Minutes from the Bioscience Skills and Careers (BSC) Strategy Advisory Panel meeting held on the 6th December 2017 at the Radisson Blu Edwardian Grafton, 130 Tottenham Court Road, London, W1T 5AY

Present at the meeting

Panel Members

Professor Ilaria Ballantuono (University of Sheffield) - Chair
Ms Samantha Aspinall (University of Leeds)
Professor Selwayan Saini (Inside Biometrics)
Dr John Elvin (MedImmune)
Professor Edward Wilding (University of Nottingham)
Professor Geraint Thomas (University College London)
Dr Tobias van der Haar (University of Kent)
Dr Karen Liu (Kings College London)
Professor Olena Doran (University of West of England)

BBSRC Staff

Dr David McAllister
Dr James Donald
Dr Robert Hardwick
Dr Karen Lewis
Mrs Nicola Cholod

Apologies received

Dr Nick Goldman (EMBL-EBI)
Dr Rebekah Smith-McGloin (Coventry University)
Rebekah Carr (UKRI)

Agenda

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<td>Oral</td>
<td>Welcome and Introduction The Chair welcomes the Panel and any new members.</td>
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<td>08/17</td>
<td>Minutes of the last meeting To note – Provide summary of the last BSC SAP meeting on 18th/19th May 2017</td>
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<td>Oral</td>
<td>Chairs Update Provide an update of the most recent RAP meeting and discuss any matters arising.</td>
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<td>09/17</td>
<td>David Phillips Mid Term Review Reports To note – Provide an overview of the recent mid-term review interviews</td>
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<td>Vulnerable Capabilities Review To note – Provide an overview of the recent review</td>
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<td>11/17</td>
<td>DTP Mid-Term Review &amp; Annual Report Analysis To update the Panel on the progress of the DTPs and CTPs to date.</td>
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<td>12/17</td>
<td>DTP3 To identify and define the objectives of the BBSRC DTP training beyond 2020 and discuss potential modes of implementation</td>
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<td>13/17</td>
<td>Bioscience Strategy Scenario Planning To provide an update on the strategy for UK biotechnology and biological sciences</td>
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OFFICIAL (PROTECT-POLICY)  BSC01/18

Oral UKRI Fellowship Programme

To provide an update on the current progress of the UKRI Fellowship Programme.

Objectives

- For SAP to discuss and interpret the findings of the DTP Mid Term Reviews, identify any gaps in the knowledge and recommend areas of action for BBSRC.
- For SAP to discuss the key messages to emerge from the DTP Mid Term Reviews and Annual Report analysis and suggest further analyses or work packs to address the areas identified.
- For SAP to identify and define the objectives of BBSRC DTP training beyond 2020 and discuss potential modes of implementation.
- For SAP to note and comment on the emerging conclusions from the biotechnology and biological sciences strategy development.

ACTIONS

For further details please follow corresponding hyperlink or see below.

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<td>BBSRC to include data on eligible and ineligible student applications in annual reports.</td>
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<td>BBSRC to further investigate the issues around success rates of BME students and agree a definition on BME between Research Councils and Research Organisations.</td>
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<td>The Panel recommended standardisation across the Research Councils of the question set and legality of the questions asked. BBSRC/RCUK/UKRI to review if the questions we ask are compliant with the new data protection legislation.</td>
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<td>BBSRC to include a question in the next survey regarding student wellbeing and what made the PhD satisfactory.</td>
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<td>BBSRC agreed to arranged additional meetings to aid the development of DTP3.</td>
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<td>What are the barriers to SME’s collaborating with the DTPs/CTPs?</td>
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<td>David McAllister to circulate the objectives of the group</td>
<td>Any Other Business</td>
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Actions from the last meeting

<table>
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<td>BBSRC to include reference to the Post-doc vision in the Pool Induction process</td>
<td>Completed</td>
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<td>BBSRC to input query regarding support of post-docs into strategic partnership conversations with the DTPs</td>
<td>Completed</td>
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<tr>
<td>BBSRC to finalise and publish a revised webpage and call for new members of the Bioscience Skills and Careers Postdoctoral Researcher Subgroup</td>
<td>Completed</td>
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<tr>
<td>BBSRC to consider the use of REPs to support widening participation</td>
<td>In Progress</td>
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ITEM 1: STANDING ITEMS

Welcome and Introduction to BBSRC SAP

1. The Chair welcomed the Panel to the meeting. This was Olena Doran’s first meeting.

Minutes of the Meeting on 18-19 May 2017

2. The minutes were circulated to Panel members for approval. Amendments were received and addressed by the office.

3. There was a discussion on the progress of the action points from the last meeting, in particular the structure and content of the student surveys. It was agreed that BBSRC should seek knowledge input from social scientists and look at their best practice for future surveys.

4. The Panel agreed the minutes of the last meeting.

Chair’s Update (Oral)

5. The Chair attended the RAP meeting and updated the Panel on the following items:
   - Vulnerable Capability Review took place and the Panel were requested to consider this in relation to the DTP3 discussion later in the meeting.
   - UKRI – a discussion took place on the structure of UKRI which comes into effect in April 2018 and where the role of BBSRC is in that structure and how we might integrate RAP into that structure.
   - Industrial Challenge Fund second call in Healthy Ageing.
   - Innovation Fellowships

David Phillips Mid Term Review Reports

6. This item was for the Panel to note. The Chair chaired the David Phillips mid-term review interview panel and although there were no particular things to note they were all very good and was a reflection on how well it works.

7. The Chair updated the Panel on the issue of research leadership and development and how this was covered during the course of the mid-term review interviews. The fellows were questioned on how they manage to establish themselves in the field beyond publications and collaborations and on how they develop their own people. Feedback was provided on areas that they needed to address and where there may be problems.

Vulnerable Capabilities Review

8. This item was for the Panel to note.

ITEM 2: DTP MID TERM REVIEWS AND ANNUAL REPORT ANALYSIS (BSC11/17)

9. Robert Hardwick introduced this item on how and why we invest in doctoral training, what we have done so far and looking ahead to the next Training Partnership competition in 2019.

10. An update of the progress of the DTPs and CTPs was given and the panel were invited to discuss and interpret the findings, identify any gaps in the knowledge and recommend areas of action for BBSRC.
11. The Panel was updated on the lessons learnt from the DTP mid-term reviews including administrative support, governance structures, clearly defined roles and responsibilities, external advisory boards and student representation and financial management. The Panel was invited to discuss the key messages to emerge from these exercises and suggest further analyses or work packages to address the areas identified.

12. The Panel discussed what may be the barriers to retain or upskill for those students over 30 as the overall age range for STEM research councils seems to be skewed towards the under 30’s. It is possible to carry out a part-time PhD heavily sponsored by industry and aligned as closely as possible with their career. The Panel considered a scheme of this nature would be enormously beneficial to universities and increase collaboration with industry.

13. The Panel raised the question regarding whether interviewers, supervisors and panel members undertake unconscious bias training when recruiting students, and also considered whether we still need to ask the questions regarding sexual orientation and disability due to information given being very sparse. It was agreed that BBSRC should still ask these questions.

14. A discussion took place regarding data on mental health and reason for the surge in students using the Research Organisations mental health services. The Panel considered that BBSRC should ask research organisations applying for DTP3 to include a summary of their mental health support functions as follows:
   - Number of support services available to students.
   - Is the DTP co-ordinator training to recognise mental health issues?

ACTION: BBSRC to include data on eligible and ineligible student applications in annual reports.

ACTION: BBSRC to further investigate the issues around success rates of BME students and agree a definition on BME between Research Councils and Research Organisations.

ACTION: The Panel recommended standardisation across the Research Councils of the question set and legality of the questions asked. BBSRC/RCUK/UKRI to review if the questions we ask are compliant with the new data protection legislation.

ACTION: BBSRC to include a question in the next survey regarding student wellbeing and what made the PhD satisfactory.

ITEM 3/4: DTP3 (BSC12/17)

15. Robert Hardwick introduced this item regarding the DTP3 (2020-2025) goal setting. The purpose of this item was to identify and define the objectives of the BBSRC DTP training beyond 2020 and discuss potential modes of implementation. The Panel was asked to consider the following questions:-
   - What are the big challenges for bioscience, the economy and society that doctoral training can help address and why are they important?
   - What specifically do we want to achieve with doctoral training and why?
16. The Panel participated in group discussions and the following points were raised:

- Academia needs to sit down with industry to design and develop studentships.
- A large amount of interaction with industry is required for the student to learn from them.
- Interdisciplinary and multi-disciplinary work.
- Engineer translation skills, designing things for a specific purpose.
- Incorporating digital methods as standard.
- Wellbeing and resilience.
- Being able to give students the opportunity to go overseas and use the training there that isn’t available in the UK. How can we incorporate this better into the scheme?
- BREXIT.

17. In groups, the Panel was requested to identify aspirations for future doctoral provision, to inform the emerging thinking around DTP3.

- We will assign assessment methods for research and transferable skills training for the purpose of aligning with career choices and opportunities.
- We will crowd source with industrial partners for the purpose of co-designing elements of our professional development programmes.
- We will link DTP with other government initiatives for the purpose of increasing productivity in British biosciences.
- We will embed science communication training for the purpose of disseminating skills into wider society.
- We will investigate induction programmes in research intensive companies for the purpose of embedding understanding of innovative industrial processes in the DTPs.
- We will incorporate bursaries within the DTPs for international training for the purpose of forging new, or exploiting existing, international collaborations.
- We will require evidence for commitment to best practice for recruitment and bias avoidance for the purpose of improving social mobility and access to degrees.
- We will promote initiatives which increase the number of people in under-represented groups for the purpose of addressing social mobility and diversity.
- We will create roadmaps for the purpose of career development and relevance.

18. It was noted that the development of DTP3 will require input from BSC over the year outside of the standard meetings.

**ACTION:** BBSRC agreed to arrange additional meetings to aid the development of DTP3.

**ITEM 5: BIOSCIENCE STRATEGY SCENARIO PLANNING, CONCLUSIONS AND RECOMMENDATIONS (BSC13/17)**

19. David McAllister updated the Panel on the strategy for UK biotechnology and biological sciences following the input provided by the Panel in March 2017. A number of observations are now emerging and are being analysed by an external body. Near-final versions will be presented to BBSRC Council on 14 December 2017.

20. As part of the development of the strategy, and future considerations of budget, the Panel was asked to consider the BBSRC training budget which is currently ~£50M per annum supporting studentships, fellowships and other sundry investments in talent.
21. The Panel was invited to note and comment on the emerging conclusions from the biotechnology and biological sciences strategy development.

22. The Panel was asked to consider:
   - The ‘right’ balance between studentships and fellowships (and other career stages)
   - The balance between the different mechanisms (or suggest alternative routes)
   - What would you recommend BBSRC do more or less of for the increase and decrease scenarios?

23. The Panel considered the following:
   - Fellowships compared to studentships is quite small.
   - Were Fellows previous BBSRC funded PhD students?
   - The proportion of fellows/students that end up in full time academic careers.
   - The proportion of PhD students that go on to secure employment that requires a PhD degree.

24. The Panel raised the following points:
   - More investment in fellowships providing the system can cope. Are positions in academia available for more posts?
   - The need for a secure pathway from PhD to elite researchers.
   - To look at when the best science/output is delivered (most accelerated) to decide when the funding would benefit their career the most.
   - PhD balance and the pros and cons of awarding the bulk of studentships to DTPs and CTPs. The Panel considered that SME’s are struggling to obtain collaborations with DTPs for awards.
   - Fellowships are needed to ensure a healthy research base of elite researchers.
   - More understanding and thoughts about what we would do rather than carry on with the status quo.
   - The use of translational fellowships to support innovation.
   - The Panel considered BBSRC would face reputational risk if we do not support fellowships as this is ‘important to maintain a pathway for BBSRC science remit’.
   - The Panel considered Future Leader Fellowships to be a higher priority than David Phillips Fellowships.

**ACTION:** What are the barriers to SME’s collaborating with the DTPs/CTPs?

25. If a sum of cash was provided the Panel would invest in:
   - High risk high gain fellowships
   - Industrial postdocs (CASE postdocs) in SME enterprise
   - Enterprise fellowships
   - SME support for involvement in the schemes
   - 50/50 funded industry postdocs
   - Establish extra international scheme for travel or training grants for postdocs
   - Funding to be able to travel dependent on Brexit

**ITEM 6: UKRI FELLOWSHIP PROGRAMME (ORAL)**
26. David McAllister updated the Panel on the UKRI Fellowships Programme. Funding has been allocated for fellowships and each research council is currently tasked with how to implement the funding.

27. Furthermore an additional 105 studentships, all relevant to the industrial strategy, have been awarded across our partnerships. 205 applications were received by BBSRC for 105 studentships.

28. Within the UKRI Talent workstream early development work is underway to explore future investments. The Panel was provided with a brief overview of the emerging thinking.

ANY OTHER BUSINESS

29. The meeting wrapped with a round-table summary of the key points to emerge from the meeting.

30. David McAllister requested volunteers for a group made up of BSC and BSI panel members for entrepreneurial thinking. The following Panel members volunteered:

- John Elvin
- Olena Doran
- Sam Aspinall
- Selly Saini

ACTION: David McAllister to circulate the objectives of the group.

31. The Chair thanked the Panel for their time and contributions to the meeting.

32. This was Selly Saini’s final meeting with the Panel, the Chair thanked Selly for his time and commitment over the past 3 years.

Close