







# Who we are and what we do: examples from the National Academies

The Academy of Medical Sciences, the British Academy, the Royal Academy of Engineering and the Royal Society work together to highlight the value of research and innovation to the UK, and to support researchers, industry and policymakers to make the UK the location of choice for world class research, development and innovation. We work with our research communities to maximise the value of research funding and to support the translation of knowledge into benefits for individuals and society at large. We look forward to working with policymakers, industry and broader society to create the conditions that will secure the UK as the best place in the world to explore, discover and innovate.

# ROYAL SOCIETY

## **Current work**

- Human resilience to climate change and disasters
- Cybersecurity research: a vision for the UK
- Vision for science and mathematics education
- The Atlas of Islamic-World Science and Innovation

## Recent work

- Leading the Way: Increasing diversity in the scientific workforce
- Climate Change: Evidence & Causes
- Modelling Earth's Future
- Fuelling Prosperity: Research and innovation as drivers of UK growth and competitiveness
- Shale Gas Extraction in the UK

## Past work

- Science as an open enterprise
- People and the planet
- Fuel cycle stewardship in a nuclear renaissance
- Brain Waves
- Human Enhancement
- The Scientific Century: securing our future prosperity
- Knowledge, networks and nations



## **Current work**

- · Crime, Punishment and Prisons
- Scotland and the UK
- Language needs for employment
- Open Access
- Underwater cultural heritage

## Recent work

- Soft Power
- Health Inequalities
- Pension provision in the UK
- Social science perspectives on the geological disposal of radioactive waste
- Challenges facing the Chinese economy

## Past work

- Human Rights and the UK
- Emerging Powers
- Language needs for security and diplomacy
- Raising household savings
- Inequality and diversity among older people
- School League Tables
- Trust and Business in Britain











## **Current work**

- Transport congestion
- Big data
- Urbanisation
- Space technologies
- Pathways to and from engineering higher education
- Learning and teaching resources for lecturers in engineering
- Computing education and digital skills
- Employer engagement: supporting teaching in schools, colleges and universities

## Recent work

- Wind energy: implications of large scale deployment on the GB electricity system
- GB electricity capacity margin
- Future ship powering options
- Shale gas extraction in the UK
- Skills for the nation: engineering undergraduates in the UK
- Jobs and growth: the importance of engineering skills to the UK economy
- Public procurement in the UK: sharing experience and changing practice
- Additive manufacturing: opportunities and constraints
- Smart buildings

## Past work

- Extreme space weather: impacts on engineered systems
- Engineering capacity in Sub-Saharan Africa
- Future of energy storage
- Heat: degrees of comfort
- Electric cars
- Global navigation space systems: resilience and vulnerabilities
- Global water security
- Synthetic Biology



## **Current work**

- UK public health in 2040: opportunities and challenges
- Team Science: reward and recognition for researchers
- Reproducibility of biomedical research
- European Regulations: Data Protection and Medical Devices
- Research & innovation in the NHS

## Recent work

- Stratified medicine
- Strengthening academic psychiatry
- Mitochondria replacement techniques
- Safety and efficacy evidence for medical devices
- Regenerative medicine
- Data safe havens

## Past work

- Strengthening the clinical research workforce and infrastructure
- Academia, industry and the NHS collaboration and innovation
- Biomedical research a platform for increasing UK health and wealth
- Regulation and governance of health research
- Animals in medical research
- Human enhancement and the future of work
- Rejuvenating ageing research
- Personal data for public good