04/190405080919.htm](http://sciencedaily.com/releases/2019/04/190405080919.htm)

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## INVITED TALKS

Functional heterogeneity of the posterior medial network during movie watching. (April, 2021). *Dynamic Memory Lab, University of California, Davis, USA.*

The cognitive and neural architecture of episodic memory. (December, 2020). *Affective and Brain Sciences Lab, Northeastern University, USA.*

Cortico-hippocampal networks supporting the reactivation of past events. (May, 2019). *Schacter Memory Lab, Harvard University, USA.*

The neurocognitive basis of episodic memory in autism. (April, 2019). *Frith Prize lecture, Experimental Psychology Society Meeting, University of Manchester, UK. Watch here: [youtu.be/pv-liiA18vY](https://youtu.be/pv-liiA18vY)*

Brain networks supporting the reconstruction of past events. (March, 2019). *Brown Cognition Seminar Series, Brown University, USA.*

Brain networks supporting the composition and precision of episodic memory. (October, 2018). *Memory Disorders Research Society annual meeting, Toronto, Canada.*

Episodic memory reconstruction in autism. (July, 2018). *Trends in Psychology Summit, Harvard University, Boston, USA.*

Neural mechanisms of episodic memory reconstruction. (February, 2018). *Boston University Memory Meeting, Boston, USA.*

Investigating recollection in adults with autism spectrum conditions. (November, 2014). *Autism Research Centre talk series, Cambridge, UK.*

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## CONFERENCE PRESENTATIONS

### Talks

Functional heterogeneity of the posterior medial episodic network. (March, 2021). *Cognitive Neuroscience Society, Virtual Meeting.*

Progression from feature-specific brain activity to hippocampal binding during episodic encoding. (May, 2020). *Cognitive Neuroscience Society, Virtual Meeting.*

Memories fade: Changes in reconstructed perceptual quality over time. (May, 2019). *Context and Episodic Memory Symposium. Philadelphia, USA.*

### Posters

Cooper, R. A. & Ritchey M. (August, 2020). Mapping the functional dynamics of the posterior medial episodic network. *Context and Episodic Memory Symposium, Virtual.*

Schmidt, H., Cooper, R. A., & Ritchey, M. (May, 2020). Temporal dynamics supporting the multidimensional quality of episodic memory. *Cognitive Neuroscience Society, Virtual Meeting.*

Cooper, R. A. & Ritchey M. (May, 2020). Progression from feature-specific brain activity to hippocampal binding during episodic encoding. *Cognitive Neuroscience Society, Virtual Meeting.*

Cooper, R. A. & Ritchey M. (October, 2019). Probing intra-network dynamics of the posterior medial system during episodic memory retrieval. *Society for Neuroscience Annual Meeting, Chicago, USA.*

Schmidt, H., Samide, R., Cooper, R. A., & Ritchey, M. (May, 2019). News flash! Investigating the dynamics of emotional memory using real-life event videos. *Context and Episodic Memory Symposium. Philadelphia, USA.*

Samide, R., Cooper, R. A., & Ritchey, M. (March, 2019). From hurricanes to homecomings: A database of news broadcast videos for investigating the dynamics of emotional memory. *Cognitive Neuroscience Society Annual Meeting, San Francisco, USA.*

Cooper, R. A. & Ritchey M. (November, 2018). Brain networks supporting the composition and precision of episodic memory reconstruction. *Society for Neuroscience Annual Meeting, San Diego, USA.*

- Cooper, R. A. & Ritchey M. (March, 2018). Effects of negative emotion on item-specific and spatial-context memory precision. *Cognitive Neuroscience Society Annual Meeting, Boston, USA*.
- Cooper, R. A., Richter, F. R., Bays, P. M., Plaisted-Grant, K. C., Baron-Cohen, S., & Simons, J. S. (April, 2017). Reduced hippocampal – fronto-parietal control network connectivity during memory retrieval in adults with autism. *Cambridge Memory Meeting, Cambridge, UK*.
- Cooper, R. A., Richter, F. R., Bays, P. M., Plaisted-Grant, K. C., Baron-Cohen, S., & Simons, J. S. (July, 2016). Reduced functional connectivity during episodic memory retrieval in adults with autism. *International Conference on Memory, Budapest, Hungary*.
- Cooper, R. A., Plaisted-Grant, K. C., Baron-Cohen, S., & Simons, J. S. (June, 2016). Eye movements reveal a dissociation between memory encoding and retrieval in adults with autism. *Cambridge Neuroscience External Review, Cambridge, UK*.
- Richter, F. R., Cooper, R. A., Bays, P. M., & Simons, J. S. (April, 2016). Distinct neural mechanisms underlie the success, precision, and vividness of episodic memory. *Cognitive Neuroscience Society Annual Meeting, New York, USA*.
- Cooper, R. A., Plaisted-Grant, K. C., Baron-Cohen, S., & Simons, J. S. (April, 2016). Using eye-tracking to investigate long-term memory encoding and retrieval in adults with autism spectrum conditions. *Cognitive Neuroscience Society Annual Meeting, New York, USA*.
- Cooper, R. A., Plaisted-Grant, K. C., Hannula, D. E., Ranganath, C., Baron-Cohen, S., & Simons, J.S. (May, 2015). Impaired recollection of visual scene details in adults with autism spectrum conditions. *Cambridge Memory Meeting, Cambridge, UK*.
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