



***Current and recent research studies within the Division of Psychiatry – Psychopharmacology section, School of Community Health Sciences***  
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### **Human autonomic psychopharmacology**

- the use of the pupillary light reflex as a model system for analyzing sympathetic/parasympathetic interactions;
- central autonomic control and the human pharmacology of psychoactive drugs (anxiolytics, antipsychotics and antidepressants);
- mode of action of the wakefulness-promoting drug modafinil (comparison of patients with fatigue disorders and healthy controls);
- development of physiological tests for the early detection of Alzheimer's disease;
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### **Behavioural pharmacology**

- analysis of the role of cortico-striato-thalamo-cortical (CSTC) neuronal pathways and their dopaminergic and 5-hydroxytryptaminergic connentions in inter-temporal choice behaviour;
- analysis of the role of the CSTC circuits and their dopaminergic and 5-hydroxytryptaminergic connentions in voluntary timing behaviour;
- use of progressive ratio schedule performance to analyse the effects of atypical antipsychotic drugs on motivational and motor processes.

### **Human neuropsychology**

- development and standardization of psychometric tests differentially sensitive to organically-based and simulated cognitive impairment;
- use of event-related potentials to detect simulated cognitive impairment;
- investigation of the effects of antipsychotic drugs on prepulse inhibition of the acoustic startle reflex and auditory evoked potentials;
- investigation of the effects of anxiolytic drugs on 'fear-conditioning' in humans;
- investigations of human timing performance.