

Animal work in National University of Singapore (NUS): Helpful pointers!

For PIs and researchers who work with live vertebrate and cephalopods, please ensure the following:

- A. IACUC approval (compulsory)**
- B. ORMC approval (compulsory)**
- C. IRB approval (where applicable)**
- D. MOH approval if restricted Human Biomedical Research (rHBR) regulated under Human Biomedical Research Act (HBRA) is conducted (where applicable)**

Applications to the above 3 institutional offices can be submitted and processed in parallel but IACUC's approval will be issued only after ORMC's and IRB's (if needed) approval. Please refer to [the online FAQ](#) and [IACUC Policies and Guidelines](#) for information on application criteria and processes. As applications for Ministry of Health (MOH) approval can only be submitted after approvals by IRB and IACUC, it is therefore advisable that rHBRs be submitted as a stand-alone protocol to expedite IACUC approval. For information on the regulation ([Human Biomedical Research Act](#)) and submission of an application to MOH, please contact [the Academic and Research Compliance and Integrity Office \(ARCIO\)](#).

**** IMPORTANT NOTE: (1) NUS IACUC MUST BE NOTIFIED when NUS staff conduct animal work in other institutions in an official (non-personal) capacity. (2) Prohibited Human Biomedical Research under the HBRA Third Schedule is NOT ALLOWED.**

A. Institutional Animal Care and Use Committee (IACUC) approval

1. Submit IACUC application via online iRIMS-IACUC (Animal Oversight) module.
 - ORMC forms for the same animal work should be submitted under the "Hazard Safety" module.
 - All questions in the IACUC forms serve a purpose. Providing the requested information will reduce unnecessary to and fro exchange. The IACUC Office offers Protocol Clinics for PIs and Researchers. You may contact [Dr Mohammed Zacky Ariffin](#) to arrange for a session.
 - A summary of the submission timeline and review process can be found [here](#).
 - [Application submission and IACUC review schedule](#) is on the [IACUC website](#)
 - Procedure rooms need to be IACUC approved and AVS licensed if live animals are transported out of the centrally managed vivarium/aquarium. Procedure room inspections will be arranged by IACUC office after IACUC has reviewed and accepted the reasons and justification for the transportation of animals.
2. Researchers working with live animals need the following requisites. This can be done in parallel to an IACUC form submission, but final IACUC approval is subjected to the following requirements being met.
 - **Occupational Health (OH) programme**
Submit the completed [health questionnaires](#) to [Ms Goh Sha Wee](#) at the OH clinic for review by the OH Physician. An OH serial number will be issued after review, certifying researchers fit to work with animals. Staff submitting the questionnaire need not pay upfront. They will, however, need to obtain the approval & signature from Dept/PI & submit the [authorization form](#) to OH clinic for billing.
 - **RCULA/ RCUF**
Complete the [RCULA registration form](#). Completion of the online AALAS module is mandatory for all. Completion of Hands-on training is required for personnel handling live animals. Please contact [RCULA](#) for more information if needed. Trained, qualified individuals, based on relevant credentials, qualifications, documented training and prior experience may apply for exemption from hands-on training by submitting the "[IACUC hands-on exemption form](#)" to [DPR IACUC Office](#). Exemption is on a case-by-case basis and will not be considered if it has been more than 2 years since similar animal work was carried out.
3. An NUS userID is needed for researchers working with live animals to be included in the protocol. If needed, visitors/researchers can apply for an NUS visitor account which will take some time to process and approve. Please approach your department for assistance.

B. Office of Risk Management and Compliance (Safety and Health Unit) approval

1. Submit ORMC application via online iRIMS-IBC (Hazard Safety) module.
 - Approach ORMC representative, [Dr Lawrence Sie](#), for more information
 - Head of Department (HoD) support is needed for all ORMC online forms submission.
 - ORMC will guide PI on the necessary Ministry of Health (MOH), Animal & Veterinary Service (AVS) or other necessary permits, if required, during the application review.

C. Institutional Review Board (IRB) approval.

1. If the animal work involves the use of human biological materials, [determine if IRB review is required](#). If so, submit [online application for IRB review and approval](#). Full IRB review is needed if the animal work falls under rHBRs. Please approach [IRB](#) for more information.

Once IACUC approval is obtained, personnel listed in the IACUC protocols can approach CM's [Ms Ong Jie Min](#) for access to [CM online website](#). Information on vivarium orientation, animal order processing and drugs order etc is on the website. Please take the time to familiarize yourself with [some of the essentials required during the course of your animal work](#).

Amendments should likewise be submitted via [iRIMS-IACUC](#), and be reviewed and approved by IACUC before changes are made to your approved animal work.