Interview: Sir John Savill – Chief Executive (2010-2018), Medical Research Council (MRC), UK



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Sir John Savill, chief executive of the Medical Research Council between 2010 and 2018, discusses the organization's transition into part of the new UK Research and Innovation (UKRI) grouping, the highlights of his tenure in terms of medical research in the UK, and the potential pitfalls of the Brexit process.

In April this year a new organization, UK Research and Innovation (UKRI), will be put in place, bringing together the seven Research Councils, Innovate UK and Research England. How will the Medical Research Council (MRC)'s operations, as the leading public funder of research in the UK, change?

The formation of UKRI provides an enormous opportunity for both the MRC, the other research councils and for researchers in the UK more generally. Significantly the British government has invested substantial amounts of money. While the UKRI's current budget stands at USD eight billion a year, by 2021 the budget will be over USD 11 billion a year. MRC is 105 years old and is thus the oldest organization within the UKRI. However, there are a number of incredibly significant organizations that comprise UKRI. As such, UKRI offers us the opportunity to improve our strategic planning, synergy and interdisciplinarity. The most significant benefits of this more integrated system will be increased funding, a single voice for science directed towards the government and better strategic coordination.

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You will be leaving your role as Chief Executive of the MRC at the end of March after being appointed in 2010. What would you highlight as your most significant achievements with the MRC?

It is important to note that the MRC family, of which I am only a part, has achieved an incredible amount over the past seven and a half years. The MRC is perceived to be a world leading organization across the globe, despite our relatively modest budget. It is world leading due to the particularly high quality of the people in the MRC. That includes not only those in the head office but also the scientists in our institutes, units and centres, MRC-funded researchers in universities and all of those that contribute to the process of being peer reviewed more generally. That being said, there are three areas in which I've seen particularly significant progress.

The first of which specifically relates to the UK's unique selling point in regard to research. That is the capacity to link, in an ethically acceptable manner, the medical records of the population of the UK, with biological data. This gives the UK a unique advantage in regard to research. The bringing together of the NHS and biological data will revolutionize many aspects of medical research. This should in turn, render the UK a particularly desirable location for pharmaceutical discovery science and medicines development. As such I am pleased to be leaving just as the MRC and eight other partners have founded Health Data Research UK (HDR UK). HDR UK is a distributed institute headed by Professor Andrew Morris [Ed. – Vice Principal of Data Science at the University of Edinburgh] and chaired by Graham Spittle former CTO in Europe of IBM. The organization has a particularly distinguished board and has established six centers across the UK. Thus, I am incredibly optimistic about the bringing together of this vast pool of longitudinal clinical data with the biological data. Furthermore, we are seeing enormous investments being channeled towards generating biological data. The MRC, the Wellcome Trust and other funders have now invested into the UK Biobank. Equally 2.2 million people are currently in MRC cohorts; as such there is an enormous capacity to drive forward discovery science, in men women and children, through HDR UK.

The second area in which I was particularly interested to see progress, was the relationship between the MRC and industry. There are numerous advantages to working with industry. In particular the pace at which the translation from research to patient benefit happens, is increased significantly. Equally, private resources that are otherwise unavailable to the publicly funded base are made available. For example, a collaboration with AstraZeneca has allowed MRC funded researchers access to AstraZeneca's lead discovery center that they are developing in Cambridge.

Furthermore, a collaboration with UCB has allowed MRC funded researchers to access their monoclonal antibody platform. As such resources that would have previously been unavailable to those outside of industry are now publicly available.

Additionally, collaborating with industry clearly indicates that the MRC is focused on both health and wealth. The UK government invests in research and development due to the economic benefits of research and development for the UK. Working with industry demonstrates very clearly the ways in which funding can drive the economy. While AstraZeneca and GlaxoSmithKline have been particularly important partners; there are also a number of international partners with whom we have a range of collaborations. As such I am delighted to see the progression of public- private partnerships in the UK. The publication of David Cooksey's report in late 2006 was particularly significant in regards to changing attitudes in the UK. The report written for the UK government on promoting translation of biomedical research demonstrated the necessity to work with industry. This is particular evident when considering that USD 7 billion USD of the total USD 11 billion devoted towards health research in the UK comes from industry. USD 2.3 billion is donated by charities while approximately USD 1 billion comes from the MRC. Thus while it is a team effort, industry plays a major role.

Thirdly, I would like to highlight the MRC's increasing influence in regard to re-shaping the research ecosystem in order to promote partnership and collaboration. This is apparent in regard to collaborations with the Francis Crick Institute, 23 university units, the UK Dementia Research Institute (UK DRI) and Dementias Platform UK (DPUK). We have had huge success in this regard.

What impacts will Brexit have for the MRC?

There are three factors that will be important following Brexit. The most significant of these will be people. Following that our second major concern is programs. Finally and least important of the three major considerations will be pounds. In regards to people, Britain has benefited enormously from the freedom of movement within the European Union. Within the Francis Crick Institute, 55 percent of post-doctorates are non-British European Union (EU) nationals while 35 percent of principal investigators are non-British EU nationals. Equally, approximately 20 percent of people who make up the UK research base are non-British EU nationals. Thus, we have benefited enormously from freedom of movement and as such we must maintain that free movement of talent, within whatever structure that arises. Nevertheless, despite the US's apparently intrusive immigration system, significant numbers of foreign nationals are attracted to working in the US due to the particularly high quality of its research base. Equally many foreign nationals find ways through which they are able to work in the US due to the attractiveness of its research base.

When it comes to programs, it is important to remain a part of the European Research Area through programs such as to the Innovative Medicines Initiative and of course the European Research Council. It is encouraging that the UK government has produced very clear statements in regard to its desire to negotiate a partnership that would allow the UK to retain access to these programs. Finally, while pounds are important, the UK government has committed to investing ahead of Brexit. As such my primary concerns are people and programs.

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Which areas of research are being prioritized by the MRC?

Our most significant focus is in relation to discovery science in humans. We must promote discovery science in humans and the way in which we have been doing that is by promoting data linkage initiatives such as stratified medicine, experimental medicine and support of stem cell research. MRC is the leading public funder of regenerative medicine in the UK. We need to place unceasing emphasis on discovery medicine in relation to men, women and children. However, this requires people's confidence and support. We have to make sure that people are interested in volunteering and participating in medical research. Nevertheless, one outstanding characteristic of British people is their altruism. As I mentioned earlier, MRC currently has 2.2 million volunteers; this interest and desire to participate is another one of the UK's unique selling points.

Another huge advantage of Britain in the field of research, is the UK's long standing diplomacy. The Science and Innovation Network (SIN), which is co-funded by the Foreign and Commonwealth Office (FCO) and the Department for Business, Energy and Industrial Strategy, provide specialists in roughly 60 countries around the world. As such, when traveling to various different countries from Switzerland to Singapore to Japan, a civil servant who thoroughly understand the system, is able to meet and assist researchers. This is enormously useful and this international collaboration is incredibly important.

A few words to conclude?

Significantly the UK is strong in relation to all aspects of research. The future of medical research however has to be interdisciplinary. This means incorporating computer science, physics, mathematics, biology, social sciences arts and humanities. Every research focus in Britain is field leading. Furthermore, medical research is inherently interdisciplinary. As such it is that comprehensive strength in all areas that gives the UK a unique advantage.

Furthermore, industry should not be deterred. This is particularly true in regard to outdated data on recruitment for clinical trials. Equally, industry should not be deterred by Health Technology Assessment, which will soon be essential worldwide. Companies will have to deliver maximum value. Overall, the UK is open for collaboration and open for business.

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