

PhD project: Biochemical and structural analysis of fungal ABC membrane protein Cdr1p



Prof Richard Cannon, Dr Erwin Lamping, Dr Masakazu Niimi

We are looking for a well-qualified and highly motivated student to embark on a PhD project as part of a study supported by the Marsden Fund.

ATP-binding cassette (ABC) membrane proteins are an important family of proteins involved in many cellular processes. **ABC protein Cdr1p is a multidrug efflux pump responsible for azole drug resistance in the human pathogenic yeast *Candida albicans*.** In this project we will test our novel model for Cdr1p topology and function.

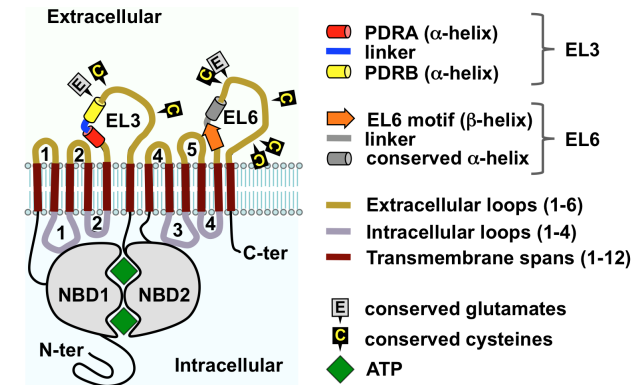


Figure 1: Schematic diagram of the predicted membrane topology of Cdr1p and conserved amino acid motifs of EL3 and EL6.

The student selected for this project will be able to attract a University of Otago PhD scholarship and will join a multidisciplinary international research team. The project will involve **single particle analysis and 2D crystallisation of Cdr1p** under the supervision of AProf Alok Mitra at the University of Auckland, and **X-ray crystallography** at the University of Otago.



AProf Alok Mitra

For Further information contact:
Dr Erwin Lamping
erwin.lamping@otago.ac.nz

Expressions of interest close:
7 July 2014



Jawaharlal Nehru
University

Prof Rajendra Prasad