



# Royal College of Physicians

## **Professor Clare Turnbull Biography**

Dr Clare Turnbull is the Clinical Lead for Cancer Genomics for the Genomics England 100,000 Genomes Project. She also leads a research team at the Institute of Cancer Research, London, focused on translational studies in cancer genomics and genetic predisposition. Her main research focus has been on studies of susceptibility, somatic and functional genomics in testicular, breast, ovarian and childhood cancers. Having trained as a Clinical Geneticist, her clinical work at Guys and St Thomas NHS Foundation Trust focuses on management of patients and families with genetic susceptibility to cancer.

## **Presentation Summary**

**Topic:** Genetic Susceptibility and Precision Prevention of Cancer

Initial euphoria that precision oncology would address the poor outcome for metastatic cancers has been tempered with realisation of the challenges associated with tumour heterogeneity, tumour evolution and emergence of resistance mutations. Recognition of this has, in part, fuelled renewed focus on opportunities for optimising early detection of cancer through screening and prevention programmes. It follows immediately that any such strategies are likely to have more impact if targeted to those at a priori highest risk of developing cancer.

Genetic testing for mutations in cancer susceptibility genes has become common place in family cancer clinics but there is new interest in the potential of genetic risk profiling to deliver personalised prevention programs to the wider population.

I shall review the current landscape of genetic cancer susceptibility and opportunities for expansion of precision prevention for broader clinical benefit.