



**UK Research
and Innovation**

UK Research and Innovation (UKRI)

Infrastructure Advisory Committee Call for Members

**Recruitment Pack
March 2020**

Closing date for applications: 24 May 2020 (Midnight)

Interviews will take place: 06 July 2020

Date of commencement of appointment: 03 August 2020

First IAC Meeting: Early-Mid November 2020 (TBC)



Call for Members – Infrastructure Advisory Committee

UKRI is seeking new members from across UKRI's stakeholder groups to join a new Infrastructure Advisory Committee which will provide advice and guidance on long term infrastructure investment priorities and prioritisation of investments. We are seeking members with strong interest or experience in research and innovation infrastructure planning or delivery, who have both deep expertise in their professional area and an ability to think strategically beyond their discipline.

Introduction

UKRI published a report *The UK's research and innovation infrastructure: opportunities to grow our capability* in November 2019. This report is intended as a strategic guide to inform investment decisions for the next generation of research and innovation infrastructure. It sets out future infrastructure landscape and identifies needs, opportunities and key themes that could be a major benefit to the UK's capability to 2030.

Building on this work UKRI is establishing a clear approach to prioritisation of major infrastructure investments and is assembling a new Infrastructure Advisory Committee (IAC) to support the process. The primary role of the Infrastructure Advisory Committee will be to provide advice to UKRI's Executive Committee and Board on long term infrastructure investment priorities and prioritisation of investments through the cross UKRI Infrastructure Fund (previously called Grand Challenges Funding).

This Fund supports step-changes in infrastructure capability and/or capacity (including new infrastructure¹, major upgrades, repurposing, transformative developments or decommissioning). It supports investments right across the disciplinary spectrum and from fundamental research to innovation focused activities. Investments may be located across the regions and nations of the UK or form part of major international collaborations. Such investments are often costly, may involve several UKRI Councils are not possible to accommodate through their core budgets. The research and innovation quality, impact potential, sustainability, including environmental sustainability and strategic importance are key considerations. Further details are subject to the outcome of future spending decisions. UKRI will publish further information on our website once this is available.

Membership of the IAC is being drawn from existing, relevant expert committees across UKRI including Council's Councils supplemented by additional members recruited through this process (see Annex A).

Responsibilities of the IAC

The responsibilities of the IAC will be to:

¹ We use an internationally recognised definition of [infrastructure](#): 'facilities, resources and services that are used by the research and innovation communities to conduct research and foster innovation in their fields. They include: major scientific equipment, knowledge-based resources, e-infrastructures.'



- a. provide advice to UKRI Executive Committee on the prioritisation of investments and portfolio options which meet the criteria of the UKRI Infrastructure Fund, including full infrastructure projects and associated scoping, design and pilot work.
- b. Keep a watching brief on delivery of the portfolio recommending refinements as investments move to implementation and further information about feasibility becomes known.
- c. Support UKRI in maintaining and developing our understanding of the UK research and innovation infrastructure landscape needs. This might include providing intelligence on the evolving landscape and identification of strategic gaps or emerging opportunities and input on wider trends in research and innovation which will be integral to infrastructure planning.
- d. Provide advice on the wider research and innovation infrastructure landscape as requested.

This recruitment

UKRI is recruiting for **up to three additional members** to complement the existing Committee membership. This open process will enable us to achieve a balanced and diverse range of expertise across the scientific disciplines, as well as capture the experience of different research and innovation systems in both the UK and internationally.

We are seeking expert members with strong interest or experience in research and innovation infrastructure planning or delivery, who have both deep expertise in their professional area and an ability to think strategically beyond their discipline, making connections across UKRI's broad remit.

IAC members will be drawn from across higher education, innovation and research organisations, industry and commerce, policy and/or civil society. **We welcome applications from all sectors and research communities and in particular from experts with industrial or commercial backgrounds and / or with an international perspective.**

Members are not required to act as representatives of their own organisation, research area, or industrial sector and are expected to adhere to the Seven Principles of Public Life (Annex B).

Please note that UKRI employees are not eligible to apply.

Application process

To apply, candidates should submit a CV (limited to two A4 pages) containing details of your professional qualifications, research, work experience, and/or other relevant experience to date and either a statement of interest in the role, or short covering letter (limited to two pages) to the infrastructure team (infrastructure@ukri.org) **by 12:00 (midnight) on Sunday 24 May.**

If you are interested in applying and have any questions, please contact the UKRI Infrastructure team: infrastructure@ukri.org



Successfully shortlisted applicants will be required to complete a Conflicts of Interest Declaration Form and an Equal Opportunities Monitoring Form and submit these via email before the interviews on 06 July 2020.

Once the deadline has passed, receipt of applications will be acknowledged. The selection panel (see below) will then review the applications against the person specification. The panel will agree which applicants will be selected for interview with successful applicants informed of the outcome by Friday 12 June. Interviews will take place on Monday 06 July (location TBC) and will include scope for remote participation if required.

At the final appointment stages, where applicants are as qualified on merit, the selection panel will seek to achieve a balanced membership in terms of, for example, diversity, expertise and experience. The Chair will make the proposed recommendation of appointments to the UKRI CEO for ratification.

The selection panel for IAC appointments will comprise:

- Professor Mark Thomson, Executive Chair, Science and Technology Facilities Council (Chair)
- Professor Melanie J Welham, Executive Chair, Biotechnology and Biological Sciences Council
- Dr Alex Marsh, Director of Strategy, Analysis and Performance, UKRI Strategy
- An Independent panel member (TBC)

A representative for the UKRI Infrastructure Team will attend to take the official record of the meeting.

Applicants will be informed of decisions by w/c 27 July 2020.

Meeting Arrangements

Availability

The Committee will usually meet formally twice per calendar year (between one and two days each) but this may be more frequent dependent on business requirements and as the new Committee establishes its working practices. Meeting arrangements will include scope for remote participation. In addition, it is expected that IAC members will need to commit between three and five days to review IAC work prior to, and in between, each of the formal meetings.

Urgent business may be handled via correspondence outside scheduled meetings with the Chair approaching all Members and requiring responses from at least half the external Members including the Deputy Chair.

In addition, the committee may be invited to participate in an annual workshop (involving a wider group) as part of work to 'horizon scan' for future trends and opportunities with implications for long term infrastructure planning.

All appointments would start from 03 August 2020 with an induction meeting / teleconference. Successful applicants will be invited to attend the first IAC meeting which will be two days in early-mid November 2020 (dates TBC).



External members will typically serve for between three and five years in the first instance, with the possibility of an extension to their term.

Remuneration

Please note this is not a salaried position, although reasonable T&S expenses will be paid in accordance with the [UKRI Travel and Subsistence Policy](#).

In accepting the invitation to join the IAC, all members are expected to agree to the Terms of Reference for membership and must abide by [UKRI's policy on conflicts of interest](#).

Equality, diversity and inclusion

UKRI is committed to equality, diversity and inclusion and welcomes applications from all. Applications from women, those with a disability and members of minority ethnic groups, who are currently under-represented at senior levels in the research and innovation community, are therefore especially encouraged.

General Data Protection Regulation

In accordance with the General Data Protection Regulation 2016/679 (EU) (GDPR), the personal information provided as part of the IAC application will specifically be used for the purpose of administering this call and aggregated anonymised data will be used for the purposes of monitoring our advisory and decision-making bodies. Analysis of the information will be viewed by UKRI staff only and personal information will not be used for any other purpose without your specific consent. For further information on how your information will be used, how we maintain the security of your information, and your rights to access information we hold on you, please contact the UK Research and Innovation Information Rights Team.

Timetable

Activity	Date
Opening Date	Monday 30 March
Deadline for applications	Sunday 24 May
Shortlisting Meeting	Monday 01 June
Shortlisting Decision Outcomes to applicants	By Friday 12 June
Interviews	Monday 06 July
Appointments confirmed by infra team	w/c 27 July
Appointment starts	03 August
First IAC meeting	Early-Mid November (TBC)

Please note, all dates are subject to change. Any updates will be posted on the [UKRI Infrastructure webpage](#) so please check this regularly.

Annex A – Current membership of the UKRI Infrastructure Advisory Committee

Member	Biography
Professor Edward Harcourt	Edward Harcourt is Director of Research, Strategy and Innovation at AHRC. He has been Fellow & Tutor in Philosophy at Keble College, Oxford since 2005. From 2014-18 served as head of the Oxford Philosophy Faculty, and remains a Director of Mind, Value and Mental Health: the Oxford Summer School in Philosophy and Psychiatry.
Professor Andrew Millar FRS, FRSE	Professor Andrew Millar was appointed Chief Scientific Adviser (CSA) Environment, Natural Resources and Agriculture in 2018. This is a part-time position and Professor Millar retains an academic position at the University of Edinburgh as Chair of Systems Biology and Associate Director of SynthSys. He is also a member of BBSRC Council. Professor Andrew Millar is an interdisciplinary biologist elected an EMBO member, FRS and FRSE between 2010 and 2013 for his research on the biological clock in plants. He grew up in Luxembourg before studying at Cambridge University and The Rockefeller University, New York. After postdoctoral research at the NSF Center for Biological Timing in Virginia, he joined the University of Warwick, before moving to the University of Edinburgh in 2005. Past roles have included: founding the SynthSys - Centre for Synthetic and Systems Biology; serving as Theme Director of Systems Biology in the Scottish Universities Life Science Alliance (2007-2009), and P.I. for GARNet (2004-2009), which represents roughly 200 laboratories of the UK's plant research community. His research interests include interdisciplinary research management, open research data, and macro-economic impacts on science.
Professor Mark Spearing	Professor S. Mark Spearing is the Vice-President for Research and Enterprise at the University of Southampton. Previously he has been the Pro Vice-Chancellor (International), and Head of the School of Engineering Sciences, having been appointed as the Professor of Engineering Materials in 2004. Prior to his appointment at Southampton he was a Professor of Aeronautics and Astronautics at the Massachusetts Institute of Technology, from 1994-2004, receiving tenure in 2001 and being promoted to a Full Professorship in 2004. His technical interests

	<p>focus on the development of, and design with materials for engineering applications. His research over the past decade has focused on understanding the micromechanisms of fracture and fatigue in composite materials, using high resolution computed tomography in conjunction with advanced modeling approaches. Spearing is a member of the Technical Advisory Group for the UK's Aerospace Technology Institute. He is a trustee of the UK's Faraday Institution. He chairs the National Research Foundation of Singapore's Fellowship Evaluation Panel. He is a past chairman of the American Institute of Aeronautics and Astronautics Materials Technical Committee, and is a life member and associate fellow of AIAA and a fellow of the Royal Aeronautical Society. He is an editor of the Journal of Composite Materials. He has published over 200 technical publications, including more than 130 in archival journals. He holds 5 patents.</p>
<p>Professor Anna Vignoles FBA</p>	<p>Anna Vignoles is a Professor of Education at the Faculty of Education, University of Cambridge, a Fellow of the British Academy, and a trustee of the Nuffield Foundation. Anna undertakes research into how we can improve students' academic achievement and help them develop the skills they need in the labour market. She has a particular interest in researching the inequalities we see in access to education (globally) and, in the UK context, the lower levels of educational success of children from poorer families. She also studies the economic and social outcomes from education. Anna has been advisor to Dame Shirley Pearce's Teaching Excellence Framework review, is on The Sutton Trust Advisory Board and has advised numerous government departments, including the Department for Education, the Department of Business, Innovation and Skills and HM Treasury.</p>
<p>Professor Dame Julia King (Baroness Brown of Cambridge) CBE, DBE, FRS, FREng</p>	<p>Baroness Brown is an engineer. An academic career at Cambridge University, including 7 years as the first Fellowship of Engineering Senior Research Fellow, led to senior business and engineering roles at Rolls-Royce plc. Returning to academia as Principal of Engineering at Imperial College, she served as Vice-Chancellor of Aston University from 2006 - 2016.</p> <p>Her current interests include climate change adaptation and mitigation and the low carbon</p>

	<p>economy. She serves as: Vice Chair of the Committee on Climate Change (CCC), where she leads on transport issues, and Chair of the Adaptation Sub-Committee of the CCC; Chair of the Carbon Trust; non-executive director of the Offshore Renewable Energy Catapult; Council member of Innovate UK. She led the King Review for the Treasury on decarbonising transport (2008), was the Prime Minister's Business Ambassador for Energy for 10 years, and is the Sector Champion for the Offshore Wind Sector Deal as part of the Government's Industrial Strategy.</p> <p>She is passionate about education and engineering: she was a member of the Browne Review on university funding and Lord Stern's review of the Research Excellence Framework. She chairs STEM Learning Ltd., the leading provider of science teacher continuing professional development, and the Henry Royce Institute for Advanced Materials.</p> <p>She is a Fellow of the Royal Academy of Engineering and of the Royal Society, and was awarded DBE for services to higher education and technology. In 2015 she was made a crossbench Peer, and is a member of the House of Lords European Union Select Committee.</p>
<p>Professor Patrick Chinnery FRCP, FRCPATH, FMedSci</p>	<p>Patrick Chinnery is Professor of Neurology and Head of the Department of Clinical Neurosciences at the University of Cambridge and clinical neurologist at Addenbrooke's Hospital. A Wellcome Trust Principal Research Fellow, his research lab is based in the MRC Mitochondrial Biology Unit. He is known for his expertise in rare inherited diseases that affect the nervous system. His lab has been studying the genetic basis of mitochondrial disorders for over two decades, harnessing the power of whole genome sequencing and developing new treatments. He jointly chairs the NIHR BioResource for Translational Research in Common and Rare diseases, and is Clinical Director of the Medical Research Council.</p>
<p>Nigel Bird</p>	<p>Nigel Bird is SRO for the Antarctic Infrastructure Modernisation Programme at the Natural Environment Research Council (NERC) and NERC's Chief Operating Officer. NERC is part of UK Research and Innovation. Prior to his current role Nigel has served as the Programme Director of the RRS Sir David</p>

	<p>Attenborough and the finance director of ESRC and NERC.</p> <p>Nigel Bird is a Fellow of the Association of Chartered Certified Accountants, has a degree in Biology and an MBA in Global Business Strategy. Nigel has worked in senior leadership positions within the Research Council's for almost twenty years.</p> <p>Alongside finance leadership roles Nigel's key project achievements to date include leading teams delivering: the successful design, build and operations of RRS James Cook and RRS Discovery; purchase and operation of BAE 146 Atmospheric Research Aircraft; creation and operation of the finance elements of UK SBS, reconfiguration of the Centre for Ecology and Hydrology, Understanding Society the UK Household longitudinal study and a handful of large research buildings and facilities.</p>
<p>Alex Herbert</p>	<p>Alex is Associate Director of Research Funding at Research England where she sits on the Executive Team. An experienced policy professional, Alex was recruited to the Civil Service Fast Stream in 2006. She spent several years in the Treasury before moving to the Higher Education Funding Council for England (HEFCE) in 2012. Alex has played a fundamental role in shaping HEFCE and Research England's strategic direction in research funding. Alex has oversight of Research funding and infrastructure related policy, including the £1.6 billion QR budget and the £900 million UK Research Partnership Investment Fund. She has overseen four rounds of the UKRIF scheme and was a member of the Programme Board for the development of the infrastructure roadmap.</p>
<p>Dr Steven Hill</p>	<p>Steven Hill is Director of Research at Research England. Steven was formerly Head of Research Policy at the Higher Education Funding Council for England (HEFCE), and leads on all aspects of research policy and funding.</p> <p>Steven is responsible for research funding, including quality-related funding (QR), general capital funding and the UK Research Partnership Investment Fund (UKRPIF). He also leads Research England's research assessment and policy work, and is the chair of the steering group for the 2021 Research</p>

	<p>Excellence Framework (REF). Policy responsibilities include research integrity, public engagement and open research, and Steven contributes to debates and discussions at home and overseas on the enhancement and assessment of research impact. His team also includes Research England's analysis function.</p> <p>Steven has a degree in Natural Sciences from the University of Cambridge, and a PhD in plant biology from the University of Edinburgh. After a number of research posts, he was appointed to a lectureship in plant science at the University of Oxford, where he taught and researched for eight years. He then shifted career tracks into the world of policy-making, with two roles at the Department for Environment, Food and Rural Affairs, focusing on bringing science and research into policymaking. Subsequently, he was appointed Head of the Strategy Unit at Research Councils UK, and then took up the post of Head of Research Policy at HEFCE in 2013.</p>
<p>Professor Sheila Rowan MBE, FRS, FRSE, FInstP</p>	<p>Professor Sheila Rowan is Chief Scientific Adviser. This is a part-time position within the Scottish Government. Sheila also remains Director of the Institute for Gravitational Research, University of Glasgow, a position she has held since 2009.</p> <p>As CSA Scotland, Sheila champions the use of science to inform policy development. She works closely with the Scottish Science Advisory Council, of which she is an ex officio member, to help ensure that the Scottish Government has access to the best scientific advice to inform its work across all policy areas. The CSA is also a keen advocate of our world-leading science base, and its potential to benefit the economy, people and environment.</p> <p>Sheila's research is targeted at developing optical materials for use in gravitational wave detectors, and her recent work has been a crucial part of the Advanced LIGO upgrades, carried out between 2010 and 2015, that contributed to one of the most significant scientific breakthroughs of this century: the first detection of gravitational waves announced in February 2016. This resulted in a share of the 2016 Special Breakthrough Prize in Fundamental Physics for her and the members of her team in Glasgow.</p>

	<p>Sheila was elected a Fellow of The Royal Society in 2018. She is the President-elect of the Institute of Physics and is Chair of Natural Philosophy at the University of Glasgow.</p>
<p>Dame Frances Saunders DBE, CB, FREng, FInstP</p>	<p>Following her graduation from Nottingham University, Frances worked as an Electronic Engineer in the motor industry before joining the Royal Signals and Radar Establishment at Malvern as a research scientist in the Liquid Crystal Devices team; the subject for which she received her PhD. She then held a wide variety of research and science and technology leadership roles within MOD establishments and in DTI (now BEIS), where she oversaw the interface with the Research Councils. Whilst working with the RCs she established the Diamond Light Source, supported the activities of the British Antarctic Survey and represented the UK on the Council for CERN and at the OECD Global Science Forum. She also worked with RCUK to develop its roadmap for large facilities. The culmination of her Civil Service career was as Chief Executive of Dstl, (MOD's Defence Science and Technology Laboratory) which she held from 2006 until her retirement in 2012.</p> <p>Frances was a founding Non-Executive Director of Ploughshare Innovations Ltd, the subsidiary of Dstl she set up in 2006 to exploit its intellectual property. She has experience as an NED of technology start-ups and innovative small companies.</p> <p>Frances now has a portfolio of advisory and voluntary positions. She was President of the Institute of Physics from October 2013-15, and a Trustee of the Royal Academy of Engineering and of the Engineering Development Trust and is still involved in RAEng activities concerned with innovation and supporting engineering leadership. She currently chairs advisory boards for the Cockcroft Institute and the Sensors and Metrology Quantum Technology Hub and sits on advisory boards for the UK Space Agency and NPL. She is a member of STFC Council and Chairs its Facilities Strategic Advisory Group, FSAG.</p>
<p>Dr James Hetherington</p>	<p>James Hetherington has been appointed as UKRI's new Director of e-Infrastructure. James has a PhD in computational particle physics from Cambridge and has extensive</p>

	<p>computational research experience in fields across the research councils, including computational physiology, environmental impact modelling, and digital humanities. His previous roles have included Head of Research Software Engineering at UCL and Director of Research Engineering at the Alan Turing Institute. He was founding chair of the UK Association of Research Software Engineers, is a Fellow of the Software Sustainability Institute, and has advised BBSRC, STFC, JISC, and EPSRC on research software issues.</p>
<p>Dr Bryony Butland</p>	<p>Dr Bryony Butland joined UKRI to lead the cross cutting work on infrastructure and the development of the UK Research and Innovation Infrastructure roadmap which worked across UKRI Councils and beyond with other key bodies within the UK landscape such as NPL, MET Office and UK Space Agency.</p> <p>Bryony started as a researcher completing her PhD in Genetics with a follow on postdoc in a biotech company designing high throughput genetic screening techniques with engineers and roboticists. She joined the UK civil service in 2003 working across government in a variety of roles including strategy work for the Department of Energy and Climate Change; Public Health policy and programmes in Department of Health; set up of Innovate UK in DTI; Horizon Scanning projects for the Government Office for Science's Foresight Programme – on childhood obesity and technology horizon scanning in particular – and work on Civil Contingencies for the Cabinet Office.</p> <p>Most recently based in BEIS she has worked on the impact of Government investment in research and innovation; acted as departmental sponsor of the UK Space Agency; led aspects of the setup of UKRI including the Higher Education and Research Bill and led the BEIS input on research and innovation in recent spending reviews. The majority of her Government roles have focused on science policy or the use of research in government including involvement in 4 Government science and innovation strategies, research commissioning and review panels. She was awarded an OBE for services to science in 2016.</p>



Professor Mark Thomson

Mark Thomson is Executive Chair of the Science and Technology Facilities Council, one of the component organisations of UK Research and Innovation. Mark joined the organisation on 01 April 2018 when UKRI came into being. Within UKRI, Mark is the Senior Responsible Officer for research and innovation infrastructure and led the development of its Infrastructure Roadmap programme.

Mark is Professor of Experimental Particle Physics based at Cavendish Laboratory, University of Cambridge and has an extensive background researching high energy particle physics. He has held national and international research leadership roles at the forefront of particle physics across a number of areas, including collider physics and neutrinos. Most recently, he has been the co-leader of the Deep Underground Neutrino Experiment (DUNE), a collaboration of over 1000 scientists, working towards the construction of a major new project in the US. Professor Thomson was the scientific lead for the recent £65M UK investment in DUNE, which secured the UK's leading role in the construction of DUNE. In addition to his own research, Professor Thomson has held numerous research oversight roles both in the UK and abroad.

Beyond his own research, Professor Thomson has held numerous research oversight roles in the UK and abroad. He has worked closely with STFC in various capacities, including chairing its main peer review body. In 2013, he published "Modern Particle Physics", a textbook that has been widely adopted for undergraduate courses at universities around the globe.



Annex B – The Seven Principles of Public Life

In 1995, the Committee on Standards in Public Life defined seven principles, which should underpin the actions of all who serve the public in any way.

Consistent with the Commissioner’s Code of Practice, applicants will be assessed on merit, and all candidates for public appointment will need to uphold the standards of conduct set out in the Seven Principles of Public Life. These will be tested as part of the selection process and the selection Panel must satisfy itself that all candidates for appointments can meet these standards; which are:

Selflessness

Holders of Public Office should take decisions solely in terms of the public interest. They should not do so in order to gain financial or other material benefits for themselves, their family, or other friends.

Integrity

Holders of public office should not place themselves under any financial or other obligation to outside individuals or organisations that might influence them in the performance of their official duties.

Objectivity

Carrying out public business, including making public appointments, awarding contracts, or recommending individuals for rewards and benefits, holders of public office should make choices on merit.

Accountability

Holders of public office are accountable for their decisions and actions to the public and must submit themselves to whatever scrutiny is appropriate to their office.

Openness

Holders of public office should be as open as possible about all the decisions and actions that they take. They should give reasons for their decisions and restrict information only when the wider public interest clearly demands.

Honesty

Holders of public office have a duty to declare any private interests relating to their public duties and to take steps to resolve any conflicts arising in a way that protects the public interest.

Leadership

Holders of public office should promote and support these principles by leadership and example.