Minutes of UKRI-BBSRC Council meeting held on 16 March 2022 in London.

Those attending:

Steve Bagshaw Professor Ewan Birney (items 1-10) John Bloomer (via Zoom) Professor Anne Ferguson-Smith Professor Laura Green Professor Gideon Henderson Professor Martin Humphries (Chair of the meeting) Professor Andrew Millar Professor Andrew Millar Professor Christine Orengo Professor Malcolm Skingle Professor Melanie Welham (UKRI-BBSRC Executive Chair) Professor Ijeoma Uchegbu

Also attending:

Dr Amanda Collis Dr Karen Lewis Dr Sarah Perkins Bill Poll Dr Rosie Cornelius (UKRI Observer, items 1-9, via Zoom) Jaspreet Kular (item 8 only, via Zoom) Dr Theresa Meacham (item 8 only, via Zoom) Dr Jo O'Leary (item 10 only, via Zoom) Dr David McAllister (item 10 only, via Zoom) Ben Simmons (item 11 only, via Zoom) Sarah Cresswell Ksymena Grzybowska (Secretary)

ITEM 1. OPENING REMARKS

- 1. The Chair welcomed everyone to the meeting. This was the first face-to-face meeting of UKRI-BBSRC Council since the start of the Covid-19 pandemic.
- 2. The Chair welcomed Sarah Perkins, BBSRC Executive Director, Strategy, Planning, Evidence and Engagement, to her first Council meeting after her return from maternity leave in January 2022.
- 3. Apologies were received from Nigel Scrutton and David Stephens. David had stepped down from his role on Council in February 2022. This would have been David's last meeting and the Chair thanked him for his significant contributions during his membership on Council.
- 4. The Chair also thanked Laura Green for her valuable input during her time on Council. This was her last meeting and her membership was due to end on 31 March 2022.
- 5. The Chair updated Council members on the Council recruitment exercise. Two new members, Jo Price (formerly Vice-Chancellor of the Royal Agricultural College) and Steven Spoel (Head of Institute of Molecular Plant Sciences, Professor of Cell Signalling and Proteostasis at University of Edinburgh) would join UKRI-BBSRC Council on 1 April 2022. Council also noted that the Chair, Malcolm Skingle and Ewan Birney were reappointed for another term (3 years, 2 years and 4 years respectively).
- 6. Council was also informed that Melanie's appointment as UKRI-BBSRC Executive Chair had been extended until March 2023.

7. Members were reminded to check their details currently being held on the conflicts register, circulated by email before the meeting, update as necessary and send any changes to Council Secretariat. Members were asked to raise any conflicts arising during the course of the meeting.

ITEM 2. MINUTES OF THE MEETING HELD ON 7 DECEMBER 2021 (UKRI BBSRC 01/2022)

8. The minutes were agreed as a correct record of the meeting.

ITEM 3. PROGRESS ON ACTIONS AND MATTERS ARISING (ORAL)

- 9. The Chair went through the actions and the following updates were noted:
 - Actions relating to EDI (Action UKRI-BBSRC 62/2021- EDI action plan was on agenda for June 2022 meeting; Action UKRI-BBSRC 61/2021 – EDI updates in EC's report to Council when available) were in hand and could be taken off the action list.
 - Action UKRI-BBSRC 65/2021 (relating to sharing learning from Impact Acceleration Account process) and Action UKRI-BBSRC 66/2021 (relating to outcomes of the Innovation to commercialisation pilot) were ongoing.

ITEM 4. EXECUTIVE CHAIR'S REPORT (UKRI BBSRC 02/2022)

- 10. The Chair invited Melanie Welham to present her report to Council. Council noted a performance summary highlighting key achievements, future plans and a scorecard summarising progress against the Near-Term Actions (NTAs) set out in BBSRC's Delivery Plan as at the end of Quarter 3.
- 11. Council noted that National Engineering Biology Programme had a high impact score. All Synthetic Biology Research Centres (SBRCs) had been awarded funding to March 2022, as part of the SBRC supplementary funding exercise. Council discussed the importance of supporting existing centres and their strategic importance. BBSRC had contributed to the cross-Council SR activity in the area as a part of the Transformative Technologies SR theme and the National Engineering Biology Programme Business Case development was ongoing, supported by the UKRI analysis team.
- 12. All Synthetic / Engineering Biology-related awards (SBRC awards, Transition awards, and Breakthrough awards) were delivered and all applicants received notification of the outcome of the competitions. For the breakthrough awards, an additional £550k was secured through DSTL which allowed UKRI to co-fund 23 awards. This represented a success rate for this opportunity of 20.5%.
- 13. Council asked about the Engineering Biology Breakthrough Awards competition and noted that there were different interpretations of definitions and some ideas were deemed out of scope. This has been reflected on to ensure definitions are clear and community engagement remains high.
- 14. Council also noted the update on the timeline for the National Engineering Biology Programme and given Council's interest in this area, BBSRC would provide a couple of slides with an update and highlights.

Action UKRI-BBSRC 67/2022: BBSRC would provide a couple of slides with an update and highlights on the National Engineering Biology Programme.

15. Council noted that the NTA relating to the Strategic Priorities Fund had a moderate impact score. An outstanding issue remained around the need for agreement with the UKRI-Strategic Priorities Fund Team regarding grant no-cost extensions in recognition of Covid-19 delays. Evidence from grant holders suggested there could be significant qualitative impacts on outputs if extensions were not granted; however, the issue was at an impasse pending confirmation of SR21 allocations outcome. The scoring would be coming down once the allocations were confirmed.

- 16. At and post COP26 BBSRC was invited to show strategic intent to AIM-4C (Agriculture Innovation Mission for Climate) working in collaboration with BMGF, Defra, and FCDO, 31 countries were signed up to this so far. BBSRC signed up to the AIM- 4C campaign and attended some follow-up meetings to that effect. UK was a signatory to the deal for domestic and overseas agriculture research. The lead in the UK was FCDO.
- 17. Council noted that the BBSRC Annual Strategic Workshop (ASW) would be held in June or in September 2022. [Post meeting note the ASW was moved from June to 30 September 2022, Council will be meeting the day before].
- 18. The Chair thanked Melanie for the report.

ITEM 5. UPDATE FROM UKRI (ORAL)

19. Rosie Cornelius updated Council on the Spending Review allocations and next steps, UKRI's Strategy, the ongoing reviews (namely Paul Nurse's review of the landscape, David Grant's review of UKRI and Adam Tickell's 'bureaucracy' review), as well as development of UKRI's Target Operating Model.

ITEM 6. UPDATES FROM GOVERNMENT DEPARTMENTS AND THE WIDER CSA NETWORK (ORAL)

- 20. Gideon Henderson (DEFRA CSA) shared his updates with Council. They related to the following:
 - Delays in Horizon Europe association Council noted that UKRI had a programme of work in case of non-association.
 - National Science and Technology Council (NSTC) Gideon emphasised the importance of engaging with NSTC and driving the agenda.
 - Situation in Ukraine it was noted there was an appetite to support Ukrainian researchers (academic exchanges and sharing facilities) via Cara (the Council for At-Risk Academics funded by universities that provided urgently needed help to academics in immediate danger). Action UKRI-BBSRC 68/2022: relay message about support for Ukrainian researchers via Cara to UKRI Task Force led by Karen Salt.
 - Paul Nurse's Review of the Landscape Council discussed the balance of funding between Institutes and university sector in the UK in comparison to other European countries such as Germany.
 - Levelling up
 - Adaptation important for Research Councils to recognise where R&D needs are in adaptation.
 - DEFRA's large programmes including: Data (making operational data accessible to researchers and the need to change the culture that currently does not recognise critical data skills), Natural Capital and Ecosystem Assessment, Net Zero R &D programme, Farming Innovation Programme, Net Zero Agriculture and Nutrients.

ITEM 7. REFLECTION ON BBSRC'S PORTFOLIO AND HIGHLEVEL MESSAGING (UKRI BBSRC 03/2022)

21. Melanie introduced this paper by saying that it was timely to reflect on BBSRC's funding portfolio in the context of first UKRI Strategy, Spending Review Allocations, BBSRC Strategic Delivery Plan and BBSRC's priorities. Melanie gave an overview of BBSRC and its remit spanning from molecules through to population studies and emphasised its unique role such as underpinning much of current research, providing national capability and expertise in key strategic areas through BBSRC strategic cally funded Institutes. Council noted the overview of annual spend for 2020/21, key messages and case studies highlighted in the presentation.

22. Council members were invited to reflect on the composition and balance of the current BBSRC portfolio set out in the paper. Council made positive comments about Institute responsiveness to challenge areas, evidence of translation, their key role in plant science and life sciences. Council noted that it would be useful to see a skills output matrix and think more about proximity to commercialisation (its stages, impact and storytelling). Council reflected where BBSRC was on its path and discussed linking research culture and diversity with research quality and providing evidence that UKRI and BBSRC are delivering in key areas such as climate change.

ITEM 8. STRATEGIC DELIVERY PLAN DRAFT (UKRI BBSRC 04/2022)

- 23. The Chair welcomed Theresa Meacham and Jaspreet Kular to the meeting and handed over to Sarah Perkins, who introduced this item. This paper provided a draft of BBSRC's refreshed Strategic Delivery Plan (SDP) building upon the comments received from Council on the outline plan in December 2021.
- 24. Council noted that the UKRI Board had asked Councils to submit draft SDPs to the 11 May 2022 Board meeting for initial review. [Post meeting note: this has been moved to the July UKRI Board meeting]. As the draft would evolve over the next two months, Council was offered a further opportunity to engage in early April. Council will be asked to sign off the final version of the SDP at the June 2022 meeting of Council.

Action UKRI-BBSRC 69/2022: A drop-in session would be arranged to consult Council on the near to final draft of the SDP in April 2022. Council will be asked to sign off the final version of the SDP at the June 2022 meeting of Council.

- 25. Council noted that the structure of the UKRI Strategy had changed (from 5 pillars to 6) since the submission of the draft SDP to Council and that BBSRC was developing a broad range of options for exemplars which could be inserted throughout the SDP based upon input from cross-office and Strategic Advisory Panel engagement.
- 26. Council members were invited to provide input and their comments related to the following:
 - including a statement about where BBSRC fits into the wider landscape recognising the importance of government spending, Higher Educational Institutions (HEIs) and strategically funded Institutes and being clear in the plan on how the strategy was going to be delivered in the context of UKRI and cognisant of Haldane Principle.
 - the importance of partnerships (also with government departments) and their key role
 - the levelling up agenda
 - incentivising collaboration between centres of excellence and the wider landscape and how BBSRC strategically funded Institutes can reach across the research landscape
 - providing translation and impact evidence
 - collaboration with Innovate UK and showcasing how Councils and Innovate UK can work together
 - emphasising driving cultural change and new ways of working
 - including more emphasis on early career researchers and their development into future leaders and collaborative leadership.
- 27. The Chair thanked Council members for their comments and noted that Jaspreet Kular, who joined the meeting, was back from maternity leave and thanked Theresa for her work whilst covering for Jaspreet.

ITEM 9. SPENDING REVIEW ALLOCATIONS: UPDATE SINCE THE DECEMBER MEETING OF COUN-CIL (UKRI BBSRC 05/2022)

28. The Chair invited Sarah Perkins to introduce this paper, which provided an update on the Spending Review 2021 (SR21) since the last Council meeting in December 2021. Council noted that Council-level allocation figures continued to be iterated with UKRI.

- 29. Council noted the summary on SR principles previously agreed by Council and a summary of UKRI Board and UKRI Executive Committee discussions to date and consensus on indicative allocations. It was noted that the SR process across UKRI had been productive.
- 30. Council noted the proposed redistribution of Council portfolios, pressures arising in FY2022/23 and beyond, and welcomed opportunities for greater collective join up across UKRI for fellowships and studentships, cognisant of the enthusiasm in government for programmes supporting talent. This was about working in more integrated ways across UKRI and providing opportunities for multidisciplinarity.
- 31. Council was informed that provisional allocations for Institutes were slightly higher because of additional funding to support rising energy costs.
- 32. Council discussed the reduction of the World Class Lab (WCL) funding in 2022 and 23 and noted that it increased significantly in future years. Cross-UKRI interdisciplinary response mode pilot to support bottom-up interdisciplinary ideas was considered to ensure there was sufficient funding and number of awards in the pilot.
- 33. In relation to additional allocations for cross-UKRI activities, Council discussed the balance of the strategic themes and noted that this was still under consideration.
- 34. Council also commented that overall strategic research does not recover in 2022/24, 2023/24 and 2024/25 and support was needed for tools and resources and data intensive science.
- 35. The Chair thanked Council members for their comments.

ITEM 10. UKRI DRAFT EDI STRATEGY (UKRI BBSRC 06/2022)

- 36. The Chair welcomed David McAllister and Jo O'Leary to the meeting and invited Melanie Welham to introduce this paper. UKRI was consulting widely on the draft UKRI EDI Strategy, with an open consultation running from 13 January to 28 March 2022. This session provided an opportunity for Council to discuss the draft UKRI EDI Strategy and provide feedback to share with the UKRI EDI team.
- 37. Council discussed the draft strategy and commented that it should contain a clear vision, goals and targets. Council considered barriers to application, evidencing change and the importance of benchmarking the progress. Council also talked about UKRI's unique role in contributing to understanding societal changes. Council felt it was important to have advocates and role models.
- 38. Council noted that Research Councils were reviewing their action plans and KPIs and that BBSRC's action plan would be discussed at a future Council meeting.

ITEM 11. BIANNUAL RISK UPDATE, REVIEW AND DISCUSSION (UKRI BBSRC 07/2022)

39. This section deemed business sensitive and was therefore recorded separately.

ITEM 12. OUTCOMES OF ANNUAL APPRAISAL OF COUNCIL'S PERFORMANCE 2021 (UKRI BBSRC 08/2022)

39. The Chair invited Ksymena Grzybowska to introduce this paper. Council noted the outcomes of the annual appraisal. Overall, comments from Council members were positive. Council members were clearer of their role as members and the role of Council as a whole, Council has been providing valuable advice and challenge to the Executive, was actively engaged in strategic discussions and balanced the portfolio and the multiple demands on BBSRC funding.

- 40. There were more positive responses to the question relating to connectivity with the wider UKRI and UKRI Board in comparison to the results from the last survey.
- 41. As expected, some of the responses reflected on the lack of face-to-face meetings due to the Covid-19 pandemic and its impact on effectiveness, networking, creative discussions, and onboarding new Council members. Council was keen on face-to-face meetings (March, June and September in-person meetings and December via Zoom this year and alternating Zoom with face-to face meetings next year) and asked that there was sufficient time to discuss agenda items and longer breaks to enable Council members to engage in informal discussions.

Action UKRI-BBSRC 70/2022: Council was keen on face-to-face meetings and asked that there was sufficient time to discuss agenda items and longer breaks to enable Council members to engage in informal discussions. (Ksymena Grzybowska).

42. Council suggested having a session with Institute Directors to discuss their SWOT analysis.

Action UKRI-BBSRC 71/2022: Council suggested having a session with Institute Directors to discuss their SWOT analysis.

ITEM 13. ANY OTHER BUSINESS AND FORWARD LOOK (UKRI BBSRC 09/2022)

43. Council noted the paper and suggested having a session on innovation (looking outside, sharing perspectives and discussing approaches to commercialisation).

Action UKRI-BBSRC 72/2022: Council suggested having a session on innovation (looking outside, sharing perspectives and discussing approaches to commercialisation).

Council Secretariat

May 2022

Annex 1

Council Dinner Discussion on 15 March 2022

Discussion topic: explore the role of bioscience research and innovation in tackling the climate and nature crisis and consider the following prompts during the evening:

- Lessons learnt from the Covid-19 crisis that could be applied.
- Is research and innovation going far enough, fast enough (gaps and potential future priorities)?
- Coordination, translation and partnership.
- Desired outputs and outcomes from the proposed UKRI programme.

Summary Notes

Lessons learned from Covid-19:

- A big investment on a big problem can deliver big outputs and tangible outcomes
- Urgency working in an agile way to deliver in a crisis (quick vaccine development)
- Resilience through diversity and cooperative competition data sharing among competing food companies enabled efficient management of the diverse national food supply chain

Is research and innovation going far enough, fast-enough?

Far enough? - things to consider

- Most GHG emissions from food systems come from the production side of the supply chain.
- Net zero interventions in agri-food should not only focus on mitigation, but should also address adaptation to the climate that has already changed.
- All aspects of biodiversity (species, genetics, functional) need to be addressed, including how these can be measured.
- Nutrient cycling in food systems (including nutrient recovery from food waste) and the link between nutrition and health.
- Viewing livestock beyond proteins other ecosystems functions, e.g., manure, digestion of human non-edible biomass (nutrient cycling in the biological system).
- Understanding people and behaviour need to invest in behavioural science.
- Agriculture has shifted from a balanced natural system to an artificial system reliant on synthetic fertilizers and having unintended consequences. We cannot transition to net zero by replacing one artificial system with another. We need to learn from the way biological processes in the natural system interact with physical and chemical processes and how these interactions respond to change.

Fast enough? - what could be better

- Climate is a major challenge and commitments are enshrined in legislation. UKRI needs to step up e.g., in the energy transition, rare metals, biomaterials and the biomass needed, plant-based solutions, transforming protein production (livestock and alternative proteins).
- Biodiversity tipping points are already being recognised, for example, pollinators are at risk of extinction as their biological cycles are getting out of synch with onset of spring flowering.

Coordination, translation, and partnership

- Levelling up balancing excellence with opportunities (promote excellence while also providing opportunities for others)
- Porosity move people across the sector; train people in the right areas and ensure they are in the right places

- Dealing with perceptions public acceptance of technical solutions, e.g., keeping livestock indoors to reduce GHG emissions and increases biosecurity
- Addressing agriculture and biodiversity from a landscape vision perspective 'what do we want England (the UK) to look like?'
- National Science & Technology Council what kind of technology should it be promoting?
- Coordinated funding of interdisciplinary research is needed for delivery of Net Zero

Annex 2

Agenda Item	Action Description	Owner	Delivery Date	Status
	Actions from 7 December 2021 meeting			
4.	Action UKRI-BBSRC 65/2021: Karen Lewis would share key learning once the Impact Acceleration Account process was completed.	Karen Lewis	When available	Ongoing
4.	Action UKRI-BBSRC 66/2021: Council would be updated on the outcomes of the Innovation to Commercialisation pilot.	Karen Lewis	When available	Ongoing
	Actions from 16 March 2022 meeting			
4.	Action UKRI-BBSRC 67/2022: BBSRC would provide a couple of slides with an update and highlights on the National Engineering Biology Programme.	Melanie Welham/ Emma Hudson		In hand
5.	Action UKRI-BBSRC 68/2022: relay message about support for Ukrainian re- searchers via Cara to the UKRI Task Force led by Karen Salt.	Melanie Welham	June 2022	In hand

8.	the hear to final draft of the SDP in April 2022. Council will be asked to sign off the final version of the SDP at the June 2022 meeting of Council.	Jaspreet Rular	April 2022	Completed
12.		Ksymena Grzybowska	Future Council meetings	Noted
13.	tors to discuss their SWOT analysis.	Ksymena Grzybowska	June and September 2022 Council meeting	Noted
13.	ing outside, sharing perspectives and discussing approaches to commercialisation).	Ksymena	Future Council meeting	Noted