



RSPCA Lay Members' Forum 2016



**The Royal Society, London
8th December, 2016**



Lay Members' Forum 2016

Thursday 8th December

The Royal Society, 6-9 Carlton House Terrace, London, SW1Y 5AG

10:15	Arrival and registration, with tea, coffee and biscuits		
11:00 - 11:10	Welcome and introduction	Maggy Jennings	RSPCA
11:10 - 11:30	Developing an AWERB in a global Contract Research Organisation (CRO)	Tim Jameson	Covance
11:30 - 11:50	Training, supervision and competence – what should the AWERB expect?	Manuel Berdoy	University of Oxford
11:50 - 12:20	Dealing with projects that have 'major ethical implications' or 'societal concerns'	Peter Thornton, Will Reynolds, Katherine Knight	Animals in Science Regulation Unit
12:20 - 12:50	Discussion OR 'Ratlife' video		
12:50 - 1:50	Lunch (possibly with 'Ratlife')		
1:50 - 2:00	Update on AWERB initiatives	Penny Hawkins	RSPCA
2:00 - 2:20	Implementing the Three Rs in pain research	Andrew Dilley	University of Sussex
2:20 - 2:40	Creating a Caring Culture	Bella Williams	UAR
2:40 - 3:00	Putting Ethics into the AWERB	Andy Greenfield	MRC Harwell
3:00 - 3:30	Discussion		
3:30 - 3:40	Concluding remarks		
3:40	Close		

Developing an Animal Welfare and Ethical Review Body (AWERB) in a Global CRO *Tim Jameson, Animal Welfare and Comparative Medicine - Covance*

Covance Laboratories is a Global Contract Research Organisation (CRO) providing drug development services to the Pharmaceutical sector including the conduct of regulatory in vivo safety studies.

Transposition of Directive EU 2010/063 in combination with the appointment of a new Establishment Licence Holder and the introduction of a new Global Animal Welfare and Comparative Medicine Leadership Animal structure created the impetus to review the structure and function of the site Animal Welfare Committee. This presentation explains how stakeholders were consulted, a charter was developed, the appointment of committee members and how the new team approached its responsibilities including lessons learned along the way.

Training, supervision and competence – what should the AWERB expect?

Manuel Berdoy, University of Oxford

Behavioural change, it turns out, is the hardest thing. Yet it is the root of real progress and, arguably, must be steeped in appropriate Education and Training.

But what should an AWERB know to be able to ask, and reflect on, relevant questions regarding training and the development of competence in its institution?

I will address some relevant developments in that area, including:

- the European Commission's *Education and Training Framework Consensus* document¹, and its relevance to the UK;
- the RSPCA/LASA *Guiding Principles on Good Practice for AWERBs*² and the LASA *Guiding Principles for Supervision and Assessment of Competence*³;
- the challenges, and some pilot initiatives, in a large institution like the University of Oxford.

References:

1. ec.europa.eu/environment/chemicals/lab_animals/pdf/Endorsed_E-T.pdf
2. tinyurl.com/RSPCA-LASA-AWERB
3. lasa.co.uk/wpcontent/uploads/2016/09/LASA_supervision_and_competence_2016.pdf

Dealing with projects that have 'major ethical implications' or 'societal concerns' *Katherine Knight, Animals in Science Regulation Unit (ASRU), Home Office*

The Secretary of State mandates that one or more persons who are independent of the establishment be on each Animal Welfare and Ethical Review Body (AWERB) to ensure the integrity and transparency of the ethical review process and reflect societal concerns, both at that locality and on behalf of the wider general public.

In addition to the local value judgements and scrutiny applied by the establishment AWERB, ASRU identifies high-risk ethical or societal concerns and balances the likelihood of achieving beneficial scientific outcomes against the harms done to the animals through a framework which includes internal referrals within the Inspectorate, extended time period for assessment of complex or multidisciplinary programmes of work and the provision of independent advice to the Secretary of State from the Animals in Science Committee (ASC) and/or an independent advisor.

Further to this, if a licence is granted, the AWERBs will be tasked by the Secretary of State to provide retrospective assessment of these projects identified as having animal welfare, ethical or societal concerns, or which identify novel or contentious issues.

This presentation will explain how ASRU interprets and identifies 'major ethical implications' and 'societal concerns', and provide some guidance as to how AWERBs can satisfy themselves that they are effectively identifying and scrutinising applications that raise these issues.

References:

1. Guidance on the operation of the Animals (Scientific Procedures) Act 1986 (March 2014)
www.gov.uk/government/uploads/system/uploads/attachment_data/file/291350/Guidance_on_the_Operation_of_ASPA.pdf
2. The Harm–Benefit Analysis Process - New Project Licence Applications Advice Note: 05/2015 (2015)
www.gov.uk/government/uploads/system/uploads/attachment_data/file/487914/Harm_Benefit_Analysis2.pdf

'Ratlife' or The Laboratory Rat: A Natural History

Written and produced by Manuel Berdoy, with funding from the Home Office

This groundbreaking video was produced in 2002, with the aims of educating the research community about rat biology and behaviour and challenging the concept that inbred strains of lab animal are innately suited to the laboratory environment and 'don't know any different'.

The 27 minute film was shot as a wildlife documentary over several months, following the lives of laboratory rats after they were released into a large, outdoor enclosure where they had to compete, like their wild cousins, for food, shelter and mates. A complex and structured rat society soon developed and thrived in this wild environment, demonstrating how wild-type behaviour remains, and is expressed when given the opportunity, despite generations of 'domestication'.

The film is still a popular educational tool some 14 years on, fuelling discussion about the ethical and animal welfare issues associated with creating and using strains of lab animal, and providing vital insights to help refine rat housing, husbandry and care.

"We may have taken the rat out of the wild, but have we taken the wild out of the rat?"

See: www.ratlife.org/ for further information, including how to acquire a copy for your establishment before it becomes available to view online in 2017.

Update on AWERB initiatives

Penny Hawkins, RSPCA Research Animals Department

AWERB-related initiatives are undertaken by a number of bodies including the Animals in Science Regulation Unit (ASRU), Animals in Science Committee (ASC), Laboratory Animal Science Association (LASA), RSPCA and the Institute of Animal Technology (IAT). This presentation will provide a brief update on current activities that aim to help AWERBs operate effectively, fulfil all of their tasks and share good practice.

This will include an update on the ASC AWERB Hub network, which aims to facilitate communication and sharing of good practice between AWERBs; and AWERB-UK, which is a separate initiative to ensure co-ordination between other bodies that undertake AWERB-related activities such as RSPCA, LASA, LAVA and the IAT. The ASC and AWERB-UK liaise closely to ensure that they complement one another and there is no duplication of effort.

Useful web links:

- ASC: gov.uk/government/organisations/animals-in-science-committee
- ASRU: gov.uk/guidance/research-and-testing-using-animals
- AWERB-UK: tinyurl.com/AWERB-UK2016
- RSPCA ethical review pages: rspca.org.uk/ethicalreview
- IAT: iat.org.uk/

Implementing the Three Rs in Pain Research

Andrew Dilley, University of Sussex

Neuropathic pain is a debilitating chronic condition that affects 6-10% of the population. It is poorly understood and as a result current treatments are often ineffective. It has therefore become a major healthcare issue. Much of our understanding into the mechanisms of neuropathic pain has come from the use of animal models that involve cutting nerves. These are severe models that can affect the welfare of the animal. They cause pain that persists for weeks and can also affect how animals move their limbs. Consequently, there is a need for better less severe models.

Although computer simulations or *in vitro* models would be the preferred approach for studying mechanisms of pain, currently such approaches are not possible. This is mainly because the underlying mechanisms involve multiple physiological systems (including an intact blood supply and immune system), which cannot easily be replicated out of the animal. Therefore, the use of live animals is still essential in some protocols.

In nerve injury models, cutting nerves stops proteins from being conveyed along axons (the wires within nerves). This leads to the accumulation of proteins where nerves have been cut. The result of this accumulation is an increase in the sensitivity of the axons, which ultimately drives neuropathic pain. We have developed an alternative animal model that involves the application of chemicals to peripheral nerves (chemotherapy drugs and chemicals that induce inflammation), which also stops proteins from being conveyed along apparent uninjured axons. Unlike nerve injury models, the changes occur without cutting nerves. Animals appear to behave normally and limb movements are unaffected.

However, when the animals are examined more closely, there are subtle changes in how they sense different stimuli applied to the skin. The observed changes are an indication that the animals have developed signs of neuropathic pain. Unlike in nerve injury models where pain seems to persist for weeks without recovery, in our model, pain behaviours are rapid and animals recover after one week. This model undoubtedly provides an alternative less severe approach for studying the mechanisms of neuropathic pain with better welfare for the animals.

As an alternative to surgery, we have been exploring a non-surgical approach. Specifically, we have been using medical ultrasound to guide an injection of chemicals around the sciatic nerve. We have also been exploring the use of alternative ways to measure pain in animals. Some of our novel approaches and preliminary results will be presented. In summary, our model represents a major refinement of current pain models.

Creating a Caring Culture

Bella Williams, UAR

The development of a Culture of Care is noted in both the guidance to Directive 2010/63/EU and in subsequent guidance documents as a key function of AWERBs. A Culture of Care goes above and beyond minimum standards of husbandry to form a way of working that strives to improve organisational practices and conditions for both animals and staff.

This session will look at the ways that we can understand and define care, including its role in forming organisational values and its relationship to animal welfare. It will consider the ethical dimensions of a caring culture and how we can apply those to governance of work with research animals.

Putting ethics into the AWERB

Andy Greenfield, MRC Harwell

The AWERB has a number of statutory functions that must be fulfilled: assessing and approving new PPL applications, monitoring progress and welfare-related issues through regular reports and mid-term reviews, offering guidance on optimising and standardizing procedures etc. Much of this work involves the consideration of harm-benefit analyses and the assessment of the impact of current and future research on animal welfare, the 3Rs and the institutional culture of care. Clearly, such activities have an ethical dimension that can be cultivated and highlighted. But asking whether and how one should be performing *specific* procedures on animals, in order to achieve justifiable scientific ends, is not the same as asking whether one should be using animals *at all*.

One way to encourage the discussion of such questions is not to radically alter the nature of AWERB activities, but to expand the influence of the AWERB at an institute. At Harwell, for example, we have 'spun off' another group, which we call the 4Rs group. It was created as a forum specifically for the discussion of best practice in welfare, the 3Rs and whether and how animals should be used. It also acts as another centre of gravity to promote discussion and wider dissemination of these ethical and welfare-related issues. It is comprised of students, animal technicians and postdocs and feedback from the 4Rs group is a standing agenda item at our AWERB.

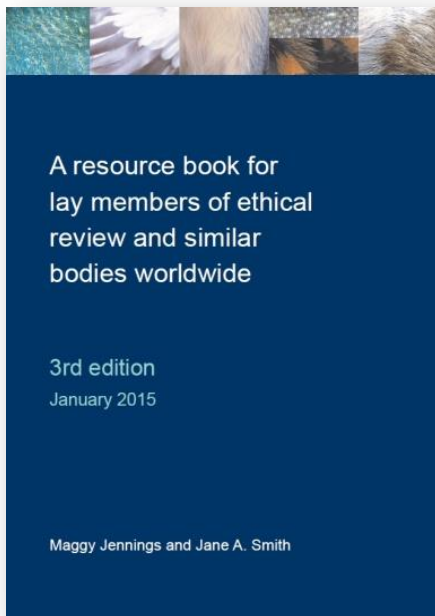
As chair of the AWERB, I am also responsible for another element aimed at raising ethical awareness at Harwell; namely, a lecture on ethics that is attended by all new starters. In this lecture, I address fundamental questions concerning the nature of ethics and ask why one might suppose it is justified to use animals for experimentation. Its aim is to get animal users (and consumers) to think about what they are doing and equip them, hopefully, with arguments they can use to defend their research to diverse audiences, as well as providing them with the opportunities to reflect upon their animal use and challenge themselves.







The **RSPCA/LASA Guiding Principles on Good Practice for Animal Welfare and Ethical Review Bodies, 3rd edition** provides a brief, clear overview of common ERB tasks and good practice for meeting these:
tinyurl.com/RSPCA-LASA-AWERB

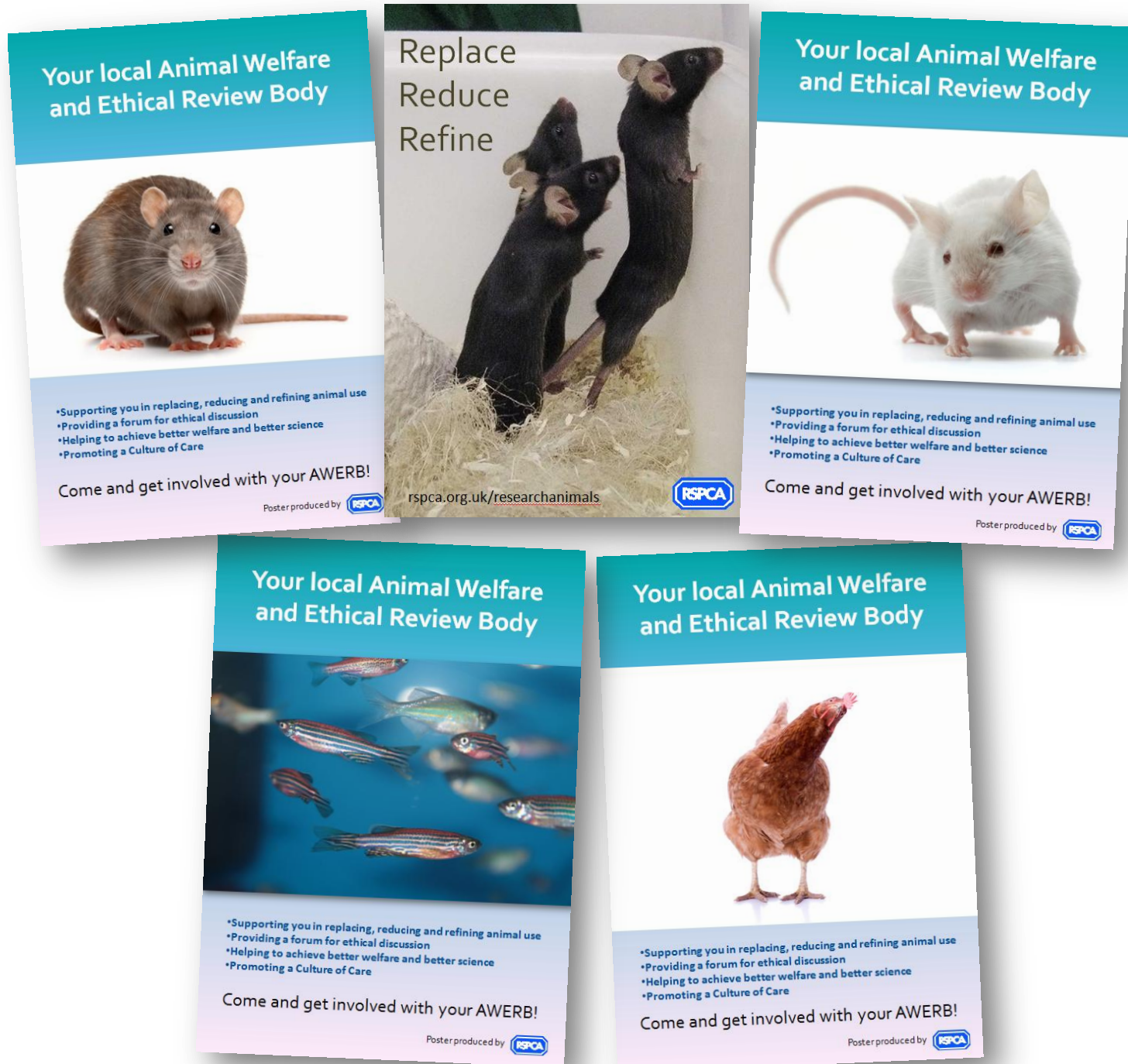


The **RSPCA Lay Members' Resource Book, 3rd edition** provides guidance on how to participate effectively in the ERB, including making ethical judgements (NB although the title refers to lay members, the content is relevant to all member categories):
tinyurl.com/RSPCALMH

This new booklet provides guidance, ideas and examples to help AWERBs fulfil their **forum for discussion** function. We are hoping to be able to give out copies at the Lay Members' Forum and it will also be available online soon – please email research.animals@rspca.org.uk if you would like a copy.



AWERB and Three Rs posters



Please contact research.animals@rspca.org.uk if you would like one or more posters, remembering to state which one(s).

Further reading

AWERB-UK, a meeting for all AWERB members including scientists, animal technologists, lab animal vets, AWERB chairs and lay members, was jointly convened by the RSPCA, IAT, LASA and LAVA and held in May 2015.

The meeting summary is at: tinyurl.com/AWERB-UK2016

