

Drugging the undruggable – new approaches for targeting transcription factors

Project Description

Project duration:	Both PhD and honours projects available
Description:	Transcription factors are the master regulators of cell state and, as a result, they play a fundamental role in disease. Despite their importance, transcription factors have traditionally remained largely refractory to therapeutic targeting. This project will leverage recent advances in CRISPR and mRNA technology to attempt to understand, then disrupt, the regions required for transcription factor activity. This could open up a new class of drugs that enable us to control the factors that control the identify of our cells.
Expected outcomes and deliverables:	This project will provide the opportunity to learn about a fundamental biological process, while obtaining new skills in state-of-the-art techniques in molecular biology, cell biology and genomics.
Suitable for:	Students with a passion for biology and a strong desire to understand things work. Skills, knowledge and/or experience in molecular biology and cell biology are desirable; however, motivated applicants from all areas of expertise are encouraged to apply.
Primary Supervisor:	Dr Charles Bell
Further info:	Please contact <u>charles.bell@mater.uq.edu.au</u> for more information on this project.