STUDENT BURSARY WINNER:

SIVESH KAMARAJAH

Project: Expression and Functional Characterisation of Scavenger Receptor F-1 and Zonula Occludens-2 in Chronic Liver Disease and Malignancy.

'Winning the Dr. Falk Core Student Bursary means a lot to me as this acknowledges my work throughout the year, and will be a great incentive to my future career and research in Hepatology. As an international student, this bursary will also relieve a portion of my financial burden for this year and allow me to focus on my passion for academic and clinical medicine.'

Sivesh Kamarajah has just completed an intercalated BMedSci (Clinical Sciences) at the Centre for Liver Research (CLR) at the University of Birmingham. He will begin his 5th year at the University of Birmingham Medical School in September 2016.

'My passion for research into liver disease and immunology stems from summer placements I undertook under the supervision of Prof. David Adams and Dr. Chris Weston. Their enthusiasm for the subject motivated me to pursue an intercalated year.

'With rising rates of deaths from chronic liver disease, there is an unmet clinical need to identify and develop therapies for patients.

'Identifying novel molecular mechanisms that regulate chronic inflammation in liver disease might lead to novel approaches for therapy and may also deliver new biomarkers of progressive liver disease and early cancer development

'A common mechanism driving liver disease is recruitment of immune cells to the liver, progressively causing scarring which can lead to liver cirrhosis and cancer. My project investigated novel proteins known as Scavenger Receptor F – 1 (SCARF-1) and Tight Junction Protein-2 (TJP-2), for which there is limited information regarding their roles in liver disease.

We have shown that SCARF-1 is more abundant in the liver tissue of patients with liver disease and promotes inflammation by recruiting immune cells into the organ, while changes in TJP-2 may contribute to the development of cancer. We hope that both of these proteins may be future targets for the treatment of liver disease and cancer.

'During the year, I worked in the laboratories based at the Centre of Liver Research in Birmingham and learnt a variety of scientific techniques. This was made possible with help and guidance from supervisors and members of the liver unit. I have thoroughly enjoyed my year and found it extremely rewarding spending my time learning and developing specific skillsets ranging from critical thinking through to effective communication of complex concepts and preparing scientific reports'.

Mr Kamarajah's supervisor's Dr. Shishir Shetty, Dr. Chris J Weston & Prof David H Adams comment:

'Sivesh is a talented, highly motivated student who has repeatedly demonstrated a clear aptitude for scientific research. He has undertaken summer placements in our laboratory and on each occasion has integrated well within the research group, picked up new techniques with ease and demonstrated the ability to design experiments and critically appraise primary data. He is clearly a very bright individual who is driven to understand the molecular basis of clinical conditions in the hope of developing new therapeutic agents and strategies for the management of patients with chronic liver disease and malignancy.'