



The Richard Doll Seminars
in Public Health and Epidemiology

Dr Michael Pawlita

German Cancer Research Center

“Infection and cancer
associations analysed by
multiplex serology”

Tuesday 13th May 2014

1-2 pm

Lecture Theatre, Richard Doll Bldg, Old Road Campus

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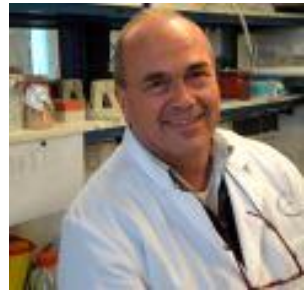
All welcome



Michael Pawlita, M.D.

Group Leader

German Cancer Research Center



Dr Michael Pawlita has a research interest in the role of infections in the aetiology of cancer.

He leads a programme of research on “*Virus-host interactions of polyoma and papilloma viruses*” at the *German Cancer Research Center* in Heidelberg, Germany. A number of viruses are known aetiologic agents, such as human papillomaviruses (HPV) for cervical and anogenital cancers, *Helicobacter pylori* for gastric cancer, hepatitis B and C viruses for hepatocellular carcinoma, Epstein-Barr virus for Hodgkin’s and Non-Hodgkin’s lymphoma and nasopharyngeal carcinoma, and human herpesvirus 8 for Kaposi sarcoma – but these viruses may also cause other cancers. He and his research group aim to explore these less established associations with other cancers, as well as discover novel markers, based on serology and nucleic acid detection, for early cancer detection or assessing disease progression.

Dr Pawlita has led the development of a high-throughput serological method (“**Multiplex Serology**”), which allows the analysis of up to 2000 serum samples per day for antibodies to up to 100 different antigens simultaneously. He has successfully developed serological assays for more than 50 HPV types, 15 *H. pylori* proteins, all polyomaviruses, and other infectious agents. In addition, his team also developed Luminex-based high-throughput nucleic acid detection methods for genotyping of >100 HPV genotypes (“**Multiplex HPV Genotyping**”), bovine papillomaviruses, all human polyomaviruses, all human herpesviruses, 12 adeno-associated viruses, and other infectious agents.