

## **Role of the Hedgehog system in development of liver fibrosis**

**Host School/Institute: Centenary Institute of Cancer Medicine and Cell Biology,  
Central Clinical School**

**URL: <http://www.centenary.usyd.edu.au>**

**Project Code: CCS13**

Supervisors: Dr Fiona Warner and Dr Nicholas Shackel

Contact Phone: +61 2 9565 6268

Contact Email: [f.warner@centenary.usyd.edu.au](mailto:f.warner@centenary.usyd.edu.au)

### Description of Project:

Liver disease, including fibrosis and cirrhosis, is a major burden to public health. Cirrhosis is a premalignant condition to the development of primary liver cancer, hepatocellular carcinoma (HCC), with over 80% of HCC cases arising in a setting of cirrhosis. The Hedgehog (Hh) signalling pathway, classically associated with development, but has recently been found to be activated in a variety of cancers, including HCC. Our laboratory was the first to identify an upregulation of Hh pathway components in association with human liver cirrhosis. To date, the role of the Hh pathway in progressive liver injury has not been characterized. Therefore, this project aims to characterize expression of Hh pathway components in a mouse model of progressive liver injury. Hh component protein expression will be assessed via the use of immunohistochemistry and Western blotting.

### Administration contact details:

Ms Dina Bowe

Phone: +61 2 9351 2405

Email: [dbowe@med.usyd.edu.au](mailto:dbowe@med.usyd.edu.au)