**SSAC Meeting Wednesday 12 June 2013**

**Scottish Government, Conference Room 6, Victoria Quay**

**Edinburgh**

**Attending:** Professor Muffy Calder

Dr Chris Masters

Professor Nigel Brown

Professor David Cumming

Mr Stuart Farmer

Professor James Hough

Professor Julian Jones

Mrs Angela Mathis

Professor Jason Reese

Professor Andrew Morris (Chief Scientific Adviser, Health, Scottish Government) – for items 1-3 only

Professor Louise Heathwaite (Chief Scientific Adviser Rural Affairs and the Environment, Scottish Government)

Ms Diane Strachan (SSAC Secretariat)

Mrs Anna Milne (SSAC Secretariat)

Also attending as observers: Mr Ben Dipper (OCSA)

Mr Douglas Brown (OCSA)

Apologies: Dr John Brown, Professor Ian Boyd, Professor Ian Diamond, Professor Jon Oberlander, Professor George Salmond and Professor Marian Scott

**1. Welcome and apologies**

1. Professor Calder welcomed members to the meeting. She gave apologies from Professor’s Boyd, Diamond, Oberlander, Salmond, Scott and Dr Brown. Professor Calder noted that Lord Winston and Dr Greig were now no longer members of SSAC. She further noted that Dr Masters had agreed to continue as SSAC Independent Co-Chair for a further two years. Professor Calder welcomed Professor Louise Heathwaite, Chief Scientific Adviser for Rural Affairs and the Environment and Professor Andrew Morris, Chief Scientific Adviser for Health to the meeting. Both now had standing invitations to all future SSAC meetings.

**2. Presentation from the Chief Scientific Adviser in Health, Professor Andrew Morris and the Chief Scientific Adviser in Rural Affairs and the Environment Professor Louise Heathwaite**

2. Professor Calder introduced this item and invited Professor’s Heathwaite and Morris to given an introductory presentation explaining their background and their roles within Government.

3. Professor Heathwaite noted she was appointed Chief Scientific Adviser for Rural Affairs and Environment (CSA RAE) in September 2012. She is also Professor of Land and Water Science and Co-Director of the Centre for Sustainable Water Management in the Lancaster Environment Centre, Lancaster University. Her research interests are in diffuse nutrient pollution, wetland hydrochemistry, and water quality. She explained that her applied research interests cut across the environmental sciences to interface with social science and economics.

4. Professor Heathwaite highlighted to members that she works closely with Professor Calder and Professor Morris to champion and promote the use of science within policy making. Her other roles include:

* Quality assurance and independent challenge on use of science within the Rural Affairs and Environment portfolio
* Strategic engagement with UK and International scientific activity in Environment and Rural Affairs science ensuring the Scottish perspective is promoted. She noted that she is a member of NERC Council and the Defra Science Advisory Council. She is also on the Steering Board of the UK Collaborative on Development Science (UKCDS) and the expert panel for the UK National Ecosystem Assessment.
* Understanding of rural and environment science activity and capability across Scotland

5. Professor Heathwaite explained that she did not hold a budget but explained that the Scottish Government provides over £60 million of funding each year towards a portfolio of strategic Rural Affairs and the Environment Science and Research. Most of this research is carried out through the Scottish Government's Main Research Providers (MRPs) e.g. James Hutton Institute, Moredun, SRUC, BioSS, Rowett Institute of Nutrition and Health and RBGE.

6. Professor Heathwaite reported that she is also Chair of the CAMERAS partnership (Co-ordinated Agenda for Marine, Environment and Rural Affairs Science) whose membership comprises in Scottish Government - RESAS, Science Advice for Scottish Agriculture (SASA) and Marine Scotland Science together with SEPA, SNH, Scottish Water, Forestry Commission Scotland, Quality Meat Scotland and Food Standards Agency Scotland. She explained that CAMERAS was originally set up to ensure that science funded in these areas is better co-ordinated but she plans to have a fresh look at its focus going forward.

7. Professor Heathwaite concluded by summarising some of her current challenges and noted that she saw the role as continually evolving.

8. Professor Calder thanked Professor Heathwaite for her presentation and asked colleagues for any questions arising from the presentation. She led a short discussion about issues raised. Members discussed the importance of science within government. Professor Heathwaite raised the important role that the Centre’s of Expertise play in support of this work.

Professor Andrew Morris – CS Health

9. Professor Calder welcomed Professor Andrew Morris, Chief Scientist for Health. Professor Morris explained that the Chief Scientists Office (CSO) supports and promotes high quality research aimed at improving the quality and cost-effectiveness of services offered by NHSScotland and securing lasting improvements to the health of the people of Scotland.

10. Professor Morris reported that in 2013-14 CSO has a budget of almost £69 million to invest in NHS related research and support. He noted that major areas of investment included, research grants, research units and studentships. He reported that during 2013 the CSO would be refreshing their research strategy. Their vision was to drive quality improvement and economic growth in NHS Scotland through research. He explained that the strategy would build upon and develop the strong science infrastructure in Scotland through established routes such as the Academic Health Science Networks and NHS Research Scotland (NRS) to position Scotland as a health science nation. He noted that major areas of focus were; data linkage to support better treatment, safety and research, new and improved pathways for regulation and governance and collaborative arrangements with industry partners. He explained that key priorities for the new strategy would be improvement science, informatics, stratified medicine, capacity building and commercial research.

11. Professor Morris noted that CSO aims to deliver value for money through partnerships with other funding agencies and that Scotland was highly successful at leveraging funding. He highlighted for example that while Scotland has 8.5% of the UK population we receive 11.5% of UK health research expenditure. He further noted that Scotland contributed 8% of the total Office for Strategic Health Research (OSCHR) budget in 2011-12 but received a 15% return on that investment. Professor Morris concluded his presentation by highlighting a number of case studies.

12. Professor Calder thanked Professor Morris for his presentation and asked colleagues for any questions arising from the presentation. She led a short discussion about issues raised.

**3. Work Programme Update – GM**

13. Professor Calder reminded colleagues that at the last SSAC meeting in March members had agreed to undertake a piece of work to review the current scientific evidence around GMO research and technology and produce a short paper considering the potential economic benefits for Scotland.

14. Professor Calder reported that a working group had now been formed and Chaired by Professor Nigel Brown. Members of the group were confirmed as Professor Diamond, Professor Salmond and Dr Brown. Professor Calder noted that Professor Boyd had provided a deputy to support this group, Stuart Wainwright from Defra she further reported that Professor Heathwaite had also agreed to join the working group.

15. Since the last meeting the working group had undertaken an initial scoping exercise and drafted a scoping paper for SSAC members to consider.

16. Professor Calder reported that SSAC had been very pleased to welcome Professor Joyce Tait to the SSAC dinner the previous evening. Professor Tait had given a very informative presentation on some of the social science and regulatory issues surrounding the GM debate in a Scottish context.

17. Professor Calder then handed over to Professor Brown to present the scoping paper. Professor Brown presented the draft scoping paper and asked members, that in light of information presented and the discussion with Professor Tait, whether the work programme should in fact concentrate on Synthetic Biology to ensure that the focus of the workstream is the impact of novel biology on the Scottish economy. He suggested that many of the issues were closely related if not identical to GM. In addition he suggested that Synthetic Biology was more topical and had fewer entrenched proponents and opponents.

18. The group discussed the proposal and agreed that Synthetic biology offered many opportunities for Scotland especially when considering for contained use in the industrial biotech and pharmaceutical industries. It was agreed that Synthetic Biology raised many similar ethical and regulatory issues to GM that would need careful consideration. Members agreed that science underpinning Synthetic Biology was often poorly understood so it would be helpful for SSAC to review and present the current evidence. SSAC agreed that social science would continue to be a key component of this work. A member suggested that it would be important to consider not only the economic threats and opportunities but also the environmental ones and the Council agreed.

19. Members discussed the methodology for the workstream and agreed that a key component of the evidence gathering process would be engagement with key individuals from the (international) scientific community. Members agreed however that it would be important to engage with opponents as well as proponents of the technology and Council agreed. SSAC members suggested a list of possible stakeholders. The group agreed that engagement would take the form of a stakeholder event(s) and one to one meetings.

20. A member noted that there was a lot of activity in this area and members should be aware of other work going on across the UK they highlighted the BIS Agritech Strategy as an example.

21. Professor Brown reported that the group had suggested reviewing the evidence (suggesting what the opportunities and threats) in five main work areas i.e. research, medical/pharmaceutical, agricultural, industrial and public attitudes and societal acceptability. He suggested that these headings could also be applicable to Synthetic Biology. Professor Calder confirmed that SSAC would not look to gather the public’s views on synthetic biology rather they would examine the current evidence currently available on public acceptability.

22. SSAC discussed the resourcing of this workstream and agreed that the group would require a senior academic at post doc level to support the working group. This individual would assist by gathering and reviewing evidence and help draft the final report. Members suggested that they would require this resource intermittently over a six month period (September – March). The Co-Chairs asked members to consider whether they knew of suitable individuals from their organisations. It was agreed that this person would be based in their own organisation and not in Scottish Government.

23. The SSAC Secretariat agreed to investigate the process for appointing/contracting an individual to carry out this work.

24. Professor Calder thanked members for their input and confirmed that the Council had agreed to revise the focus of the workstream. The working group would now look to undertake a piece of work to review the current range of scientific evidence around Synthetic Biology research and technology. This would consider the science underpinning synthetic biology and the evidence for and against its use. The project will have a focus on the opportunities and threats for Scotland and in particular the economic and environmental opportunities and threats.

**5. Update Open Access and Data Response to the Finch Report**

*Open Access data*

25. Professor Calder reminded colleagues that she and Professor Jones had agreed to examine the current issues surrounding open access data associated with publically funded research. She noted that the SSAC had agreed that they would look in particular at the possible implications for key stakeholders in Scotland to raise awareness of potential issues arising from wider moves towards open access data.

26. Professor Calder suggested that the first step was to understand where universities were in terms of setting up processes. To that end she had asked members of SSAC from academic institutions to find out about their institutions policy and report back. Members reported on their organisations policy and it was clear that while most organisations had signed up to compliance with the RCUK agreement to develop a roadmap there had not been significant further action to date. Professor Reese reported however that an individual had been appointed at the University of Strathclyde to progress this issue and Professor Calder suggested that it would be helpful to talk to this person.

27. SSAC members agreed that there were currently no specific actions at this point but that they would continue to monitor the situation.

*Open Access Publications*

28. Professor Jones presented a draft SSAC response to the review of the Finch Report’ – Accessibility, Sustainability, Excellence: How to Expand Access to Research. SSAC members discussed the response and agreed the draft with number of small amendments. Members highlighted that potential impact on the learned societies.

**6. Implications for Science and the Independence debate.**

29. Dr Masters reminded colleagues that at the last meeting members had agreed to undertake a piece of work to consider what the possible implications for science and engineering could be in the independence debate. He noted that the aim of the workstream was to compile a series of pertinent issues, raised by the science and engineering community that will require to be considered in the course of the debate.

30. Dr Masters reported that since the last meeting the Co-Chairs had written to a large number of key stakeholders (approximately 90) within the science and engineering community to ensure that as many views as possible were represented. He noted that the list had included universities, learned societies, research pools trade bodies and a wide range of businesses. The responses had been collated and members were asked to consider a draft paper setting out the main themes and issues based on the responses received.

31. Dr Masters suggested that the timing for this piece of work was critical and in order to be helpful to Government and influence thinking this piece of work should ideally be completed by the end of summer and signed off at the September SSAC meeting.

32. Dr Masters made colleagues aware that the Scottish Government White Paper on Independence was likely to be published towards the end of 2013. He further noted that the BA/RSE were also holding a series of events to “Englighten the Constitutional Debate” and an event focusing on possible impacts of constitutional change upon science and higher education was due to take place on 17 October.

33. SSAC members considered the timing and presentation of this piece of work.

34. A member further suggested that it was important that there was ongoing dialogue with Government on this piece of work to make clear that SSAC intends this piece of work to be helpful to Government. The Co-Chair’s agreed and noted that they planned to meet regularly with key Directors as this work progressed.

**7. Minutes**

35. The SSAC agreed and approved the minutes of the last SSAC meeting held on 13 March 2013.

**8. Matters Arising**

*SFC Innovation Centres*

36. Professor Calder updated colleagues on the SFC innovation centres. She reported that the initial phase of Innovation centres were launched on 23 April the first three centres were in Stratified Medicine, Sensors and Imaging Systems and Digital Health. A second more targeted process was currently underway, which will focus on industrial sectors in which the potential for an innovation centre is likely.

*SSAC Self-Assessment Exercise*

37. Dr Masters reported that the Co-Chairs of the SSAC have agreed that Council will in line with good governance practice; undertake a self-assessment exercise to help bring benefit to Council performance. He explained that it was very timely given there has recently been a review of Departmental Science Advisory Council’s in Whitehall.

38. Dr Masters reported that the self-assessment exercise will take the form of a questionnaire which has been designed to identify the strengths and weaknesses within the Council meeting process in order to facilitate changes and improvements where necessary. The questionnaire has been designed by the Secretariat and in the first instance the exercise will be conducted without external resources.

39. Dr Masters explained that the Secretariat would be circulating the questionnaire to members shortly and asked that all members complete the exercise. Responses to the questionnaire will remain anonymous and analysis of the results and issues will be presented to Council in due course.

**9. Media Update**

40. Dr Masters introduced this item. No media items were reported.

**10. Chair/Member Updates**

41. Members updated colleagues on topics of interest from their areas.

**12. Date of the Next Meeting**

The next SSAC dinner and meeting would be held on the 10-11 September in Edinburgh.

SSAC Secretariat

June 2013