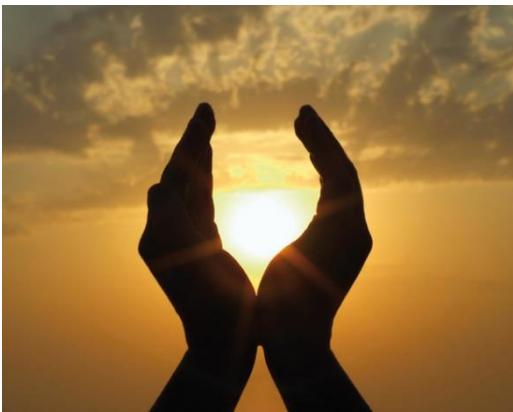


# Alexandra Vincent

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Research Councils UK



# UK Research and Innovation transition

# UKRI Staff Appointments

Chief Executive Designate – Sir Mark Walport



UKRI Strategy Director – Rebecca Endean

UKRI Programme Director - Anne Dixon



Andrew Thompson first Executive Chair



# Global Challenge Research Fund

# Global Challenges Research Fund



*Cutting edge research which addresses the problems faced by developing countries*

2015 Government Spending Review Outcomes

- Address global challenges through disciplinary and interdisciplinary research
- Strengthening capability for research and innovation, within developing countries and the UK
- Agile response to emergencies and opportunities

# Global Context



# UK Context

## UK Aid Strategy

- Strengthening global peace, security and governance
- Strengthening resilience and response to crises
- Promoting global prosperity
- Tackling extreme poverty and helping the world's most vulnerable



UK aid:

tackling global challenges in the national interest

Cm 9163

November 2015

# Research agenda for enabling change

## ***Equitable access to sustainable development***

to create new knowledge and drive innovation that helps to ensure that everyone across the globe can prosper through access to health, food, water, education, energy etc.

## ***Sustainable economies and societies***

to identify new responses to the challenges arising from changes in population, technology, consumption and pressure on the environment

## ***Human rights, good governance and social justice***

to understand how to strengthen the institutions that underpin peaceful societies, good governance, respect for human rights and the rule of law.

# Investment criteria

- ✓ **Official Development Assistance (ODA) compliance**  
meeting OECD guidelines
- ✓ **Problem and Solution Focused**  
strengthened through involvement of partners in developing countries
- ✓ **Research Excellence**  
particularly new approaches not constrained by traditional methodologies or disciplinary silos
- ✓ **Impact**  
substantial contribution to improved social welfare, economic development, and environmental sustainability in developing countries.
- ✓ **Capacity Building and Partnership**  
forging strong and enduring partnerships between UK and the Global South and by enhancing the research and innovation capacity of both.
- ✓ **Agile Response to Emergencies**  
building research evidence to support humanitarian and policy responses to disasters, crises and emergencies.

# Research agenda for change (1)

## *Equitable access to sustainable development*

Our vision is to create new knowledge and drive innovation that helps to ensure that everyone across the globe has access to:

- Secure and resilient food systems supported by sustainable marine resources and agriculture
- Sustainable health and well being
- Inclusive and equitable quality education
- Clean air, water and sanitation
- Affordable, reliable, sustainable energy

## Research agenda for change (2)

### ***Sustainable economies and societies***

Our ambition is to identify new responses to the challenges arising from changes in population, technology, consumption and pressure on the environment:

- Sustainable livelihoods supported by strong foundations for inclusive economic growth and innovation
- Resilience and action on short-term environmental shocks and long-term environmental change
- Sustainable cities and communities
- Sustainable production and consumption, e.g. materials and other resources

## Research agenda for change (3)

### *Human rights, good governance and social justice*

Our goal is to understand how to strengthen the institutions that underpin peaceful societies, good governance, respect for human rights and the rule of law. We need new insights to help:

- Understand and effectively respond to forced displacement and multiple refugee crises
- Reduce conflict and promote peace, justice and humanitarian action
- Reduce poverty and inequality, including gender inequalities

# Industrial Strategy Challenge Fund

# What is the ISCF?

- Initially delivered by Innovate UK and the Research Councils, this will be managed by UK Research and Innovation once it is established.
- Programmes delivered by the fund will be industry-led and powered by multi-disciplinary research and business-academic collaboration.
- The Industrial Strategy Challenge Fund will:
  - Help the UK capitalise on its strengths;
  - Support business-led collaborations with coordinated research efforts;
  - Identify challenges that may well cut across boundaries of research;
  - Focus on areas with the potential to transform existing industries and create entirely new ones.

# What is the ISCF?

- The ISCF is a fund designed to identify R&D focussed challenges across emerging and incumbent sectors that if met could result in large economic returns for the UK. It will be a significant part of the government's £4.7 billion increase in research and development over the next 4 years.
- The ISCF will invest in solving these challenges by bringing together the UK's research excellence with its innovation ecosystem through strategic management and leadership under UK Research and Innovation (UKRI).
- Industry involvement in ISCF challenges is critical, because solving the challenges is all about opening up emerging or existing markets where the UK could become a world-leader. Challenges need to be shaped by the needs of business and researchers and must be delivered with co-investment from industry.
- The challenges will be led within UKRI by Challenge Directors – experts in their field who will have significant decision making power over how a challenge is delivered, and the portfolio of projects supported by the challenge funding.

# What has already been announced for 17/18?

- On the 21<sup>st</sup> of April the first six challenges to be supported through the ISCF were announced:
- To develop world leading batteries, designed and manufactured in the UK, to fully exploit the industrial opportunity of vehicle electrification (£252m)
- To develop first-of-a-kind technologies for the manufacture of medicines to accelerate patient access to new drugs and treatments (£197m)
- To develop AI and Robotic systems that can be deployed in extreme environments such as occur in off-shore energy, nuclear energy, space and deep mining (£93m)
- To develop next generation launch technologies and manufacturing and testing capabilities that will allow the UK to construct satellites and deliver payloads into orbit (£99m)
- To develop the AI and control systems need to drive vehicles autonomously through complex environments (£38m)
- To develop the next generation of affordable light-weight composite materials for use in aerospace applications (£26m)