



# Royal College of Physicians

## **Christopher Buckley Biography**

Christopher Buckley is Kennedy Professor of Translational Rheumatology, Director of Clinical Research at the Kennedy Institute of Rheumatology, Oxford and Director of the Birmingham NIHR Clinical Research Facility at the University of Birmingham. He obtained a degree in Biochemistry from the University of Oxford (1985) with subsequent undergraduate training in Medicine (MBBS) at the Royal Free Hospital, London (1990). His postgraduate medical training was in General Medicine and Rheumatology at the Hammersmith Hospital, London (Mark Walport, Dorian Haskard), and John Radcliffe Hospital, Oxford. He obtained a DPhil arising from a Wellcome Trust Clinical Training Fellowship with John Bell and David Simmons at the Institute Molecular Medicine, Oxford in 1996.

Funded by a Wellcome Trust Clinician Scientist Fellowship, he joined the Department of Rheumatology in Birmingham later that year. In 2001 he was awarded an MRC Senior Clinical Fellowship and in 2002 became Arthritis Research UK Professor of Rheumatology. In 2012 he was appointed Director of the Birmingham NIHR Clinical Research Facility. In May 2017 he took up a new joint academic post between the Universities of Birmingham and Oxford to direct the Arthritis Therapy Acceleration Programme (A-TAP) which is collaboration between the two Universities and seven NHS Trusts to deliver early phase experimental medicine studies in immune mediated inflammatory diseases.

## **Presentation Summary**

**Topic:** Towards Early Arthritis Management

An ideal intervention in a chronic inflammatory disease such as Rheumatoid Arthritis (RA) would be a preventive one. In order to develop preventive strategies and therapies two key developments need to occur: (1) Biomarkers need to be identified that can be used to predict an individual's risk of developing RA. (2) Modifiable disease mechanisms need to be identified and characterized in the early phases of disease.

These issues were key objectives of the FP7 funded TEAM consortium which aimed to identify diagnostic biomarkers and disease mechanisms operating during the transition from health to disease in rheumatoid arthritis. Our consortium developed and delivered a collaborative, integrated programme of work that linked researchers with key SMEs involved in biomarker development to produce a "personalized predictive bio profile" for patients destined to develop RA. The Euro-TEAM consortium directly compared biomarkers in the preclinical phases of disease with established markers in the clinical phases. Secondly, it looked beyond the synovium interrogating lymphoid, lung and periodontal tissue in a first-in-class approach to measuring systemic changes in the earliest phases of disease. Thirdly, it placed great emphasis on understanding why synovial inflammation resolves in some individuals. Fourthly, it explored a key cell type (stromal cell) that has been almost completely ignored in current biomarker studies. Finally, it directly involve patients and other specialists, particularly from the fields of genetics, ethics and patient and public involvement in helping to visualize and communicate risk following a positive biomarker test. The results and implications for practicing physicians from the TEAM consortium will be discussed in this presentation

