Press release: Major new funding to attract world's best in science and innovation

- £1.3 billion boost to attract and retain world-class talent and guarantee the UK's position at the forefront of innovation and discovery through the modern Industrial Strategy
- Business Secretary Greg Clark launches prestigious £900 million UK Research and Innovation (UKRI) Future Leaders Fellowship Scheme – open to best researchers from around the world
- the investment will fund at least 550 new fellowships for the brightest and best from academia and business

Business Secretary Greg Clark today (21 June) unveiled a major new investment in UK talent and skills to grow and attract the best in science and innovation.

As part of his speech to the International Business Festival in Liverpool, Mr Clark outlined £1.3 billion of investment for British universities and businesses to develop the next generation of entrepreneurs, innovators and scientific leaders who will ensure our future economic prosperity.

Previous investment in new talent has funded research into new cancer drugs and developed critical technology which will bring us driverless cars. Today's announcement will build on this success and boost the pipeline of talent needed to build a Britain fit for the future. The money, part of the single biggest investment in science in 40 years, will help ensure the UK invests 2.4% of GDP in R&D by 2027 and becomes the most innovative economy by 2030.

Business Secretary Greg Clark said:

> We are a nation of innovators, with some of the world's greatest inventions created on British soil – from penicillin to the first computer programme. We want to retain our global reputation as a destination for world-class scientists and researchers, by providing opportunities to find and nurture the next Ada Lovelace and Isaac Newton's.
>
> International collaboration has been key to many of the most significant discoveries and breakthroughs and I want the UK to remain the go-to destination for the best scientists and innovators. We are investing in the rising stars of research and innovation to ensure the UK is where the products and technologies of tomorrow are developed.

The inaugural UKRI Future Leaders Fellowship Scheme will receive £900 million

over the next 11 years, with 6 funding competitions and at least 550 fellowships awarded over the next 3 years. The investment will provide up to 7 years of funding for early-career researchers and innovators, including support for part-time awards and career-breaks, providing flexibility to researchers to tackle ambitious and challenging areas. For the first time ever, this type of scheme will now be open to businesses as well as universities. The scheme aims to help the next generation of tech entrepreneurs, business leaders and innovators get the support they need to develop their careers. It is open to best researchers from around the world, ensuring the UK continues to attract the most exceptional talent wherever they may come from.

Complementing the Future Leaders Fellowship Scheme, the Royal Society, Royal Academy of Engineering, British Academy, and Academy of Medical Sciences will collectively receive £350 million for the prestigious fellowships schemes. This funding will enhance the research talent pipeline and increase the number of fellowships on offer for high skilled researchers and innovators.

Over the next 5 years, £50 million has been allocated through the National Productivity Investment Fund for additional PhDs, including 100 PhDs to support research into AI, supporting one of the Grand Challenges within the Industrial Strategy and ensuring Britain is at the forefront of the AI revolution.

Chief Executive of UK Research and Innovation Professor Sir Mark Walport said:

> Talented people are the energy and engine of new knowledge, new ideas and new opportunities. The long-term investment announced today means the UK will continue to attract and grow the very best, supporting those who want to solve the most difficult questions whether they are in frontier science, our evolving society or our changing economy.

Venki Ramakrishnan, President of the Royal Society said:

> We are delighted by this crucial investment in science researchers from the UK government. This money will be used to support scientists during crucial stages of their careers, whether they have been identified as future leaders in their fields and are just starting an independent research career, or are well-established, world-leading talent that we want to retain in the UK. This investment in scientists at both stages of their careers is crucial to the continued success of UK science.

Professor David Cannadine, President of the British Academy, said:

> We are delighted to be able to expand opportunities for

> international collaboration and early-career research in the humanities and social sciences.
>
> The challenges that we face as a nation and as an international community – from the march of automation to improving productivity – will require collaboration from the very best minds, working across disciplines.
>
> It is timely, therefore, that the national academies are working together to further the UK's reputation as a destination for world-leading research.
>
> We also look forward to supporting further early-career researchers closer to home through the Postdoctoral Fellowship scheme, which is often a vital stepping stone to establishing a successful academic career.

Professor Sir Robert Lechler PMedSci, President of the Academy of Medical Sciences said:

> The finest science requires the finest researchers. If we are going to solve the biggest health challenges and harness opportunities, we need to attract and nurture the most talented researchers within our network of trailblazing scientists in the UK.
>
> Excitingly, this funding from The Talent Fund allows the Academy to develop a unique cross-sector leadership scheme that will support today's biomedical and health researchers to become tomorrow's leaders of innovation. It will support talented researchers in the middle of their careers to understand academe, pharmaceutical and biotech industries, the NHS and government and forge new collaborations across these traditional boundaries and enhance their dynamic leadership skills.
>
> The funds will also support 60 Springboard grants for biomedical researchers at the start of their independent careers and eight Rising Stars Professorships, establishing the research careers of talented researchers.
>
> Together these programmes will support researchers to ensure their talent is recognised, supported and nourished throughout their career. These researchers will help further high quality, innovative research to improve the health of our society.

Dr Hayaatun Sillem, CEO, Royal Academy of Engineering, said:

> Investment in engineering research and innovation is vital for the UK's economic and social wellbeing. This funding will help the UK to continue to attract and retain the world-leading engineering

> talent needed to be at the forefront of developing and applying new technologies.
>
> The government’s commitment to supporting highly skilled researchers and engineers is very welcome. Providing career-long support is essential if we are to establish the UK as the leading nation for engineering innovation.

Up and down the UK, government funding in research talent is already resulting in incredible results which are helping to build a greater understanding of the world we live in, as well as creating the next game-changing technologies and innovations.

Research includes:

Contributing to cancer drug development through studying cancer-causing proteins

Professor Victoria Cowling at the University of Dundee – Medical Research Council (MRC)

In 2007, Professor Victoria Cowling at the University of Dundee was awarded a MRC Career Development Award to study a cancer-causing protein called Myc. During her award, she had two periods of maternity leave and her fellowship was extended accordingly. In 2014, she successfully competed for a prestigious MRC senior fellowship. Her work focuses on identifying other proteins targeted by Myc in cancer cells, so that new targets for drug development can be identified.

Her fellowship provided the flexibility for her to build in collaboration with the Dundee Drug discovery unit to use cutting-edge technology. Since then Professor Cowling has received several million pounds’ worth of funding for her research work from the UK Government. In 2015 she won the British Society of Cell Biology Women in Cell Biology Early Career Medal, an award given to an outstanding female cell biologist who has started her own research group in the UK within the last 6 years.

Cutting-edge research into mobile autonomy

Professor Paul Newman, University of Oxford – The Engineering and Physical Sciences Research Council (EPSRC)

In 2010, Professor Paul Newman, at the University of Oxford, became an EPSRC Leadership Fellow. Paul leads the Oxford Mobile Robotics Group (MRG), which is at the cutting-edge of UK research into driverless technology. The fellowship gave him the opportunity to take projects forward on a number of levels from establishing essential industrial links with partners such as BAE Systems and Nissan to setting up a spin out company Oxbotica. It also gave Paul the chance to contribute to the Department for Transport’s review on driverless vehicle technology.

Developing theory about the history of our universe

Professor Gert Aarts, University of Swansea – Science and Technology Facilities Council (STFC)

Gert Aarts held an STFC Advanced Fellowship from 2004-2009, working on the development of quantum field theory and its application to the matter in the early universe.

> The STFC Advanced Fellowship offered an excellent opportunity to establish myself in the UK, after having carried out postgraduate and postdoctoral research in the Netherlands, Germany and the USA. The possibility to carry out independent research, while at the same time being embedded in the Particle Physics Theory group and the Physics Department, allowed me to mature as a researcher and ease the transition from postdoc to full-blown academic. The latter comes with additional teaching and admin tasks, but thanks to the Fellowship, this transition was manageable and enjoyable. Being mentored by a Departmental colleague played an important positive role in this.
>
> At my University, an agreement about a permanent post was made early on in the Fellowship. Since this removes uncertainties about next positions, the focus can be on research and academic career, which is an important step-change. Being well-funded and prestigious, the Fellowship is also instrumental in achieving research-related promotion criteria; during the Fellowship I was promoted to Senior Lecturer, at the end to Reader and two years later to Professor. Hence, in my experience the combination of an RCUK funded Fellowship with a University position provides the best of both worlds, combining research independence and funding with progression through the academic ladder.

Burnout: a geo-history of contemporary exhaustion

Dr Thomas Jellis, British Academy Postdoctoral Fellow at the University of Oxford

In 2016, Dr Thomas Jellis was awarded a British Academy Postdoctoral Fellowship to study the condition known as ‘burnout’. This increasingly ubiquitous term refers to the exhaustion of physical or emotional energy as a result of prolonged stress. The research project, which started in January 2017, examines the ways that burnout has come to be diagnosed and the entangled relations between mental health, society, and space. Dr Jellis hopes to trace the history of the term ‘burnout’ and examine how and where it is experienced and takes shape, and what spaces of care for such a condition exist.

Over the course of the Postdoctoral Fellowship, he plans to submit papers to leading journals both within the discipline and beyond (Transactions of the

Institute of British Geographers, Environment and Planning A, and Theory, Culture and Society), convene a workshop on the spaces of care for mental health, and publish a research monograph. His work will be presented at various conferences, including the Annual Meeting of the Association of American Geographers and the Annual Conference of the Royal Geographical Society. Dr Jellis’ work will have significant implications for employers, policy makers, and other stakeholders.