

Animal Bioscience Research in Scotland Workshop

The specific aims of this Workshop are examine current areas of animal bioscience research in Scotland, focusing on:

- **New technology**
- **Animal disease**
- **Food safety**
- **Comparative medicine**
- **Biosecurity and surveillance**
- **Welfare, ethics and society**

Through formal presentations and discussion sessions, we wish to explore each of these issues in the following contexts:

- **the current global/national priorities in these areas;**
- **perceived opportunities for Scotland in terms of fundamental and applied research, exploitation and the training of the next generation of scientists and engineers; and**
- **areas where Scotland might be able to establish a position of leadership in the UK, EU and global contexts.**

The outputs from this Workshop will inform the ongoing work of the SSAC in relation to identifying areas of scientific excellence in Scotland. The SSAC believes that Scotland can enhance its research capability through multidisciplinary research activity which will promote Scotland's research excellence to the rest of the world.

Background Briefing on Animal Bioscience in Scotland

Scotland has, for many decades, made a significant impact on animal bioscience across the world. The main contributors to this are the Scottish universities, including the two veterinary faculties in Glasgow and Edinburgh, and the research institutes funded by SEERAD and BBSRC. Outputs have ranged from the introduction of new cloning technologies, to development of novel vaccines, and to modelling infectious disease outbreaks for improved future control programmes. This area of science continues to develop in Scotland and exciting initiatives are currently underway at both national and regional levels to enhance the impact of animal science for the benefit of animal, humans and the economy.

Recent years, even weeks, have demonstrated that the role of animal bioscience will remain at the forefront of policy and strategy with regard animal and human disease control. Foot and Mouth Disease, E coli O157, Newcastle Disease, Avian Influenza, Bovine TB are a few examples of where disease and infection in animals has a direct impact not only on the target species, but also the wider agricultural industry and potentially catastrophic effects on national economy through allied industries, such as tourism. Human public health and advances in our understanding of disease processes also rely on the pivotal role played by the animal bioscientist.

Notwithstanding local pooling and initiatives funded by other agencies and bodies (SEERAD, SFC, BBSRC), there remains no cohesive strategy across the breadth of animal biosciences (ethics, basic biology, applied, veterinary) that embraces all institutions active in the field within a distributed Centre of Scientific Excellence. With a flawed high school level perception of what it is to be a “scientist” in this domain, as in others, and with student application numbers static and career progression uncertain even in historically popular subjects such as veterinary medicine, this workshop is charged with identifying topics and areas which might be used to market the domain more effectively – exciting, challenging and with established role models.

Set against the background of Scotland’s strength, even as a small country, there are a number of issues to be addressed through presentation and discussion. For example: What is Scotland’s role? Where are the pressure points and road blocks? Are all the solutions within pooling of expertise? How might this area of science impact on the wider population in terms of health and wealth? Who should be our main collaborators on a global scale?

The challenge for the workshop and those attending must be to identify how we can capitalise on an area in which we are already internationally competitive, building on strengths across the country and ensuring we remain vigilant to the threats and competition that lie beyond our shores.