

GREAT RESULTS AT MAIN UK ANNUAL LIVER MEETING

We are feeling rather proud this month. At the annual meeting of the British Association for the Study of the Liver (BASL) in September our scientists made a great showing: 3 presentations (out of 16), 6 posters and 2 prizes – the Basic Science Research Prize and the prize for Best Poster.

And it hasn't ended there. Professor Roger Williams has been awarded the Distinguished Achievement Award of the American Association for the Study of Liver Disease – the first ever UK recipient. We know it's about the work not the prizes but it is good to know that our team is being recognized for doing such great work.

SEPSIS AND LIVER DISEASE

Sepsis has been in the news this month. The Health Service Ombudsman has found significant failings in treatment of the condition which is caused when the body's immune system overreacts to infection and attacks organs such as the heart and liver. In fact sepsis is the leading cause of death in patients with end stage liver disease, with 34% of hospitalised cirrhotic patients and 90% of acute liver failure patients developing bacterial infections. Recurrence of acute infections in these patient groups is common and ultimately responsible for the development of multiple organ failure.

Sepsis is a consequence of the failure of a robust and co-ordinated immune response. Neutrophils are white blood cells which form an essential part of the immune system. The neutrophils of patients with acute liver failure are impaired in their ability to destroy invading bacteria and are also prone to spontaneously bursting, releasing their toxic contents, which results in widespread injury to surrounding tissues and distant organs, leading finally to multiple organ failure and death.



Dr Lee Markwick, swapping a lab coat for something much smarter on his wedding day earlier this month. Congratulations Lee and Rachel.

Dr Lee Markwick has been working on the impact of sepsis in liver patients since he joined the Institute in July 2011. Doctors have long known that patients with acute alcoholic hepatitis have impaired anti-bacterial immunity, increasing their susceptibility to infections. Lee has shown that while alcohol impairs neutrophil function directly, this dysfunction is profoundly increased after the alcohol has been metabolised; in other words, the metabolites produced when alcohol is broken down in the body exacerbate the problem, further impairing the neutrophils already compromised ability to respond to bacterial infection.

We hope that Lee's work will contribute to a greater understanding of how the neutrophils are compromised and in doing so we will be able to identify novel therapeutic targets and restore the body's immune response. Lee is now looking at hydrogen sulphide and its role in modulating inflammation and neutrophil anti-bacterial functions.

Legacies support our work

This month we have been fortunate to receive a legacy. Leaving a legacy is such a positive way to contribute to the future and it will enable us to continue to make the research breakthroughs that will help people who suffer from liver disease. There is more about this on our website and we can also send you a *Legacy Information Pack*. Please do take a look but remember also that you should always consult a solicitor when planning your Will.

Sad loss of two former Trustees

Geoffrey Lawson was one of the Foundation's first Trustees and when he stepped down as a Trustee he became our first Patron. Sadly he died this summer and our sympathies are with his wife, family and many friends. We are also mourning the loss of Lord Barney Hayhoe. Also, a Trustee and then Patron, he was a staunch supporter not just of the Foundation but more generally of healthcare and social welfare in the UK. We remember them, with fondness and gratitude.

**Watch our scientists describe their work
and how we are tackling liver disease:**

**<http://youtu.be/WArsDxiH1gk> or follow the link
on our home page**



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Dr Antonio Riva from the Viral Hepatitis Research
Group, presenting a paper at BASL

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their liver at some point in their life**



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