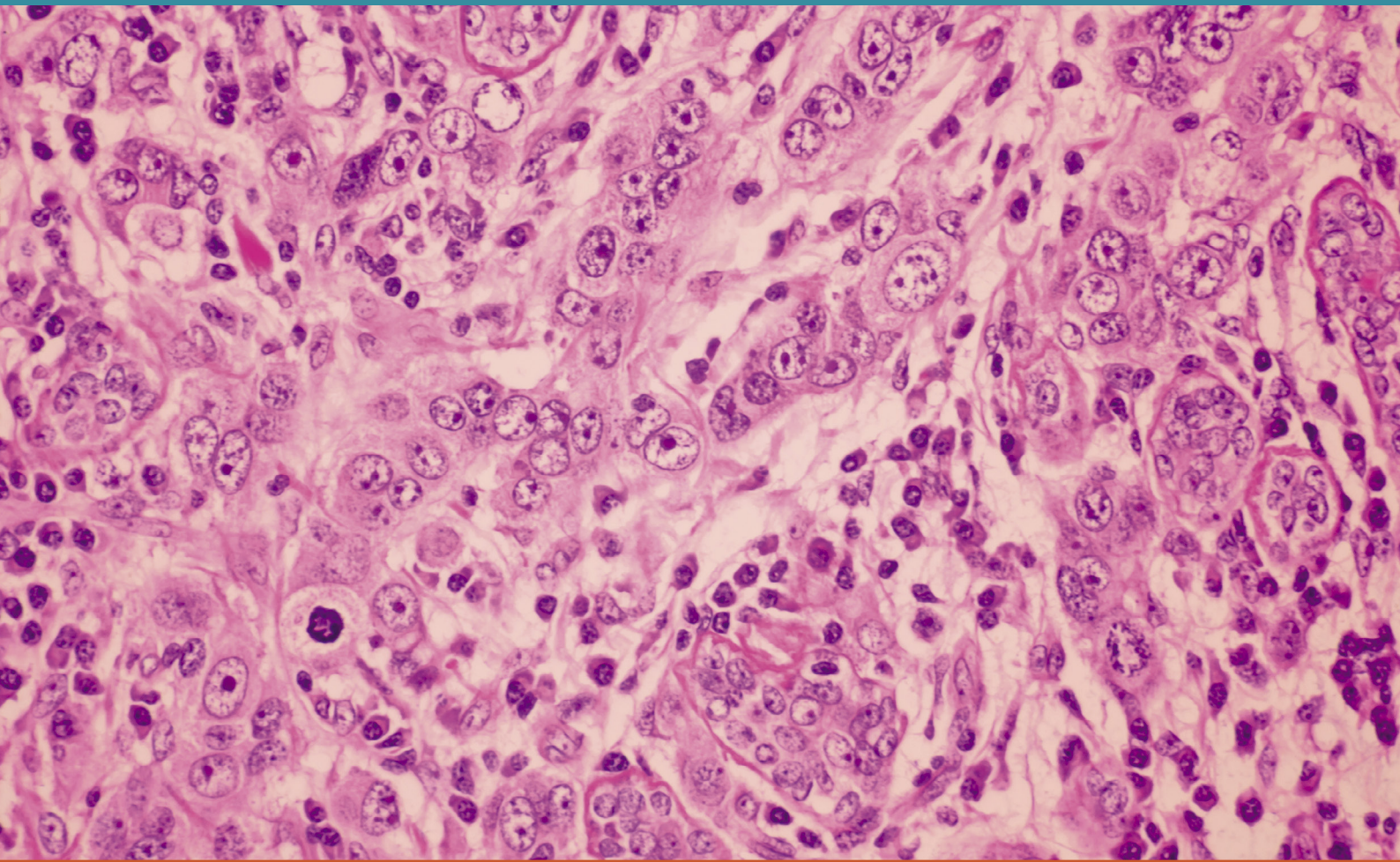


# Care-full stories: Story 8: Talking about replacement

December 2022



# Background

These scripts, inspired by the Care-full Stories project, were developed by collaborators at the RSPCA as part of their training for lay members of Animal Welfare and Ethical Review Bodies (AWERBs). They have kindly agreed we can share these here alongside the other Care-full Stories resources. The scenarios set out two different versions of a conversation which takes place at a meeting of the Ethical Review Body for animal research. The focus is on how effective this forum can be for allowing meaningful conversations about the possibility of replacing the use of animal in some or all parts of a research project. They would be useful for any group thinking about scientist-AWERB interactions and for use when training lay members of AWERBs.

## Scene

We are joining the Animal Welfare and Ethical Review Body (AWERB) part way through their review of a Project Licence application. The applicant (Scientist) has just provided an overview of their application and the chair is now about to open this up for discussion. The Lay Member (LM) asks a question about how the applicant has considered replacements for the use of animals in their project.

## Characters:

- **Chair of the Ethical Review Body** (Chair)
- **Lay Member** (LM)
- **Licence Applicant** (Scientist)

### In person:

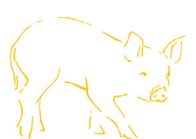
The characters sit in chairs arranged in a semi-circle (ideally) around a table facing out towards the audience. The chair sits in the centre.

### Online:

The characters have their cameras and microphones turned on, everyone else is muted with their cameras off.



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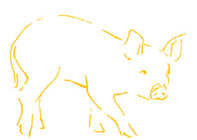
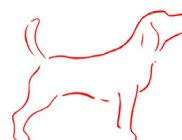


# Scenario one

- Chair** Thank you for introducing your application, Dr Smith. Now let's go round the table and see whether there are any questions for you. Dave, let's start with you.
- LM** Thank you... well I thought the Non Technical Summary was clear and it looks like an important project to me. I just had a couple of questions. One is how did you decide on the tumour size? It looks a bit big to me, won't it be uncomfortable?
- Scientist** It has to reach that size so that it can metastase...
- LM** Metastase?
- Scientist** Spread through the body. The project is about developing treatments for cancers that have spread, as it says in the Non Technical Summary.
- LM** Oh... OK. Also when it asks how you searched for replacements, it's just got the URL to a website, what does that mean?
- Scientist** That's a 3Rs database
- LM** So... how does that work?
- Scientist** (sounding irritated) I looked on this database for an alternative, and there weren't any that I could use.
- LM** Oh... is that the only option to look for a replacement?
- Scientist** It isn't possible to replace animals in this project, it needs a whole animal with a functioning immune system. This is research into metastatic breast cancer! The British Research Council wouldn't have funded this project if it wasn't using the best methodology.
- LM** Oh, um...
- Chair** Look, we really need to move on now
- LM** But I hadn't finished...!
- Chair** Sorry, we need to keep to time. Who's giving the NACWO report?

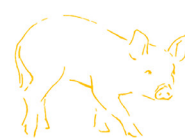
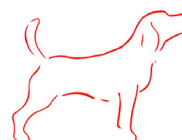


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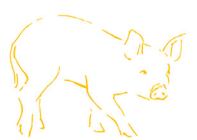


## Scenario two

- Chair** OK, let's just make sure everyone has been able to comment that wants to... any more questions, going round the table?
- LM** Yes please... can I ask you about how you searched for replacements?
- Scientist** Sure!
- LM** I don't understand why you can replace one part of the protocol and not another. Why is that?
- Scientist** Well, some aspects are easier to replace than others. The part of the protocol I could replace involved assessing how the compound will pass through layers of cells in the lung, and we can actually do that with a lung-on-a-chip now. I'd been keeping an eye on that technology, looking at the literature and talking to colleagues, and I'm pleased to say we are now able to replace animals in that part.
- LM** That's really good, thanks. So why can't you use the lung-on-a-chip for the other protocols then?
- Scientist** It's a bit complicated to explain ...
- Chair** It's important though, and we've got time so please go ahead.
- Scientist** OK. So the European Commission has got a website that lists databases of replacement alternatives, and I look through those three or four times a year to see what's been added. There's one on non-animal models for respiratory tract diseases and there are some really promising technologies in there, but when you're trying to develop gene therapy for cystic fibrosis you have to take into account how the gene you're adding might be expressed in the whole person. So at the moment I do still need whole animals. But I keep in touch with the institute that develops the organs-on-chips and there's also a group in the US that's starting to trial gene therapy in organoids – we're going to meet up at an international conference soon and see how we can maybe work together. I think this is going to be a step by step process, but I do want to use human cells and tissues instead of animals wherever I can. I'll need more training in some of the new techniques though.



- Chair** Well that's one of the AWERB's functions – to help make sure you all receive the training you need. Barbara, are you happy with that response?
- LM** Yes, thank you. And please can we have a discussion some time about how the University supports scientists who need training and support around alternatives?
- Chair** Good idea – let's include it at the next awayday.
- Scientist** If you like, I could come and give you more detail about how I got the funding and training to use the lung-on-a-chip?
- Chair** Great, thank you!



# Points for discussion:

1. What level of expertise around Replacement can be expected from the AWERB, and from its individual members?
2. What questions can AWERB members ask about Replacement?
3. How can unhelpful answers be constructively addressed?
4. How could the AWERB best promote Replacement, and help scientists to access humane alternatives?
5. How can scientists demonstrate their engagement with finding replacements for the use of animals in their work - and do they know what is expected of them?



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