## 2. AIMS AND OBJECTIVES

## 2.1 Aim

To identify proteins that are differentially expressed between resistant and susceptible *B. glabrata* Campinas strain hepatopancreas proteomes, that have been exposed to miracidia of *S. mansoni*, using 2DE, MS and bioinformatics.

## 2.2 Preliminary Work

After preliminary work cutting spots of interest from gels created in previous projects (Baker unpublished, 2008; Murray unpublished, 2008), the results back from Q-ToF (Quadruple Time of Flight) where not promising. Only possible autolysis products from trypsin could be seen, therefore new gels where run, with a five times increase in protein concentration incorporated into the protocol.

## 2.3 Objectives

- 1. To generate a 2D gel of the hepatopancreas tissue from *S. mansoni* resistant, and a susceptible *B. glabrata*.
- To analyse the difference between the gel from susceptible snails and the gel from resistant snails.
- 3. To identify spots of interest (unique spots or proteins up-regulated or down-regulated twofold or more) using MS and Bioinformatics.