Curriculum Vitae

Jack R Rivers

Postdoctoral Researcher

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Education

Postgraduate:

PhD Pharmacology (currently)

Department of Pharmacology and Toxicology

University of Otago

April 2008 – present

*Hypoxia Ischemia and the Cannabinoid Receptor Type Two: From Expression, Neuroprotection, to Immune Modulation.*

First Class Post Graduate Diploma (Honors Equivalent)

Department of Botany

University of Otago

February 2007 – December 2007

*The interaction between oxidative stress signals during heat stress and viral infection in Phaseolus Vulgaris. Assessing antioxidant activity, DNA damage, and lipid peroxidation.*

Undergraduate:

BSc (Anatomy)

Department of Structural Anatomy

University of Otago

2004-2006

Awards

Winner, as voted by the audience, of the Australasian “Three Minute Thesis Competition”. *This can be viewed on http://www.postgraduate.uwa.edu.au/news/3mt/video/rivers*

Winner of the 2011 University of Otago “Three Minute Thesis Competition”.

Winner of the Fred Fastier Oral Presentation Prize at the 2009 ASCEPT annual conference.

Finalist at the 2009 University of Otago “Three Minute Thesis Competition”.

Runner up in the Fred Fastier Oral Presentation Prize at the 2008 ASCEPT annual conference.

Recipient of the University of Otago Doctoral Scholarship. 2008

Recipient of Marsden Funding for Doctoral Studies. 2008

Relevant Employment History and Duties

Assistant Research Fellow/Postdoctoral Researcher

University of Otago, Pathology Department.

January 2012- April 2013

Supervised by Professor Madhav Bhatia. ph (03) 378 6238, email- [madhav.bhatia@otago.ac.nz](mailto:madhav.bhatia@otago.ac.nz)

Pharmacology laboratory demonstrator

University of Otago, Department of Pharmacology

February 2009 – present

Supervised by Dr. Greg Giles. ph (03) 4797322, email- gregory.giles@otago.ac.nz

Head Senior Residential Assistant

Cumberland College, University of Otago

February 2009- present

Supervised by Peter Waker. Ph (03) 4795570, email- pr.walker@otago.ac.nz

I have also assisted in postgraduate supervision by closely supporting and mentoring Honors students and Masters students, teaching them lab techniques, surgical skills, computer illustration, and helping with writing up processes. This was done under when I was a senior Ph.D. student at the Pharmacology department and as research fellow in Pathology Department.

Professional affiliations

Australasian Winter Conference on Brain Research (AWCBR) 2008, 2009 and 2011

Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists (ASCEPT) 2008- 2010

Publications

**Primary Authorship**

Rivers, J.R., and J.C. Ashton. 2010. The development of cannabinoid CBII receptor agonists for the treatment of central neuropathies. Central Nervous System Agents for Medicinal Chemistry. 10:47-64.

Rivers, J.R., and J.C. Ashton. 2012. Neonatal asphyxia and stroke: morbidity, models, consequences, and treatments In Hypoxia: Causes, Types and Management. D. Vordermark, editor. Nova Publishers. 108-130.

Rivers, J.R., and J.C. Ashton. 2013. Age Matching Animal Models to Humans - Theoretical Considerations. Curr Drug Discov Technol.

Rivers, J.R., A. Badiei, and M. Bhatia. 2012. Hydrogen sulfide as a therapeutic target for inflammation. Expert Opinion on Therapeutic Targets. 16:439-449.

Rivers, J.R., S.D. Maggo, and J.C. Ashton. 2012. Neuroprotective effect of hydroxypropyl-beta-cyclodextrin in hypoxia-ischemia. NeuroReport. 23:134-138.

Rivers, J.R., B.A. Sutherland, and J.C. Ashton. 2011. Characterization of a rat hypoxia-ischemia model where duration of hypoxia is determined by seizure activity. Journal of Neuroscience Methods. 197:92-96.

Rivers-Auty, J., and M. Bhatia. 2013. Hydrogen sulfide, systemic inflammatory response syndrome (SIRS) and compensatory anti-inflammatory response syndrome (CARS) following sepsis. OA Inflammation. 01:2-.

**Middle Authorship**

Ang AD, Rivers JR, Hegde A, Ishii I, Bhatia M. The effect of CSE deletion in murine model acute pancreatitis. *Submitted for review by the American Journal of Physiology 2013.*

Jupp, L., J.R. Rivers, and M. Bhatia. 2013. Hydrogen sulfide and substance P in acute pancreatitis. In Adaptation Biology and Medicine. Vol. 7. A.R. Popescu and P.K. Singal, editors. Narosa Publishing House, New Delhi. in press.

Guest Speaker and Media Appearances

Interviewed by Rebecca Rutherford for Critic Magazine on my research 7th May 2012 *http://www.critic.co.nz/features/article/1924/jack-rivers*

Guest speaker at the departmental symposia for the University of Otago’s Department of Women’s and Children’s Health 9th November 2011.

Interviewed on Radio One on my research 1st September 2011. *Pod-cast available at http://r1.co.nz/podcasts.php*

Reviews for Peer Reviewed Journal Articles

*Reviewed 1 article for the Journal of Neuroinflammation 12/12/2011*

Conferences

***Proceedings of AWCBR 2011***

[Poster] Cannabinoid receptor type II as a target for neuroprotection following hypoxia

ischemia. Or is it an active vehicle in the driving seat?

*Rivers JR, Ashton JC. Department of Pharmacology and Toxicology, Otago School of Medical Sciences, University of Otago, Dunedin, PO Box 56, 9054, New Zealand.* AWCBR 2011, Conference Proceedings, Queenstown, New Zealand

***Proceedings of WCBR 2010***

[Poster] Effect of the cannabinoid CBII receptor partial agonist GW 405833 on neurological damage caused by hypoxia ischemia in rats

*Rivers JR, Ashton JC. Department of Pharmacology and Toxicology, Otago School of Medical Sciences, University of Otago, Dunedin, PO Box 56, 9054, New Zealand.* WCBR 2010, Conference Proceedings, Breckenridge, Colorado, USA

***Proceedings of AWCBR 2009***

[Oral Presentation] A new look at an old model: Analysing predicting factors of infarct size in a rat perinatal ashpyxia model

*Rivers JR, Ashton JC. Department of Pharmacology and Toxicology, Otago School of Medical Sciences, University of Otago, Dunedin, PO Box 56, 9054, New Zealand.* AWCBR 2009, Conference Proceedings, Queenstown, New Zealand

***Proceedings of ASCEPT 2009***

[Oral Presentation] Hypoxia ischemia and the selective protection of the penumbral striatum of the CBII partial agonist GW405833

*Rivers JR, Ashton JC. Department of Pharmacology and Toxicology, Otago School of Medical Sciences, University of Otago, Dunedin, PO Box 56, 9054, New Zealand.* ASCEPT 2009, Conference Proceedings, Dunedin, New Zealand

***Proceedings of ASCEPT 2008***

[Oral Presentation] Preliminary investigations into the specificity of antibody probes raised against the cannabinoid CBII receptor.

*Rivers(1) JR, Sutherland(1) BA, Brownjohn(1) PW, Glass(2) M, Aston(1) JC. (1) Department of Pharmacology and Toxicology, Otago School of Medical Sciences, University of Otago, Dunedin, PO Box 56, 9054, New Zealand. (2) Department of Pharmacology and Clinical Pharmacology, University of Auckland, Private Bag 92019 Auckland, New Zealand.* ASCEPT 2008, Conference Proceedings, Queenstown, New Zealand