



The Academy of
Medical Sciences

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Presidential perspectives

Professor Sir Robert Lechler PMedSci talks to Geoff Watts about science, medicine and management

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'The Academy of Medical Sciences has come to occupy a vital role. It helps to sustain and advance the remarkable record of the UK in biomedical science.'

As Vice Principal (Health) of Kings College London and Executive Director of King's Health Partners, his two principal day jobs, Professor Sir Robert Lechler occupies an office in one of the older and most attractive of the hotchpotch of buildings that make up the Guy's Hospital campus adjacent to the Shard in Central London.

The 18th Century edifice in which he actually works is known - for historical reasons, presumably - as the Counting House. What better workplace for someone responsible for a research and education endeavour with an annual turnover of £400 million, and leadership of a partnership with a turnover in excess of £3 billion of public money.

Lechler talks of having been privileged to enjoy three careers - in science, medicine and management, taking account of his two day jobs, now supplemented by his election to the Presidency of the Academy of Medical Sciences, it is no surprise that it's the third of his three careers - the one comprising management and leadership - that now predominates, and has done for most of the past decade.

Lechler gave up clinical work ten years ago when he left his previous post at Imperial College to join King's. "In my field you need to be giving it at least 20 per cent of your time to maintain the reflexes and be safe, and I couldn't do that when I came here to King's." The field he refers to is renal transplantation medicine. He still misses clinical work, the pastoral element in particular. "One of its attractions is that you get to know patients really well because once they've had their transplant you go on seeing them for years. And I miss the detective work of the diagnostic chase."

No need, though, to sympathise; Lechler gets satisfaction enough from managing things - and has done for more than 20 years. "I've never had so much fun in my life," he says. It's a light-hearted, unserious, throw away remark, and said with a smile. But you get the feeling, talking to him, that it's also exactly true.

Taking on leadership

Lechler dates the first step on his current pathway as having been taken back in 1992 when he was appointed to the chair of molecular immunology at the Royal Postgraduate Medical School in Hammersmith, now part of Imperial College School of Medicine.

“That was my first serious leadership role,” he recalls. “I started to grow the department and recruit people, and I found doing this to be interesting and enjoyable.”

So, a grand plan was it? Take on a bigger management role and cut back the hands-on science and medicine? He says not. “My career just evolved. If you’d talked to me early on I’d have had no idea what was going to happen.” He actually went to medical school intending to be a general practitioner. He was born in a village in rural Lincolnshire where his Father was a single-handed GP with a surgery and dispensary at the back of the house. “I used to go round with him on his visits during school holidays. I thought this is what I want.”

He studied medicine at Manchester University. It wasn’t until his final year that he thought seriously about what he wanted to do when he graduated. He then made two changes: he worked much harder; and he decided to opt for hospital medicine. Following graduation in 1975 he completed his initial training at the city’s Royal Infirmary, then at Wythenshawe Hospital, and subsequently at St Bartholomew’s in London. Having by now realised that he wanted a research component to his life, an MRC training fellowship in the Department of Immunology at Hammersmith set him on course for what could have been a conventional academic career.

As a senior registrar he spent a couple of years as a Wellcome Trust travelling fellow at the US National Institute of Allergy and Infectious Diseases in Bethesda, returning to Hammersmith in 1986 to take up a senior lecturer/consultant post. He became Professor of Molecular Immunology in 1992, Director of Immunology in the Imperial College Faculty of Medicine two years later, then Dean of its Hammersmith Campus and, finally, Head of the College’s Division of Medicine. His move to Guy’s, Kings and St Thomas’s as Head of the School of Medicine followed in 2004, and it was a year later that he was appointed one of King’s College’s vice-principals. Each of his moves, he says, has confirmed his feeling that this was the direction in which he wanted to travel. “I get enormous satisfaction out of helping to shape things.”

Does he ever wonder if he should have been a manager from the outset instead of a doctor-turned-manager? Laughingly, he admits that part of him loves the idea of pushing the boat out in some sink-or-swim venture. But he says he’s enjoyed his three careers - and it’s surely the case that while running a hedge fund or some big commercial corporation might have brought wealth, he’d not have had the intellectual engagement offered by the years of a close involvement in science.

Working life and achievements

Present appointments

- 2009 Executive Director, King's Health Partners
- 2005 Vice Principal, Health Schools, King's College London
- 2004 Dean, Guy's King's College and St Thomas' Hospitals School of Medicine and Dental Institute
- 2004 Professor of Transplantation Immunology
- 2004 Honorary Consultant in Renal Medicine at Guy's and St Thomas' Foundation Trust

Recent positions

- 2004 – 2009 Deputy Chairman, Guy's and St Thomas' Foundation Trust Board
- 2004 – 2005 Head of School, Guy's King's and St Thomas' School of Medicine
- 2003 – 2004 Head, Division of Medicine, Imperial College London
- 2001 – 2004 Dean of Hammersmith Campus, Faculty of Medicine, Imperial College London
- 1995 – 2004 Chief of Immunology Services to Hammersmith, Hospital NHS Trust
- 1994 – 2004 Professor and Director of Immunology, Division of Medicine, Faculty of Medicine, Imperial College London
- 1986 – 2004 Honorary Consultant in Medicine, Hammersmith Hospitals NHS Trust

Recent offices held

- 2015 President, Academy of Medical Sciences
- 2014 Founder and Board Member, MedCity
- 2014 Founder and Board Member, Imanova
- 2013 Member of Boris Johnson's London Health Board
- 2010 Trustee and member of Council of the British Heart Foundation
- 2007 Founding Member of the Global Medical Excellence Cluster in South East England
- 2005-2008, 2011-2013 Member of Council of Academy of Medical Sciences
- 2006-2012 Member of Executive of Council of Heads of Medical Schools

Qualifications, memberships and awards

- 2012 Awarded KBE
- 2012 Fellow of the Royal College of Physicians, Edinburgh
- 2000 Fellow of the Academy of Medical Sciences
- 1996 Fellow of Royal College of Pathologists
- 1990 Fellow of Royal College of Physicians, London
- 1983 PhD, University of London
- 1975 MB, ChB, University of Manchester

The attractions of immunology

Returning to that science, what originally drew him to immunology?

“I was beginning to find the field [transplant immunology in particular] interesting and very exciting. I see organ transplantation as one of the major successes in medicine of the second half of the last century. It transformed end stage failure in many organ systems.” His aim was to understand the mechanisms underlying rejection and find out if they could be subverted.

Given Lechler’s enthusiasm for the benefits of transplantation you might have thought he’d be drawn to surgery. “Actually I have done probably 200 kidney transplants,” he says. A startling assertion, coming from a physician - until he adds, “But they were all in rats.” More seriously he goes on to explain that it was “trying to unravel the mechanisms that lead to rejection and then to create tolerance that fascinated me - and continues to do so.”

What does he feel he’s contributed to the field? He cites earlier work on defining the pathways through which the major histocompatibility antigens are recognised within the immune system: work that suggests how best to regulate the system to induce immune tolerance. “In the field of immune system regulation, which is the core of what we now do, we were one of the first groups to focus on human regulatory cells and we’re now running two trials, one in kidney patients and one in liver patients, using regulatory cells which are there to prevent autoimmunity. If you don’t have them you get autoimmune disease. That’s true in mice and it’s true in humans.”

He talks in the present tense because, while he’s wound up his clinical work, he manages to maintain a foothold in research. He’s married to Giovanna Lombardi, Professor of Human Transplant Immunology in the MRC Centre for Transplantation at Guy’s Hospital. “We co-hold a research grant, though very much with me as the junior partner because of my lack of time. But I go to lab meetings when I can.” He maintains this limited but direct involvement with research not only because of the satisfaction it offers, but also because he feels that it adds an important credibility to his role as an academic leader.

His career path prompts an obvious question: how much formal training has he had for his various management and leadership roles? Very little, it seems. The odd day from time to time and, latterly he sought out some one-to-one coaching. Given this he might argue that formal training isn’t essential. In fact he doesn’t argue any such thing. Although he’s learned most of what he knows about leadership more through experience than by instruction - and perhaps being lucky in his instincts - he’s certainly not averse to looking for ways to sharpen his performance and sidestep pitfalls. “It’s ridiculous when you think about how little we invest in training for people who are going to play quite substantial leadership roles,” he says. “We’re getting better at it, but in my day we weren’t.”

Academic Health Science Centres

Lechler is Executive Director of King's Health Partners, an Academic Health Science Centre (AHSC) comprising King's College itself together with three NHS Foundation Trusts: the South London and Maudsley; Guy's and St Thomas's; and King's College Hospital.

Together they have 36,000 employees, 25,000 students, and an annual turnover of £3.1 billion. Given the scale of this collaboration and the pivotal role played by Lechler it comes as no surprise to learn that he has given some thought to the concept of the AHSC, and success of the half dozen now in existence in the UK.

Their creation followed a 2007 recommendation by Professor Lord Darzi in his report *A Framework for Action*. Darzi saw them as a way of ensuring that developments in medical research lead to clinical benefits for patients. But has the AHSC idea worked as intended?

When the question is put to Lechler there's a pause before he answers. "The first thing I would say is that I'm absolutely convinced it's the right vision. What those of us engaged with biomedical research wish to achieve is to deliver improvements to human health. This requires a more intimate relationship between health care providers and university departments." But this statement of support in principle is followed by a less confident caveat; Lechler does not think that these "engines of innovation" have delivered quite as much as he'd hoped for.

This is partly, he thinks, because the culture in NHS organisations and universities is very different. "The financial pressures - and they're very acute at the moment in the NHS - make it really difficult even for NHS Trust chief executives who wish to engage in the R&D agenda to do so. They often have to focus on the immediate at the expense of the long term, however important." And of course there's a lot of tribalism, he adds. This may be understandable, but it isn't helpful. He also points out that acquisition of the official AHSC seal of approval was just that: a badge, but not one accompanied by a sudden flood of additional funding.

Lechler is not however unduly concerned. He emphasises that he doesn't see the AHSCs as any kind of blind alley. "We're on a journey, and I'm more optimistic now than I have been." He also believes that the initiative has served to catalyse closer working in general between hospitals and their university partners across the UK, and not just within those partnerships officially recognised as AHSCs. He has what you might describe as a restrained optimism.

'I think the Academy is making practical steps forward in the area of gender diversity. Particularly through its programme of specialist media training, and the SUSTAIN programme which supports up-and-coming female researchers across all scientific disciplines, not just medical science.'



Taking on the Presidency

As Lechler talks about his career and the issues that have preoccupied him at various times over the past decade - the future of Academic Health Science Centre's, for example, or the status of women, or the South East bias - it becomes apparent that many of them are of equal or even greater concern to the Academy.

As its President his perspective has to shift from considering the interests of a single institution to those of a whole Fellowship; but much of the substance of his new concerns will be familiar.

He sees this familiarity with the territory as among the assets he brings to the Presidency. Crucial to sustaining and enhancing the performance of biomedical science in the UK are partnerships between different universities, between different disciplines, and between academia, the NHS and industry. "This is what I've been endeavouring to foster in my own domain of responsibility for the past ten years. I think this is crucial for the Academy to sustain and develop. So I bring that enthusiasm and experience."

"Another thing I'm committed to is what I would call a balanced science base." He speaks with approval of the categorisation invoked by the late Donald Stokes, Professor of Politics and Public Affairs at Princeton University. Stokes put forward the notion of science as not only basic or applied but as encompassing a third category he labelled "use-inspired basic research". Lechler is firmly of the view that you need activity in each of these categories to achieve the maximum impact. He recognises the important relationship between basic and clinical sciences within a body like the Academy that celebrates both. He also points out that he's lived in both

worlds in previous jobs, and relishes the opportunity to champion both.

Lechler is also keen to support work to address the gender balance in medical science at senior levels. "It's nothing less than a scandal," Lechler comments. "Twenty per cent of the professoriate is female when at lecturer level it's about 50:50. The Academy worries about this, and does everything it can to boost the proportion of female Fellows - but to some extent the problem lies in the professoriate from which most Fellows are elected." He points to practical steps for overcoming the imbalance; they range from more and better mentoring to finding ways of dealing with the work life blend for women and men.

His experience of facing up to this issue stems from King's College's response to the Athena SWAN Charter that aims to foster equality and diversity among staff and students in UK institutions. "Here at King's I do feel we've made progress," he says. "The level of awareness of equality and diversity is a great deal higher, and there's a strong commitment. But it's one of those things that will need constant energy." As a member of the King's College Athena SWAN steering group Lechler will have learned lessons with relevance to the Academy's own efforts.

Beyond the South East

Another continuing issue for the Academy is the disproportionate concentration of biomedical research efforts in London and the South East. That this geographical skew applies just as much to most other areas of life in the UK is no excuse for neglecting its manifestation in medical science.

It is, however, a fact of life - as Lechler, not least through his College's partnership with the Crick Institute and his own involvement with Med City, is well aware. It's important that other regions maximise their potential, he says, and not only for their own sake but to avoid the loss to the rest of the country. The solution, he thinks, lies in further developing the clusters of geographically close research institutes that have emerged in recent years, universities and science-based companies. The Edinburgh Science Triangle would be one example.

High on his agenda for the first year of his Presidency is to engage with the Academy's Regional Champions to meet Fellows across the UK and explore ways to increase connections between and beyond the Fellowship.

Delivering expert advice

For its past policy work in general Lechler commends the Academy, highlighting "many fantastic reports that have made a real difference." But he is keen to explore how the existing thread of work might be supplemented by increased outputs in another. "What the Academy tends to produce is the definitive, scholarly offering done in great depth. Really high class pieces of work." He hopes to see the Academy increase its ability to respond dynamically to the rapidly changing policy environment where ministers demand advice in ever shorter timescales. He sees the Fellowship as the Academy's most precious and unique asset for this, and one that is much in demand by government ministers, regulators and research funders.

He also worries a lot about the future sustainability of the NHS. "The numbers just don't add up." While recognising that such matters are principally in the province of bodies like the King's Fund, he wonders if the Academy could find some way of contributing to improving productivity in the NHS.

‘It’s ridiculous when you think about how little we invest in training for people who are going to play quite substantial leadership roles...we’re getting better at it, but in my day we weren’t.’

Lechler was elected to the Academy Fellowship in 2000. Although not among the first wave of academics pushing 20 years ago for its creation, he gives due credit to its founders for their far sightedness. “It’s come to occupy a vital role,” he says. “It helps to sustain and advance the remarkable record of the UK in biomedical science. It’s become the major voice of academic medicine and biomedical research in the UK.” He points to the Academy’s work not only in connection with policy but with another “p” word that he views as equally important: people. He talks of its efforts to encourage more clinicians to take up academic careers, and to provide grants and mentorship support to clinical and basic scientists.

Is there room for anything other than work in Lechler’s life? Just about, it seems. Over the years he’s restored a ruin near Spoleto in the Italian province of Umbria. “A great project and I love the place, although we don’t get there enough. When I’m in Italy I sketch. I find it relaxing because you just focus on one thing. Two hours of nothing else.” One day he hopes to take some classes: to learn how to do more than simply reproduce what he sees. “I think I’ve got just enough ability to justify putting some effort into it.”

Meanwhile it’s work that remains the ever-present factor. While we talk in a room in the Guy’s Counting House Lechler is drinking coffee from a mug decorated to publicise the local Academic Health Science Network. Besides the logo it carries a word cloud: innovation, collaboration, health, wealth creation, networking. He’ll surely have that mug, or another like it, on his desk at the Academy.

The Crick Institute

When the Francis Crick Institute opens in 2016 the board outside will carry the names of six scientific and academic organisations: the MRC, Cancer Research UK, the Wellcome Trust, UCL, Imperial College, and King's College London.

The original list comprised just four names; only UCL had initially been chosen as a university partner. That King's too is now a partner is in no small measure a consequence of Lechler's lobbying.

His determination reflects his view of the potential importance of the Crick as a research institution. He felt not only that King's would miss out, but that the Crick itself would benefit from partnerships with all three of the London universities that are major players in biomedicine. He was aware that to have two further bodies muscling in on the action must have irritated UCL - but relationships are now extremely constructive and collaborative.

It's this participation of three major universities, each a partner in an academic health science centre, that will help to make the Crick unique, he argues. What he refers to as "the wonderful palace that's now been built beside St Pancras Station" will focus on discovery science, but with three conduits for translation through these three partners and their AHSCs. "And we're not just affiliated," he points out. "We are part of the Crick. When we talk about 'The Crick Institute' it's more than the building. We will have staff going in, roughly a hundred body spaces from each partner, and people coming out when they see an opportunity to translate their research discoveries." In short, the translational pipelines are already laid in a way they wouldn't have been without these partnerships.



About the Academy

The Academy of Medical Sciences is the independent body in the UK representing the diversity of medical science. Our aim is to promote advances in medical research and ensure these advances are converted into healthcare benefits to society.

Promoting excellence

Through an independent Fellowship of more than 1,100 leaders in their fields, elected for their outstanding contributions to the healthcare industry.

Stimulating dialogue

Forging national and international links across medical science, research and beyond to inform policy, encourage collaboration and address some of the greatest medical challenges of our time.

Developing the next generation

Providing funding and mentoring to the next generation of medical researchers to support their careers and ensure pioneering work is translated in to health benefits for society.

Our vision

is to improve health through research.

Our mission

is to promote medical science and its translation into benefits for society.

Support our transformation

The Academy only receives approximately 25% of its income from government funding. We must therefore seek core support from individuals and organisations to make a difference in our future ability to promote excellence, dialogue and the next generation in the medical sciences.

In 2014 the Academy launched the Transformation Fund to facilitate a step change in activities and increase our ability to rapidly address challenges as they occur in an independent and effective manner.

We are currently more than halfway to reaching our £5 million target.

How you can help

There are many ways to give to the Academy, including a one-off donation, regular gift or leaving a gift in your will. A popular option is to join our esteemed Helix Group by providing a donation of £250 or more a year. Helix Donors are recognised on a commemorative board in our Fellows Room, on our website, in our Annual reports and at events to thank our supporters and benefactors.

If you wish to discuss furthering your important support to the Academy, please contact Sarah Porter our Fundraising Manager.

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