# <u>HMPPS appoints 3 non-executive</u> <u>directors</u>

News story

HM Prisons and Probation Service (HMPPS) has appointed David Bernstein, Heather Savory and Nick Folland as non-executive directors.



Non-executive directors are senior figures from outside government, appointed to provide challenge to departments. They are appointed directly by the Secretary of State and are not civil servants. Their role is to:

- give advice to ministers and officials on the operational and delivery implications of policy proposals
- provide independent support, guidance and challenge on the progress and implementation of the department's strategic direction
- advise on performance and monitor implementation of the department's business plans

David Bernstein has been chairman of the British Red Cross since 2015 and brings a wealth of business experience. In 2014 he was appointed Commander of the Order of the British Empire (CBE) for his services to football.

Heather Savory has 30 years' experience in the public and private sector. She is currently a non-executive director within the UK Parliament Authority for the House of Lords and was previously Director General for Data Capability at the Office for National Statistics.

Nick Folland was chief executive of the Crown Prosecution Service between 2016 and 2018. He is also the Senior Independent Member of the Natural Environment Research Council – the UK's leading public funder of environmental science.

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#### <u>Government fund will support new ideas</u> <u>for cleaning up space</u>

One of the biggest global challenges facing the space sector is orbital congestion and space debris. There are currently an estimated 900,000 pieces of space debris including old satellites, spent rocket bodies and even tools dropped by astronauts orbiting Earth. Space debris can stay in orbit for hundreds of years and present a real danger to the rapidly increasing number of new satellites being launched each year.

The UK Space Agency is looking to fund two active debris removal feasibility studies through its Space Surveillance and Tracking (SST) programme, which aims to make space safer and more sustainable. The feasibility studies will develop a debris removal mission concept and system design. The deadline for applications is 19 July 2021 [Updated: 9 July] and the opportunity is open to businesses, non-profits and academics.

Jacob Geer, Head of Space Surveillance and Tracking at the UK Space Agency, said:

Space debris is a growing issue but there are real opportunities for the UK to lead the world in developing and marketing technologies to solve the problem. This funding could give space firms the scope and support to make real breakthroughs.

As we progress further into this new age of space megaconstellations, the UK Space Agency will work with the industry and international partners to ensure humanity can utilise space safely and sustainably. The surge in new missions to refuel, repair or reposition old spacecraft in orbit could present a real opportunity for the UK.

This is the latest investment the UK Space Agency is making in cleaning up space. In 2020 it awarded seven UK companies a share of over £1 million to help track debris in space. It also recently awarded £2.5m to Astroscale to develop the technology to remove communication satellites. The UK is also the leading contributor to the European Space Agency's Space Safety programme which provides collaboration and funding opportunities for UK scientists and industry.

One collision with space debris could create thousands of small, fast-moving fragments which can damage the satellites that provide everyday services such as communications, weather forecasting or satellite navigation.

Today's announcement follows a new publication by UKSpace highlighting the

importance of In-orbit servicing (IOS) capabilities for national security and economic growth. The report acknowledges the UK is ahead of the curve in important areas like close proximity operations, as demonstrated by Astroscale's recent ELSA-d mission. It predicts that technologies and skills developed through IOS, including debris removal, could deliver massive benefits to society, with revenues worth tens of billions of pounds to the UK.

New figures released by the UK Space Agency this month show strong growth in the UK space sector. Income rising from £14.8 billion in 2016/170 £16.4 billion in 2018/19, representing a growth of 5.7 per cent in real terms, while employment is up by 3,200 from 41,900 to 45,100. Research and development spending rose 18 per cent in real terms from £595 million in 2016/17 to £702 million in 2018/19.

### <u>New international approach to combat</u> <u>emerging health threats as crucial G7</u> <u>health talks begin</u>

- UK-hosted G7 health meetings begin in Oxford to unite major democracies to take action on improving global health and tackling COVID-19 around the world
- This comes as a new report demonstrates the impact of G7 on expanding global vaccine access and reducing infectious disease outbreaks in 70 countries

The risk of global pandemics and emerging health threats will be reduced through a new international approach set to be agreed by G7 countries today (Thursday 3 June), that will bolster international collaboration to eliminate potential dangers posed by animals and the environment in the future.

With three-fifths of all infections jumping from animals to humans, the Health and Social Care Secretary, Matt Hancock and G7 health leaders will pledge to work together to improve early identification of animal and environmental health to prevent diseases from spreading.

As the G7 health ministers' meetings begin in Oxford, the UK and its partners will agree to share information on how to detect threats to global health security to identify the drivers of human health emergencies and causal links with animal, plant or environmental factors.

With the world focused on combating COVID-19 and tackling climate change,

this collaboration could help bolster scientific understanding of how environmental threats such as marine plastics could be spreading drugresistant microbes through our oceans, to help fight antimicrobial resistance.

Today and tomorrow, health ministers from the world's leading democracies are convening at Oxford University – the beating heart of scientific brilliance in developing vaccines and world leaders in clinical trials – to agree lifesaving action in the critical areas of global health security, clinical trials, antimicrobial resistance, and digital health.

Health and Social Care Secretary Matt Hancock said:

Globally we are only as strong as the weakest link in the health security chain. No one is safe until everyone is safe.

We need to make better use of advances in our ability to collect, analyse, and share health data from all aspects of life, enabling faster collaboration to respond to health security threats and stop diseases in their tracks.

The UK and our partners in the G7 have a strong track record of working together to support each other and protect the most vulnerable. As I gather with my ministerial counterparts, we have an opportunity to learn from this pandemic to collectively build back better and safeguard our global health security.

As the G7 health ministers' meetings start, the Health Secretary along with the Foreign Secretary Dominic Raab have published a new report on G7 progress to improve global health in developing countries.

The Carbis Bay Progress Report shows that since 2015, G7 members have helped expand access to vaccines, supported developing countries to train, recruit and retain health workers, and assisted more than 70 countries to stop infectious disease outbreaks from spreading.

Foreign Secretary Dominic Raab said:

The report shows that G7 members are working together to supercharge global health security, including recruiting 19,000 'disease detectives' in over 80 countries to help tackle outbreaks before they become epidemics.

Under the UK's presidency, G7 foreign and development ministers committed to supporting COVAX to deliver COVID vaccines globally, reaching 127 countries and territories so far. And the UK is working with the World Health Organization to launch a Global Pandemic Radar to track and share data on COVID variants and new diseases so the world can respond to emerging threats. Following the Ebola outbreak in West Africa, G7 members committed to working with low- and lower-middle income countries to build stronger health systems.

An example of the progress made is the UK's midwifery programme in Bangladesh, which is helping to reduce maternal and newborn deaths and offering professional employment in rural areas to women. Despite COVID-19, over 4,300 midwives have been trained and almost all are working in rural health facilities, including in Rohingya camps.

The new international approach to preventing pandemics builds on the Prime Minister's recent launch of a new Global Pandemic Radar to identify emerging COVID-19 variants and track new diseases around the world. The pathogen surveillance network will be an international partnership that saves lives and protects health systems by spotting diseases before they cause future pandemics and enabling the rapid development of vaccines, treatments and tests.

The G7 health ministers' meetings in Oxford will take place over 2 days, ahead of the G7 leaders' summit in Cornwall which begins on 11 June. They provide a valuable opportunity to pledge decisive action to safeguard global health, as well as discuss live issues and to engage virtually with the G7 presidency's guest countries: Republic of India, Republic of Korea, Australia and Republic of South Africa.

As with all major events this year, extensive contingencies have been in place to minimise any risks and steps taken to ensure the events are COVID-secure.

The Prime Minister has pledged to use the UK's G7 presidency to work with our global partners to implement a 5-point plan to prevent future pandemics. This includes setting up a worldwide network of zoonotic research hubs to spot a new pandemic before it starts. Zoonotic research centres would be charged with spotting dangerous animal pathogens before they cross the species barrier and infect human beings.

The Carbis Bay Progress Report shows that G7 countries have:

- worked with partners and organisations to increase support for strengthening health systems: in the case of Gavi, The Vaccine Alliance, funding for health system strengthening grew from 21% of total spend in 2016 to 31% in 2019
- steadily increased their financing for health system strengthening, rising from 38% in 2015 of all donor disbursements for general health to 47% in 2019
- mobilised financial and technical support for health systems and the goal of universal health coverage, including to support health workers that are crucial to the daily delivery of essential services
- funded and assisted international mechanisms operated by the World Health Organization and the World Bank that support swift emergency responses in low- and lower-middle income countries during health emergencies, including pandemics
- supported 74 countries to strengthen their implementation of the

International Health Regulations (2005), which are the rules that countries must follow to identify disease outbreaks and stop them from spreading

#### Kaami report published

News story

Grounding of a general cargo vessel on the Sgeir Graidach shoal in the Little Minch, Scotland.



Our report on the grounding of the cargo vessel Kaami off the west coast of Scotland on 21 March 2020 resulting in the vessel being declared a constructive total loss, is now published.

The report contains details of what happened, actions taken and recommendations: <u>read more</u>.

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## <u>Worms on a mission to research muscle</u> <u>loss in space</u>

Led by scientists from Nottingham and Exeter University, with hardware designed by Oxford-based Kayser Space, a research team aims to determine the causes of muscle changes during spaceflight and find ways to mitigate these biological changes. Discovering more about muscle loss in space will expand our understanding of how ageing affects our muscles; this could lead to more effective therapies and new treatments for muscular dystrophies here on Earth.

Science Minister Amanda Solloway said:

Experiments in space push the frontiers of knowledge and provide real-life benefits for the rest of us back on Earth.

It is astonishing to think that sending worms into space could improve our health and help us lead longer lives, and I am thrilled that UK researchers are leading this effort.

The worms, C. elegans, share many of the essential biological characteristics of humans and are affected by biological changes in space, including alterations to muscle and the ability to use energy.

The research will build on an experiment from 2018 and will test new molecular causes of, and potential therapies for muscle loss during spaceflight.

Dr Bethan Philips, Associate Professor of Clinical, Metabolic and Molecular Physiology, at the School of Medicine at the University of Nottingham, said:

Since the dawn of the space age, there have been concerns that space travel can be harmful to astronauts. We are very excited that this latest mission will enable us to build on the work we have already done to not only further explore what causes muscle loss with spaceflight, but to also look at how to prevent it. This work will have implications not only for astronauts but also for many situations on Earth.

Dr Tim Etheridge, Associate Professor at the University of Exeter, said:

The experiment will give us even more new information on the molecules that cause muscle decline in space, and whether targeting these with novel drugs and interventions can help. This information can then build the foundations for safely sending humans on long-term missions into deep space.

Kayser Space, based in Oxfordshire, has developed the hardware for the experiment. The worms will be housed in culture bags inside 24 matchbox-sized experiment containers, each containing three culture bags. Once on board the ISS, these containers will be placed into the incubator in the station's Columbus Module. The experiment will take place over 5-6 days.

David Zolesi – Kayser Space Managing Director, said:

This launch is the second of a series of three life science payloads developed by Kayser Space to fly to the ISS within three years. It is an important achievement that will help Kayser to bolster its position as a leading partner to the UK scientific community for implementing experiments in space.

The experiment is due to launch to the ISS on the SpX-22, a Commercial Resupply Service mission contracted by NASA and flown by SpaceX using a Cargo Dragon 2 from the Kennedy Space Center in Florida.