Dr Toby Athersuch

Short Bio

Dr Toby Athersuch was appointed to the MRC-HPA Centre for Environment & Health as a Lecturer in Environmental Toxicology & Biomarkers in March 2010. This appointment at Imperial College London is jointly held between Biomolecular Medicine in the Department of Surgery & Cancer, and The Department of Epidemiology & Biostatistics in the School of Public Health.

His research is primarily focused on the development and application of state-of-theart analytical techniques such as high-resolution nuclear magnetic resonance (NMR) spectroscopic and mass spectrometric (MS) methods to the study of molecular mechanisms of human disease processes. The application of metabolic profiling and other integrated post-genomic profiling technologies to answering epidemiological questions using various study designs is a rapidly expanding field of research, and requires the development of profiling techniques to underpin the required individuallevel analyses.

Toby has also developed multivariate statistical tools to aid data analysis, visualization and interpretation of the complex data generated by these techniques and has been involved in the development of bioinformatic approaches for the integration of metabolic profile data with transcriptomics and other phenotypic endpoints. His previous experience includes acting as the primary analyst for metabonomics in two large EU-funded project consortia (carcinoGENOMICS and EnviroGenomarkers), aimed at deriving biomarkers of chemical exposure and disease risk as part of investigations in human carcinogenesis and cancer. By necessity, advances in these areas will require further development of appropriate analytical and data analysis methods that address the needs of epidmiological investigations.

He is responsible for coordinating the MRC-HPA Centre for Environment & Health PhD Training Programme, which will include organisation of events for newly recruited students (first main intake October 2010) and existing students, associated with Centre Members.

Contact Details:

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