

RUAREC Standard Operating Procedure

Veterinarian Involvement in Research and Teaching Activities Involving Animal Subjects at Rhodes University

Drafted by: Rhodes University Animal Research Ethics Committee (RUAREC)

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1. Background of this Standard Operating Procedure (SOP)

Ethical review and clearance/approval processes of research and/or certain teaching activities involving animals as defined below (referred to as research and teaching in further text of this SOP), must follow rigorous procedures, adhere to stringent standards, as well as fulfil national and international legal/accreditation requirements and best practices. This SOP and all its parts apply to activities in research and teaching that are conducted in/by:

- All academic departments of Rhodes University;
- All institutes affiliated with Rhodes University;
- All investigations conducted by affiliated researchers working with animals at Rhodes University (these are academic and support staff, undergraduate and postgraduate students, postdoctoral fellows, research associates and senior research associates).

The above-mentioned academic units and/or individuals are referred to as RU stakeholders in further text of this SOP. Overall, all the unit operations and steps involved in the ethical review and clearance/approval processes of research and teaching at Rhodes University are aimed at achieving the following:

- To produce of new knowledge as part of the academic project at Rhodes University that involves animals;
- To validate, review and continuously update the subject matter and content that are taught as subject matter in all disciplines at Rhodes University which have animal ethics implications;
- To ensure that the knowledge produced and/or validated must be of high standard, as to withstand the peer-review and all other review standards in a given academic discipline in which results of studies that involve animals are published;
- To achieve comprehension and understanding of the necessary and prescribed knowledge of animal physiology, behaviour and other related aspects of curriculum outcomes and/or degree requirements in a particular academic discipline;
- To conduct research and teaching according the principles of academic integrity, fairness and with respect and with the view towards the protection of animals rights;
- To contribute to the preservation of the habitat and the protection of populations of higher primates in South Africa, on the African continent and internationally.

In light of the above principles and any other relevant ethical considerations, there are several stages to the animal ethics review process and ongoing monitoring of research and teaching. To ensure that the above-mentioned tenets are achieved, one of the steps in the ethical review and active process is the careful scrutiny to prevent unnecessary harm to all animals specifically in any and all research and teaching activities by RU stakeholders.

In conjunction with the above, it is stated clearly here that there is an urgent and ongoing need to maintain competence and familiarity by RU stakeholders with the necessary procedure to properly handle and to properly conduct research and teaching with all animals properly. To achieve this, this SOP is designed to achieve two main aims. Firstly, the SOP is aimed at outlining procedure(s) that is/are to be followed by all RU stakeholders with respect to the relevant research and teaching activities that involve animals. The second main aim of this SOP is to outline a procedure for the development of the ethical review expertise among the members of the Rhodes University Animal Research Ethics Committee (RUAREC) in terms of the knowledge and competencies to carry effective review and monitoring of research and teaching activities with animals and to maintain the necessary standards of animal welfare by RU stakeholders.

2. Philosophy and practical implementation/execution of the SOP

Philosophy of this SOP is derived from the principles of "*replacement, reduction, refinement and responsibility*". Therefore, the use of animals, as defined above, in research and teaching by RU stakeholders is only sanctioned and authorised, if no other alternatives are available to achieve the particular outcomes of research and teaching by RU stakeholders. These considerations must be based on a very careful weighing of risks and benefits of such as research and teaching activities involving animals. In line with these facts, all activities in research and teaching by RU stakeholders with animals imply and are aimed at maintaining compliance and adherence to the following South African legislation and international standards that are aimed and protection of animal rights and welfare; and that take the specific consideration of animals into account:

- South African National Standard no. 10386:2008
- Animals Protection Act no. 17 of 1962 as amended
- Animal Protection Amendment Bill of 2017
- SPCA Act no. 169 of 1993
- Performing Animals Protection Act no. 24 of 1935 as amended
- Animal Matters Amendment Act of 1993
- Medicines and Related Substances Amendment Act 59 of 2002
- Professional Code of Ethics of the African Association of Zoos and Aquaria
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, Available at: <u>www.cites.org/eng/disc/text.php</u>; website accessed on 18th June 2019).

Animal welfare must further be seen to include the freedom from "thirst and hunger", from "thermal and physical discomfort, pain, injury, distress" (SAAPAB, 2017).

3. Veterinarians' involvement in Research and Teaching activities

Unless otherwise stated in the text below, the following definitions for this SOP were extracted from section 1 of the Veterinary and Para-veterinary Professions Act no. 19 of 1982 (as amended; this act is designated as the Act in further text of this SOP). These definitions are as follows:

Veterinarian – any person who is registered or deemed to be registered in terms of the Act to perform the veterinary profession of a veterinarian. In addition, a veterinarian must be registered in the appropriate register operated by the (see section 18 subsections/paragraphs 1 and 2 of the Act). An extract of the register signed by the Registrar of the South African Veterinary Council (established in terms of sections 2-17 of the Act) or a certified copy thereof should be provided to RUAREC and filed by the Ethics Coordinator for all the Veterinarians, who are trained and/or have experience in working with animals. The veterinarians must provide a proof of experience of previous professional previous work/research experience with animals. The exact nature of the proof must be decided on by a majority of all RUAREC members in a regular or special committee meeting.

The veterinarians must be involved in all research and teaching performed by or including the involvement of RU stakeholders, if such activities involve specific procedures done to animals. These procedures are detailed in the next section. The role of the veterinarians is to monitor and ensure/protect the wellbeing and maintenance of homeostasis of animals in all the research and teaching activities with such animal subjects that are performed by RU stakeholders. It's not necessary for the veterinarians to be (standing) members of RUAREC. However, RUAREC, through its Chairperson and the Ethics Coordinator, should make every effort to maintain an ongoing engagement with the veterinarians. This engagement is to be carried out in the form of activities such as workshops and/or lectures run by, or in collaboration with, the veterinarians. The most fundamental aim of the engagement is to develop and keep up to date the knowledge and expertise of the RUAREC members in relation to the research and teaching involving animals. RUAREC and all RU stakeholders aim to achieve the fulfilment and maximum compliance with all South African and international regulations and guidelines for the research and teaching that involve the participation of animals, as defined above. To this effect, all academic units, institutes and/or laboratory facilities must make arrangements to have their animal facilities inspected for compliance with this SOP by a veterinarian or animal welfare organisation.

4. Veterinary procedures

In compliance with current South African legislation, veterinarians (not researchers) are allowed to perform certain procedures, detailed here below. These procedures (hereafter deemed 'veterinary procedures') may be done by a researcher only if the researcher has been deemed competent by a registered veterinarian, and the researcher has been authorised by the SAVC, to perform the procedure in question. This can be determined by conducting the procedure in the presence of a veterinarian, who, once satisfied that the researcher is competent in the procedure, provides a letter verifying the competence of those particular researchers. This option of receiving "letters of competence" is, however, limited to less risky procedures, and procedures (such as surgery and assessments of animal health) must be performed by a registered veterinarian, unless the researcher has been authorised by the SAVC to perform these procedures. Once the Letter of Competence has been obtained, this letter, and the ethics approval letter, will be used in a submission to the SAVC for authorisation.

In accordance with South African legislation (Veterinary and Para-veterinary Professions Act no. 19 of 1982), a registered veterinarian (not the researcher) will need to perform these veterinary procedures:

- Any invasive procedures; procedures that invade the body of the animal, such as injections, PIT tagging, rectal/penile/vaginal/cloacal probing, stomach lavage, intestinal lavage, to name a few.
- Administration of any controlled drugs or treatment; administering (whether by injection, orally, rectally or any other medical procedure) of scheduled drugs to an animal as part of the research activities or treatment of animals for testing purposes or treatment of animal injuries. Scheduled drugs (according to the Medicines and Related Substances Amendment Act 59 of 2002) are the responsibility of the veterinarian. These procedures include anaesthesia of animals.
- Diagnosis or assessment of pain/status etc. for welfare purposes;
- *Surgery*; Any procedure that is considered as surgery (i.e., cutting into the animal body under anaesthesia; administering of stitches; etc)
- *Euthanasia*; The cessation of life of an animal. Euthanasia procedures must be taxon specific and in line with the guidelines detailed in the *SANS 10386:2008*.

This is not an extensive list of veterinary procedures. If the procedure on a vertebrate, cephalopod or decapod will injure, invade the body of, or impact on the welfare of the animal, please consult the Chair of the RUAREC or the veterinarian RUAREC committee member for advice on who is allowed to perform the procedure.

Timeline of procedures:

- (a) Consult with a SAVC-registered veterinarian/RUAREC Chair regarding whether a particular procedure is considered a veterinary procedure.
- (b) Perform a competency assessment, assessed by a SAVC-registered veterinarian, and obtain a Letter of Competence from the vet.
- (c) Submit an application for ethics approval to the RUAREC for the project in which the procedure will be used. Obtain approval.
- (d) Submit the application for Authorisation for the procedure to the SAVC, being sure to include the Letter of Competence and the ethics Approval Letter.
- (e) Once authorisation has been obtained from the SAVC, then, and only then, may the researcher perform the procedure on live animals.

5. References

- African Association of Zoos and Aquaria (ASZA, 2007). Professional code of ethics. *Operational document 2.13.2*, African Association of Zoos and Aquaria (South African non-profit organisation no. 034-450-NPO).
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