

2012  
2016

# Improving health through research

A five year vision for the Academy of Medical Sciences



# A five year vision for the Academy

---

I am delighted to present the Academy's strategy for 2012-16. It builds on our previous successes in recognising and supporting excellent medical scientists at key stages of their career, in influencing policy to improve health and wealth, and in providing a forum for debate and consensus building for the medical science community.

As an Academy, our most important role is to look ahead to the opportunities and challenges of the future and to be proactive in identifying how medical science can respond. We are already aware of some of these challenges – the growing global burden of non-communicable disease, the escalating cost of healthcare and of drug development, the economic downturn and healthcare reform. However there are also unprecedented opportunities such as advances in medical science, the stratification of disease, closer relationships between academia, industry and the NHS, and a growing recognition of the value of interdisciplinary and international collaborations.

I believe that recognising and enabling excellence in medical science, wherever and at whatever stage it occurs, is the key to addressing these challenges and exploiting the many opportunities. Excellence requires encouragement and opportunity and we will seek to increase both for the next generation of medical scientists by strengthening and diversifying our funding, mentoring and outreach activities. Collaboration between disciplines, institutions, and sometimes countries, underpins successful medical science and its translation. In the next five years we will seek to stimulate and reward such relationships.

We will also be striving to ensure that the Academy is relevant to the whole spectrum of medical science – to all those working in the biomedical and clinical sciences, in the underpinning disciplines and at the emerging interfaces. And, although we are working hard

to establish our new headquarters in London as a fitting home for UK medical science, we will increase our regional activities for aspiring researchers and Fellows and our engagement with regional entities such as the proposed Academic Health Science Networks in England and equivalent collaborations in the devolved administrations.

We will take a holistic approach to translating excellent science into health benefits, working within – and seeking to strengthen - the medical research ecosystem of health providers, industry, academia, medical research charities, regulators and Government.

Our partners and funders in the UK and beyond, who share our commitment to the promotion of medical science and its translation into benefits for society, have been essential to our success. We are indebted to them. Their continued support in the future will be vital if we are to realise our ambitions.

Finally, I am very grateful to all those who have contributed to the development of this strategy, including the Academy's Fellows and staff. I look forward to working with them to deliver this strategy.



Professor Sir John Tooke PMedSci

# About the Academy

---

Founded in 1998, the Academy of Medical Sciences is the independent body in the UK representing the diversity of medical science. Our elected Fellows – over 1000 – are central to our success. They are drawn from the fundamental biological sciences, clinical academic medicine, public and population health, health technology implementation, veterinary science, dentistry, medical and nursing care and other professions allied to medical science as well as the essential underpinning disciplines including mathematics, chemistry, physics, engineering, ethics, social science and the law. It is their knowledge, influence and networks that are the Academy's most powerful assets. We are one of the UK's five National Academies and work closely with them and our sister Academies overseas. We are also an integral part of the UK's strong biomedical research community, working closely with funders, medical research charities, the NHS and the private sector.

## At its core the Academy is:

- A champion for excellent research and researchers
- Independent, evidence-based and authoritative in its approach
- Proactive in identifying and responding to developments in health, society, science and policy
- Expert and accessible in the information we provide
- Committed to partnership and interdisciplinary engagement

Our vision is to improve health through research.

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

Underpinning our strategy are six objectives:

- Promoting excellence
- Influencing policy to improve health and wealth
- Nurturing the next generation of medical researchers
- Linking academia, industry and the NHS
- Seizing international opportunities
- Encouraging dialogue about medical science

# Promoting excellence

---

Excellent medical science and medical scientists are the key to breakthroughs in preventing and treating ill health and they underpin the UK's contribution to the international science endeavour. Recognising and promoting excellence in medical science therefore lies at the heart of all our work. Finding the brightest and best, celebrating their achievements and harnessing their expertise for the benefit of wider society is central to our role as a National Academy. The way in which medical science operates is constantly evolving and we will seek to reflect this in the way that we recognise and reward excellence. We will also strive to ensure, particularly through our policy work, that the research environment enables the pursuit and achievement of excellence.

## **Celebrating medical science**

Our activities to promote medical science and celebrate the work of our Fellows and the researchers that we support will be expanded and we will widen access to our lectures through online media. We will seek funding to celebrate and build on the legacy of the internationally renowned scientific symposia that were held by the Ciba and Novartis Foundations, in what is now our home.

## **Rewarding achievement**

We will continue to recognise outstanding individuals through named lectures and medals. An additional prize, perpetuating the name of the Medical Research Society, will allow us to recognise academic excellence among clinical academics as they develop their careers. Excellence is enabled by collaboration and by engagement between disciplines and institutions. We will explore ways to acknowledge the success of teams, not just individuals, and to recognise wider contributions to medical science such as public engagement, innovation and translation.

## **Strengthening the Fellowship**

Our Fellows exemplify the excellence that we are seeking to promote. We will review the election process to ensure that the Fellowship fully represents excellence in medical science irrespective of gender, age, ethnicity, discipline, geographic location or workplace. We will network the Fellows both virtually and in person, at events throughout the UK, to reinforce their strong sense of collegiality.

## A champion for excellent research and researchers

We champion excellent research and researchers through our **one-to-one mentoring and outreach scheme**. The mentoring scheme links Academy Fellows with clinical academic trainees at the postdoctoral level to provide impartial support to individuals as they face the opportunities and challenges of building an independent research career. A network of Fellows champion the wider benefits of a research career. These independent, UK-wide initiatives complement the support offered locally, helping to create an environment where excellent researchers can flourish.

“Finding the brightest and best, celebrating their achievements and harnessing their expertise for the benefit of wider society is central to our role as a National Academy.”

# Influencing policy to improve health and wealth

---

One of the Academy's greatest strengths is its ability to convene the best medical scientists to address the greatest challenges facing society. We aim to be the UK's leading source of independent advice for those making decisions about medical research and researchers and to provide evidence from medical science to underpin policy development in the public, private and charitable sectors. With the Fellowship at the core, we will continue to both set, and respond to, the policy agenda.

## **Tackling major challenges**

We will prioritise projects that address significant health problems and/or contribute to economic growth. We will tackle the growing burden of non-communicable diseases, the escalating cost of healthcare and the opportunities provided by scientific and technological advances. A sustainable science and innovation base is vital to the health and wealth of the UK and we will continue our work to achieve this goal, including ensuring that the environment for researchers is fit for purpose.

## **Maximising our impact**

Effective partnerships are responsible for much of our impact. We will strengthen and expand our network of partners to ensure that we have access to the best expertise and knowledge. International engagement will enable us to draw on best practice from outside the UK and to increase the global impact of our work. We will only select projects where we can have significant influence and will follow up the recommendations of key reports and statements within two years of publication.

## **Engaging policymakers**

By increasing our engagement with decision makers across government and the life science community, we will ensure our policy activities meet their needs, while safeguarding our independence. We will promote the interaction of leading researchers with decision makers and, through our policy internship schemes with the Wellcome Trust and the Medical Research Council, help train a new generation of researchers who are confident in engaging in policy.

## **Looking ahead**

We will use approaches such as horizon scanning to identify future healthcare needs and the research programmes and workforce required to address them.

## Proactive in identifying and responding to developments in health, society, science and policy

Our **Animals containing human material** working group study was an initiative taken from within the scientific community, after the Academy identified an increasing need for debate and guidance in this area. The study drew on the findings of a public dialogue to ensure societal views informed the recommendations. Thanks to its timely publication and through close engagement with cross-Government policymakers, the report is making a useful contribution to the revision of UK legislation.

“We aim to be the UK’s leading source of independent advice for those making decisions about medical research and researchers.”

# Nurturing the next generation of medical researchers

---

Transformational scientific discoveries, changing health burdens, economic challenges and evolving research environments mean that inspiring and supporting the next generation of medical scientists along their career pathway must remain one of our most important roles. Strengthening clinical academic medicine, which has been under threat, will remain a priority across our careers activities. However we will review whether there are other groups of researchers that could benefit from our portfolio of support. We will identify needs, co-develop innovative solutions with a range of partners such as the National Institute for Health Research and the Wellcome Trust, and catalyse organisations with the capacity to release successful initiatives across the career pathways.

## **Developing innovative support schemes**

Through a new partnership with the Wellcome Trust we will develop regional activities that inspire medical students to pursue a career in research. We will continue to trial new formats and content for our regional outreach events for clinical academic staff at key career stages and will pilot personal development courses for target groups such as early career researchers. The renewal of support for our starter grant scheme for clinical lecturers will provide vital 'seed corn' funding. An enhanced programme of policy work on the medical research career pathways, along with feedback from researchers, will allow us to optimise our activities.

## **Networking researchers across boundaries**

We will facilitate connections between the diverse range of medical researchers working along the translational pipeline and address the cultural barriers that often divide them. The prestigious annual Clinician Scientists in Training meeting is now part of our portfolio and we will explore how this, and new initiatives, can promote the relationships and collaborations required to drive progress.

## **Fostering research independence**

Our highly regarded one-to-one mentoring scheme for clinical academics on the cusp of research independence will remain a core activity. We will seek to catalyse organisations in the UK and beyond to develop local mentoring schemes, supported by publications highlighting the lessons learnt from our scheme. The remaining cohort of Academy/Health Foundation Clinician Scientist Fellowships will continue to be supported.

## **Remaining connected**

We will consider how independent researchers can continue to engage with, and contribute to, the Academy's work once they have moved beyond the scope of our schemes. We will build on successful pilot activities in which Fellows and researchers reaching independence debate the major challenges and opportunities in medical science.

## Committed to partnership and interdisciplinary engagement

Our **Starter Grants for Clinical Lecturers** scheme demonstrates how the Academy forges strategic partnerships to effect tangible benefits to research. The scheme is principally funded by the Wellcome Trust, but has leveraged a consortium funding approach, with the British Heart Foundation and Arthritis Research UK joining the scheme. 'Start-up' funds are awarded to research-active Clinical Lecturers across all research disciplines and the scheme is open to interdisciplinary and innovative applications. A large majority (86%) have used their funding to generate preliminary data that will form the basis of an application for substantive research funding and to form new scientific collaborations.

“Inspiring and supporting the next generation of medical scientists along their career pathway must remain one of our most important roles.”

# Linking academia, industry and the NHS

---

Meeting patient needs through biomedical discovery in an economically and socially sustainable manner requires a holistic approach. Facilitating strong and equitable partnerships between academia and industry will be a crucial part of this approach, and remains a major focus of the Academy's activities. Our ability to connect researchers, research funders and users from across government, academia, industry, the charity sector and the NHS will ensure delivery of this objective.

## **Promoting sustainable models of translation**

To accelerate the translation of research into benefits for patients and the economy, we will explore: new relationships between academia, industry and the NHS in the development pipeline; the assessment of potential value of innovations; adaptive approaches to licensing; proportionate regulation and governance; and the role of patients, practitioners and the NHS in the development, adoption and diffusion of new treatments. Underpinning this will be our continued commitment to fundamental scientific research, which is the source of future translational activity.

## **Supporting a vibrant innovation ecosystem**

Through our policy and networking activities we will encourage an innovation ecosystem that includes strong academia-industry links and an NHS that acts as a driver and adopter of research and innovation. We will seek opportunities for flexible collaboration and permeability across sectors, including within our own activities, and the creation of appropriate funding structures and incentives.

## **Ensuring a strong UK life science industry**

To secure the health and wealth of the UK it is vital to foster an environment that supports home-grown biotechnology and medical device companies, that attracts and retains pharmaceutical companies to the UK, and where entrepreneurs and investors are encouraged to establish new enterprises. This will remain a key theme of our engagement with government.

## Independent, evidence-based and authoritative

Our 2011 study to **review the regulation and governance of health research** received over 300 pieces of evidence from industry, academia, medical research charities and patient groups. The project had cross-party support and was funded by Government, but strictly independent in its conduct. Peer review by Academy fellows and other independent experts added to the report's authority. Our recommendations have been translated into initiatives to streamline the regulation and governance of health research.

“Facilitating strong and equitable partnerships between academia and industry will be a crucial part of our approach.”

# Seizing international opportunities

---

Medical science is an increasingly international endeavour and many major health challenges are now global in nature. The Academy will strive to ensure that the UK takes a leadership role in tackling these challenges and in enabling excellent people to move and collaborate across national boundaries. In delivering this objective we will draw on the expertise of our Fellows working in the UK and overseas and on our partnerships, particularly with our sister Academies across the world.

## **Influencing European policy for health and research**

We will work with policymakers to ensure that the UK's position on EU policy issues, such as clinical trials and access to data, facilitates (and is informed by) medical research. We will support the Federation of European Academies of Medicine to ensure that it becomes an influential source of expertise and advice for European policymakers working in health, research and research regulation.

## **Responding to global health challenges**

We will focus on health challenges that transcend national borders, but that particularly affect low and middle-income countries. Through our policy work, lectures and collaborations we will seek insights from comparisons of research infrastructure, healthcare systems and the use of technologies in resource poor and resource rich settings.

## **Promoting international mobility, connections and capacity building**

Working independently and in partnership, we will seek to ensure that UK policy in areas such as immigration, overseas aid policy and funding facilitates international capacity building, mobility and collaboration among medical scientists. We will strengthen our collaborative links with academies of science and medicine abroad and continue our Daniel Turnberg Travel Fellowship Scheme.

“We will strive to ensure that the UK takes a leadership role in tackling these challenges and in enabling excellent people to move and collaborate across national boundaries.”

# Encouraging dialogue about medical science

---

To operate effectively, the Academy must maintain and enhance its engagement with a range of stakeholders including the Fellows and other medical researchers from across the sector, policymakers, funders and the public, including patients. Over the next five years we will have a particular focus on increasing the range and effectiveness of our engagement with groups of patients and wider society. Our new website will be at the centre of our efforts to improve dialogue with all our audiences.

## **Interacting in accessible and innovative ways**

We will take advantage of the changing culture of online communication; harnessing social media to enhance the way we communicate and connect with our audiences. We will exploit technological developments such as new digital publishing formats to increase the accessibility of publications such as our policy reports. Our ongoing programme of proactive and reactive media engagement will ensure that the Academy remains a leading source of trusted comment on medical science and healthcare.

## **Involving the views of stakeholders to shape our advice**

The public, particularly as patients, is playing an increasingly important role in research, health and healthcare. We will focus on increasing input from, and dialogue with, them to ensure that the hopes and concerns of wider society, as well as the knowledge of the medical research community, shape our advice and our choice of projects.

## **Inspiring others with medical research and its impact on health**

We will support a culture in which scientists are encouraged to communicate their work, particularly with the public and aspiring researchers. We will look for opportunities to hold public events alongside our prize lectures and to profile our Fellows, and their research, on our website and at events throughout the UK.

## Expert and accessible in the information we provide

Making information relevant to all audiences is a key priority in all our work. Since 2007 our major working group study reports have included a non-technical summary which is made readily available to interested members of the public. Our key scientific lectures are used to theme Science Festival events across the UK to share the findings of cutting edge research with members of the public. Content from our 2010 **Jean Shanks Lecture** on developments in ageing research formed the basis of two public discussion events at the Cheltenham Science Festival and the British Science Festival in Bradford.

“Our ongoing programme of proactive and reactive media engagement will ensure that the Academy remains a leading source of trusted comment on medical science and healthcare.”

# Delivering the strategy

---

The Academy will maximise its human, physical and financial resources in order to achieve the objectives set out in this strategy.

**The Fellowship** gives its time generously and freely - driving our policy work, undertaking peer review, ensuring effective governance and mentoring aspiring researchers. They will remain central to all that we do. We will continue to recognise their contribution and ensure it is used to maximum effect.

**Our staff**, although small in number, are essential to our success. We will continue to recruit the best talent and harness the skills and energy of staff.

**The Academy's premises** at 41 Portland Place are a valuable asset for the Academy and an important source of unrestricted income. Not only will we ensure that the building offers a welcoming home for our Fellows and the wider medical science community, but we will safeguard it into the future by working to maximise our income and consider options to retain it beyond its current lease.

**Our current funders** help us to deliver many of our programmes and projects and provide some core funding. However, obtaining funds for our core activities continues to be a challenge and we will need to focus our efforts on renewing existing sources due to end in 2013 and on approaching new donors. We deliver extraordinary value for our partners and the wider community and we will work on ways to communicate this better. We will continue to seek to diversify our sources of income both to ensure that the Academy is financially sustainable and to maintain our independent voice.

**Effective partnerships** with medical research charities, Government, academia, funders and industry underpin many areas of our work. To deliver the objectives in this strategy we will work with new and existing partners to maximise the impact of our activities.

# Anticipated outcomes

---

In delivering this strategy we will have:

- Demonstrated to decision makers through the information and advice we provide: the advantages of evidence-based health policy; how the UK and the EU can remain a supportive environment for excellent medical research and researchers; and the ways to maximise the translation of the knowledge generated for public good.
- Strengthened connections within the medical research ecosystem and built a mutual recognition that industry, academia and the NHS are credible and crucial partners in delivering healthcare benefits to society.
- Inspired, and nurtured excellence in, the next generation of medical science researchers ensuring that they can maximise scientific discoveries for health and wealth benefits.
- Positioned the Academy as a receptive, innovative and future-orientated organisation with an engaged Fellowship that reflects the diversity of the life sciences sector and that has the resources to fulfil its vision of improving health through research.

The Academy's Council will evaluate the efficiency and effectiveness of the Academy's activities as it delivers this strategy. The outcomes of this evaluation, and that of individual programmes and schemes, will inform continual improvement.

We welcome feedback on this strategy and would be happy to discuss our vision, mission and objectives further. The extent to which these aspirations can be realised will be dependent on additional funding and external partnerships. We are actively seeking this support from organisations and individuals to enable us to deliver this strategy, for more information please contact:

Professor Sir John Tooke PMedSci, President, Academy of Medical Sciences,  
41 Portland Place, London, W1B 1QH  
[john.tooke@acmedsci.ac.uk](mailto:john.tooke@acmedsci.ac.uk)



The Academy of Medical Sciences  
41 Portland Place  
London W1B 1QH

+44 (0)20 3176 2150

For further information visit:

[www.acmedsci.ac.uk](http://www.acmedsci.ac.uk)

Registered Charity No. 1070618

Registered Company No. 3520281