

**Policy Name/Title**: University of the Free State Use of Animals (including non-human primates) in Research and Teaching Procedure

Research and Teaching Procedure									
Policy Group(s):	B: Teaching and Learning								
Delete categories that are	C: Research	_							
not relevant.	G: Institutional Research and F	Plan	ning						
Type:	Policy		Guideline						
Tick document category	Procedure	Χ	Regulation						
UFS Statute and/or	UFS Statute, Government Gaz	UFS Statute, Government Gazette, No 48187, 10 March 2023							
regulation reference									
number and date:									
Relevant legislation	1. Animal Diseases Act 35 of	_	84						
and/or policy, codes of	2. Animal Health Act 7 of 200	02							
practice, professional	3. Animal Protection Act 71 of								
authorities:	4. Constitution of the Republ		·						
	5. Fertilisers, Farm Feeds, A	gric	ultural Remedies a	and Stock					
	Remedies Act 36 of 1947								
	6. Genetically Modified Orga		-	of 1997					
	7. Hazardous Substances Ad								
	8. Health Professions Act 56 of 1974								
	Medicines and Related Substances Control Act 101 of     1965								
	10. Performing Animals Protection Act 24 of 1935								
	11. Provincial Nature Conservation Acts or Ordinances								
	12. Rules Relating to the Practising of the Para-Veterinary								
	Profession of Laboratory	Aniı	mal Technologist, [						
	Agriculture (1997) GN 14			<b>f</b> \					
	13. Rules Relating to the Prac Nurse, Department of Age 1991		•						
	14. Societies for the Prevention of 1993	on o	of Cruelty to Anima	ls Act 169					
	15. Veterinary and Para-vete	rina	ry Professions Act	19 of 1982					
	16. Animal Improvement act								
	17. Animal protection Act 71	of 1	962						
	18. Movement of Animals and	d Ar	nimal Produce Bill						
	19. Red Meat Manual								

Relevant inst policies/man		2004 and r Species (T Endangere (AIS), Biopr 22. National Er of 2003. 23. Marine Livi Name and refere 1. University Policy (Upo 2. Guide to t Teaching (' 3. Departmen – Principles 4. South Afric SANS 1038 5. SANS 1488 6. University ( Updated J 7. University	<ul> <li>21. National Environmental Management: Biodiversity Act 10 of 2004 and related regulations (Threatened or Protected Species (TOPS), Convention on the International Trade in Endangered Species (CITES), Alien and Invasive Species (AIS), Bioprospecting, Access and Benefit Sharing (BABS).</li> <li>22. National Environmental Management: Protected Areas Act 5 of 2003.</li> <li>23. Marine Living Resources Act 18 of 1998.</li> <li>Name and reference number: <ol> <li>University of the Free State Research Integrity and Ethic Policy (Updated June 2022)</li> <li>Guide to the Care and Use of Animals in Research an Teaching (Version 21-11-2017)</li> <li>Department of Health (DoH), 2015: Ethics in Health Research Principles, Processes and Structures</li> <li>South African National Standard: care and use of animals SANS 10386: 2021</li> <li>SANS 1488:2014 Humane Transportation of livestock by roa (Updated January 2019)</li> <li>University of the Free State: Research Strategy 2015 – 202 (Updated January 2019)</li> <li>University of the Free State Constitution of the Anima Research Ethics Committee (Accepted June 2023)</li> </ol> </li> <li>State the stakeholder group/s and/or structures consulted during the stakeholder group the sta</li></ul>						
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Consultation			• •						
before approv	and signed o		policy development or review process as follows:  a) Management Committees of the Faculty of Natural and						
		Agricultur (03/03/202 Establishm b) Animal Gu – developn 10/08/2023 inputs; 18/0 document a c) Animal R 18/07/2023 final input o d) Senate Re of working document) e) Executive document)	<ul> <li>Agricultural Sciences and the Faculty of Health Sciences (03/03/2023 to 12/05/2023 – Nomination of members and Establishment of Animal Guideline working group).</li> <li>b) Animal Guideline Working group (17/05/2023 to 10/07/2023 – development of first draft of new procedure; 19/07/2023 to 10/08/2023 – refinement of procedure document after AREC inputs; 18/08/2023 to 12/09/2023 – finalisation of procedure document after stakeholder inputs).</li> <li>c) Animal Research Ethics Committee (10/07/2023 to 18/07/2023 – input on first draft; 13/09/2023 to 19/09/2023 – final input on procedure document).</li> <li>d) Senate Research Ethics Committee (16/05/2023 – approval of working group composition; 19/10/2023 – approval of final document).</li> <li>e) Executive Committee of the Senate (15/04/2024 approval of</li> </ul>						
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To be verified and signed		Prof FW Peter	Prof FW Petersen 22 May 2024						
once approve relevant author	d by the	Vice-Chancello	Vice-Chancellor and Principal Date						
Approval	To be	Commencement	To be	Review	To be inserted				
date	inserted	date	inserted	date					
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Procedure Document		
1. Procedure Statement	1.1	The UFS recognises the moral dilemma posed by the use of sentient animals (i.e., animals that can feel sensations and experience emotions), including non-human primates, for research, teaching and testing. The institution subscribes to the ethics of only supporting studies that promise to contribute to the understanding of biology and environmental principles and to the acquisition of knowledge that can reasonably be expected to benefit humans, animals and/or the environment.
	1.2	The UFS acknowledges the sensitive and emotional nature of research and teaching using non-human primates (NHPs). Furthermore, the UFS is mindful of the ethical concerns that may arise with regard to NHP research and of the associated public sensitivity surrounding research with NHPs. However, the UFS further acknowledges the critical role NHPs have in understanding and managing diseases and disorders that cause human suffering. Therefore, the UFS will allow the breeding and use of NHPs in a legal and carefully regulated manner.
	1.3	In establishing this procedure, the UFS sets a statement for the consideration of ethical requirements, and corresponding procedures to meet those requirements, on the use of animals for research, teaching and testing.
	1.4	Ethical considerations are universal and have to be prioritised against any other interest. Ethical considerations include (not exclusively) the minimisation of physical, psychological, social or financial risks, and the fulfilment of moral and legal standards.
	1.5	The Animal Research Ethics Committee (AREC) must approve all research and teaching involving animals before the research commences so that a formal evaluation of the potential harm/benefit equation can be undertaken. The latest South African National Standard (SANS) 10386 for the Care and Use of Animals for Scientific Purposes and the South African Medical Research Council's Guidelines on Ethics for Medical Research provide the minimum benchmark to ensure ethical and humane care of animals used for scientific purposes and teaching activities. International and foreign codes for animal research include the 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 and the Australian Code for the Care and Use of Animals for Scientific Purposes (8th Edition) 2013.
2. Preamble/ background	2.1	The responsible and ethical use of animals, including non-human primates, in research is essential for making substantial contributions to knowledge and improving the lives of both humans and animals, particularly in the realm of disease treatment and prevention, as well as food security.

- 2.2 Animals are used in both human and veterinary medicine or animal production studies for diverse purposes, such as behavioural, physiological, pathological, toxicological, and therapeutic research, agricultural studies for food production and food security, experimental surgery or training, and drug and biological preparation testing.
- 2.3 Despite the significant contribution of research involving the use of animals, there remains a pressing need to ensure the use of animals in research is justified by the assurance that the potential benefit to either humans, animals and/or the environment, outweighs the potential harm to the animal subjects.
- 2.4 The utilization of animals in predicting the potential consequences (benefits) of procedures and experimental test samples on human beings entails a commitment to their well-being. Therefore, sensitivity in animal experimentation requires balancing scientific or teaching interests with general values and norms supporting the interests and welfare of the animal subjects.
- 2.5 While replacing the use of animals in research with alternative methods or animal models is encouraged, there are nonetheless limitations exerted by lack of physiological simulation and complexity of the body system. Some biomedical experiments in animals are essential for medicine development as living systems (and in the case of NHPs, the similar and unique physiological and genetic characteristics to humans) produce more comprehensive data that can be extrapolated to applications in humans, and this critical information cannot be acquired by any other means. The training of students on animal handling and behaviour can not be performed on artificial simulated models.
- 2.6 Nonetheless, all researchers and teachers must justify the use of animals and also explain why alternative models of research (such as cell-based models or computer simulations) or other animal models are not capable of achieving the scientific objectives. The use of animals in scientific research can only be justified if the benefits outweigh the potential harm to the animal subjects. Proposals involving NHPs should exclusively be approved in exceptional circumstances.
- 2.7 Furthermore, the likely adverse events on animals should be predicted, and anticipated where possible, and managed appropriately should they occur, which could include that the study be terminated at the earliest time so as to avoid unnecessary discomfort or suffering. It is recommended that departments compile a database of possible adverse events and secondary complications to assist researchers in compiling of research protocols. A detailed harm-benefit analysis must be done by researchers as part of protocol development, to determine the maximum benefit with the minimum harm. This

		must be taken as the optimal termination point of animal research studies.
3. Purpose	3.1	This guide has been prepared to give direction to the use of experimental animals (including wildlife field trials, observational studies, and collection of samples outside of designated research facilities) by the research, teaching and technical personnel, undergraduate and postgraduate students of the UFS.
	3.2	It is expected that all researchers who contemplate performing animal experiments should acquaint themselves with the contents of this document.
4. Scope	4.1	The document's framework relates to the use of animals, including non-human primates, in research, teaching, and testing at the UFS. For the purposes of this guide, the term 'researcher' includes members of the UFS in academic research fields and non-academic research fields, contract researchers, and postgraduate and undergraduate researchers who work with animals. It also relates to external researchers who wish to conduct animal-related research activities at the UFS.
	4.2	All animal-related research conducted under the auspices of the UFS is bound by the principles stipulated in this document, irrespective of whether the researchers are employees, students, or visiting researchers at the UFS. This is applicable regardless of the source of their funding, the field in which the research is conducted, or the site where the research is conducted.
	4.3	Experimental animals include all live, sentient non-human vertebrates, including eggs, foetuses and embryos, that is; fish, amphibians, reptiles, birds and mammals, and encompassing domestic animals, purpose-bred animals, farm animals, wildlife and higher invertebrates such as the advanced members from the Cephalopoda and Decapoda (SANS 10386:2021). The immature forms of non-human vertebrates from the following stages of development are included: i) mammals, birds and reptiles: from halfway through gestation or incubation periods; ii) fish and amphibians: from the time at which they become capable of independent feeding.
	4.4	This document also pertains to all invertebrates below the level described in point 3 above, as well as samples from dead animals.
5. Legislative and regulatory requirements and	5.1	The UFS recognises that all vertebrate animals are protected by law in South Africa (Animals Protection Act No 71 of 1962).
relevant standards	5.2	The <b>South African National Standard (SANS) 10386: 2021</b> for the Care and Use of Animals for Scientific Purposes and the South African Medical Research Council's Guidelines on Ethics

for Medical Research provide the minimum benchmark to ensure ethical and humane care of animals used for scientific purposes and teaching activities. International and foreign codes for animal research include the 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 and the Australian Code for the Care and Use of Animals for Scientific Purposes (8th Edition) 2013. 6. Guidina 6.1 In exploring the benefits of using animals in research, the scientific community must also acknowledge their responsibility principles to ensure the humane treatment of animals in all aspects of research, testing, and education. 6.2 The use of animals in scientific research can only be justified if the benefits to humans, animals and/or the environment outweigh the potential harm to the animal subjects. 6.3 The guiding principles that govern the humane treatment of animals in scientific research at the UFS is contained in this document. Before conducting any research involving animal use, researchers must demonstrate why there is no viable alternative and explain how they will minimize the number of animals used and their suffering. 6.4 As per the UFS Research Integrity and Ethics Policy, all animal research conducted under the auspices of the UFS should uphold the following fundamental "five R" principles in the planning and conduct of animal research: Replacement. Reduction, Refinement, Relevance, and Responsibility. Replacement of animals, wherever possible, with alternative non-animal research models or systems, or alternative animal models. Animals may only be used when the researcher's best efforts to find an alternative have been unsuccessful or the research justifies advancements to using animal models. **Reduction** of animals in experiments by design strategies that facilitate the use of the smallest number that will allow valid information to be obtained from the study. Statistical analysis and scientific evidence must justify the number of animals requested. Refinement of all aspects regarding the use of animals. This includes but is not limited to: a) Animal sourcing, b) Animal care practices (including husbandry and environmental enrichment, trained and competent staff) c) Experimental procedures (including design, materials and techniques used to eliminate physical and psychological distress within limitations imposed by the objectives of the research) d) Researchers should refine procedures to eliminate or minimize pain (the use of effective and safe analgesia) and suffering (including determining end-points of the procedure, including humane and intervention endpoints)

- e) Provide specie-specific housing and care for the animals and continually strive to improve animal welfare, before during and after each procedure.
- f) Consider the fate of each animal at the end of the procedures.
- g) Method of killing the animals when necessary.

In addition, the following two principles should be considered:

**Relevance:** Animal research must address an important question relevant to the advancement of knowledge, education, science, and human and animal welfare through research.

**Responsibility:** It is the responsibility of everyone who procure, breeds, care for, and use animals for research and education purposes to ensure that the animals are afforded the highest levels of welfare and protection from abuse.

- 6.5 Furthermore, the principle of freedom provides that laboratory or other confined animals should be able to live and grow under conditions and circumstances in which their species' specific needs are met. Each animal facility must develop and maintain standard operating procedures that address the specie-specific requirements to address the five freedoms as described by Webster namely: Freedom from thirst, hunger and malnutrition, Freedom from discomfort, Freedom from pain, injury or disease, Freedom to express normal behaviour, and Freedom from fear and distress.
- 6.6 In addition to the above principles, researchers should think more broadly about their research in respect of the 12R framework outlined in the DoH 2024 Ethics in Research guidelines.

## 7. Ethical review

- 7.1 Ethics review of research and teaching that involve the use of animals.
- 7.2 Animal Research Ethics Committee (AREC). All research and teaching at the UFS pertaining to the use of animals must be evaluated and approved by the Animal Research Ethics Committee, which is registered with the NHREC, before the research commences so that a formal evaluation of the potential harm/benefit equation can be undertaken.
- 7.3 The primary responsibility of the AREC is to protect the safety and welfare of animals by ensuring that mechanisms and processes used to in animal experiments are justified and humane.
- 7.4 The AREC is expected to provide ethical guidance to researchers and educators regarding standards of animal care and welfare, and to ensure minimal standards pertinent to the use of animals in research and teaching are adhered to, and ethical issues arising from proposed or ongoing studies are managed appropriately.

7.5 The AREC should only approve applications that comply with the ethical principles for humane use of animals for research, teaching and testing, whilst ensuring that both the researchers and educators and individuals under their supervision have the competence, training, and skills to ensure the comfort, health, and humane treatment of animal subjects.

# 8. Conditions for animal experimentation

## 8.1 Scientific and Teaching Activities

- 8.1.1 Written approval from the AREC is required before any scientific or teaching activities involving animals are carried out.
- 8.1.2 Research or teaching activities that involve animals acquired and/or housed by the Animal Research Facilities of the UFS must also obtain written approval from the Director / Manager of the facility for ethical approval. This is to ensure that the facility is aware of the planned study, can provide or accommodate the necessary number of animals for the specific research or teaching activity, and will provide the necessary support. If support is required from facilities, a signed agreement between the researchers and facility needs to be submitted to the AREC prior to the study, stipulating what support the facility will provide (such as cleaning, feeding and veterinary care during and after the study). Even though these duties can be formally and in writing delegated to facility staff, it remains the overall responsibility of the researcher to ensure the animals' welfare. Any study not taking place on UFS property must have written permission from the landowners or property managers before final AREC approval will be given.
- 8.1.3 All experiments involving live animals must be carried out under the supervision of a staff member with appropriate training and experience. Students must complete an appropriate training course. The necessary SAVC authorisation / registration is required before final AREC approval will be given.
- 8.1.4 The researcher must adhere to the experimental procedures approved by the AREC and promptly notify the Chair in writing if any changes are made to the procedures during the course of an experiment. Members of the AREC may request to view daily activity logs during any site inspection.
- 8.1.5 Written approval must be obtained prior to continuation of any experiment if any unexpected, adverse events occur that may impact on the well-being of an animal in their care.
- 8.1.6 All researchers and animal facility managers must promptly notify the AREC of any unexpected, adverse events that may impact on the well-being of an animal in their care. This notification must include details of the steps taken to address the problem.
- 8.1.7 In serious cases, no further experimentation may be undertaken until the protocol has been reviewed by the AREC. Each

protocol must have clearly defined endpoints after which a study may not continue.

- 8.1.8 All researchers must submit reports to the AREC as requested, including prompt notification of any adverse events that impact on animal wellbeing, advice when a project is completed or discontinued, and the information required for the annual report of any ongoing project.
- 8.1.9 A final report must be submitted on completion of all projects via the online submission system.

#### 8.2 General Provisions

#### 8.2.1 **Acquisition:**

The Researchers must accept responsibility for ensuring that all animals are acquired only from legal (authorized) sources registered with the appropriate provincial authority or recognized research institutions. Researchers can have a written agreement with the animal facilities of the UFS to acquire or breed certain animals for research or teaching purposes. These facilities will serve as service providers and must ensure all legal requirements are met before the commencement of the acquisition or breeding.

#### 8.2.2 Daily welfare monitoring:

Daily animal care records must be kept to document the well-being of the animals and to monitor the efficiency of husbandry practices. A Daily Activity Log must be maintained and displayed where the animals are held. The log must be made available any time for members of the AREC to inspect. It is the responsibility of researchers to perform daily monitoring of animals in their studies. However, the management of the UFS facilities must provide oversight to ensure that the animals housed in their facilities are monitored. Non-compliance from a researcher must be reported to the AREC immediately.

#### 8.2.3 Identification and recordkeeping:

Researchers must ensure that animals return to grazing paddocks or animal houses are clearly identified and that the exact nature of the experiment is recorded on individual animal records. These records must be maintained for animals that are used for more than one research protocol. The records must also be available anytime should the members of the AREC require them. Researchers and teachers can make use of the Animal Welfare Sheet available from the AREC.

#### 8.2.4 Housing and Care:

The housing and care of all animals should be in agreement with the best practices as stipulated in the latest SANS 10386 and/or internationally accepted standards. The management of the UFS facilities must ensure that all conditions of these facilities are according to the minimum prescribed standards.

#### 8.2.5 Emergency plans:

A detailed SOP containing a contingency plan should be in place, prior to admission of an animal to a research facility (e.g. experimental farm,

laboratory or breeding facility), to deal with any medical emergency or environmental hazard. The emergency plan as set out in the UFS AREC constitution must be followed. Any unforeseen sign of pain, suffering, or distress in any animal must be reported promptly to the Emergency Contact listed on the Authority and/or the Animal Facility Manager. It is advised that researchers receive specialised training in identifying specie-specific signs of pain, illness, injury and/or morbidity in the animals they work with for early disease diagnosis and management. Detailed evacuation plans must also be kept on-site.

#### 8.2.6 Reporting:

It is expected from all staff, students, and external collaborators and colleagues of the UFS to report animal welfare concerns, deviations from approved protocols, and any unanticipated adverse events or incidents related to animal research or that may influence the care and well-being of research animals. It is the UFS's responsibility to ensure that these concerns are investigated, and corrective action is taken. If an incident was not reported, undesirable consequences may ensue.

#### 8.2.7 **Zoonoses**:

It is imperative that all personnel involved in handling animals, or otherwise encountering animals, abide by the relevant standard operating procedures, including but not limited to those pertaining to health screenings of animal workers and adherence to occupational health and safety regulations.

#### 8.2.8 Veterinary requirements:

The maintenance of the health and well-being of animals is of utmost importance. To guarantee the welfare of these animals, rigorous veterinary standards must be fulfilled. These requirements include regular health evaluations, vaccinations, and medical treatments as needed by a SAVC registered veterinarian. All animals should also be provided with specie-suitable housing, nutrition, and social interactions, as prescribed by the attending veterinarian. Neglecting these requirements can result in negative consequences for both the animals and the staff responsible for their care. As a result, it is imperative that all facilities abide by strict veterinary protocols to ensure the long-term health and welfare of these animals.

#### 8.2.9 Researcher responsibilities:

Researchers should seek guidance from the AREC Chair if they are in doubt about their responsibilities.

#### 8.2.10 Continuation or duplication of experiments:

The justification for continuing or repeating experiments must be based on the results obtained and the potential effects on the welfare of the animals, and must be subject to continuous review.

8.2.11 **Unreliable data due to pain, distress or discomfort:** Researchers should be aware that activities involving the use of animals that produce undue pain, distress, or discomfort may result in data that are unsatisfactory or misleading when extrapolated to normal conditions.

#### 8.2.12 Inspections:

The inspection of all UFS research facilities is crucial to guarantee the humane treatment of these animals and to verify that the research protocols are executed in compliance with ethical and regulatory principles. These assessments are typically carried out by members of the UFS AREC and a representative of the NSPCA, and may cover different aspects of facility operations, including animal care, housing, veterinary care, and research procedures. The objective of these inspections is to identify any potential issues or areas of concern and to guarantee that the facility is in compliance with relevant laws and regulations. Frequent evaluations can assist in maintaining high standards of animal welfare and ensure that research is performed in a responsible and ethical manner. Inspection visits to the UFS animal facilities can be on both a regular and an ad hoc basis. At least one prearranged visit must be performed annually, with a subsequent formal report supplied to both the facility manager and the Chair of the UFS SREC. It must be ensured that a senior staff member familiar with the management practices of the facility is available during the facility visit. The Chair of the AREC must facilitate access and permissions before facility visits. Ad hoc visits may be unannounced. However, it is important to acknowledge that the term 'unannounced' does not imply a lack of prior communication with the facility being inspected. In fact, it is quite common for inspectors to make a phone call or engage in other forms of communication prior to the inspection in order to maintain a respectful and cordial atmosphere. It is the responsibility of the UFS facilities to ensure that they comply with the minimum standards and legal requirements to house animals in their facilities.

#### 8.3 Specific provisions

#### 8.3.1 **Tethering:**

Tethering large mammals for a prolonged period or in metabolism cages is not recommended and should be avoided. Alternatives to tethering must be explored and researchers should consult with the AREC for guidance. The maximum time that sheep can be kept in metabolism cages is 28 days.

### 8.3.2 Animal interactions:

All animals (wildlife and livestock) can experience significant stress during interactions with humans and their new surroundings. Researchers must use appropriate techniques to minimize stress during handling, capture, marking, transport, maintenance, and killing of animals. Technique-specific standard operating procedures must be developed and maintained that describe how stress will be minimised. These SOP's must be provided to the AREC for approval before final approval will be granted. Transport of all animals must be done in accordance with the latest Livestock Welfare Coordinating Committee Code Of Practice – Handling And Transport of Livestock, and the SANS 1488:2014 Humane Transportation of livestock by road. In some cases, prior permission from the appropriate governing authorities is required to carry out these procedures on wild vertebrates. Additionally, researchers must obtain the necessary permits/licenses from National and Provincial governmental and regulatory departments.

#### 8.3.3 **Health screenings:**

All animals should be in good health, well-groomed, and appropriately vaccinated and treated for parasites, unless a deviation from the norm is necessary for the specific research question. It is the responsibility of the researcher who acquired the animals to ensure that veterinary screening is performed and that all animals are certified as disease-free. This must be established before delivery to any UFS facilities. If an animal develops signs of disease following delivery, the researcher must ensure adequate quarantine and veterinary management of the animal. A detailed record of the veterinary screening and procedures must be kept by the researcher, and a copy must be supplied to the facility manager. Monthly morbidity and mortality reports must be submitted to the AREC by each facility.

#### 8.4 Specific considerations regarding non-human primates

## 8.4.1 Acquisition and Breeding

The NHP Facility of the UFS strives to have a self-sustaining NHP colony in order to not use wild-caught NHPs, as internationally described as best practice (European Directive 2010/63/EU; UK Commission of advice from the Animals in Science Committee Nonhuman primates bred for use in scientific procedures). Only the offspring of NHPs from the captive colony at the UFS may be used in biomedical research studies. NHPs introduced into the breeding colony may not be used in biomedical research studies - this includes wild caught as well as orphan or other NHPs that are not bred in the NHP Facility. The NHP breeding colony can be supplemented when deemed necessary to avoid extensive inbreeding and maintain genetic diversity and/or when the breeding colony is deemed too small to produce sufficient offspring. This must be done with the input of relevant experts in the field and regulatory authorities, under the guidance of a SAVC registered veterinarian. The UFS accepts responsibility for ensuring that NHPs are acquired only from legal (authorized) sources registered with the appropriate provincial authority or recognized research institution. Note: The UFS has disallowed the scientific use of wildcaught baboons in biomedical research studies.

#### 8.4.2 Environmental enrichment:

Environmental enrichment is a top priority for housing NHPs. All staff working with NHPs must be well-trained and sensitized to their needs. NHPs should not be singly housed unless prior approval has been granted by the AREC or in cases of emergency due to illness or injury. These exceptions should only be for as long as necessary, taking into account the requirements of the experiment or treatment.

## 8.4.3 Retirement, rehabilitation, and rehoming:

It is the responsibility of the attending veterinarian to monitor the health and well-being of animals in the colony. The decision to retire an animal from participation in scientific studies must be made by the attending veterinarian. It must be noted that older animals can be kept in the colony for the social structure and cohesion of the colony. When deemed necessary, the possibility of rehabilitation and rehoming must be explored in consultation with all relevant role-players, such as the National and Provincial Department of Agriculture, Land Reform and

	Rural Development, nature conservation bodies, the National and Provincial Department of Health, and animal welfare organisations.						
9. Responsibility	<b>9.1 NHREC:</b> Registration Body for RECs and REC audits. Sets the norms and standards for health and health-related research involving animals. Determines the guidelines to facilitate the best practices for RECs.						
	<b>9.2 DRD:</b> Custodian of the Policy. Provide the system and processes to support Research Ethics at the UFS. Provide updates on legislative requirements. Manage research and ethics information. Provide annual reporting to Management.						
	<b>9.3 SREC:</b> Institutional Governance Body over research ethics; processes and structures						
	<b>9.4 AREC</b> : Review research applications and handles research ethics-related complaints.						
	<b>9.5 Faculties:</b> HODs, Supervisors, and Researchers to ensure well-formulated research applications.						
	<b>9.6 Other:</b> Research Ethics Administrators, University Meeting Administration Department, Faculty Representatives, Chair of the AREC.						

10. Accountability and Authority	:							
10.1 Implementation:	10.1.1 DRD							
	10.1.2 SREC							
	10.1.3 AREC							
10.2 Compliance:	10.2.1 DRD							
	10.2.2 SREC							
	10.2.3 AREC							
	10.2.4 Researchers, Students, Research Administrators							
10.3 Monitoring and evaluation:	10.3.1 Deputy Vice-Chancellor : Research and							
	Internationalisation							
	10.3.2 Senior Director: Research and Development							
10.4 Development/review:	This procedure was developed by the task team comprised of							
10.4 Development/review.	nominees from relevant Faculties within the institution.							
	Then reviewed by:							
	10.4.1 The UFS AREC							
	10.4.1 The UFS AREC 10.4.2 Deans of Faculties							
	10.4.2 Deans of Faculties 10.4.3 Stakeholders of the UFS							
	10.4.4 Senate Research Ethics Committee							
	TOTAL COMMISSION ENTIRE COMMISSION							
10.5 Approval authority:	10.5 This procedure shall be approved by the Senate							
	Research Ethics Committee of the UFS, which is a							
	standing committee of Senate at the UFS.							
10.6 Interpretation and advice:	10.6 Nothing in this procedure document should be							
	interpreted as relieving a UFS academic or support							
	staff member(s), undergraduate or postgraduate							
1	student(s), postdoctoral fellow(s) or (senior)							

researcher associate(s) of any obligations acquired as a result of membership of a professional or other association. However, adherence to a professional code of ethics does not in itself override the obligation to observe this procedure and the relevant protocols on ethics. A section indicating who is responsible for the interpretation and advice on the procedure must be included and, if applicable, must also indicate how this body or person derives its/his/her authority, whether by delegation or otherwise.

## 11. Who should know this policy?

- 11.1 Academic or support staff member(s)
- 11.2 Undergraduate or postgraduate student(s)
- 11.3 postdoctoral fellow(s) or (senior)
- 11.4 researcher associate(s) associated with the UFS using animals in research and/or teaching activities.

#### 12 Procedure 12.1. At the UFS, animal research is coordinated by the SREC and implementation managed by the AREC. The SREC is mandated by the Senate to provide broad leadership on research ethics and ensure the plan effective functioning of AREC. The SREC has Senate-delegated responsibility for developing, monitoring, and maintaining all UFS research ethics procedures and research ethics committees. 12.2. The SREC acts as an advisory and governance structure. The committee reports to the Senate and its operations are determined by its Remit and Standard Operating Procedures. The composition, functioning and responsibilities of the AREC is governed by the AREC constitution, compiled in line with the requirements of National DOH directives and the latest SANS 10386. 12.4. The Research Ethics Offices at DRD work collaboratively with the AREC, as well as individual researchers, under the auspices of the SREC, to promote responsible conduct of research and, in particular, foster ethics in animal research and teaching. 13. Resources The UFS shall provide: required education and information dissemination on animal ethics, a) b) institutional support and structures necessary to bring this procedure into effect, infrastructure and support to ensure optimal functioning of the c) resources necessary to facilitate wide dissemination of this policy d) to all stakeholders, Provide training on the management of zoonoses when e) applicable.

UFS-AREC shall provide (stipulated in the approved AREC constitution):

	(a) animal ethics policies, SOPs, guidelines and policy briefs/interpretations as necessary,									
	(b) critical review of all institutional research and teaching practices with respect to animal ethics,									
	(c) review and approval of research projects and teaching with respect to animal ethics, and									
	(d) any other service to support animal ethical considerations within its scope to all members of the UFS community and for al activities using animals that fall under the ethical responsibility of the UFS.									
	(e) Perform passive and active monitoring of studies and animal-related procedures and processes.									
14. Definitions and	14.1 AREC – Animal Research Ethics Committee									
Abbreviations	14.2 DOH – Department of Health									
	14.3 DRD – Directorate of Research Development									
	14.4 EU – European Union									
	14.5 HOD –Head of Department									
	14.6 NHP – Non-human Primate									
	14.7 NHREC – National Health Research Ethics Council									
	14.8 NSPCA – National Council of SPCA's									
	14.9 SANS – South African National Standard									
	14.10 SOP – Standard Operating Procedure									
	14.11 SREC – Senate Research Ethics Committee									
	14.12 UFS – University of the Free State									

14. Answers to	
FAQs	
	List questions asked by participants in the development of the policy.
	Provide answers that will help direct action within the relevant departments.

EFFECTIVENESS OF THE POLICY										
Performance	То	be	completed	on	review	by	the	person	responsible	for
Indicator(s):	imp	implementation, monitoring and evaluation.								