

11 Aug 2023 IACUC Town Hall

Introduction to iRIMS-IACUC (Animal Oversight)

Marcus Toh, IACUC Office



NUS
National University
of Singapore

National University of Singapore

Coming soon...

- The Integrated Online Research Compliance system (iORC) will be replaced by iRIMS-IACUC (Animal Oversight) for all new applications.
- Amendments to approved IACUC applications in the iORC will continue to be made and submitted via iORC until the application expires.



Sign in with your username and password

Username

Password

[Forgot your password?](#)

Sign in

What's new?

► New Dashboard

- Allow researchers to monitor the progress of their IACUC applications

Animal Oversight

Alert

Approved Protocols

Draft Protocols

Protocols in Review

Continuing Reviews

Continuations in Review

De Novo Reviews

Draft Amendment

Transfer Ownership

Hazard Safety

Approved Protocols

Draft Protocols

Protocols in Review

Preview Protocol

Submitted

PI

Protocol #

Assignee

Date Sent

Time Sent

Title

From

To

Action

New - 3 Protocol(s) Submitted

06/15/2023

Toh, Sou Yong Marcus

2023-0326

Ein, Yuen Peng

06/19/2023

21:44:34

Test protocol to put protocol on meeting agenda

IACUC Office

Meeting

Placed on Meeting Agenda

03/14/2023

Toh, Sou Yong Marcus

2022-0004

Pillai01, Law02, Tan03

06/06/2023

02:46:13

Test project title for IACUC proposal

IACUC Office

Member(s)

Quorate Review

02/16/2023

Toh, Sou Yong Marcus

2023-0321

Siew, Ee Yan

03/10/2023

01:08:54

test protocol 2

IACUC Office

Member(s)

Post Meeting Review

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View 1 - 3 of 3

New Dashboard

Find 									
Submitted	PI	Protocol #	Assignee	Date Sent	Time Sent	Title	From	To	Action
▼ New - 3 Protocol(s) Submitted									
06/15/2023	Toh, Sou Yong Marcus	2023-0326	Tan, Yuen Peng	06/19/2023	21:44:34	Test protocol to put protocol on meeting agenda	IACUC Office	Meeting	Placed on Meeting Agenda
03/14/2023	Toh, Sou Yong Marcus	2022-0004	Pillai01, Lava02 Test03	06/06/2023	02:46:13	Test project title for IACUC proposal	IACUC Office	Member(s)	Quorate Review
02/16/2023	Toh, Sou Yong Marcus	2023-0231	Siew, Ee Yan	03/10/2023	01:08:54	test protocol 2	IACUC Office	Member(s)	Post Meeting Review

What's new?

▶ Just 'One IACUC form'

- No more main forms (e.g Animal Research, Classroom Teaching) and procedure forms (e.g A, B, C etc). Questions from the main and procedure forms are now found in the various sections of the IACUC form.
- The default form is the Animal Research form. Questions pertaining to Classroom Teaching, and Exhibition and Demonstration will appear only if the option is selected in the 'Type of Work' section.
- Researchers have the option to combine research and breeding within the same application.

What's new?

- More checkboxes and drop-down menus

Info	Pre-Op	Surgery	Post-Op	Surgery Locations
------	--------	---------	---------	-------------------

Preparation of Surgical Space (check all that apply)

Use of dedicated area that is free of clutter and excessive equipment (For rodents only).	☐
Area cleaned and disinfected prior to surgery (For large animals, CM will do the cleaning and disinfection for the OT).	☐
Dedicated sterile area on the surgical work surface.	☐
Other	☐
Preparation of Instruments (Before Surgery)	<input type="text"/>
Preparation of Instruments (between animals)	<input type="text"/>

Preparation of materials used during procedure (catheters, probes, EEG needles, etc). Check all that apply.

Provided sterile by vendor	☐
Autoclaving	☐
Gas (Ethylene Dioxide or Hydrogen Peroxide)	☐
Cold Sterilant	☐
Clean but not sterile (non-survival only)	☐
Other	☐

Preparation of surgeon (check all that apply)

Wash hands (rodents only)	☐
Surgical scrub of hands with germicidal soap	☐
Clean gown (rodents only)	☐
Sterile surgical gown	☐
Sterile surgical gloves	☐
Clean gloves (non-survival only)	☐
Surgical mask	☐
Bonnet	☐
Shoe covers	☐
Other	☐

What's new?

► Tabs

8. Type of Work

Type of Work

Teaching

Teaching Declaration

Which of the following describes the type of animal use proposed in this application?

8.1 - Type of Work *

Teaching ▼

 Save changes

 Cancel changes

What's new?

► Annual Protocol Review form

- To be submitted via iRIMS-IACUC (Animal Oversight).
- Reminders will be sent by the system
- Annual Breeding Protocol Review (ABPR) will continue to be processed offline.

Continuing Review

Info

Progress Report

Protocol Number

2023-0268

Principal Investigator

Pillai01, Lava02 Test03

Title

R4-2730 CRs - protocol EMAIL before 2 days

Date of Initial Approval

03/07/2022

Department

Organization

Email

odessa.reilly@cayuse.com

Phone

Species	Pain Category	Total # Approved	Balance	Approve Date
No records to view				

Find

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Fund Source	Fund Title	Grant Number	Currently Funded	Sponsored Project #
Agri-food & Veterinary Authority Of Singapore			No	Approved

Find

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View 1 - 1 of 1

What's next?

▶ Roadshow

➤ Tuesday, 26 September, 10-11am via Zoom

- Trainer will be going through the process of navigating the iRIMS-IACUC (Animal Oversight) module, filling up an IACUC form and the protocol review process (e.g how you could address comments/questions from IACUC within iRIMS-IACUC (Animal Oversight))

Questions?

▶ Email: IACUC General Enquiries dprbox33@nus.edu.sg

THANK YOU

https://signin.train-sg.cayuse.com/login?tenant_id=e21259a2-d0a6-4e17-877c-e69a60baf9c&redirect_uri=https%3A%2F%2Fnus.sp.train-sg.cayuse.com%2F&response_type=TOKEN&state&nonce&auth_error=false

IACUC Townhall

Follow-up of AAALAC site visit

IACUC Office
11 August 2023

AAALAC Site Visit



Jan 2023 Townhall

- Researchers informed of impending AAALAC site visit
- Advised to prepare for visit: protocols and SOPs, record updates, equipment, drugs and consumables

3 full days ... 28th Feb, 1st and 2nd March 2023

- Day1: MD1(L4), MD2(L1, 2, 4)
- Day2: MD11(B1), MD2(L3), CeLS, DBS, TMSI
- Day3: ASTC, ABSL3 and **PI procedure rooms**

AAALAC Site Visit



- Mandatory finding by AAALAC site visitors were related to deviations from the approved protocol
 - analgesia – lack of administration
 - euthanasia – inappropriate method use for confirming death

Post-AAALAC Site Visit Follow-up

- gathering of information to have a clearer picture as to how the deviations arose
- PI and research staff were recommended **refresher training** which were completed and received **reminder letters** by IACUC

PI and research staff co-operated with IACUC to complete the recommended refresher training in a timely manner for reporting back to AAALAC.

Post-AAALAC Site Visit Follow-up

- IACUC Office to conduct PAMs in 30 satellite laboratories / procedure rooms.

- From Jun to Aug 2023:
 - IACUC Officers conducted scheduled PAMs in at least 6 procedure rooms.
 - No non-compliance issues were identified during these PAM sessions.



Preventive measures

- Enhancing post approval monitoring (PAM) of procedure rooms
 - increasing frequency
 - to identify and rectify observed issues

- Engaging stakeholders
 - through continuous education
 - sharing with PIs and researchers on approved protocol compliance
 - goal of developing a culture of compliance in NUS

PAM checklist summary

- ☐ Availability of latest version of the approved protocol in the laboratory
- ☐ Only approved personnel are working on approved procedures
- ☐ Procedures must follow the approved protocol exactly
 - ✓ Method of anaesthesia - Drugs of the correct dose
 - ✓ Aseptic surgery – heat source, eye protection, sterilisation
 - ✓ Pre- and Post-operative plans
 - schedule of must be followed (once/twice a day, post-op days)
 - drug administrations must be recorded, drug use logged
 - ✓ Experimental manipulation
 - correct dose and volume
 - ✓ Monitoring
 - frequency (daily, including weekends)
 - humane endpoints
 - records to be kept e.g. body weight, tumor size
 - ✓ Euthanasia – correct method including secondary method to confirm death

Amendments must be approved before starting work



THANK YOU!

IACUC Townhall 2nd session

Friday 11th August 2023

Agenda

- 3:00pm: Welcome and Introduction by Prof Sanjay Khanna (IACUC Chair)
- 3:10pm: Presentation on results of AAALAC site visit, by Dr Leslie Retnam (Senior Associate Director, IACUC Office)
- 3:15pm: Presentation on follow-up of AAALAC site visit by Dr Tan Yuen Peng (Compliance Officer, IACUC Office)
- 3:20pm: Highlights of new on-line IACUC protocol submission platform by Mr Marcus Toh (Manager, IACUC Office)
- 3:30pm: Presentation by Dr Lois Zitzow (AV and Director CM)
- 3:45pm: Q&A
- 4:25pm: Closing Remarks by Prof Sanjay Khanna
- 4:30pm: End of Townhall

Welcome and introduction by Prof Khanna

IACUC Chair



Results of AAALAC site visit

Dr Leslie Retnam
Senior Associate Director
IACUC Office

AAALAC site visit





Achievement of Accreditation

National University of Singapore

Singapore

9 November 2010

Association for Assessment and Accreditation of Laboratory Animal Care International

AAALAC site visit



Why is AAALAC's role important? www.aaalac.org

- For some, animal research is a controversial topic.
- But like others in the animal welfare arena, AAALAC endorses the use of animals to advance medicine and science when there are no non-animal alternatives, and when it is done in an ethical and humane way.
- When animals are used, AAALAC works with institutions and researchers to serve as a bridge between progress and animal well-being.
- This is done through AAALAC's voluntary accreditation process in which research programs demonstrate that they meet the minimum standards required by law, and are also going the extra step to achieve excellence in animal care and use.
- In this way, AAALAC International is where science and responsible animal care connect.
- For “units” which obtain full accreditation after an AAALAC site visit, AVS may accept it in lieu of its subsequent annual licensing inspection.



ANIMAL & VETERINARY SERVICE

A cluster of NParks

From: Seen Yin LEE (NPARKS) <LEE_Seen_Yin@nparks.gov.sg>

Sent: Thursday, August 3, 2023 2:46 PM

To: Toh Sou Yong Marcus <marcustoh@nus.edu.sg>

Cc: Cheryl GERMONO (NPARKS) <Cheryl_germono@nparks.gov.sg>; Heejun LEE (NPARKS) <LEE_Heejun@nparks.gov.sg>; Dayyan LIM (NPARKS) <Dayyan_LIM@nparks.gov.sg>

Subject: RE: Inspection for Animal Research Facility - NATIONAL UNIVERSITY OF SINGAPORE (VR008)

- External Email -

Dear Marcus

Thank you for the information, and congrats!

With the renewal of your AAALAC-accreditation, your facility would be exempted from AVS inspection this year.

Best regards

Seen Yin

Seen Yin LEE ▪ Senior Manager, Compliance Management ▪ Animal and Veterinary Service ▪ National Parks Board ▪ Tel: (+65) 6334 8433

AAALAC site visit



accredit@aaalac.org
www.aaalac.org

July 12, 2023

Philip Keith Moore, Ph.D.
Chief Research Compliance & Chief Research Integrity Officer
Office of Deputy President (Research and Technology)
and Institutional Official
National University of Singapore
21 Lower Kent Ridge Road
Level 5, University Hall
Lee Kong Chian Wing
Singapore 119077

Dear Professor Moore:

The AAALAC International Council on Accreditation has reviewed the report of the recent site visit to the National University of Singapore, Singapore. The Council commends you and the staff for providing and maintaining an excellent program of laboratory animal care and use. Especially noteworthy were the strong

AAALAC site visit



Especially noteworthy were the:

1. strong support and commitment to the animal care and use program, evidenced in part by your participation and the participation of the Institutional Animal Care and Use Committee (IACUC) Chair and public members, and safety representatives in the AAALAC International site visit;
2. dedicated IACUC Office that managed the protocol review process and animal welfare concerns and document management for the entire institution;
3. highly experienced professional team overseeing daily animal and veterinary care, evidenced in part by well enriched animal environment and the appearance of healthy animals;
4. high level of institutional support to professional development and continuing education for the animal care and veterinary staff, evidenced in part by the number of staff that were certified by the American Association for Laboratory Animal Science (AALAS) as well as making the AALAS Learning Library available for all animal users and IACUC members;
5. impressive surgical suites that were equipped with state-of-the art equipment for imaging and animal monitoring that were available to support high quality research;
6. well maintained and designed animal facilities with a dedicated in-house engineering team for preventive maintenance together with implementation of innovative designs for research support equipment; and
7. thorough risk based occupational safety and health assessment program led by a knowledgeable safety health officer.

AAALAC site visit



The Council is pleased to inform you that the program conforms with AAALAC International standards as set forth by the *Guide for the Care and Use of Laboratory Animals*, NRC 2011. Therefore, **FULL ACCREDITATION** shall continue.

Council acknowledges receipt of the correspondence dated April 3, April 1 and March 16, 2023 detailing actions taken relative to concerns expressed by the site visitors during the exit briefing. Specifically, the items addressed satisfactorily included: appointing a non-scientific member to the IACUC; improving post-approval monitoring for satellite animal areas; re-evaluating the mechanism for reporting animal health concerns to the veterinary medical team; and implementing improved intra-operative monitoring and record keeping for small mammals and aquatic species.

AAALAC site visit



Specifically, the items addressed satisfactorily included:

1. appointing a non-scientific member to the IACUC;
2. improving post-approval monitoring for satellite animal areas;
- 3.
- 4.

AAALAC site visit



Improving post-approval monitoring for satellite animal areas

“The IACUC Office will enhance its PAM. With effect from April 2023, the IACUC Office will target PAM in at least 30 satellite laboratories annually, which will be in addition to annual IACUC Facility Inspections.”

AAALAC site visit



Improving post-approval monitoring for satellite animal areas

“The IACUC Office will enhance its PAM. With effect from April 2023, the IACUC Office will target PAM in at least 30 satellite laboratories annually, which will be in addition to annual IACUC Facility Inspections. And for satellite laboratories where non-compliances are detected, these laboratories will be re-visited within 6 months.”

AAALAC site visit



Improving post-approval monitoring for satellite animal areas

“The IACUC Office will enhance its PAM. With effect from April 2023, the IACUC Office will target PAM in at least 30 satellite laboratories annually, which will be in addition to annual IACUC Facility Inspections. And for satellite laboratories where non-compliances are detected, these laboratories will be re-visited within 6 months. Additionally, training of personnel and investigators in euthanasia and analgesia methods in these satellite areas to better improve compliance with institutional policies is being explored. Training topics to be given by AV and IACUC Officers will include methods of euthanasia and analgesia, compliance with approved protocols and implications of non-compliance(s), obtaining approval before deviating from approved procedures, and developing a culture of compliance through education and collaborative efforts.”

AAALAC site visit



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New to Animal Work? >

IACUC Meeting Schedule >

Reporting Animal Care and Use
Concerns >

RCULA/RCUF Training Schedule >



**** Notice- 16 May 2023**

May refresher training arising from March visit by AAALAC and culture of compliance

Dear PIs

IACUC office had, in March, emailed PIs with a request to attend an in-person refresher training sessions. There were 3 sessions to accommodate as many as possible. All PIs and Researchers who have protocols approved to use animals at premises outside of the main vivaria must attend the session.

Please identify and instruct your team members to register via dprnmy@nus.edu.sg for one of the following sessions:

Either

Monday 22 May 11AM to 12 Noon; OR
Tuesday 23 May 1:20PM to 2:30PM

Venue: CeLS Auditorium

Topics to be covered:

- a. Methods of euthanasia and analgesia (Dr Ztizow, Attending Veterinarian)
- b. Compliance with approved protocols, implications of non-compliance(s) and obtaining approval before deviating from approved procedures, (IACUC office) and
- c. Developing a culture of compliance through education and collaborative efforts (IACUC office)

Attendance at any one of these sessions **is required** for you and your researchers.

Thank you,
IACUC office

AAALAC site visit



Specifically, the items addressed satisfactorily included:

1. appointing a non-scientific member to the IACUC;
2. improving post-approval monitoring for satellite animal areas;
3. re-evaluating the mechanism for reporting animal health concerns to the veterinary medical team; and
4. implementing improved intra-operative monitoring and record keeping for small mammals and aquatic species.

AAALAC site visit



Re-evaluating the mechanism for reporting animal health concerns to the veterinary medical team

DBS Satellite Fish facility

A. to report to CM vet staff all fish with clinical abnormalities and all fish that are found dead:

- i. daily report to be emailed to CM Vet Team;
- ii. CM will continue to attending to clinical cases and record-keeping;
- iii. PI and researchers will continue to act on cases as instructed by CM vet staff.

B. to attend refresher training by the CM vet.

C. CM vet staff will continue to conduct routine rounds at DBS, and frequency will be increased if warranted.

AAALAC site visit



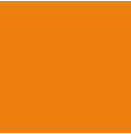
Implementing improved intra-operative monitoring and record keeping for small mammals and aquatic species.

1. Continue following the intraoperative monitoring parameters as described in the approved CM SOP 201 and SOP 101;
2. Continue implementing any additional specific intraoperative monitoring parameters and methods described in the approved protocol;
3. Continue requiring use of Post-Operative Card (placed on the rodents' cage) as described in the approved CM SOP 201.
4. Plan to develop a new rodent pre-surgical and monitoring record.

CM veterinarians planning a new rodent pre-surgical and monitoring record for use in ALL rodent surgeries, including those that are non-survival. When finished, it will be reviewed and approved by IACUC prior to implementation.



Thank you



Feedback via Qualtrics

https://nus.sydney1.qualtrics.com/jfe/form/SV_6sWtCGBWVG9YvJQ





slido

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#2910 389

