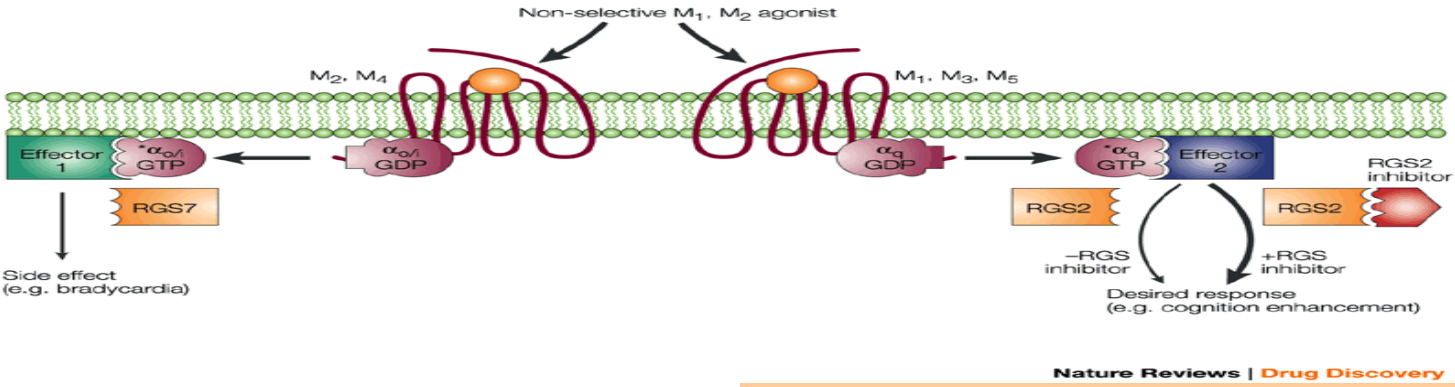
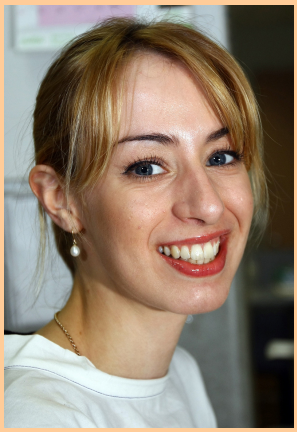


The role of muscarinic receptors in the pathology of schizophrenia

Tammie Money (PhD canididate)



Tammie completed a Bachelor of Science at Monash University majoring in Pharmacology and Psychology in 2004. She is currently undertaking a PhD at the Mental Health Research Institute investigating the regulation of the muscarinic receptors in schizophrenia utilising postmortem human brain and cell culture, under the supervision of Prof Brian Dean and Dr. Elizabeth Scarr.

In 2006 she was awarded a grant-in-aid for a submitted abstract to the Australasian Society for Psychiatric Research. In 2007 she was awarded the Mental Health Research Institute's Lady Zeidler student travel award for travel to the Society for Neuroscience conference in Washington DC. She plans to continue neuropsychiatric research involving human tissue, with a particular focus on developing pharmacological targets.

The role of muscarinic receptors in schizophrenia: Previous studies have demonstrated a significant reduction in muscarinic receptors in schizophrenia (Crook *et al.*, 2001, Raedler *et al.*, 2003, Dean *et al.*, 2008). More recently our laboratory identified a subgroup of subjects with schizophrenia with ~75% reduction in M_1 receptors (CHRM1) in Brodmann's area (BA) 9 (Scarr *et al.*, 2008). My research has been to determine whether the loss of CHRM1 is i) present in BA24 and ii) restricted to the same group of individuals who have a deficit in CHRM1 in BA9 and iii) to investigate factors that can act to regulate levels of CHRM1 expression. In addition, data from cell culture experiments to investigate the affect of cholinergic and antipsychotic drugs on cellular growth will be discussed.

NorthWestern Mental Health

DEPARTMENT OF PSYCHIATRY

MONDAY COLLOQUIUM

Monday 14 September 2009 / 1North, Main Block, Royal Melbourne Hospital, Victoria

Lunch: 1215-1230 Presentation: 1230-1330

Monday Colloquia are a joint presentation between the University of Melbourne Department of Psychiatry & North Western Mental Health. For more information contact Dr Simon Jones at sgjones@unimelb.edu.au