

CITATION FOR THE DEGREE OF DOCTOR OF CIVIL  
LAW AWARDED TO SIR MARK WALPORT



Mr Chancellor,

Putting the sons of Asclepius aside, I think it is fair to say that Britain has remained at the forefront of medical practice for time immemorial. This is a

remarkable achievement, given the modest size of our islands. I believe it is linked to our seemingly innate ability to creatively explore the unknown, pushing the boundaries of medical knowledge, linked to a fascination with the underpinning basic and clinical science that emerged during the 17<sup>th</sup> century Age of Enlightenment.

Interestingly, several studies have shown that embedding medical research within routine clinical practice is also linked to high quality patient care across the board. This is not just in specific areas of intense inquiry, but through a general “knock-on” effect: the academic milieu seems to drive up standards throughout the whole health-care institution.

But this solid foundation is no reason for complacency, because the medical landscape is well recognised for a rapid pace of change. Future-proofing our health service is contingent on our ability to identify and nurture the next generation of doctors and biomedical scientists, and direct them on the same exploratory path as Thomas Willis and William Harvey. In a nutshell, we need to identify and support the brightest

minds in biomedicine – and this is exactly what Sir Mark Walport has done tirelessly throughout his career.

Let us cast our minds back to the dark ages of medical training, long before the present.....to some point in the late-1990s. At that time junior doctors did strange things: we (because I was one of them) worked very long hours, with continuous shifts spanning four days, and even more peculiarly, we wore a strange uniform no longer seen on hospital wards, which included a neck-tie and a white coat with bulging pockets stuffed full of books and papers.

However, recruitment of doctors into medical research was on the decline. A change in the training structure was encouraging junior staff to take up Consultant positions as soon as possible in a rapidly expanding NHS. Those motivated to pursue an academic career were becoming increasingly marginalized - as the exception rather than the rule. An academic career was perceived as unattractive, and the brightest and best were being lost.

Recognising the problem, Mark Walport led a working party that critically appraised the issue, and most importantly, devised a practical solution address the decline. In short, the 2005 “Walport Report” bucked the trend, placing academic training firmly back on the agenda as core business, kick-starting a period of sustainable growth that continues to the present day. At a time of unprecedented biomedical research funding, and with the most exciting imaging, genetic and cell

biology tools at our disposal, this presents enormous opportunity for the new graduates here today.

Although well known as Professor of Medicine at the Hammersmith Hospital, outside the golden triangle Mark Walport had a reputation for his groundbreaking work unpicking the immunological mechanism behind the complex connective tissue disease, systemic lupus erythematosus. He published widely in the Journal of Immunology, Nature Genetics, and the New England Journal of Medicine.

Supported by the Wellcome Trust, he became increasingly involved in Trust business. A medical polymath with a razor sharp intellect, he had an early invitation to join the governing board, where he started to influence national science policy. A strong advocate of genetics, he supported significant expansion at the Sanger Institute, ensuring, amongst other things, that the UK was an equal partner with the US in the human genome project. With a hunger to understand new technologies and spot niches where they might be applied effectively, he was the natural successor to Mike Dexter, and was appointed Director of the Trust in 2003, the year the first draft human genome sequence was published.

Mr Chancellor, for those who are not aware, The Wellcome Trust is the second largest charity in the world, and was established in 1936 built on the legacy of Sir Henry Wellcome. Sir Henry was a pharmaceutical magnate of the 19<sup>th</sup> century, who, amongst other things, patented a unique way of delivering medicines call the “tabloid”. This was the

precursor of the modern tablet present in hospitals and households throughout the world. Sir Henry was a philanthropist and avid collector of medical artifacts, and left his entire legacy to a charitable trust.

In 2003, when Mark Walport took over, the Wellcome Trust was a well-established influential organization, having underpinned a large segment of the UK medical and veterinary research community for over 60 years. In many respects it simply needed a safe pair of hands. However, the stock market crash saw a dramatic reduction in the Trust endowment: it was a time to tighten our belts.

In appointing Mark Walport, the Governors took a bold, but insightful decision. Under his leadership the Wellcome Trust has, quite simply, transformed from being a major funder of UK biomedical science, to a world-leading organization carving out the scientific landscape and shaping international policy, dedicated to achieving extraordinary improvements in human and animal health. Developing a strong investment arm at the Trust enabled Sir Mark to outspend the previous three directors put together. As a result he has become known as the “ten billion pound man”. Let me give you some examples.

By the end of the 1990s, there was emerging evidence that a difference in the genetic code of healthy individuals might predispose to common diseases like diabetes, or multiple sclerosis. Researchers across the globe had their own personal collections of a few hundred patients, and were carrying out experiments to see whether specific regions of the genetic

code altered our predisposition to these diseases. This led to a growth industry in so called “genetic association studies”.

The problem was that different laboratories were getting different results, and many could not be replicated - which is a key step in proving that a finding is real. Sir Mark realised that this international effort was a huge waste of time and money, and so, with major Wellcome Trust investment, he forged the “Wellcome Trust Case Control Consortium”, which forced investigators forget their differences, get their heads together, and to perform the definitive studies involving many thousands of subjects. In one fell swoop he changed the course of biomedical science... and his predictions were accurate. This collaborative approach continues to yield major advances in understanding human disease. An excellent recent example is primary biliary cirrhosis, where researchers in Newcastle and Cambridge have solved a longstanding mystery: why do these patients have an intractable itch? This has led to treatment trials based on a new understanding of the mechanism.

Throughout his time at the Trust, Sir Mark has also promoted the importance of computer-based analysis of biological data, or “bio-informatics”. Using this approach enables the interpretation of these increasingly complex datasets, linking biology to clinical data from patients. He has also been a strong advocate of the prompt public release of experimental data, and the open publication of research reports. With the Wellcome Trust resources, he has driven a culture change in publishing, which now ensures that the pace of discovery is

not hindered by personal ambition, geographic or commercial boundaries.

Sir Mark's strong commitment to UK science and medicine is illustrated by his central role in forming the influential Academy of Medical Sciences in 1998, but he has also worked closely with transatlantic and European funders. He has personally forged joint endeavours with the Howard Hughes Medical Institute in the US, and, more latterly, with the Max Planck Institute in Germany. He also oversaw a substantial increase Trust investment overseas, particularly in sub-Saharan Africa and South East Asia. This led, for example, to the development of groundbreaking treatments against malaria.

So what attributes have underpinned Sir Mark's approach? Firstly, he is a doctor, and impact on patient care has always been firmly on his horizon. Secondly, he has an encyclopedic knowledge of basic and applied science - and not just in the medical arena. Thirdly, he has an enormous capacity to assimilate and weigh up the available evidence, enabling him to see a clear and balanced solution to a complex problem. Finally, he is not afraid to express his opinion, even if this threatens entrenched dogma. His analytical, evidence-based approach brings the open-minded along with him, and leads to change having substantial impact over broad domains. Not surprisingly, he received a knighthood in the 2009 New Year honours list for services to medical research, and was elected as Fellow of The Royal Society in 2011.

A key strength has been his ability to work with, rather than compete with leaders of parallel organisations, such as the Medical Research Council, and the National Institute for Health Research. With complementary skills and in complementary domains, he realised that together they would provide a powerful force. His approach saved British science and technology funding from the brutal cuts predicted in the 2011 comprehensive spending review, with a successful argument based on his belief that this investment will underpin our country's economic recovery.

Mr Chancellor, when our recent honorary graduate, Professor Sir John Beddington, announced his retirement as Chief Scientific Adviser to Her Majesty's Government, Sir Mark was the obvious choice as his successor. Now in post, will he disappear down a dusty Whitehall corridor, never to be seen or heard again? Those who know him consider this highly unlikely. Recently described as the "bold, courageous, principled, and outspoken leader of the scientific community", I strongly suspect that he will continue along the same vein – and having dedicated nearly 40 years to medical research, it is only fair that the rest of the scientific community now benefits from his talent and energy, as he extends his influence to all Government science strategy.

Never afraid to grasp the nettle, he has influenced the global scientific arena, shaping our approach to data protection, and molding international policy in the life sciences. I doubt it is possible to identify any one individual who has had such a positive impact on medicine in

our generation, and he is now set to do the same across the whole scientific landscape. Mr Chancellor, I therefore ask that you award him the degree of Doctor of Civil Law, *honoris causa*.

Patrick Chinnery, 16<sup>st</sup> July 2013