Editorial

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Received: 26 April 2012 / Accepted: 22 May 2012 / Published online: 1 June 2012
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This special issue on Neuroscience in Southern Africa is dedicated to the memory of David McCandless, founding Editor of *Metabolic Brain Disease*, in recognition of his support and encouragement to publish our research findings. The current issue highlights neuroscience research in Southern Africa. It covers a broad spectrum of clinical and basic neuroscience.

The issue begins with three provocative reviews proposing novel approaches to treatment of disease in “*The Conundrum of Iron in Multiple Sclerosis - Time for an Individualised Approach*” and “*Pathology supported genetic testing and treatment of cardiovascular disease in middle age for prevention of Alzheimer's disease*”; and behavioural consequences of a dysfunctional arousal system in “*Synergistic tonic and phasic activity of the locus coeruleus nor-epinephrine (LC-NE) arousal system is required for optimal attentional performance*”.

This is followed by six papers on clinical neuroscience including imaging studies: “*IH-MRS in Autism Spectrum Disorders: A Systematic Meta-analysis*”, “*A Diffusion Tensor Imaging and Neuropsychological Study of Prospective memory impairment in South African HIV positive individuals*”, “*Grey matter abnormalities in social anxiety disorder: a pilot study*”; and clinical approaches “*Assessment of Epstein-Barr virus in blood from patients with multiple sclerosis*” and “*CYP2D6 Genotyping and Use of Anti-*

depressants in Breast Cancer Patients: Test Development for Clinical Application”.

Last but not least, papers on basic neuroscience cover aspects of neuropharmacology in “*Paracetamol prevents hyperglycinemia in vervet monkeys treated with valproate*” and “*Chronic treatment with the phosphodiesterase type 5 inhibitors sildenafil and tadalafil display anxiolytic effects in Flinders Sensitive Line rats*”; as well as drug addiction, specifically methamphetamine (tik) which is a serious problem among the youth in South Africa in “*The role of neuroendocrine hormones in methamphetamine-induced addictive behaviour in rats*”, “*The effects of lobeline and naltrexone on methamphetamine-induced place preference and striatal dopamine and serotonin levels in adolescent rats with a history of maternal separation*” and “*Effects of maternal separation and methamphetamine exposure on protein expression in the nucleus accumbens shell and core*”. Finally, the last four papers focus on the long-term effects of stress experienced during the early stages of development: “*Maternal separation enhances object location memory and prevents exercise-induced MAPK/ERK signalling in adult Sprague Dawley rats*”, “*Effect of Maternal Separation on Mitochondrial Function and role of Exercise in a rat model for Parkinson's Disease*”, “*Early maternal separation leads to down-regulation of cytokine gene expression*” and “*Exposure to Prenatal Stress Enhances the Development of Seizures in Young Rats*”.

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