



Curriculum Vitae Professor Dr Alastair Compston



Name: David Alastair Standish Compston

Date of birth: 23 January 1948

Research Priorities: Multiple sclerosis, pathogenesis and novel therapies, genetics

Alastair Compston is a British neurologist. Now retired, he has been researching the aetiology, disease mechanisms and therapeutics of multiple sclerosis (MS) since the mid-1970s. He is acknowledged as a leader in this research field over several decades. With his many collaborators in Cambridge and internationally, he has been associated with the identification of genetic risk factors for MS, he developed a novel therapy approach with drug development through to licencing of Lemtrada®, and he has advanced concepts on the complex pathogenesis and evolution of disease progression.

Academic and Professional Career

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| 2004 | Founder and Chairman, Department of Clinical Neurosciences, University of Cambridge Clinical School, University of Cambridge, Cambridge, UK |
| 2001 | Founder and Co-Chairman, Cambridge Neuroscience, Cambridge, UK |
| 1994 - 2001 | Consultant Advisor in Neurology to the Chief Medical Officer, UK |
| 1992 | Founder and Chairman, Medical Research Council Cambridge Centre for Brain Repair, Cambridge, UK |
| 1989 - 2015 | Professor of Neurology, University of Cambridge, Cambridge, UK |
| 1987 - 1988 | Professor of Neurology, University of Wales, Cardiff, UK |
| 1982 - 1986 | Consultant Neurologist, University of Wales, Cardiff, UK |
| 1978 | PhD in Medicine, University of London, London, UK |
| 1975 - 1982 | Training in Neurology, National Hospital for Neurology and Neurosurgery, London, UK |

1971 MB BS (Hons), Middlesex Hospital Medical School, London, UK

Functions in Scientific Societies and Committees

2019 - 2022 Member and Chairman, Sectional Committee 10 (Health and Human Science), Royal Society of London

2009 - 2010 President, Association of British Neurologists, UK

2004 - 2013 Editor, Brain: A Journal of Neurology

2002 - 2003 President, European Neurological Society

2001 - 2004 Chairman, Panel "Neuroscience and Mental Health", Wellcome Trust, London, UK

Honours and Awarded Memberships

2018 Koetser Award, Betty & David Koetser Foundation for Brain Research, Zurich, Switzerland

2018 Jean Hunter Prize, Royal College of Physicians, London, UK

2016 ABN Medal, Association of British Neurologists, UK

since 2016 Fellow, Royal Society, UK

since 2016 Commander, Order of the British Empire (CBE), UK

2016 Galen Medal, Society of Apothecaries, London, UK

2015 Honorary Fellow, European Academy of Neurology

2015 Hughlings Jackson Medal, London, UK

2015 John Dystel Prize for Multiple Sclerosis Research, National Multiple Sclerosis Society, UK and American Academy of Neurology (AAN), USA

2015 Richard and Mary Cave Award, National Multiple Sclerosis Society, UK

2013 Medal for Scientific Achievement in Neurology, World Federation of Neurology

since 2012 Foreign Member, National Academy of Medicine, USA

2011 Ian McDonald Award, National Multiple Sclerosis Society, UK

2010 Gertrud-Reemtsma Foundation Prize, Max Planck Society, Munich, Germany

since 2008 Member, German National Academy of Sciences Leopoldina, Germany

2007 Charcot Award, Multiple Sclerosis International Federation

2002 Sobek Research Prize, Roman, Marga und Mareille Sobek Stiftung, Stuttgart, Germany

since 2000	Foreign Member, Royal Physiographic Society of Lund, Sweden
since 2000	Fellow, Royal Society of Biology, UK
since 1998	Fellow, Academy of Medical Sciences, UK
since 1997	Fellow, Royal Society of Arts, UK
since 1986	Fellow, Royal College of Physicians, London, UK

Research Priorities

Alastair Compston is a British neurologist. Now retired, he has been researching the aetiology, disease mechanisms and therapeutics of multiple sclerosis (MS) since the mid-1970s. He is acknowledged as a leader in this research field over several decades. With his many collaborators in Cambridge and internationally, he has been associated with the identification of genetic risk factors for MS, he developed a novel therapy approach with drug development through to licencing of Lemtrada®, and he has advanced concepts on the complex pathogenesis and evolution of disease progression.

Multiple sclerosis is an inflammatory disease of the central nervous system. It is established that the body's own immunological defence system intermittently attacks the protective membranes (myelin sheath) of nerve fibres, and the underlying axons, in the brain and spinal cord. This results in episodes of neurological dysfunction manifesting, for example, as impaired vision, loss of sensation and weakness.

Starting with his co-demonstration of the link to HLA-DR15 (1976), Alastair Compston and his many colleagues have systematically shown that multiple sclerosis develops against the background of genetic susceptibility in which many risk variants, each individually exerting a small effect, underly the predisposition to disease. In related work, he has studied the cellular neurobiology of glia, especially myelin-forming cells in the central nervous system, as the basis for understanding the possibilities for enhancing endogenous and exogenous repair.

With others, Alastair Compston developed a novel therapy approach in which the attacking immune cells are depleted using biological medicines (monoclonal antibodies) leaving a sufficient number to deflect coincidental infections but too few to maintain disease activity in the nervous system. Later the repertoire is reconstituted providing significant longer term disease protection but not without adverse effects, especially secondary autoimmunity affecting other organs. The antibody Alemtuzumab (Campath-1H) is now marketed as Lemtrada®. Alastair Compston has shown that it is possible to slow down activity of the disease in the early stages of multiple sclerosis in most patients, and thereby to delay or even prevent subsequent progression. Alemtuzumab is now an established means of treatment amongst a growing number of other therapies for multiple sclerosis, each varying in their risk-benefit ratios.