

Hons projects for those with Gutsy Ambitions:

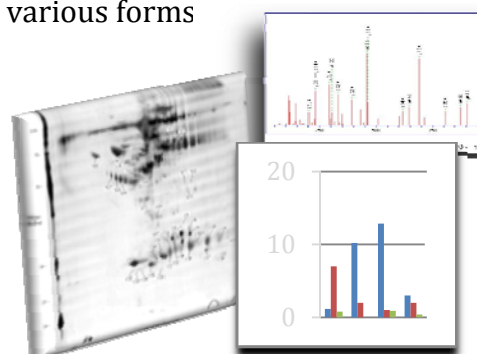
Proteomic biomarkers in the assessment of IBD severity and prediction of treatment response

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The diagnosis and measurement of inflammatory bowel disease activity is currently based on clinical, endoscopic, radiologic and histological criteria. The identification of protein markers in blood plasma that can be used to objectively and accurately describe clinical activity, prognosticate disease course and help guide management as predictors of treatment response would significantly reduce the discomfort and stress associated with these tests. Characterization of the plasma protein profiles in UC and CD comparing responders and non-responders of treatment may identify proteins that predict treatment response, prognosticate disease course, determine mechanisms of drug action/ effect, and improve the efficiency of treatment.

The proposed study will yield significant data on biologically protein differences with a potential for identifying markers of disease activity and predictors of treatment response. Coupled with quantitation it should prove to be a powerful means to evaluate the holistic action of treatment on proteins at the proteome wide level within plasma. Techniques will focus largely on the identification of differential proteins between samples using various forms fractionation, Liquid Chromatography, Mass Spectrometry, quantitation and analysis

The ultimate goal of finding biomarker proteins, either individually or as a panel of proteins, may lead to the development of new clinical applications to directly benefit patients in the management of IBD. This project would suit an enthusiastic and motivated person who is willing to work as part of a team and independently to drive this project using proven and novel techniques.



Contact Dr Valerie Wasinger for further details.
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