



Royal College of Physicians

Dr Miles Parkes Biography

I am clinical lead for inflammatory bowel disease (IBD) in Cambridge. My research interest is focused on the genetics and pathogenesis of the Crohn's disease and ulcerative colitis, and clinical translation of advances.

My basic training in IBD genetics occurred in Oxford at the Wellcome Trust Centre for Human Genetics where I undertook a 3.5 year MRC research training fellowship supervised by John Bell and Derek Jewell. I moved to Cambridge in 2001 and established the East of England IBD genetics research programme, now one of the largest repositories of IBD DNA and phenotype data worldwide (>3500 IBD cases). I lead the UK IBD genetics consortium, and was co-PI for the Wellcome Trust Case Control Consortium. These collaborations led to seminal early GWAS studies in Crohn's disease and ulcerative colitis.

Our UK IBD genetics consortium has remained highly productive under my chairmanship over the last 10 years and has, itself and through collaboration with the International IBD Genetics consortium, published a number of key studies in IBD genetics in Nature and Nature Genetics. Increasingly our efforts are focused around whole genome sequencing, understanding the genetics of disease course and treatment response, and clinical translation of the findings. I am currently chief investigator on the PROFILE trial, testing a molecular biomarker (developed in Cambridge) in patients with newly diagnosed Crohn's disease.

Presentation Summary

During this presentation I will review the recent advances in our understanding of the molecular genetic basis of Crohn's disease and the determinants of disease severity and prognosis. The translation of these advances and the route to clinical impact will also be discussed, alongside recent progress in IBD pharmacogenetics.