

### Renal Scientists Forum – Best Free Communications from Young Scientists.

This year's scientist session was exceptionally well attended with a good mix of basic scientists and clinician scientists at all levels. The first presentation by Dr Yu Liu was on the role of macrophages in nephritis and how their actions were affected by SOCS. The work showed that different SOCS were associated with the development of either classically or alternatively activated macrophages and suggested that pathways could be directed to potentially influence disease progression. The next talk by Mr Thomas Tapmeier looked at T cell function in nephropathy. His work illustrated the important role that T cells play in this disorder and suggested that CD4 cells instigated fibrosis and in the experimental model led to decreased survival. The following presentation by Mr Nicol Hutchinson tackled signalling mechanisms in epithelial to mesenchyme transition. This particularly focussed on the different isoforms of Rho and how down regulation by siRNA had differing effects on apoptosis and migration. After this Dr Laura Denby presented some novel work on the development of vectors to target renal cells. This used a phage library approach which was screened using WKY rat kidneys to select renal binding targets only which were then inserted into adenoviral vectors. The next presentation by Miss Konstantia-Maria Chavele focussed on the role of the mannose receptor in crescentic glomerulonephritis. This talk presented data to show that the knock out of the mannose receptor was protective in an NTN model and that in wild type animals it is the renal expression of the receptor that is important. The last presentation was by Dr Joanne Marks who investigated the role of MEPE in phosphate absorption. Her work showed a specific role for MEPE in jejunal but not duodenal absorption of phosphate and also that MEPE increased the levels of phosphate in urine.

The presentations were judged by Prof Agnes Fogo and Prof Raghu Kalluri who had a difficult time choosing between them as the both scientific content and the presentations themselves were so excellent, yet again illustrating the high calibre of renal scientists. The eventual winner was Miss Chavele who received £250 and free registration to the next annual conference in Glasgow (2008) from Prof Fogo. Following the presentation Prof Kalluri gave a fascinating seminar on stem cell therapy for kidney disease taking us through the progression of his and others work up to present day and the potential it holds for therapy.