

## Animal Science Meeting 2018 – Friday 7<sup>th</sup> December

### Workshop 3: "A curriculum for undergraduate education in research animal sciences"

Dave Lewis (Senior Lecturer in Pharmacology & Bioethics, University of Leeds) and Manasi Nandi (Senior Lecturer in Integrative Pharmacology, King's College London) gave an intro to the session and some background on the British Pharmacological Society led 'Curricula for the use of research animals'.

#### Introduction

- There is disparity between how education in research animal sciences is provided in UK universities.
- This may be due to several factors e.g.:
  - lack of resources/facilities
  - educators with limited experience in the discipline and/or providing education in it
  - lack of prioritization due to other pressure on the curriculum
- The British Pharmacological Society led the development of a learning outcomes framework (the curricula) aiming to address this issue.
- It is intended to support institutes in delivering programmes where students are expected to have an understanding of research animal sciences.
- The Learning Outcomes are split into "Core learning outcomes" and "Experiential learning outcomes".

#### Questions posed to the group

1. Do you see a need for the learning outcomes framework at your institute and across the sector?
2. What challenges do you see for implementation at your institute and/or across the sector? Should we focus on specific aspects?
3. How could we best address these potential challenges, what support do you think educators need?
4. Is there any way you or your institute could help to facilitate implementation?
5. How can we evaluate success? What would success look like?

#### Summary of discussion

- Degree of consistency within teaching and resources needed.
- Time is an issue for all educators (even those confident and competent with research animal sciences), therefore readily available resources/facilities will be beneficial.
- There is a cost issue with resource development, but lecture slides aren't enough
- Sarah Reed, University of Kent: no access to animal units. So, to battle inconsistency in teaching, visits to an animal research facility need to be arranged for all students (250+ in this case). Classes could go in smaller groups.
- Jennifer Harris, ABPI: undergraduate biomedical science students don't understand how important this learning may potentially be if they decide to go into research in the future.
- Replacement is good, but at the moment we need both – animals still needed, and in some areas will always be needed.
- Inexperienced educators really need support so that they don't avoid this area altogether. They could be confident about some bits, but not in others. This initiative will tackle that, and "bridge the gap".
- Educator experience makes a huge difference in the delivery of these topics.

- Conversation about students and ethics/morals – consensus was that all biosciences students should still have an understanding of this area even if they don't morally agree. It is not about challenging their morals, but rather providing them with more of an understanding of why and how it's important and engaging students in this area.
- Ethics should be tackled early on in undergraduate courses.
- Manasi spoke about the importance of experimental design, and push for graduates to be better trained in experimental design and interpretation.
- Students need to understand the importance of critical analysis.

#### Ideas moving forwards

- Steering group (British Pharmacological Society and The Physiological Society) to take this initiative forwards and disseminate across the sector.
- Ambassador scheme: This idea involves offering a grant to nominated ambassadors, to enable them to network and promote the curriculum at neighbouring institutes.
- Manasi spoke about Emma Robinson's (University of Bristol) idea to develop a 10-credit module, sat by students as distance learning, covering learning outcomes from the curricula.