Robert G.K Munn

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EDUCATION

2013 **University of Otago**

PhD
Doctoral advisor: Professor David Bilkey

2005 **University of Otago**

MSc (distinction) in Psychology
Advisor: Professor Neil McNaughton

2003 **University of Otago**

BSc (Psychology/Chemistry)

RESEARCH EXPERIENCE

Present **Stanford University**, **Department of Neurobiology**
Postdoctoral Fellow. *Research advisor: Dr. Lisa Giocomo*.
In vivo single unit recordings of neurons in mouse entorhinal cortex

2007-2012 **University of Otago, Department of Psychology**
Doctoral student, *Doctoral advisor: Prof. David Bilkey*
In vivo single unit and field potential recordings from hippocampal place cells over very long time periods

2006 **University of Otago, Department of Psychology**
Research Assistant, *Supervisors: Dr. Rachel Zajac & Prof. David Bilkey*
Human eyewitness testimony research and animal behavioural and electrophysiological experiments

RESEARCH INTERESTS

The function of the hippocampal/entorhinal circuit that supports memory

The interaction between anxiety and memory in hippocampal function and dysfunction

Dysfunction of the hippocampal/entorhinal circuit in states such as depressive disorders, Alzheimer's disease and schizophrenia

TEACHING EXPERIENCE

2010-2013 **University of Otago, Department of Psychology**
Guest Lecturer in Psychopharmacology
An annual series of lectures on psychopharmacology, covering the pharmacokinetics and dynamics of psychoactives to a graduate-level clinical psychology class

2005-2011 **University of Otago, Department of Psychology**
100- and 200- level undergraduate laboratory demonstrator
Delivery of lecture material, supervision of practical work and grading and assessment for classes of between 20 and 30 undergraduates

PUBLICATIONS

Journal Articles

Munn, R.G.K., Bilkey, D.K. (2014) Circadian scale increases in theta and gamma-band coherence between hippocampus, cingulate, and insular cortices. *In preparation*

Munn, R.G.K., Tyree, S., McNaughton, N., Bilkey, D.K. (2014) The frequency and power of hippocampal theta rhythm are modulated on a circadian period and entrained to food availability *Under review at Hippocampus*

Tyree, S., **Munn, R.G.K**., McNaughton, N. (2014) Partial anxiolytic-like effects of Leptin on hippocampal RSA and fixed interval responding *In submission*

Zajac, R., Dickson, J., **Munn, R.G.K**, O'Neill, S. (2013) Trussht me, I know what I shhaw: the acceptance of misinformation from an apparently unreliable co-witness *In press at Legal and Criminological Psychology DOI: 10.1111/lcrp.12032*

Munn, R.G.K., Bilkey, D.K. (2012) The firing rate of hippocampal CA1 "place cells" is modulated with a circadian period. *Hippocampus* 22(6): 1325-1337

Munn, R.G.K., McNaughton, N. (2008) Effects of fluoxetine on hippocampal rhythmic slow activity and behavioural inhibition. *Behavioural Pharmacology* 19(3): 257-264

Conference proceedings

Munn, R.G.K., Campbell, M., Mallory, C.S., Chetkovich, D & Giocomo, L.M (2014) Postsynaptic HCN channel deletion viaTRIP8b knockout causes expansion of grid scale and reduces malleability of grid cells. *SfN Abstracts*

Munn, R.G.K., Tyree, S., McNaughton, N., Bilkey, D.K (2013) The frequency and power of hippocampal theta rhythm are modulated on a circadian period and entrained by food availability. *SfN Abstracts* 856.15/HHH25

Munn, R.G.K., Bilkey, D.K. (2010) Modulation in the firing rates of CA1 "place cells" over long recordings: a putative circadian time signal in the hippocampus? *FENS Abstr., vol.5, 176.41*

Munn, R.G.K., McNaughton, N. (2005) Fluoxetine, a specific reuptake inhibiting antidepressant, shares electrophysiological properties with both novel and classical anxiolytics. . *Proceedings of the 23rd International Australasian Winter Conference on Brain Research*

McNaughton, N., **Munn R.G.K.** (2005) Fluoxetine impairs learning in the Morris Water Maze. *Proceedings of the 23rd International Australasian Winter Conference on Brain Research*

INVITED TALKS

February 2013: Presentations to the laboratory groups of Professor Sidney Wiener at College de France, and Professor Kate Jeffrey at University College London

HONOURS AND AWARDS

2013: Dean's postdoctoral fellowship from the Stanford University School of Medicine

2011: Otago University Psychology in-house conference: Student presentation winner

2007: University of Otago postgraduate scholarship

2005: Summer research bursary from the University of Otago "Memory Theme" funding body

REFERENCES

Research

Lisa Giocomo, Stanford University: giocomo@stanford.edu

David Bilkey, University of Otago: dbilkey@psy.otago.ac.nz

Neil McNaughton, University of Otago: nmcn@psy.otago.ac.nz

Teaching

Dione Healey, University of Otago: dionehealey@psy.otago.ac.nz