Executive summary:

The creation of UKRI has allowed the research councils, Innovate UK and Research England to speak with a more coordinated voice to Government and take responsibility for cross-Council identification and response to major societal challenges.

In *Growing Older, Better*, The Physiological Society recommended that ‘UKRI should develop programmes of work to promote research underpinning the biological processes of ageing across the research councils.’ In September 2021, BBSRC and MRC announced a joint-funding call ‘to enhance collaboration, building interdisciplinary communities and knowledge exchange in the field of ageing research’ with a focus on ‘integrative approaches leveraging the expertise of molecular, cellular, organismal and population level research offer the potential to identify key ageing pathways, biomarkers and intervention strategies.’

There is also concern among the physiology community regarding a declining focus on discovery-based science that is not focused necessarily on solving a global problem but builds knowledge that may have application in the future.

Consultation response:

Do you support the intentions behind the creation of UKRI and the 2015 Nurse Review? Why?

The Physiological Society supports the intentions behind the creation of UKRI. Despite a number of political administrations and shifting priorities since its inception, the creation of UKRI has allowed the research councils, Innovate UK and Research England to speak with a more coordinated voice to Government and take responsibility for cross-Council identification and response to major societal challenges.

Does UKRI act effectively as a single voice for the RD&I sector, and as a steward of the system?

While the significance and pervasiveness of mission- or challenge-led research in UKRI funding calls is welcome, we are concerned about the extent to which this is reflected in other parts of UKRI, not least the discipline-led Research Excellence Framework (REF) coordinated on behalf of all the UK’s higher education funding bodies.

Additionally, in The Physiological Society’s 2020 report ‘Translating UK knowledge and research into impact: Physiology and knowledge exchange’, The Society advocated for UKRI, in collaboration with BEIS and DIT, to invest in establishing a Global Coordinating Centre for Healthy Ageing Research and Development to focus on identifying world-class productive knowledge exchange between academia and public and private sectors. This would be designed to promote opportunities for physiologists to engage with networks throughout the RD&I system to address shared challenges, attract further investment and talent, and increase productivity in the UK health economy.

Has UKRI led to better links between parts of the RD&I sector? (Especially improving interdisciplinary research and linking academic research with private sector innovation)
The role of IDR to address research questions posed by global social, economic, ecological and political changes is widely recognised. Funding for research grants increasingly seeks interdisciplinary research teams, and there is significant overlap between mission- or challenge-led research and the need for interdisciplinary teams and approaches to address these challenges. The need for interdisciplinary skills and approaches is reinforced in the recent Innovation Strategy and Life Sciences Vision in response to interdisciplinary, mission- or challenge-led issues such as climate change and ageing.

**Is the split of UKRI’s funding between different activities, recipients and sectors appropriate?**

In 2019, as part of The Physiological Society’s evidence building for the report *Growing Older, Better* into ageing research, we noted that researchers were concerned about gaps in the funding structure between the more discovery-based science focus of BBSRC and the more disease-specific focus of MRC.

The Society and the report’s Expert Group, recommended that ‘UKRI should develop programmes of work to promote research underpinning the biological processes of ageing across the research councils.’ In September 2021, BBSRC and MRC announced a joint-funding call ‘to enhance collaboration, building interdisciplinary communities and knowledge exchange in the field of ageing research’ with a focus on ‘integrative approaches leveraging the expertise of molecular, cellular, organismal and population level research offer the potential to identify key ageing pathways, biomarkers and intervention strategies.’

This is just one example of where closer strategic alignment between research councils has allowed for more interdisciplinary, integrated responses from different parts of the research landscape. The retention of sector-specific funding bodies also gives different organisations within the RD&I sector, the opportunity to engage directly with sections of UKRI most interested in their research and policy priorities.

**Does UKRI have the right structure and delivery model for the functions it performs?**

n/a

**What reforms do you think could improve the way UKRI operates, or the role it plays within the RD&I system?**

Through the *Life Sciences Vision*, the target of 2.7% spend on R&D as a proportion of RD&I and the £20bn investment of public funding, the UK Government has demonstrated that it intends to put RD&I at the heart of the UK’s post-Brexit economy. As such, UKRI, through collaboration between Innovate UK and the research councils, should further promote the value of interdisciplinary working and capture the contribution of knowledge exchange as part of the funding process.

There is also concern among the physiology community regarding a declining focus on discovery-based science that is not focused necessarily on solving a global problem but builds knowledge that may have application in the future. The rapid development of the COVID-19 vaccine is one example of this.

**Is there anyone else external to government you think we should consult as part of the review?**

As part of the review, UKRI should ensure it receives input from organisations promoting EDI in RD&I and Early Career Researchers.