

## Professor Alan Bernard Rickinson MA, PhD, FRCP (Hon), FAMS, FRS

Professor of Cancer Studies

### Contact details

**Telephone** [+44 \(0\)121 414 4492 \(tel:+44 121 414 4492\)](tel:+44%20121%20414%204492)

**Fax** +44 (0)121 414 4486

**Email** [a.b.rickinson@bham.ac.uk \(mailto:a.b.rickinson@bham.ac.uk\)](mailto:a.b.rickinson@bham.ac.uk)

School of Cancer Sciences  
College of Medical and Dental Sciences  
University of Birmingham  
Edgbaston  
Birmingham  
B15 2TT



### About

Alan Rickinson led the development of the Institute of Cancer Studies (now School of Cancer Sciences) at the University of Birmingham from 1983 to 2001, overseeing its expansion from a small non-clinical research department into a large research institute integrating basic work on cancer genetics, viral oncology and tumour immunology with translational studies in gene/ immunotherapy and the activities of a large Cancer Clinical Trials Unit.

He has since that time been fully committed to maintaining Birmingham's position as an international centre of excellence for work on human tumour viruses, and continues to lead a large research group focusing on the Epstein-Barr virus and its associated malignancies.

### Qualifications

- FAMS, 1998
- FRS, 1997
- FRCP (Hon), 1996
- PhD, Cell Biology, Cambridge, 1969
- MA, Natural Sciences, Cambridge, 1965

### Biography

Alan Rickinson received his BA, MA, and PhD degrees from the University of Cambridge, where he read Natural Sciences and then trained in the Department of Radiotherapeutics led by Professor JS Mitchell. Alan then worked as a postdoctoral fellow at the University of Sydney, where he was introduced to the then rudimentary arts of lymphocyte culture and mitogen-induced lymphoblast transformation. Realizing at that time that viruses offered the most promising way to dissect cell growth transformation, he returned to England to work with Tony Epstein at the University of Bristol on the Epstein-Barr virus (EBV)-induced transformation of human B cells.

What began to fascinate him was the fact that a potent growth transforming agent could be carried by most individuals as an apparently asymptomatic infection. This led to two lines of investigation. One explored the notion that EBV could adopt different forms of latency *in vivo* to that displayed in the *in vitro* transformation system, an idea that ultimately led to the discovery of distinct patterns of viral antigen expression in the different types of EBV-associated tumours. The other, initiated while on sabbatical in Australia with his colleague Denis Moss, concerned the role of immune T cells in controlling EBV infection and the consequences of T cell suppression on the virus-host balance. Both lines of investigation have been developed for over two decades at the University of Birmingham, and are now leading to clinical trials of a vaccine designed to boost T cell immunity to viral antigens expressed in EBV-positive tumours.

Professor Rickinson has received numerous honours. He is an elected Fellow of the Royal Society (UK National Academy of Science), a Founder Fellow of the UK Academy of Medical Sciences, and Honorary Fellow of the Royal College of Physicians, London. He serves on the Editorial Board of several important journals and is on the Scientific Advisory Board of many research centres both in UK and worldwide. He has numerous publications and his work has had a tremendous impact on elucidating the biology and immunology of EBV infection and development of therapeutic vaccines to target EBV-associated malignancies.

### Publications

Sauce, D., Larsen, M., Abbott, R.J., Hislop, A.D., Leese, A.M., Khan, N., Papagno, L., Freeman, G.J. and Rickinson, A.B. (2009). Upregulation of IL-7 Receptor (alpha) and Programmed Death 1 marks an epitope-specific CD8+ T cell response that disappears following primary Epstein-Barr virus infection. *J. Virol.* 83(18):9068-9078.

Mackay, L.K., Long, H.M., Brooks, J.M., Taylor, G.S., Leung, C.S., Chen, A., Wang, F. and Rickinson, A.B. (2009). T cell detection of a B-cell tropic virus infection: newly-synthesised versus mature viral proteins as antigen sources for CD4 and CD8 epitope display. *PLoS Pathog.* 5(12):e1000699.

Fox, C.P., Rickinson, A.B. (2010). EBV meets its match. *Blood* 115(5):920-921.

Leung, C.S., Haigh, T.A., Mackay, L.K., Rickinson, A.B., Taylor, G.S. (2010). Nuclear location of an endogenously expressed antigen, EBNA1, restricts access to macroautophagy and the range of CD4 epitope display. *Proc Natl Acad Sci U S A.* 107(5):2165-2170.

Hislop, A.D., Palendira, U., Leese, A.M., Arkwright, P.D., Rohrlisch, P.S., Tangye, S.G., Gaspar, H.B., Lankester, A.C., Morretta, A., Rickinson, A.B. (2010) Impaired Epstein-Barr virus-specific CD8+ T cell function in X-linked lymphoproliferative disease is restricted to SLAM family positive B cell targets. *Blood* 116(17): 3249-57.

Fox, C.P., Haigh, T.A., Taylor, G.S., Long, H.M., Lee, S.P., Shannon-Lowe, C., O'Connor, S., Bollard, C.M., Iqbal, J., Chan, W.C., Rickinson, A.B., Bell, A.I., Rowe, M. (2010) A novel latent membrane 2 transcript expressed in Epstein-Barr virus-positive NK and T cell lymphoproliferative disease encodes a target for cellular immunotherapy. *Blood* 116(19): 3695-704.

Long HM, Taylor GS, Rickinson AB. (2011) Immune defence against EBV and EBV-associated disease. *Curr Opin Immunol.* [Epub ahead of print].

Horst D, Favalaro V, Vilardi F, van Leeuwen HC, Garstka MA, Hislop AD, Rabu C, Kremmer E, Rickinson AB, High S, Dobberstein B, Rensing ME, Wiertz EJ. (2011) EBV Protein BNLF2a Exploits Host Tail-Anchored Protein Integration Machinery To Inhibit TAP. *J Immunol.* [Epub ahead of print].

