THE LIVER GROUP

CHAIRMAN'S REPORT

FOR THE YEAR ENDING 31 DECEMBER 2011

2011 was for the Charity a really important year – a milestone (a word I shall also use later on) in our drive to create an effective device to save the lives of patients with severe liver disease, the bioartificial liver.

I mentioned in my report last year that a key step would be to gain a major tranche of funding that would enable us to specify and manufacture the bioreactor that comprises the bioartificial liver to the stringent quality and regulatory standards that will be necessary for the device to be used in man. We are all absolutely delighted that in September last year we learnt that our application to the Wellcome Trust –for a Translational award was successful, and we were awarded just over two million pounds over three years to do this work. (the grant being made to our host organisation UCL). The formal start of the grant is after various contractual issues and 'due diligence' have been finalised on the proposal, so that the funds come on stream in 2012. The grant - because it is no longer an application for 'blue-skies' research, but to translate a concept into reality, is subject to regular oversight during the three years, against agreed milestones of progress. The work will largely be performed UCL, but also is being performed in collaboration with the University of Miskolc in Hungary, and in the last year with our collaborators back at the University of Cape Town. Our team looks forward to the challenge of rising to the occasion, and certainly it will take a great deal of hard and dedicated work by the laboratory team.

I wish I could say that that was the end of our fund-raising drive – but that would be unwise! One of the highly desirable characteristics of a liver device is transportability, and our current design achieves this by a 'cold-chain' which can prolong the effectiveness of the cell cultures for up to 72 hours. Whilst this allows our approach to be feasible, so a working machine could be delivered to the bedside within that time frame to treat a patient with liver failure, a technique for an indefinite shelf-life would be greatly preferable. I mentioned last year that we began work on that, moving from simple approaches which can be used where there are only a few cells in a small volume of fluid, to the more complex processed that need to be developed for the large number of cells that our bioreactors Also, we have developed a novel concept as a 'bolt-on' to our device, to reduce the incidence of infection and sepsis in patients with liver failure. This device could also be used in patients with septicaemia from any cause. As we have learnt from the main thrust of our activity, developmental work – to bring us to the stage when major funds such as those from the Wellcome can be earned – is both prolonged and expensive So we shall continue to fund-raise for the charity and the 'Liver-for-life 'appeal.

I and all the trustees wish to express our immense gratitude to our supporters, without whom our work would not be possible; to our colleagues in the laboratory at UCL who have worked so hard to progress the project; and to our auditors. I must add my personal thanks to my fellow trustees for all their dedication and help.

Humphrey Hodgson, Chairman