

## Employment

### Research Associate

Research Only

Division of Diabetes, Endocrinology & Gastroenterology (L5)

The University of Manchester

16 Dec 2019 → present

## Research outputs

### Altered proportions of retinal cell types and distinct visual codes in rodents occupying divergent ecological niches

Allen, A. E., Hahn, J., Richardson, R., Pantiru, A., Mouland, J., Babu, A., Baño-Otalora, B., Monavarfeshani, A., Yan, W., Williams, C., Wynne, J., Rodgers, J., Milosavljevic, N., Orłowska-Feuer, P., Storchi, R., Sanes, J. R., Shekhar, K. & Lucas, R. J., 7 Apr 2025, In: *Current biology* . 35, 7, p. 1446-1458.e5

### Reconfiguration of the visual code and retinal cell type complement in closely related diurnal and nocturnal mice

Allen, A. E., Hahn, J., Richardson, R., Pantiru, A., Mouland, J., Baño-Otalora, B., Monavarfeshani, A., Yan, W., Williams, C., Wynne, J., Rodgers, J., Milosavljevic, N., Orłowska-Feuer, P., Storchi, R., Sanes, J. R., Shekhar, K. & Lucas, R. J., 5 Jul 2024, Cold Spring Harbor Laboratory Press, (bioRxiv).

### Regulation of mouse exploratory behaviour by irradiance and cone-opponent signals

Tamayo, E., Mouland, J., Lucas, R. & Brown, T., 21 Aug 2023, In: *BMC Biology*. 21, 178.

### Colour opponency is widespread across the mouse subcortical visual system and differentially targets GABAergic and non-GABAergic neurons

Feord, R. C., Gomoliszewska, A., Pienaar, A., Mouland, J. & Brown, T., 8 Jun 2023, In: *Scientific Reports*. 13, 9313 .

### Colour and melanopsin mediated responses in the murine retina

Mouland, J., Watson, A. J., Martial, F. P., Lucas, R. J. & Brown, T. M., 13 Mar 2023, In: *Frontiers in cellular neuroscience*. 17, 1114634.

### Beyond irradiance: Visual signals influencing mammalian circadian function

Mouland, J. & Brown, T. M., 2022, In: *Progress in Brain Research*. 273, 1, p. 145-169 25 p.

### Extensive cone-dependent spectral-opponency within a discrete zone of the lateral geniculate nucleus supporting mouse colour vision

Mouland, J., Pienaar, A., Williams, C., Watson, A., Lucas, R. & Brown, T., 13 May 2021, In: *Current biology* .

### Modulations in irradiance directed at melanopsin, but not cone photoreceptors, reliably alter electrophysiological activity in the suprachiasmatic nucleus and circadian behaviour in mice

Mouland, J., Brown, T. (Corresponding), Martial, F. & Lucas, R. (Corresponding), 27 Apr 2021, In: *Journal of Pineal Research*. 70, 4, e12735.

### Acute In Vivo Multi-Electrode Recordings from the Mouse Suprachiasmatic Nucleus

Mouland, J., Walmsley, L., Brown, T. & Lucas, R., 19 Jul 2020, (Accepted/In press) *Circadian Clocks : Methods and Protocols*.

### The spectral sensitivity of cone vision in the diurnal murid, *Rhodomys pumilio*

Allen, A., Mouland, J., Rodgers, J., Bano Otalora, B., Douglas, R., Vulgar, A. A., Brown, T. & Lucas, R., 20 Apr 2020, (Accepted/In press) In: *The Journal of Experimental Biology*.

### Cones support alignment to an inconsistent world by suppressing mouse circadian responses to the blue colours associated with twilight

Mouland, J., Martial, F., Watson, A. R., Lucas, R. & Brown, T., 16 Dec 2019, In: *Current biology* . 29, 24, p. 4260-4267.E4

**Multiplexing Visual Signals in the Suprachiasmatic Nuclei**

Stinchcombe, A. R., Mouland, J., Wong, K. Y., Lucas, R. J. & Forger, D. B., 7 Nov 2017, In: Cell Reports. 21, 6, p. 1418-1425 8 p.

**Responses to spatial contrast in the mouse suprachiasmatic nuclei (SCN)**

Mouland, J., Stinchcombe, A. R., Forger, D. B., Brown, T. & Lucas, R., 18 May 2017, In: Current Biology. 27, 11, p. 1633-1640

**Colour as a signal for entraining the Mammalian circadian clock.**

Walmsley, L., Hanna, L., Mouland, J., Martial, F., West, A., Smedley, A. R., Bechtold, D. A., Webb, A. R., Lucas, R. J. & Brown, T. M., 17 Apr 2015, In: PLoS Biology. 13, 4, p. 0 e1002127.