MOLECULAR PATHOLOGY OF CANCER AND APPLICATION IN DIAGNOSIS, SCREENING AND TREATMENT

Duration: One week
Cost: £1,000. If you are an NHS employee full funding is available through Health Education England
Tutors: Dr Mieke van Hemelrijck & Dr Anita Grigoriadis – King’s College London
Dr Soo-Hyun Kim - St George’s, University of London
Location: King’s College London

SGUL.AC.UK/GENOMICS
This module aims to provide you with the knowledge and competencies in basic molecular pathology of cancer to be able to accurately assess methods used in cancer diagnosis, screening, and treatment. The module will guide you from a basic introduction in cancer biology, to comparing and contrasting genomic information applied in the diagnosis, classification, treatment, and monitoring of cancer, and interpretation of basic statistics and screening methods as well as RNA-seq, exome and whole genome sequence analysis of tumour tissue in the context of biomarker development and clinical relevance of treatment response.

LEARNING OBJECTIVES
This module will enable you to:

• Apply the principles of cancer development and cancer predisposition, and utilise this to identify people and families at higher risk of cancer
• You will be able to critically evaluate how modern genomics is applied in the context of cancer aetiology and treatment

ASSESSMENT
Work produced for assessment will be assessed against specific criteria for the module concerned and against St George’s general postgraduate (level 7) criteria which state that students working at master’s level should be able to demonstrate the following attributes in their work:

1. Critical and analytical thought processes;
2. An appropriate use of evidence;
3. Reference to relevant theoretical constructs;
4. In-depth understanding of current thought and practice within the chosen field;
5. Appropriate presentation (including acceptable academic style and correct referencing technique).

ENTRY REQUIREMENTS
Applicants should have a lower second class degree (2:2) in a subject that offers an appropriate grounding in science, healthcare or genetics. Alternative professional qualifications may be considered. Please visit sgul.ac.uk/genomics for the full criteria.

“I began the Genomic Medicine course in March 2016 initially being drawn to the programme integrating scientific research with medicine and in particular personalised healthcare. The programme is modular in structure which complements my employment in the NHS, allowing work alongside study. The lecturers are very helpful, the small group teaching with online resources available gives better understanding of disease genetics, interpreting genomic data, diagnostic laboratory methods and treatments.

Sobia Butt, Genomic Medicine Module student

Apply via sgul.ac.uk/genomics