## Report - 8th December 2009

On Tuesday 8th December three medical students were presented with their Cardiff Medical Society Elective Bursary.

They presented an outline of their elective project to the society.

## James Melhorn

My elective was in paediatric surgery in Rio de Janeiro.

I speak some Portuguese having done medical placements in Lisbon previously through the Erasmus scheme, and I wanted to continue learning medical portuguese in Brazil. After sending letters to hospitals in Rio I was invited by a surgeon specializing in paediatric urology to follow his work for a 3 month period. This meant watching him in his capacity as surgical director at Rio's major public paediatric hospital - Municipal de Jesus - and also seeing his private work at three other hospitals in the city. The stark contrast in locations, patients, and healthcare was an interesting aspect of this elective. I saw a variety of congenital and acquired problems whilst learning more of the language along the way. In particular I became familiar with presentations and surgical techniques for vesicoureteral reflux, cryptorchidism and hypospadias. I was tutored along with Brazilian medical students and was able to assist in operations.

## Wei Shen Tan

Characterisation of In vitro Cultured Porcine Renal Cells

Cell-based therapies for renal failure are a promising approach to alleviate the problem of limited kidney donors. A major hurdle in developing these therapies is the ability to culture sufficient renal cells in order to be of therapeutic use. In this study, we showed that porcine renal cells could be successfully cultured in vitro while maintaining their phenotype till passage 9. These cells also double in approximately 24 hours till passage 10. Based on these findings, we hypothesized that it is possible to expand porcine renal cells to a quantity sufficient for cell-based therapies using renal core biopsy.

## **Peter Hodgins**

8 weeks of trauma in Soweto

In August this year I left the UK for South Africa, to spend 8 weeks at the Chris Hani Baragwanarth Hospital in Soweto. 'Bara', as it is affectionately known, is Soweto's only hospital serving a population of over 4 million. It is massive, sprawling over an area of 173 acres, with over 429 buildings, 10 km of corridor and over 3000 beds. The shear size of the hospital and the population it serves are the reasons behind its reputation for having one of the busiest trauma units in the world. While there I saw everything from minor injuries requiring no treatment to those requiring an emergency room thoracotomy. There was only one thing predictable about the place: there was always another patient waiting.