

Animal Use Location and IACUC Review Requirement

1. Policy statements

The intent of this policy is to ensure that all animal work conducted by NUS staff and students are in accordance with the rules and regulations.

2. Definitions

Animals	All live fish, amphibians, reptiles, birds, non-human mammals, and cephalopods.
Clinical studies	<p>Research that gains information from animal patients with the intention of advancing animal health care by identifying effective therapies and practices to treat a given condition, or by advancing basic understanding of a disease.</p> <p>There are two main types of clinical studies: clinical trials and observational studies. Both are done using a research plan or protocol. While clinical trials involve assigning animals to specific interventions, observational studies involve assessing outcomes subsequent to routine medical care.</p>
Collaboration	Collaborative research using animals and involves coordination among researchers/staff from two or more institutions pursuing mutually interesting and beneficial research.
Contract research	Research done on a fee-for-service basis. NUS can be a service provider or recipient and may or may not have ownership of project's Intellectual Property.
Institutional Animal Care and Use Committee (IACUC)	The Committee, constituted by an institution, responsible for the oversight and evaluation of all aspects of the institution's animal care and use programme.
Institution	Any institution, company, organisation, association, body or person that uses or intends to use animals for scientific purposes and is licensed to do so.
Protocol	A written description of a project put forward by a PI for review by an IACUC.
Scientific purposes	Any purpose for which activities (including breeding of animals integral to a research or teaching project) are performed for the acquisition, development or demonstration of knowledge or techniques in any scientific discipline, including the purpose of research, teaching, diagnosis, field trials, product testing, production of biological products and environmental studies.

3. Scope

This policy applies to all NUS use of animals, **in an official (non-personal) capacity**, for scientific purposes as defined under the law, including clinical studies.

The use of experimental or novel therapies in animal patients for treatment purposes only (and not scientific purposes) is governed by the [Code of Ethics for Veterinarians](#) and does not fall under the scope of this policy.

4. Guidelines

All NUS use of animals for scientific purposes, as defined under the law, requires IACUC approval. Please refer to Annex A for a summary of IACUC review requirements for NUS animal work to be conducted in different animal use locations.

4.1. Animal work conducted in NUS-licensed animal facilities and procedure rooms

4.1.1. **NUS IACUC protocol review and approval is required** for all animal work conducted in NUS-licensed animal facilities and procedure rooms, regardless of whether:

- a. the PI is an NUS employee; or
- b. only part of the animal work is done in the NUS-licensed facility or procedure room.

4.1.2. NUS IACUC protocol review and approval is required unless **all** the following conditions are met:

- a. a project is to be conducted at both NUS and another institution; and
- b. the majority of the work or the most invasive procedures are done at the other institution; and
- c. a protocol is approved by the other institution's IACUC; and
- d. an umbrella Memorandum of Understanding (MOU) is signed between the two institutions allowing for investigators to submit a protocol at only one institution.

4.2. Biodiversity/Field studies

NUS IACUC protocol review and approval is required for biodiversity or field studies conducted by NUS staff or students.

4.3. Animal work conducted in non-NUS licensed animal facilities and procedure rooms

4.3.1. **Work conducted at other institutions with NUS-owned animals**

4.3.1.1. ***Other institutions with their own IACUC or equivalent***

a. ***AAALAC-accredited institutions***

Animal work using NUS-owned animals in AAALAC-accredited institutions is **allowed, providing the following conditions are met:**

- i. A protocol is approved by the IACUC of the institution where the animal work is conducted. Note that an approved NUS IACUC protocol is not required.
- ii. A written agreement between each institution's IACUC outlining responsibilities as stated in the latest NAELAR Guidelines is required. At the minimum, the written agreement should

include clear descriptions of the following:

- animal ownership,
 - responsibilities of each party, including animal care and occupational health and safety,
 - IACUC oversight and review of the protocol,
 - provision of veterinary care, and
 - post-approval monitoring.
- iii. Investigators must notify **both** IACUCs of any breach in protocol during a collaboration or contract work arrangement.

b. ***Non-AAALAC-accredited institutions***

Animal work using NUS-owned animals in non-AAALAC accredited institutions is **not allowed**.

4.3.1.2. ***Other institutions without their own IACUC or equivalent***

Animal work with NUS-owned animals in institutions without an IACUC or equivalent oversight body is **not allowed**.

4.3.2. **Work conducted at other institutions with non-NUS owned animals (100% of project)**

4.3.2.1. ***Other institutions with their own IACUC or equivalent***

a. ***AAALAC-accredited institutions***

An NUS protocol is not required to conduct animal work with animals owned by other institutions that have their own IACUC or equivalent. The same requirements as section 4.3.1.1. above apply.

b. ***Non-AAALAC accredited institutions***

If the host institution is not AAALAC accredited, a more stringent and rigorously worded inter-institutional agreement is required.

4.3.2.2. ***Other institutions without their own IACUC or equivalent***

If the host institution does not have an IACUC and NUS staff members or students wish to engage in animal use, NUS IACUC protocol review and approval must be obtained, where the following requirements are met:

- a. AVS or the overseas equivalent regulatory body has granted prior written permission to the host institution to engage in animal research work; and
- b. There is a formal written agreement with the host institution which gives express written consent to submit to the supervisory jurisdiction of the NUS IACUC framework (i.e. the host institution must agree to comply with NUS IACUC's animal welfare standards, comply with all NUS IACUC directions and grant access for inspections and monitoring activities relating to the IACUC protocol).

4.3.3. **Work conducted at other institutions with non-NUS owned animals (portion of project)**

4.3.3.1. *Other institutions with their own IACUC or equivalent*

- a. Review and approval of both an NUS IACUC protocol and a host institution IACUC protocol is required unless an MOU is signed between the two institutions. In such cases, the MOU terms as described in 4.1.2. apply.
- b. For institutions without an MOU:
 - i. NUS IACUC protocol review and approval is required for the part of the animal work to be conducted in NUS-licensed facilities. Information on what has or will be done to the animals in the other institution must be included in the NUS protocol.
 - ii. An IACUC protocol must also be reviewed and approved by the other institution for the part of animal work to be performed in their facilities.
- c. The NUS IACUC protocol will only be approved after approval from the other institution has been obtained.
- d. The same requirements apply regardless of the AAALAC accreditation status of the other institution.

4.3.3.2. *Other institutions without their own IACUC or equivalent*

NUS IACUC protocol review and approval is required. The same requirements as 4.3.2.2. apply.

4.4. *Animal work or biodiversity/field studies outside of Singapore*

The same principles as 4.1 to 4.3 apply. In addition, review and approval of the animal work must be obtained according to the host country rules and regulations.

4.5. *Clinical Studies*

For all clinical studies, an approved IACUC protocol is required BEFORE treatment and data collection activities begin. The same principles as 4.1. to 4.4. apply.

Any treatments that take place BEFORE IACUC approval is received must not be included in any publications, presentations, etc.

Treatments that take place BEFORE IACUC approval may not be eligible for inclusion in product applications with AVS, HSA, FDA, or other regulatory agencies.

4.6 *Others*

IACUC office will seek clarifications from AVS or other relevant authority on a case by case basis for any other types of arrangement not covered under this policy.

5. *References*

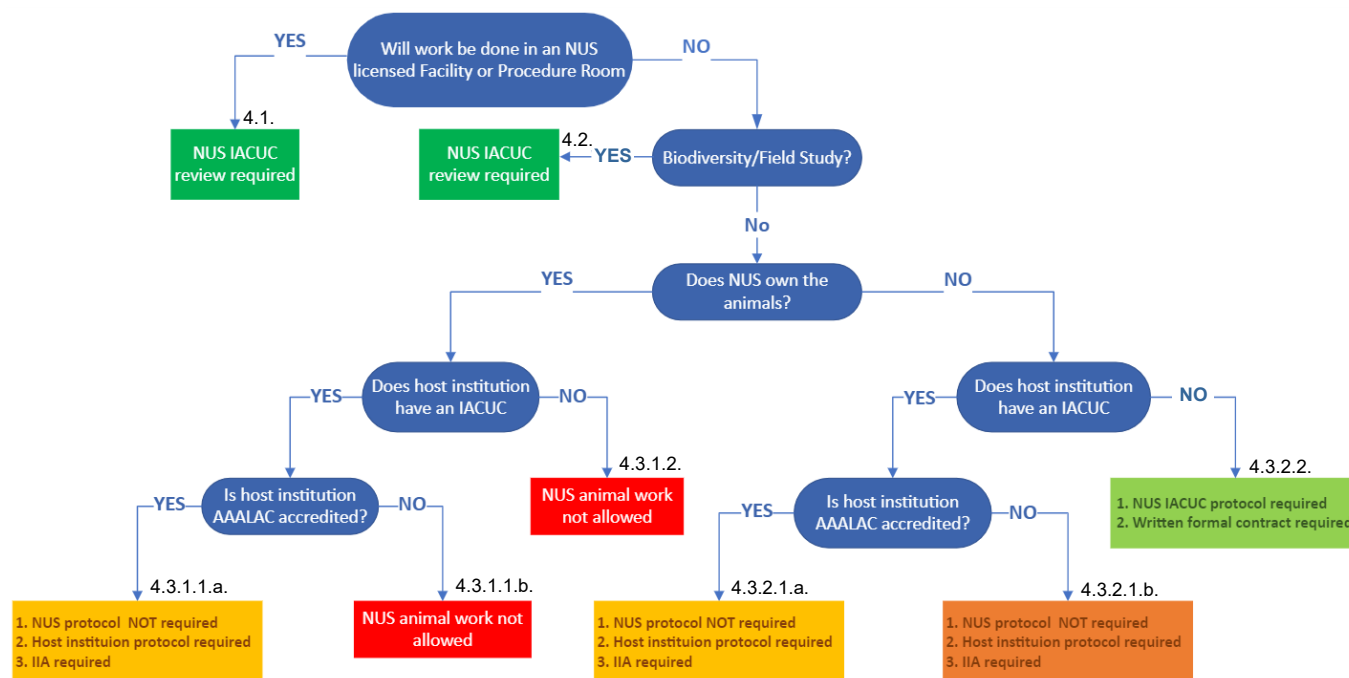
1. Guide for the Care and Use of Laboratory Animals. National Research Council, 2011.
2. Guidelines on the Care and Use of Animals for Scientific Purposes. National Advisory Committee for Laboratory Animal Research. 2022

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Revision	Author	IACUC approval date
Last reviewed	Dr Foo Tet Wei, John	14 August 2013
P106.01. Reviewed to: <ul style="list-style-type: none">1. ensure policies are in compliance with the NAELAR Guidelines 2022 and the updated Animals and Birds (Care and Use of Animals for Scientific Purposes) Rules 2004; and2. up-to-date with current practices Changes made to add section for "Collaboration or contract work"	Dr Chew Li Li IACUC	16 January 2023
P106.02. Changes made to: <ul style="list-style-type: none">1. addressed IACUC review requirements for animal work performed by NUS staff in different animal use locations;2. change the title of the policy from "NUS Staff Using Non-NUS Animal Facilities" to "Animal Use Location and IACUC Review Requirement"; and3. update the format of the policy.	AP Gavin Dawe Ms Joyce Foo AP Burton Ong Dr Lois Zitzow Dr Chew Li Li	15 July 2024

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Approved

Annex A: NUS IACUC review required*



Legend

***Applies to all work with animals, including contract work, collaborations, and clinical studies**

Green : NUS IACUC review required (standard practice)

Red : No NUS animal work allowed

Light Green : NUS IACUC protocol required if (and only if):

1. AVS has granted prior written permission to the host institution to engage in animal research work; and
2. There is a formal written agreement with the host institution which gives express written consent to submit to the supervisory jurisdiction of the NUS IACUC framework (i.e. the host institution must agree to comply with NUS IACUC's animal welfare standards, comply with all NUS IACUC directions and grant access for inspections and monitoring activities relating to the IACUC protocol).

Orange : No NUS IACUC protocol required. A written agreement [i.e. Inter-Institutional Agreement (IIA)] between the two institutions' IACUCs to outline responsibilities as stated in NAELAR 2nd Edition applies.

Dark Orange : No NUS IACUC protocol required. A written agreement [i.e. Inter-Institutional Agreement (IIA)] to outline responsibilities as stated in NAELAR 2nd Edition applies. As the host institution is NOT AAALAC accredited, a more stringent and rigorously worded Inter-Institutional Agreement (IIA) is required.