LEOH
JOURNAL OF ANIMAL LAW, ETHICS AND ONE HEALTH

Journal of Animal Law, Ethics and One Health (LEOH)

ISSN 2813-7434
www.leoh.ch

"We Recognise the Value of Animal Experimentation, but we Recognise the Value of Animals as well": Qualitative Insights on the Conflicting Experiences of Researchers on the Implementation of the 3Rs in Switzerland

DOI: 10.58590/leoh.2025.013

EDWIN LOUIS-MAERTEN [1,*], LESTER D. GENEVIÈVE [1,2,3,4], HELENE SEAWARD [1] AND BERNICE S. ELGER [1,5]

Abstract

The practice of animal experimentation leads to conflicting obligations experienced by laboratory staff, e.g. regarding the dual status of laboratory animals or the severity of procedures versus the societal benefit of research. This generates ethical tensions that may remain unresolved and directly impact the implementation of best practices in animal research, in particular regarding the 3R principles (replace, reduce, refine). In this study, we conducted 35 semi-structured interviews with Swiss researchers working in public institutions. Following a qualitative analysis through reflexive thematic analysis, we identified two broad categories of conflicting experiences in relation to the implementation of the 3Rs: (1) Loyalty conflicts between their professional obligation to advance science, their own career, and to care for animals; (2) Conflicting personal attitudes on how researchers relate to animals, perceive the 3Rs, and perceive transparency. This empirical mapping of experiences lived by researchers shows the complex nature of dilemmas in this setting and the specificities of this stakeholder group. Conversely, it also uncovers how researchers cope with these dilemmas, which can help to design more targeted ethical research on the topic. These insights call for further ethical and legal guidance to provide better axiological clarity in this context.

Keywords

Animal research, attitudes, ethical dilemma, loyalty conflict, 3Rs

Suggested Citation Style

Louis-Maerten, Edwin, Geneviève, Lester D., Seaward, Helene, Elger, Bernice S. (2025). "We Recognise the Value of Animal Experimentation, but we Recognise the Value of Animals as well": Qualitative Insights on the Conflicting Experiences of Researchers on the Implementation of the 3Rs in Switzerland. *Journal of Animal Law, Ethics and One Health (LEOH)*, 162-184. DOI: 10.58590/leoh.2025.013

[1] Institute for Biomedical Ethics, University of Basel, Basel, Switzerland

[2] Faculty of Medicine, Laval University, Quebec City, Canada

[3] VITAM – Research Centre on Sustainable Health, Integrated University Health and Social Services Centres of Capitale-Nationale, Laval University, Quebec City, Canada

[4] Quebec Excellence Centre on Ageing, Integrated University Health and Social Services Centres of Capitale-Nationale, Laval University, Quebec City, Canada

[5] Centre of Legal Medicine, University of Geneva, Geneva, Switzerland

[*] Corresponding author (edwin.louis@unibas.ch)

"We Recognise the Value of Animal Experimentation, but we Recognise the Value of Animals as well": Qualitative Insights on the Conflicting Experiences of Researchers on the Implementation of the 3Rs in Switzerland

Content

I. Introduction

Animal experimentation is widely used around the world to support scientific endeavour. A vast majority of it is done with human interests in mind, either to better understand fundamental biological principles, discover novel therapies, meet regulatory purposes, or educate students (Animal Protection Ordinance, 2008; Directive 2010/63 of the European Parliament and of the Council, 2010; Bout et al., 2014). In Switzerland, around 600,000 experimental animals were used in 2023, a rather constant figure for the past thirty years (FSVO, 2024). Among these, 55% were used for basic research and 18% for applied and translational research (FSVO, 2024). Although genuine scientific advancements were made

through animal experimentation, the recognition of sentience in many experimental species has led to growing ethical concerns as regard to using animals in this context (Andrews et al., 2024; Browning & Veit, 2022).

Indeed, in *The Principles of Humane Experimental Technique*, Russell and Burch (1959, chap. 2) note that "Far from despising lower animals (as it is convenient to call them) (…), we should logically treat them with special consideration. (…) No sane person regards a baby as insentient, because he cannot talk." This led the two British authors to define the 3R principles of animal experimentation (replace, reduce, refine) (Russell & Burch, 1959, chap. 4), which became one of the cornerstones of current regulations on animal experimentation. The 3Rs are often branded as 'ethical principles', even though this ethicality may sometimes be challenged as their definition often lacks an explicit and coherent normative framework (Louis-Maerten et al., 2024). Nevertheless, the general intention behind the 3Rs is to minimise the harm experienced by the sentient species that are being used. Indeed, since these animals matter morally, there is a moral imperative to avoid doing harm to them. This creates a dual status of laboratory animals, already flagged by Arluke (1988), where they are seen as both objects of experiments and subjects with whom one can bond. As a result, laboratory workers experience some forms of conflicting attitudes towards animals and animal experimentation (Engel et al., 2020; LaFollette & Shanks, 1997).

This conflicting state is even more salient at broader levels, where the promotion of alternatives to animal models often coexists with a cautious argument presenting animal experimentation as a "necessary gold standard" in science (Marshall et al., 2022; Pound, 2023; Worth et al., 2025). This dual discourse, where the moral urgency of the 3Rs is constantly put forth but buffered by pragmatic constraints, creates a space where stakeholders of animal experimentation must navigate ethical tensions. While there may be no doubt that animal welfare is an important consideration for laboratory workers (Franco & Olsson, 2014), the reality of using animals for experimental purposes often goes against this consideration, which creates an unpleasant cognitive state better known as cognitive dissonance (Engel et al., 2020). As a result, laboratory workers shape the perception of their work in a way that puts them in a more comfortable cognitive state, for example by shifting responsibility onto institutional rules or ethics commissions, or by devaluing animals (Engel et al., 2020). More generally, these conflicting attitudes may take different forms in practice and may have a profound impact on the professional quality of life of laboratory workers (LaFollette et al., 2020) and on the public perception of animal experimentation (McLeod & Hobson-West, 2016; Mills et al., 2018).

However, most of the existing empirical data is focussed on caring positions at the laboratory, *e.g.* veterinarians or animal technicians, and more rarely on the researchers themselves. Yet, the latter have a unique position in this context by having an added professional obligation, *i.e.* their own research agenda, which puts them in a specific role conflict where they may express an ethical commitment to animal welfare while simultaneously wanting to advance science and use the best model they have at hand. We will refer to this role conflict as a case of dual loyalty or, depending on the number of conflicting interests, multiple loyalties. Dual loyalty refers to a situation where individuals have conflicting professional allegiances to two entities or causes that are usually difficult to reconcile. This concept has been particularly discussed in the context of human healthcare, for example in medical education (Atkinson, 2019), occupational practice (London, 2005), military practice (Clark, 2006; Olsthoorn, 2019), psychiatric practice (Robertson & Walter, 2008), or prison health care (Merkt et al., 2021). In these instances, dual loyalty is defined as "a conflict or potential conflict between a healthcare professional's simultaneous obligations – expressed or implied – to a patient and to a third party" (Atkinson, 2019). To our knowledge, in the context of animal experimentation, this notion of dual loyalty has only been empirically investigated in laboratory veterinarians so far (McGlacken et al., 2023), where the authors contrast the advocate role of veterinarians with their practical role in research facilities.

This article reports a subset of findings from a broader qualitative study we performed with researchers on their experiences and beliefs on the implementation of the 3R principles in Switzerland. The specific objective of this article is to describe the conflicting experiences and ethical tensions perceived by these researchers in relation to 3R implementation. This will help to better understand how researchers handle the various obligations they have, their professional needs in the context of animal experimentation, and their specific rapport with the 3R principles.

II. Methods

This study is part of a broader project entitled "Implementing the 3Rs in Switzerland: an interdisciplinary in-depth exploration of barriers and facilitators" (Implement-3R), which is part of the Swiss National Research Program 79 "Advancing 3R" (NRP79, 2025). The aims of the project are to explore the perceptions that researchers have concerning the 3R principles and to identify barriers and facilitators to their implementation in Switzerland. This article follows the consolidated criteria for reporting qualitative research (COREQ, Tong et al., 2007).

1. Research team and reflexivity

The research team consisted of one PhD candidate in biomedical ethics (ELM), two postdoctoral researchers (HS and LDG), and the principal investigator (BSE). After receiving training in qualitative research and acquiring the necessary interview skills, ELM solely conducted semi-structured interviews with the researchers involved in this study. ELM had no prior relationship with the interviewees before the start of the study. He has a background in veterinary medicine (doctorate) and applied ethics (B.A., M.A.). His general positioning concerning animal experimentation stems from the field of animal studies (Waldau, 2013), with a reformist and so-called "new welfarist" standing (Fasel & Butler, 2023). The rest of the team has a background in biomedical ethics, with various specific experiences such as medicine (LDG, BSE), public health (LDG), or psychology (HS), and were regularly involved in the analysis phase where they provided feedback.

2. Theoretical framework

Reflexive thematic analysis was the methodological approach used for this study (Braun & Clarke, 2019, 2021a). Therefore, the research questions were addressed within a paradigmatic framework of interpretivism and constructivism. We chose to embed this study within a "big Q" paradigm – *i.e.* inductive work and hypothesis generation, as opposed to "small q" paradigms that are more often based on a positivist epistemology (Kidder & Fine, 1987) – to reflect the richness of accounts from the participants concerning their views and experiences on the implementation of the 3Rs in Switzerland, while acknowledging the reflexive influence of our own interpretations as an interdisciplinary team of researchers (Braun & Clarke, 2023; Walsh, 2015). Positivist notions of data interpretation were avoided as much as possible during the collection and analysis of the dataset.

3. Participant selection

Thirty-five participants were recruited through purposive and snowballing sampling. We approached participants by email and informed them about the nature and objectives of the study, the expected duration of the interview, and measures taken to ensure anonymity and confidentiality. In case of non-response, we sent a single reminder a couple of weeks after the initial invitation. Using this strategy, we approached 103 researchers between February 2024 and December 2024. Out of these, 18 explicitly declined to participate, 50 did not answer the invitation, and 35 accepted the invitation. The overall response rate was thus 34% (35/103). No participants dropped out from the study after their interview.

4. Interview setting

Most of the semi-structured interviews (28/35) were conducted face-to-face, either at the interviewee's workplace, or in a public space like a café. The rest of the interviews (7/35) were conducted using the online meeting software Zoom with the end-to-end encryption functionality. When the interview was conducted face-to-face, it was most often in a private office or in a meeting room without anyone else being present. All interviews were conducted in English, except for one that was conducted in French (the native language of both interviewer and participant).

5. Description of sample

Two populations of researchers were included during the recruitment process: researchers developing replacement, reduction, or refinement strategies as part of their current research (3R), and researchers doing *in vivo* research without any specific 3R emphasis (AX). Table 1 describes the academic position of the participants and their main demographic characteristics.

Table 1: Participants description

Gender	Female		14 (40%)
	Male		21 (60%)
	Other		0 (0%)
Age group	20-29		5 (14%)
	30-39		6 (17%)
	40-49		12 (34%)
	50-59		6 (17%)
	60-69		5 (14%)
	≥ 70		1 (3%)
Academic position	Junior position	PhD student	5 (14%)
		Post-doctoral researcher	3 (9%)
	Senior position	Senior researcher*	14 (40%)
		Full professor	12 (34%)
		Emeritus professor	1 (3%)
Type of research	*In vivo* experimentation (AX)		19 (54%)
	3R research (3R)		16 (46%)
Language region[†]	French-speaking cantons	Fribourg	5 (14%)
		Geneva	5 (14%)
		Vaud	5 (14%)
	German-speaking cantons	Basel-Stadt	6 (17%)
		Bern	7 (20%)
		Zürich	7 (20%)

Scientific field°	Animal welfare science	1
	Biochemistry	5
	Biomedical engineering	3
	Cancer research	7
	Cardiovascular research	3
	Cellular biology	13
	Ecology and evolution	3
	Environmental health	1
	Genetics and genomics	5
	Immunology	4
	Microbiology	3
	Molecular biology	3
	Neuroscience	10
	Nutrition and metabolism	1
	Pharmacology and toxicology	7
	Physiology	3
	Reproductive and developmental biology	3

*Includes assistant professorship and associate professorship positions

†Some cantons are bilingual but were classified in a single category based on the main language spoken (e.g., Fribourg as a French-speaking canton and Bern as a German-speaking canton)

°Participant could select multiple fields to describe themselves

6. Data collection

ELM, LDG, and BSE developed the interview guide, which is presented in Appendix. It was pilot tested in January 2024 with three researchers who met the inclusion criteria for this study (two researchers working on refinement and replacement, respectively, and one researcher doing *in vivo* research on mice), and some modifications were made accordingly based on the feedback received. The interviews were audio recorded and transcribed verbatim while omitting identifiable information. Participants had the possibility to review their transcripts and add comments to facilitate the interpretation of their thinking. However, no repeat interviews were carried out. The mean duration of the interviews was 68 minutes (range: 39-96). Interviews were carried out until we felt we had enough richness, complexity, and variety in the dataset to be able to yield meaningful conclusions with our analysis. Importantly, we did not evaluate the saturation of our dataset, as this study is embedded in a non-positivist paradigm (Braun & Clarke, 2021b).

7. Data analysis

Data analysis was performed using the qualitative data analysis software MAXQDA 24 (VERBI Software, 2023, version 24.1.0) and following the six (non-linear) steps of reflexive thematic analysis (Braun & Clarke, 2019, 2021a). A single coder (ELM) coded the entirety of the dataset, with guidance from more seasoned qualitative researchers (BSE and LDG). The results were then discussed collegially with all the co-authors of this article.

8. Ethics approval

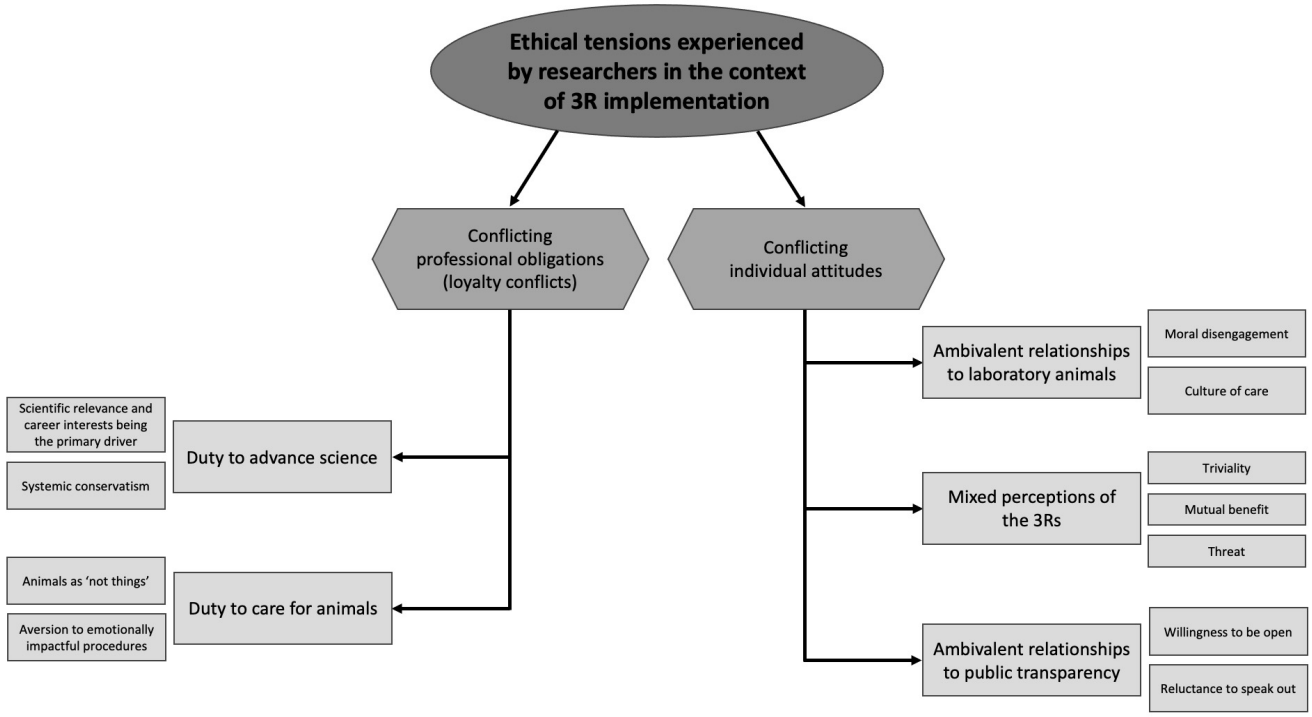
The present study was reviewed and approved by the Ethics Commission of the University of Basel (UEK, reference number 137_16112023).

III. Results

1. General presentation

In our sample, ethical tensions were described from both conflicting professional obligations and conflicting individual attitudes. Concerning the professional obligations, the conflicting experiences illustrate a case of dual loyalty where the duty to advance science collides with the duty to care for the animals. Concerning individual attitudes, three conflicting experiences are described: (1) the relationships towards laboratory animals; (2) the perception of the 3Rs; (3) the rapport to public transparency. The different themes we generated are summarised in a thematic map in Figure 1.

Figure 1: Thematic map showing themes of ethical tensions experienced by researchers in the context of 3R implementation



2. Conflicting professional obligations: duty to advance science

a) Scientific relevance and career interests being the primary drivers for researchers

Many participants pointed to the fact that their primary mission as scientists is to be able to answer a research question, and it is the latter that dictates which types of instrumental means (including animals) should be used. This explains another recurring comment about the perceived necessity of using animals to answer biomedical questions. This also follows the logic of how animal experimentations are evaluated, with first an assessment of suitability of a method for achieving a scientific goal, and then an assessment of the necessity of the means for that goal.

> If you keep trying to do good research, the first thing is the scientific question. (…) And the animal model will help you to prove your hypothesis or to show the effect of what you think

> can be obtained. So, the first task is to have the scientific question. (...) And I think we are not using animals for the purpose of using animals, just to 'publish or perish'.
>
> (Participant AX-08 – Senior researcher)

> So, I think the 3Rs are on the radar of many people in science, but it might not be the primary thing to choose their question. I think the primary thing is the question itself. And what follows from the question is the model.
>
> (Participant 3R-04 – Full professor)

As emphasised by the following participants, researchers do not necessarily ponder their use of animals at first, but rather the relevance of their choice of model in order to yield the most meaningful and conclusive results. This also extends to the efforts they need to provide in order to get such results: as researchers using animals, they are biased in what sorts of questions they ask in the first place, which may make the use of animals more convenient over innovative options. At the same time, these comments also indicate more personal motives: researchers tend to choose specific models, including animals, not only because it seems best from a scientific standpoint, but also because it seems best for the advancement of their own career, which links to the next sub-theme on systemic conservatism.

> But at least in my field, if you can do it with an animal, people still prefer doing it with animals… [pause] Because what you find is going to be more like real. Because whenever you do the simplified models, they lose this aspect of how real biology works. (…) I would not say they would go to trash completely, but their real-life significance is pretty much decreased in some instances. That is why people still prefer doing in vivo work at first.
>
> (Participant AX-07 – Senior researcher)

> So, there are several arguments for that, but I tend to realise that the only thing they [researchers] actually care about, and I understand it, is whether this is working for them or not, whether this is actually working. They actually don't really care where it comes from. (…) They will only care about whether it is better for them, or it will work in their hands… [pause]
>
> (Participant 3R-11 – Post-doctoral researcher)

b) Factors of systemic conservatism

Other aspects that determine how researchers behave are the expectations and the general functioning of the broader research and epistemic community. When it comes to animal experimentation, there was a shared feeling of inertia and slow-moving change among participants. Factors such as climbing the academic ladder, staying competitive on the global scale, or being published in high impact-factor journals fuel, from their perspective, conformist and conservative choices of experimental models. As a result, as long as following the 3Rs does not have significant positive impacts on career advancement, researchers will prefer more conservative options to "stay in line" with the broader epistemic community.

> The challenge is how… A lot is influenced by how the community behaves, right. It is kind of a community thing. The challenge is… to keep on… trying to be clever. Instead of doing the obvious, trying to make people think about an alternative. This is still a challenge, maybe even more than it used to be because, you know, experiments have to be fast and everything has to be streamlined because, it is ridiculous, but people are counting papers for careers, for promotions. (…) I don't think the challenge is technical… So much can be done. Many research questions can be answered by alternatives, like organoids, all these kinds of things that happen today, computation…, data mining. So, the challenge is to make people do that.
>
> (Participant 3R-05 – Full professor)

> And because science people do not want to change, I think many PIs [Principal Investigators] that have like a very high reputation and that all the studies have been done in mice, if now you tell them there are these alternatives, [they] would respond that they have to change all their models that they have been working on for years. And people do not want to do it. So then, until there are new ones of these people, it will not change because they are the teachers of the university and they are the ones doing the research...
>
> (Participant 3R-03 – Senior researcher)
>
> It is quite unfortunate, but you are not judged on whether or not you are following the 3Rs. You are judged on the article you published with the impact factor you achieved. And you are judged on a publication list. And ultimately, what is within it, or at least how you treated the animals to get your publication, nobody is going to judge you on that. At least not in the scientific community.
>
> (Participant AX-06 – Senior researcher)

3. Conflicting professional obligations: duty to care for animals

a) Awareness that animals are 'not things'

When explaining the relevance of the 3Rs, participants described how important it is to recognise the inherent worth of the animals being used. They do not have the same legal or moral status as cell cultures. So much so that some participants conceded that more efforts should be put into developing an empathetic virtue in individual researchers towards this inherent worth.

> We should try reducing the number because it is a living being that we are harming or that we are putting on some kind of treatment. Even if it is not that stressful, this animal exists only for our research. And I think there, we could emphasise this a little more, even in statistics courses with people that did not have a lot to do with science. They could mention at one point: 'You will be working with a live organism, and you should probably reduce the numbers and that is quite important.'
>
> (Participant 3R-13 – PhD student)
>
> And then, yes, the organisations have to improve animal well-being. Yes, okay. But I think it should be in every scientist. I mean, every person should be trying to do their best towards animals, no? Here it says of course the staff and scientists and all the things should be controlled, but everything is like the responsibility of the organisation, there is no... They have kind of removed the ethical part, like everyone should be trying to be a good human being, it does not matter if one tells you or not.
>
> (Participant 3R-03 – Senior researcher)

b) Aversion to emotionally impactful procedures on animals

Participants, particularly those working with animals, were often spontaneously sharing the negative feelings associated with the use of animals in research. Specifically, the killing procedure or procedures with a high degree of severity were mentioned as having a strong impact on their morale. This can lead to negative psychological stress and subsequent states such as compassion fatigue, but also to the development of coping mechanisms, such as removing the witnessing of procedures (*e.g.*, CO_2 killing "out of sight") or having colleagues (junior researchers, animal technicians) carrying out procedures to keep a distance with this strain.

> It is always a difficult time when we need to sacrifice an animal. It is not something that we enjoy doing, actually. So, it is always tough, emotionally tough. I remember the first time I was doing it, I was just crying in front of my animals. Because nobody wants to kill them.
>
> (Participant AX-02 – Post-doctoral researcher)

> There are fields like that. Pain research is pretty much like this. Who wants to do this, inflict pain to an animal? (…) This is not primarily because of the regulations. This is because people do not want to do these experiments. They are ugly and you do not sleep well if you do these types of things to animals and if you are not a sadistic person, which you should not be if you are a scientist. [general laughter] You do not want to do this.
>
> (Participant AX-11 – Emeritus professor)

4. Conflicting individual attitudes: ambivalent relationships to laboratory animals

a) Moral disengagement

Participants were showing various ways of relating to their laboratory animals. On the one hand, some of them (and in particular those in senior positions working with animals) expressed different levels of moral disengagement, *i.e*. a departure from the professional obligation to care for the animals. For instance, the objectification of animals, speciesist statements, the comparison to other sectors of animal use such as agriculture, or the disregard for emotions.

> I think the emotion is a guideline for our action but not the only one… [pause] And this I like with the 3R principles, that they are principles. They are not emotions. We could of course say 'Let us stop immediately all research on animals', and then we would have maybe reduced the burden of these maybe bad emotions. But on the other hand, we have also to be honest that we want advancement in medical therapies and that we want the development of new drugs and so on. Most people also want to eat meat, still. And so, we should be honest about this thing and not only be emotional about it.
>
> (Participant 3R-15 – Senior researcher)

> But I think for biomedical research, for particular diseases, I always write in my application, it is a bit provocative, 10,000 mice are less worth than a human being, you know. So, it sounds now that we can discuss it ethically, but I always think so. Because when I see the cat from my neighbour, eating the birds from the trees, nobody says anything to the cat, you know. So, I think we have to put this into perspective, right.
>
> (Participant AX-03 – Senior researcher)

b) Culture of care

On the other hand, the inclusion of the professional obligation to care for animals led participants to talk about, either spontaneously or in the dedicated section of the interview, the notion of culture of care. Most often, culture of care was perceived through a "One Welfare" perspective, where the interdependency of human and laboratory animal welfare was emphasised. In particular, building competence and resilience for laboratory workers was seen as an important consideration.

> What could be improved is the working condition of staff. (…) So, if this could go beyond the personal level, where I think this is a given, and could go towards an institutional level where institutions say, 'We make sure there is enough resources to properly care for the animals', that would be the next step. Because the people, they care. But we often have the impression that the institutions do not care whether we are able to care, whether people get enough sleep, or whether people get enough money for doing this job. (…) Because if nobody cares about them, how should they care about the animals? So, it is like this chain of caring. If that is broken, that is when the problem happens… [pause]
>
> (Participant AX-04 – Full professor)

Further, a few comments were made by junior researchers on having access to dedicated mental health services for laboratory staff. This aspect may be interpreted as a response to an experience of moral distress, *i.e.* a psychological distress caused by a moral interrogation in using animals for certain experimental procedures.

> But I know a colleague that suffered a lot already during the training, so they never started working with animals in the end in the laboratory. (…) But for sure, if your laboratory is only working with mice, this might be a bigger issue and then this kind of service might be useful. If you have no escape from working with animals, then maybe it [having access to mental care services] is nice. But I think it is just a way to heal something that should not happen first.
>
> (Participant AX-14 – Post-doctoral researcher)

In contrast, senior researchers were more doubtful as to the true value of the notion of culture of care. They were seeing it as a form of "virtue display" (Participant AX-01) or a hollow concept that is redundant with the values already held by the research community through their professional obligation to care for animals.

> Well, I mean, I think it is one of those things you need to have, otherwise you are going to look like [a fool] [general laughter]. Look, I think we are all human beings. So, what this makes me feel like is… like my PhD students need a reminder that they need to care about the animals. I think none of them does. I think they are all aware. These are live animals. We are talking about living organisms. They have feelings. They feel pain. They feel stressed, particularly with the kind of things we do to them… [pause]
>
> (Participant AX-15 – Senior researcher)

5. Conflicting individual attitudes: mixed perceptions of the 3Rs

a) The 3Rs as a trivial consideration

Unexpectedly, the participants related sometimes very differently to the 3Rs. For example, participants were often describing their implementation in practice as somewhat evident or a consideration that is naturally engraved in their research planning. As such, the 3Rs do not appear as a transformative, self-critical aspect in designing experiments, but as a step that is normalised and inherent to researchers' ethos.

> To me, the 3Rs are something that I am not sure I fully understand. Or, better said, I understand it, but to me it sounds a bit strange because... we all have been doing and are doing 3R and we will do 3R. (…) So it is really something that is intrinsic to science. But somehow it is presented as a novel way to do science, but I don't think it is, at all.
>
> (Participant AX-01 – Full professor)
>
> But I mean, the 3Rs, get my impression, it is intellectually a pretty shallow concept. It is not very complex. I mean, it is pretty basic… [pause] And so what? Even animal experimentation, is it good or bad? You get to the bottom of the subject very fast. (…) So, for me, the 'philosophy of 3R', it is not much there. I mean, in a sense it is good, it is a very operational principle. But it is not a philosophical, a deep philosophical concept.
>
> (Participant 3R-17 – Full professor)

b) The 3Rs being mutually benefitting to both research outputs and animals

Alternatively, the participants were also highlighting how the 3Rs (refinement specifically) can have a positive impact on their research outcomes because of the positive impacts on the animals. In other words, if the animals are treated well, the resulting outputs will have an improved quality, thus more scientific relevance, and the 3Rs are an instrumental means to reach this end.

> To me, what the 3Rs mean is that we have to treat our experimental animal models with the highest respect possible and as the most precious resource that we could have… And therefore, think before doing, of course. (…) But we have to plan, obviously as good as possible, our experiments to make sure that we do not miscontrol in the end. So, I guess that for me,

> the 3Rs means also a little bit slowing down the pace of how you do things. Maybe not being so impulsive like 'Oh yeah, I saw it, now let's do this!' Maybe you think over it. [laughs]
>
> (Participant AX-12 – Full professor)

c) The 3Rs as a threat to researchers

Finally, some participants were also expressing more negative perceptions towards the 3Rs. In this case, the principles were described as a form of defiance against their research skills or another burden on their research process. "And then, what it leads to is a 3R aversion. If you then say 3R, it is like a red flag. Like 'Oh God, the 3Rs again. Leave me alone. I just want to focus on my research.'" (Participant AX-15 – Senior researcher)

> Well, I have noticed that I was going to say in the older generation but that is not true. I have friends my age who are doing research and who, when we talk about the 3R principles, obviously feel like it is a critique to what they are doing… [pause] And I get it, it is not nice… (…) In some ways, they think that one is criticising their work. That is what I mean by being threatened. (…) And when you tell this to scientists, they say 'But we have always worked like that. I have published tons of papers using this method. If you make me change now, somehow you are saying that the whole work I have done before has to be rethought, or it makes it look like it was not good science, basically.'
>
> (Participant 3R-11 – Post-doctoral researcher)

6. Conflicting individual attitudes: ambivalent relationships to public transparency

a) Willingness to be open

The last conflicting attitude expressed by researchers is about the societal openness on animal experimentation. In accordance with many initiatives to increase public transparency, *e.g.* the Swiss Transparency Agreement on Animal Research (STAAR, 2025), many of the participants agreed that more efforts should be made to demystify the use of animals in scientific procedures and how they are actually treated in laboratories.

> Yes, I think it is very important that we communicate with the society, that we inform the society on our activities, that we actually also show what is being done regarding the 3Rs, but that we also openly discuss the fact that maybe for some experiments it is very difficult to, at the moment at least, to replace them. Yes, I think it is very important to be in a transparent dialogue there and to show..., to actively actually show what is being done. Because maybe sometimes that is a bit underrepresented, you know.
>
> (Participant 3R-19 – Full professor)
>
> If we do those experiments confidently enough to also stand up and say: 'We do it because of this and this'. If we already anticipate that we do it in a little niche that is not really okay, we should not do the experiment. We should try to find alternatives. (…) So, I think the realistic discussion and realistic view of saying 'Give me alternatives, I am hoping to do it differently', but not hide yourself. And that is probably something I learned out of that phase. It was sort of two years or three years, but I was not personally affected by those activists. So, it was a time which was critical as well…, where we thought a lot 'Are we doing the right thing? Should we stop it?' And dialogue would be of course always more fruitful than sort or shying away and saying 'Okay, they shout, we do not talk at all, and then they disappear'.
>
> (Participant 3R-10 – Full professor)

b) Reluctance to speak out about animal experimentation

As mentioned by the latter participant, this willingness to be transparent is clashing with the reported bad perception of animal experimentation in society. This leads to a form of self-censorship where

researchers avoid talking about their experiments to prevent a potential backlash from the general population or even from their own institution.

> I think it is hard… On the one hand you sort of almost feel like you should not talk about your research, that maybe others will not approve. But I think we have to somehow overcome that and be more public about what we do and the measures that we take to do it well. (…) But I think there is this… Sometimes you would rather just avoid talking about it, because it is easier, rather than being more open because it is what we have to do.
>
> (Participant 3R-01 – Senior researcher)
>
> That is why this issue is so delicate, right? And I am only doing this [interview] because it is anonymous. Because if you stick your head out, someone is going to bite it off.
>
> (Participant AX-15 – Senior researcher)
>
> As I said, the animal welfare facility tried to fly a little bit under the radar [laughs] because it is always controversial. (...) And they try to avoid to make this too much public because this will generate a lot of frictions in the public, which I think is not good because it is great what they do but people do not understand why we still need it.
>
> (Participant 3R-12 – Full professor)

IV. Discussion

This study aimed at reporting the conflicting experiences lived by researchers in the context of 3R implementation. Far from being straightforward principles to apply, the 3Rs are embedded within a larger complex of professional obligations, institutional and systemic pressures, emotional challenges, and social perceptions. Our findings illustrate ethical tensions experienced by researchers. A first conflict stems from a dual loyalty experience, between the advancement of science and of their personal career, and the care to animals. In the context of these conflicting professional duties, researchers tend to prioritise the former over the latter. As a result, the 3Rs are often considered as a secondary aspect of experimental design, in the best case being seen as synergetic and in the worst case as a form of scientific defiance. This preference should be interpreted within a larger context of structural constraints in academic settings, such as competition for grant funding or current metrics for publication and academic merits (Fang & Casadevall, 2012; Wellcome Trust, 2020). Because researchers work in such a competitive setting, they experience personal conflicts at multiple levels, including their relationships to laboratory animals, how they relate to public transparency, and their beliefs about the 3Rs. As a result, each researcher tries to find various ways to morally cope with these conflicts in order to 'not perish'. Participants in our study shared ways of developing such a pragmatic approach that tries to reconcile the pursuit of scientific and personal objectives together with considerations for animal welfare. Accordingly, these conflicting experiences are not just abstract ethical dilemma but also have tangible consequences in daily research work. This further emphasises the need to investigate the difficult and specific situation in which researchers find themselves in comparison to other laboratory workers.

Participants' relationships to laboratory animals ranged from empathy and feeling personal distress to objectification and feeling emotional distancing. In particular, mechanisms of moral disengagement were sometimes evident and echoed existing literature (Arluke, 1988; Birke et al., 2006; Message & Greenhough, 2019; Vezirian et al., 2025). For instance, the rationalisation of animal experimentation through an analogy to predation such as a cat preying on birds in trees. At the same time, the increasing promotion of a culture of care in animal experimentation appears as a possible solution through institutionalising professional norms and virtues (Kirk & Myelnikov, 2022; Tremoleda et al., 2023). However, this requires structural support and genuine commitment to the concept from all institutional levels, otherwise it will not bring the positive shift it envisions and will remain a hollow banner, or better termed by one participant, a case of "virtue display".

Concerning public transparency, our results illustrate a broader sociopolitical dilemma in animal experimentation: how to balance openness and misrepresentation of laboratory work? This dilemma is not a new one and has been reported as a "selective openness" by Holmberg and Ideland (2012). To be effective, public accountability of animal experimentation requires full transparency (Lüthi et al., 2024). While our participants recognised this political imperative, they also voiced their concerns regarding the risks of disclosure to their individual reputation. This does not only apply to the general public, but also to the relationship with their own institution and broader research community, leading to concurrent forms of self-censorship. Overall, this ambivalent stand undermines public trust, feeding into the very scepticism it seeks to avoid (Pound & Blaug, 2016).

Our findings finally call into question the assumed universality of the 3Rs as an 'ethical' framework. The conflicting perceptions that were reported by our participants show how divergent the interpretations of the principles can be. Some participants viewed them as intuitive and integral to good scientific practices, highlighting their current instrumental framing (Lauwereyns et al., 2024; Louis-Maerten et al., 2024; Smith & Lilley, 2019). But other participants were also seeing the principles as bureaucratic means of limiting scientific research or even a potential threat. The notion of "3R aversion" brought forth by one participant may reflect some deeper tension between scientific autonomy and regulatory oversight, as well as a form of "compliance fatigue". This suggests that 3R implementation should not be reduced to simple checklists or increased rules to follow, but should be designed towards stronger and more consistent normative principles in the interest of animal care and welfare. Indeed, answering conflicting experiences requires axiological clarity, *i.e.* the ability to discriminate and rank different values to have a consistent action. In the specific case of dual loyalty, current literature proposes resolution frameworks through rights-based approaches (Atkinson, 2019; London et al., 2006). In the context of animal experimentation, this would suggest developing increased protection of animals used for scientific purposes, while enabling researchers to develop and have access to alternative methods that can replace their use of animals. This increased ethical awareness would not only help to resolve cases of loyalty conflicts, but would also promote a better relationship with animals in line with a "One Welfare" approach, increase the relevance of the 3R principles, and make public transparency easier to achieve. On a more pragmatic level, because career advancement is influenced by traditions and expectations from the epistemic community, this requires clearer advantages for researchers showing efforts in the implementation of the 3Rs.

This study has several limitations that need to be acknowledged. First, given the qualitative nature of the study, the results are context-sensitive and cannot be inferred to a larger population. However, they remain informative in guiding further empirical research in similar settings and providing some empirical weight to normative analyses. Second, our sample did not represent the full range of disciplines in Swiss animal research and only included researchers from public institutions. Third, cultural factors and social desirability may have played a role in the information and experiences that were shared. Indeed, animal experimentation being a sensitive topic, participants may have provided responses on some aspects they believe were more acceptable rather than expressing their true opinion. Further research should therefore focus on more specific designs (*e.g.* quantitative surveys, Delphi methods, or ethnographic studies) to help elucidate and refine these aspects.

V. References

Andrews, K., Birch, J., Sebo, J., & Sims, T. (2024). Background to the New York Declaration on Animal Consciousness. https://sites.google.com/nyu.edu/nydeclaration/declaration (accessed 4 June 2025).

Animal Protection Ordinance, No. SR 455.1, Swiss Federal Council (2008).

Arluke, A. B. (1988). Sacrificial Symbolism in Animal Experimentation: Object or Pet? *Anthrozoös, 2*(2), 98–117. https://doi.org/10.2752/089279389787058091

Atkinson, H. G. (2019). Preparing physicians to contend with the problem of dual loyalty. *Journal of Human Rights, 18*(3), 339–355. https://doi.org/10.1080/14754835.2019.1617121

Birke, L., Arluke, A., & Michael, M. (2006). *The Sacrifice: How Scientific Experiments Transform Animals and People*. Purdue University Press.

Bout, H. J., Van Vlissingen, J. M. F., & Karssing, E. D. (2014). Evaluating the ethical acceptability of animal research. *Lab Animal, 43*(11), 411–414. https://doi.org/10.1038/laban.572

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health, 11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., & Clarke, V. (2021a). *Thematic Analysis* (1st ed.). SAGE Publications.

Braun, V., & Clarke, V. (2021b). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health, 13*(2), 201–216. https://doi.org/10.1080/2159676X.2019.1704846

Braun, V., & Clarke, V. (2023). Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a knowing researcher. *International Journal of Transgender Health, 24*(1), 1–6. https://doi.org/10.1080/26895269.2022.2129597

Browning, H., & Veit, W. (2022). The sentience shift in animal research. *The New Bioethics, 28*(4), 299–314. https://doi.org/10.1080/20502877.2022.2077681

Clark, P. A. (2006). Medical Ethics at Guantanamo Bay and Abu Ghraib: The Problem of Dual Loyalty. *Journal of Law, Medicine & Ethics, 34*(3), 570–580. https://doi.org/10.1111/j.1748-720X.2006.00071.x

Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes, L 276/33 (2010).

Engel, R. M., Silver, C. C., Veeder, C. L., & Banks, R. E. (2020). Cognitive Dissonance in Laboratory Animal Medicine and Implications for Animal Welfare. *Journal of the American Association for Laboratory Animal Science, 59*(2), 132–138. https://doi.org/10.30802/AALAS-JAALAS-19-000073

Fang, F. C., & Casadevall, A. (2012). Reforming Science: Structural Reforms. *Infection and Immunity, 80*(3), 897–901. https://doi.org/10.1128/IAI.06184-11

Fasel, R., & Butler, S. (2023). Welfarism vs Abolitionism, a Dichotomy? In *Animal Rights Law* (1st ed.). Hart Publishing.

Federal Food Safety and Veterinary Office (FSVO). (2024). Tierversuche 2023 in der Schweiz. https://www.tv-statistik.ch/de/statistik/ (accessed 4 June 2025).

Franco, N., & Olsson, I. (2014). Scientists and the 3Rs: Attitudes to animal use in biomedical research and the effect of mandatory training in laboratory animal science. *Laboratory Animals, 48*(1), 50–60. https://doi.org/10.1177/0023677213498717

Holmberg, T., & Ideland, M. (2012). Secrets and lies: "Selective openness" in the apparatus of animal experimentation. *Public Understanding of Science, 21*(3), 354–368. https://doi.org/10.1177/0963662510372584

Kidder, L. H., & Fine, M. (1987). Qualitative and quantitative methods: When stories converge. *New Directions for Program Evaluation, 1987*(35), 57–75. https://doi.org/10.1002/ev.1459

Kirk, R. G. W., & Myelnikov, D. (2022). Governance, expertise, and the 'culture of care': The changing constitutions of laboratory animal research in Britain, 1876–2000. *Studies in History and Philosophy of Science, 93*, 107–122. https://doi.org/10.1016/j.shpsa.2022.03.004

LaFollette, H., & Shanks, N. (1997). *Brute Science: Dilemmas of Animal Experimentation*. Routledge. https://doi.org/10.4324/9781003060000

LaFollette, M. R., Riley, M. C., Cloutier, S., Brady, C. M., O'Haire, M. E., & Gaskill, B. N. (2020). Laboratory Animal Welfare Meets Human Welfare: A Cross-Sectional Study of Professional Quality of Life, Including Compassion Fatigue in Laboratory Animal Personnel. *Frontiers in Veterinary Science, 7*, 114. https://doi.org/10.3389/fvets.2020.00114

Lauwereyns, J., Bajramovic, J., Bert, B., Camenzind, S., De Kock, J., Elezović, A., Erden, S., Gonzalez-Uarquin, F., Ulman, Y. I., Hoffmann, O. I., Kitsara, M., Kostomitsopoulos, N., Neuhaus, W., Petit-Demouliere, B., Pollo, S., Riso, B., Schober, S., Sotiropoulos, A., Thomas, A., Vitale, A., Wilflingseder, D., Ahluwalia, A. (2024). Toward a common interpretation of the 3Rs principles in animal research. *Lab Animal, 53*(12), 347–350. https://doi.org/10.1038/s41684-024-01476-2

London, L. (2005). Dual loyalties and the ethical and human rights obligations of occupational health professionals. *American Journal of Industrial Medicine, 47*(4), 322–332. https://doi.org/10.1002/ajim.20148

London, L., Rubenstein, L. S., Baldwin-Ragaven, L., & Van Es, A. (2006). Dual Loyalty among Military Health Professionals: Human Rights and Ethics in Times of Armed Conflict. C*ambridge Quarterly of Healthcare Ethics, 15*(04). https://doi.org/10.1017/S096318010606049X

Louis-Maerten, E., Rodriguez Perez, C., Cajiga, R. M., Persson, K., & Elger, B. S. (2024). Conceptual foundations for a clarified meaning of the 3Rs principles in animal experimentation. *Animal Welfare, 33*, e37. https://doi.org/10.1017/awf.2024.39

Lüthi, N., Rodriguez Perez, C., Persson, K., Elger, B. S., & Shaw, D. (2024). Toward Transparency on Animal Experimentation in Switzerland: Seven Recommendations for the Provision of Public Information in Swiss Law. *Animals, 14*(15), 2154. https://doi.org/10.3390/ani14152154

Marshall, L. J., Constantino, H., & Seidle, T. (2022). Phase-In to Phase-Out – Targeted, Inclusive Strategies Are Needed to Enable Full Replacement of Animal Use in the European Union. *Animals, 12*(7), 863. https://doi.org/10.3390/ani12070863

McGlacken, R., Anderson, A., & Hobson-West, P. (2023). Two Worlds in One: What 'Counts' as Animal Advocacy for Veterinarians Working in UK Animal Research? *Animals, 13*(5), 776. https://doi.org/10.3390/ani13050776

McLeod, C., & Hobson-West, P. (2016). Opening up animal research and science-society relations? A thematic analysis of transparency discourses in the United Kingdom. *Public Understanding of Science, 25*(7), 791–806. https://doi.org/10.1177/0963662515586320

Merkt, H., Haesen, S., Eytan, A., Habermeyer, E., Aebi, M. F., Elger, B., & Wangmo, T. (2021). Forensic mental health professionals' perceptions of their dual loyalty conflict: Findings from a qualitative study. *BMC Medical Ethics, 22*(1), 123. https://doi.org/10.1186/s12910-021-00688-2

Message, R., & Greenhough, B. (2019). "But It's Just a Fish": Understanding the Challenges of Applying the 3Rs in Laboratory Aquariums in the UK. *Animals, 9*(12), 1075. https://doi.org/10.3390/ani9121075

Mills, K. E., Han, Z., Robbins, J., & Weary, D. M. (2018). Institutional transparency improves public perception of lab animal technicians and support for animal research. *PLOS ONE, 13*(2), e0193262. https://doi.org/10.1371/journal.pone.0193262

Olsthoorn, P. (2019). Dual loyalty in military medical ethics: A moral dilemma or a test of integrity? *Journal of the Royal Army Medical Corps, 165*(4), 282–283. https://doi.org/10.1136/jramc-2018-001131

Pound, P. (2023). *Rat Trap: The Capture of Medicine by Animal Research – and how to Break Free*. Troubador Publishing.

Pound, P., & Blaug, R. (2016). Transparency and Public Involvement in Animal Research. *Alternatives to Laboratory Animals, 44*(2), 167–173. https://doi.org/10.1177/026119291604400210

Robertson, M. D., & Walter, G. (2008). Many Faces of the Dual-Role Dilemma in Psychiatric Ethics. *Australian & New Zealand Journal of Psychiatry, 42*(3), 228–235. https://doi.org/10.1080/00048670701827291

Russell, W., & Burch, R. (1959). *The Principles of Humane Experimental Technique* (1st ed.). Universities Federation for Animal Welfare.

Smith, A. J., & Lilley, E. (2019). The Role of the Three Rs in Improving the Planning and Reproducibility of Animal Experiments. *Animals, 9*(11), 975. https://doi.org/10.3390/ani9110975

Swiss Transparency Agreement on Animal Research (STAAR). (2025). Swissuniversities. https://www.swissuniversities.ch/en/organisation/bodies/chamber-of-universities/bodies/swiss-transparency-agreement-on-animal-research-staar (accessed 4 June 2025).

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care, 19*(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Tremoleda, J. L., Kerton, A., Mazhary, H., & Greenhough, B. (2023). New perspectives for teaching Culture of Care and their strengths and challenges. *Laboratory Animals, 57*(2), 170–181. https://doi.org/10.1177/00236772221127352

VERBI Software. (2023). MAXQDA 24 (Version 24.1.0) [computer software]. Berlin, Germany: VERBI Software. Available from maxqda.com.

Vezirian, K., Beffara, B., & Bègue, L. (2025). Non-significant results as for the association between heart rate variability, personality, and the objectification of lab-animals into the conduct of animal testing. *Social Neuroscience*, 1–14. https://doi.org/10.1080/17470919.2025.2486967

Waldau, P. (2013). *Animal Studies: An Introduction*. Oxford University Press.

Walsh, R. T. G. (2015). Making discursive space in psychology for qualitative report-writing. *Qualitative Psychology, 2*(1), 29–49. https://doi.org/10.1037/qup0000020

Wellcome Trust. What researchers think about the culture they work in. (2020). https://wellcome.org/reports/what-researchers-think-about-research-culture (accessed 4 June 2025).

Worth, A. P., Berggren, E., & Prieto, P. (2025). Chemicals 2.0 and Why We Need to Bypass the Gold Standard in Regulatory Toxicology. *Alternatives to Laboratory Animals, 53*(1), 21–25. https://doi.org/10.1177/02611929241296328

VI. Statements and declarations

Ethical considerations: The Ethics Commission of the University of Basel approved this study (reference number 137_16112023) on November 16th, 2023.

Consent to participate: Written informed consent for inclusion in this study was obtained from all participants.

Consent for publication: Not applicable.

Funding statement: This work was supported by the Swiss National Science Foundation, as part of National Research Programme 79 (grant number: 407940_206432).

Acknowledgements: The authors would like to thank Dr. Eva De Clercq, Prof. Dr. Brenda Kwak, and Prof. Dr. Hanno Würbel for their esteemed support in reviewing earlier drafts of this manuscript. ELM

is also grateful to the participants of the Basel Animal Ethics Reunion for their helpful comments regarding a presentation of preliminary results associated with this manuscript.

Data availability: Anonymized interview transcripts from participants who gave written consent for their data to be shared publicly are openly available on SWISSUbase at https://doi.org/10.82574/hqzg-kk91, reference number 21097_3061. Data from participants who did not give such a consent can only be shared upon reasonable request, by contacting the corresponding author.

VII. Appendix: Interview guide

Part of the interview guide	Questions	AIM: What should be discussed (spontaneous)
Introduction	Review the informed consent (pauses, no correct nor incorrect answers, etc.) Socratic posture: neutral and concerned; not-knowing posture; expert status for the people. e.g. "I am not an animal research expert; I have no experience in the day-to-day implementation of the 3Rs for animal research protocols. I am very interested in your professional experience. And I think that, when addressing a topic like this one, it is crucial to not only rely on theoretical papers. That is why we want to have this discussion with you and learn from your own perspective." General structure of the interview: - Your experience as a researcher - Your knowledge of the 3Rs - Your use and application of 3R methods - What factors may influence your practice - The culture at your workplace	
Experiences on research	**I want to begin with some general questions about your professional experience.** 1. Could you briefly tell me more about your work and your professional background? →*Probing question:* #1: How many years have you been working in this profession? 2. What experience do you have with working with animals? →*Probing question:* #1: To what extent are you involved with working with animals now?	- Give space to introduce the professional background - Importance of animals in their research

Knowledge of the 3Rs	**I would now like to ask you something about your view of the 3Rs.** 3. Can you tell me something about any training you received on the 3Rs? *→Probing question:* #1: What do you think about the current level of knowledge that researchers have on the 3Rs? #2: What aspects of the 3Rs training are particularly important for the education of researchers, according to you? 4. Could you briefly explain what the 3Rs mean for you? *→Probing question:* #1: How would you personally define each R?	- Development of knowledge and understanding of the 3Rs
Practical application of the 3Rs	**I want to now talk about your actual use of the 3Rs for your research.** 5. What kind of 3R methods, if any, are you using for your research? *→Probing question:* #1: Where do you primarily get this knowledge from? e.g. personal research, peers, institution, Animal Welfare Committees, etc. 6. From your experience, how is it for you to draft a research protocol that involves animals or no animals? *→Probing questions:* #1: For in vivo: Which of the 3R principles is the most straightforward to apply in your research? Why? 7. For in vivo: How do you communicate within your team when implementing the 3Rs? 8. In what ways do you think that the use of 3R methods in your field of research (including replacement methods) may impact a research career?	- Experiences with 3R methods - Experiences on incorporating 3R principles into research planning - Impact of 3Rs on career

Motivations to apply the 3Rs	**We will now address another topic. It is about factors influencing your applications of 3R.** 9. In your perspective, what, if any, challenges do you (or other researchers) encounter when applying the 3Rs? 10. What, if any, facilitators to the implementation of the 3Rs are available to you? (in general or to the participant specifically) 11. In your opinion, does the current legislation satisfy the needs of the scientific community regarding the use of animals for experimentation? *→Probing question:* #1: What do you think about the current Swiss legislation with regard to your ability to do your research? 12. How do you think your research field should address the societal debate concerning animal experimentation?	
Culture of care	**The next question will concern the culture of care. There is a definition of what it means provided by the 3RCC Swiss Culture of Care Charter. As this definition is quite long, I printed it for you. Can I ask you to read it?** [PUT ON CARD: "Culture of Care (CoC) in laboratory animal science is the commitment of an organization to improve animal wellbeing, the application of the 3Rs and scientific quality by implementing a caring and respectful attitude towards the animals bred or used for scientific procedures, its staff and promoting transparency and visibility about its research activities. The establishment of a CoC program within the organization signifies the responsibility to be proactive and striving to go beyond the legal requirements and obligations."] 13. How does this definition resonate with the animal research culture in Switzerland? 14. What levers would be most important to you in order to fully incorporate this definition in Swiss animal research?	https://swiss3rcc.org/media/pages/culture-of-care/ea0679dac5-1670858067/coc_charter_flyer_a5.pdf
Conclusion	- If you could make some general recommendations that would facilitate the implementation of 3R in Switzerland, what would they be? - Do you have other questions? Is there anything you would like to add? Are there other things that you expected me to ask you about?	

	- When the transcript is ready, do you wish to have a copy in order for you to review our discussion and clarify some points if needed? - Is there anything you would like to ask me about this study? - Thank you a lot for your participation, it has been a pleasure to know more on your experiences about the 3Rs.