 <p>THE UNIVERSITY OF QUEENSLAND AUSTRALIA CREATE CHANGE</p>	<p>UQ Animal Ethics Committee - Standard Operating Procedure LAB_003 Transportation of Laboratory Rodents (Expires November 2027) Institutional author: UQ Biological Resources AEC Reviewed & Approved:</p>	<p>Page 1 of 3</p> <hr/> <p>Version #2</p>
---	---	--

LAB_003 Transportation of Laboratory Rodents (Expires November 2027)

I. OBJECTIVE

This SOP describes the procedural considerations workers must take when sending or receiving laboratory rodents, to or from a UQ Biological Resources (UQBR) facility, via foot, road or air transport.

NB: The use of (*) indicates this statement is dependent on the facility procedures

NB: The use of () indicates this statement is dependent on AEC Approvals**


II. COMMENTS / RECOMMENDATIONS

- All transportation of animals must:
 - Have prior Animal Ethics Committee (AEC) approval (**).
 - Observe a period of acclimatisation for the rodent's post transport, AEC approval is required to vary these periods.
 - NIL – Internal facility transport
 - 3 days – Transportation within campus
 - 7 days – Transportation from other campuses and institutions
 - Be considered necessary - after ensuring there are no viable local alternatives.
 - Be performed in compliance with any relevant regulations (e.g. OGTR requirements for transporting GMOs).
 - Consider methods to reduce any public exposure (e.g. cover animals so that they may not be seen by potential onlookers and take quiet routes)
- All transportation of animals to/from UQBR facilities must be:
 - Facilitated by UQBR wherever possible,
 - In line with SOPs "LAB_004 Packing Rodents for Issue and Export" and "LAB_005 Unpacking Received Rodents", and UQBR-OM-01 Management of Rodent Husbandry across UQBR
 - In consultation with the relevant facility manager and or the UQBR imports/exports officer, see: <https://biological-resources.uq.edu.au/staff-resources/importing-and-exporting-animals>
- Notable logistical considerations for researchers include:
 - Veterinary inspection prior to international export as per IATA requirements.
 - Provision of specialised diet, or other particulars.
 - Potential requirements for quarantine or re-derivation on arrival.
 - Requirements for an acclimatisation period on arrival.
 - Once animal orders are delivered to UQBR the responsibility of the animal is transferred to the CI
- The impacts of transportation associated stress¹ on the welfare of the animals must be considered and minimised wherever possible. This includes but is not limited to:
 - Avoid transport of vulnerable animals wherever possible e.g. early lactating females.
 - Avoid transport during inclement weather conditions (particularly via air transport).

¹ changing cages, the addition or loss of cage mates, unfamiliar sounds, odours and vibrations and fluctuations in temperature all have potential to contribute to stress.

Conditions:

- Investigators named in an animal ethics application, relative to this SOP, must be competent to implement the SOP
- Any variation to this SOP must be described in the relevant animal ethics application
- If this SOP has not been reviewed and approved by a UQ AEC within the last three years it is no longer valid and cannot be used in animal ethics applications until reapproved (see "AEC Reviewed/Approved" date in this document's header).

 <p>THE UNIVERSITY OF QUEENSLAND AUSTRALIA CREATE CHANGE</p>	<p>UQ Animal Ethics Committee - Standard Operating Procedure LAB_003 Transportation of Laboratory Rodents (Expires November 2027) Institutional author: UQ Biological Resources AEC Reviewed & Approved:</p>	<p>Page 2 of 3</p> <hr/> <p>Version #2</p>
---	---	--

- Road and air transport vehicles must have a climate-controlled cargo hold (e.g. courier vans must be air-conditioned).
- If the temperature inside the air-conditioned vehicle is over 28°C and the driver needs to leave the vehicle for over 10 minutes to deliver animals, they must reach out to the receiving facility to arrange for collection from the vehicle.
- Where temperatures are forecast to be 32°C or more and transportation requires movement outside of the facility transportation is completed prior to 9am.
- To minimise transport containers falling from trolleys, straps are used to tie them to the trolley, or a trolley with sides is used.
- Research groups will collect ordered animals by 1030 unless temperature noted above requires 9am collection. Where this does not occur UQBR will contact the requestor and where the order is not collected by 1100 rodents will be unpacked into the facility and will require re-ordering.

III. EQUIPMENT

- Equipment is as per SOPs “LAB_004 Packing Rodents for Issue and Export” and “LAB_005 Unpacking Received Rodents”: PPE, Equipment Items, Consumables, Administration & Transport Labels
- Appropriate trolley, if transport is via “foot” (i.e. if you are walking them to their destination)
- Appropriate vehicles, for transport via “road” and “air” (requires climate-controlled cargo hold)

IV. PROCEDURE (SENDING ANIMALS)

1. Confirm all sender’s details (i.e. yourself), receiver’s details, animal identification particulars, transport details. Refer to: <https://biological-resources.uq.edu.au/staff-resources/importing-and-exporting-animals>

Most of this confirmation will occur between yourself and the receiver (and if being exported, the receiving government authorities and any local transporters).

2. Provide UQBR staff with all these details with sufficient notice.

Ensure any specific transport associated requests are also provided e.g. specialised diet requirements or requests for pre-export veterinary assessment.

3. UQBR staff will conduct the transport as per “LAB_004 Packing Rodents for Issue and Export”, using the details provided by the research group.
4. Ensure you keep appropriate records of the animal despatch. (*) (**)

Records must meet any facility specific, DAWE, OGTR and AEC requirements.

V. PROCEDURE (RECEIVING ANIMALS)

1. Confirm all sender’s details, receiver’s details (i.e. yourself), animal identification particulars, and transport details. Refer to: <https://biological-resources.uq.edu.au/staff-resources/importing-and-exporting-animals>


Most of this confirmation will occur between yourself and the sender, and yourself and relevant local authorities (if the animal is imported).

2. Provide UQBR staff with all these details with sufficient notice.

Ensure any specific requirements are also provided e.g. specialised diet requirements.

Conditions:

- Investigators named in an animal ethics application, relative to this SOP, must be competent to implement the SOP
- Any variation to this SOP must be described in the relevant animal ethics application
- If this SOP has not been reviewed and approved by a UQ AEC within the last three years it is no longer valid and cannot be used in animal ethics applications until reapproved (see “AEC Reviewed/Approved” date in this document’s header).

	UQ Animal Ethics Committee - Standard Operating Procedure LAB_003 Transportation of Laboratory Rodents (Expires November 2027)	Page 3 of 3
	Institutional author: UQ Biological Resources AEC Reviewed & Approved:	Version #2

- UQBR staff will receive the animals as per "LAB_005 Unpacking Received Rodents", using details provided by the research group.
- The relevant UQBR facility manager or exports/imports officer may consult with you in relation to a required period of quarantine on arrival (depending on the health status of animals and facilities involved and any international import requirements).
- Ensure you keep appropriate records of any animal receipt.
Records must meet any facility specific, DAWE, OGTR and AEC requirements.
- A period of acclimatisation must be permitted to allow animals to recover from transportation stress and to acclimate to the new facility. (**)
Following the stated acclimatisation periods is required to provide confidence that physiological parameters have returned to basal levels (following transport associated stress).

VI. BIBLIOGRAPHY

- Conour, L. A., K. A. Murray and M. J. Brown (2006). "Preparation of Animals for Research—Issues to Consider for Rodents and Rabbits." ILAR Journal **47**(4): 283-293.
- Drozdzowicz, C. K., T. A. Bowman, M. L. Webb and C. M. Lang (1990). "Effect of in-house transport on murine plasma corticosterone concentration and blood lymphocyte populations." Am J Vet Res **51**(11): 1841-1846.
- Hoorn, E. J., J. A. McCormick and D. H. Ellison (2011). "High tail-cuff blood pressure in mice 1 week after shipping: the need for longer acclimation." Am J Hypertens **24**(5): 534-536.
- Nicholls, A. W., R. J. Mortishire-Smith and J. K. Nicholson (2003). "NMR spectroscopic-based metabonomic studies of urinary metabolite variation in acclimatizing germ-free rats." Chem Res Toxicol **16**(11): 1395-1404.
- Obernier, J. A. and R. L. Baldwin (2006). "Establishing an appropriate period of acclimatization following transportation of laboratory animals." Ilar j **47**(4): 364-369.
- Tuli, J. S., J. A. Smith and D. B. Morton (1995). "Stress measurements in mice after transportation." Lab Anim **29**(2): 132-138.
- UQBR. (2020). "Importing and exporting animals." University of Queensland Biological Resources (UQBR), from <https://biological-resources.uq.edu.au/staff-resources/importing-and-exporting-animals>

Version #	Reviewing AEC (note: all other relevant AECs ratify the approval)	AEC Review Date	Approval To Date
[#]		[DD/MM/YYYY]	

Conditions:

- Investigators named in an animal ethics application, relative to this SOP, must be competent to implement the SOP
- Any variation to this SOP must be described in the relevant animal ethics application
- If this SOP has not been reviewed and approved by a UQ AEC within the last three years it is no longer valid and cannot be used in animal ethics applications until reapproved (see "AEC Reviewed/Approved" date in this document's header).