

## FERGUS SCHOLEFIELD CANCER RESEARCH FUND 2016 AWARD



The 2016 Fergus Scholefield Cancer Research Bursary has been awarded to Dr Danielle Crawley MBBS BSc (hons) MRCP. Danielle is undertaking a PhD within the Cancer Epidemiology Group at King's College London, and is due to complete in October 2018. She is exploring the relationship between metabolism and prostate cancer, with a focus on diabetes and the drug metformin. As part of her PhD, Danielle has set-up the **METAL** Trial (**MET**formin **And** Longevity). This study is now running in 3 UK centres.

The **METAL** Trial is a double-blind placebo-controlled "Window" study investigating the effects of metformin on prostate cancer progression. It has been suggested that metformin may slow down prostate cancer progression. However, to date it is unclear how and why metformin affects prostate cancer cells. Men undergoing radical prostatectomy as curative treatment for prostate cancer are randomised to receive either metformin or a placebo for a few weeks prior to surgery. Tissue from their diagnostic biopsies is then compared to the tissue obtained at surgery to assess any differences.

The Fergus Scholefield Cancer Research Fund has awarded £4000 for the additional analysis of blood samples collected as part of the METAL Study. The aim is to look at how metformin effects circulating epigenetic and metabolomic markers. Epigenetic markers reflect changes in genetic activity due to the environment (e.g. the use of metformin). Metabolomic markers reflect the health status of a person. This information will help determine any anti-cancer properties of metformin, leading to the development of a larger clinical trial utilising the drug in its most efficient and effective manner.