BSc in Reproductive & Developmental Sciences &

BSc in Surgery and Anaesthesia Project Outline 2011-2012

**Project Title: The Influence of Cognitive Enhancement on Recollection of Critical Patient Information**

**Academic Supervisor: Colin Sugden**

**Division: Surgery & Cancer**

**Section: Surgery**

**Co-supervisor:**

**Who will be responsible for day-to-day supervision? Ian Flindall**

**Contact Details of Person whom Medical Student should contact for further details:**

**Name: Ian Flindall Email: i.flindall@imperial .ac.uk Tel: 07515877624**

**Group’s Research Interest: Cognitive Enhancement**

(Double click the appropriate check box to indicate your choices below)

**Is this a clinical [ ]  or laboratory [x]  project?**

**Suitable project for: Reproductive and Development**  **Sciences** Yes **[ ]** No **[ ]**

**Surgery and Anaesthesia** Yes **[x]** No **[ ]**

**Synopsis of project (background/research question/methods to be used/relevant key references):**

Modafinil is a cognitive enhancer. There is evidence to show it is actively used by student populations, academics and the military as an aid to improve working memory. The project would entail testing short term memory (recall) of patient histories in a double blind randomised crossover trial (placebo v Modafinil) in a medically trained population. Participants will be assessed for memory error (Deese-Roediger- McDermott Paradigm and Schematic errors) and recall when administered Modafinil compared with placebo. This will be compared with non surgical memory tests. The student will be expected to run the study and liaise closely with the day to day supervisor throughout the course of their BSc.

Previous students involved with Modafinil have published a paper, and had oral and poster presentations.

This study will allow the student to become familiar with a small double blind controlled trial. It involves the administration of medication to participants. They will be expected to become familiar with the ethics and potential uses of Modafinil and be able to follow protocols whilst accurately recording the information obtained. The student will also need to develop their abilities in Case presentations to enable them to assess their participants.

General papers of interest:

Sahakian, B. & Morein-Zamir, S., 2007. Professor's Little Helper. *Nature*, 450(20-27 December), pp.1157–1159.

Sugden, C. et al., 2011. Effect of Pharmacological Enhancement on the Cognitive and Clinical Psychomotor Performance of Sleep-Deprived Doctors: A Randomized Controlled Trial. *Annals of surgery*.

Williams, S.J. et al., 2008. Waking up to sleepiness: Modafinil, the media and the pharmaceuticalisation of everyday/night life. *Sociology of health & illness*, 30(6), pp.839–855.

Will the research involve work done under the Animals (Scientific Procedures) 1986 Act? Yes **[ ]** No **[x]**

**If YES*,***

Will the student be required to undergo Home Office training? Yes **[ ]** No **[ ]**

Are the appropriate project and personal licences in place? Yes **[ ]** No **[ ]**

**Project licence**:

Licensee

Date of issue

Number

**Personal licence**:

Licensee

Number

**Will the research involve the use of genetically modified tissue?** Yes **[ ]** No **[x]**

**If YES**

Has the work been approved by the relevant GM Committee Yes **[ ]** No **[ ]**

Date approval was granted

Reference Number

**Will the project involve work on human subjects, human tissue or access to confidential patient information?** Yes **[x]** No **[ ]**

## If YES

## has ethical approval been obtained Yes [ ]  No [x]

## Date approval was granted

## IC REC or IRAS REC number

**Note: Approval for any of the above MUST be in place before the student begins the project.**

**A risk assessment form will be required.**

**Project Payment**: I have an F account Yes **[ ]** No **[x]**

## If you have an F account please give full account code: