



## MANCHESTER NEUROSCIENCE SEMINAR SERIES

FROM THE UNIVERSITY OF MANCHESTER, DIVISION OF DIABETES,  
ENDOCRINOLOGY & GASTROENTEROLOGY

# DR DAVID LYONS

Hosted by Dr Beatriz Bano Otalora

## The Chronobiology of Neuroendocrine Dopamine Release - Cellular and Circuit Mechanisms of Circadian Control

Our goal is to understand how the mammalian brain prepares us for the rigours of reproduction and parental behaviour and the role biological timing plays in the co-ordination of this complex process. As many of the necessary adaptations are driven by the hormone prolactin (Prl), we focus upon understanding the mechanisms that produce circadian variation in the activity of tuberoinfundibular dopaminergic (TIDA) neurons - the highly specialised brain cells that control the release of Prl from the pituitary. In this seminar I will introduce the audience to the neuronal and network properties of this remarkable neuroendocrine circuit, before going on to describe some of our most recent work regarding potential mechanisms by which the master clock of the suprachiasmatic nucleus may tune the activity of the TIDA system to drive the daily rhythms in hormone release that are critical for reproductive success.

MAY • 24TH • 2022

2.00pm - 3.00pm

HYBRID DELIVERY

Michael Smith Lecture Theatre and  
online

<https://zoom.us/j/91942369626>

Meeting ID: 919 4236 9626

EVERYONE WELCOME