

### **Animal Experimentation Regulations at The Chinese University of Hong Kong**

The Chinese University of Hong Kong (CUHK) strives to uphold the highest international standards in animal care and welfare, and thus conducts teaching and research involving live animals in accordance with Cap 340 Animals (Control of Experiments) Ordinance, The Hong Kong Code of Practice for Care and Use of Animals for Experimental Purposes, and The International Guiding Principles for Biomedical Research Involving Animals.

For these reasons:

1.1 All procedures must be appropriately designed and scientifically justified and only proceed under licence from the Department of Health, according to the Code of Practice and only following approval from the University Animal Experimentation Ethics Committee (AEEC).

Any amendments to the approved licence or procedure must be approved by the Department of Health AND the AEEC before work can continue.

1.2 When teaching and research involving animals is necessary there should be an emphasis on following the principles of the 3Rs;

- to **Replace** animals with non-animal alternatives,
- **Reduce** the number of animals used &
- **Refine** procedures so as to improve animal welfare.

Also the:

- 4<sup>th</sup>R, to **Respect** the animal's welfare during the conduct of the research is vitally important. Unnecessary pain, suffering or loss of life should be eliminated whenever possible. In the opinion of the AEEC all projects need to justify the scientific benefit versus the cost in welfare or loss of life to the animals used.

Projects not fulfilling the above principles may be rejected by the AEEC.

1.3 Humane endpoints should be applied whenever possible so as to minimise unnecessary and/or unintended pain and/or distress, and appropriate anaesthesia and/or analgesia provided when more than momentary or minimal pain is present. Any unexpected adverse events that may compromise the animals' welfare must also be reported to the AEEC.

1.4 Animals must be housed in appropriately designed areas and enclosures, and cared for by trained animal care personnel and veterinary staff. Water should be freely available at all times. Food may be withdrawn for up to 16 hours in animals smaller than 100g or up to 24 hours in larger animals, but the duration should be minimised as far as possible. Any restriction in water, or food above these values must be approved by the AEEC.

1.5 Researchers conducting microbiological, radiological or chemical treatment on animals should have the necessary safety approvals and safeguards in place to protect themselves and others.

1.6 Animals selected for research should be of appropriate species and genetic background to the type of research being conducted as well as have known nutritional, microbiological and general health status so as to ensure scientific validity and reproducibility.

1.7 So as to protect the Specified Pathogen Free (SPF) status of CUHK laboratory animals, only following approval from the Director of the Laboratory Animal Services Centre (LASEC) may any laboratory animals be permitted to be transferred within CUHK or enter CUHK.

1.8 University animal facilities may periodically be inspected with announced or unannounced visits from the Hong Kong Governments' Department of Health, as well as the University's AEEC, to ensure compliance with Cap 340 and AEEC approvals. Inspectors may ask for licence details, experimental records (e.g. Form 6) and/or details of your AEEC approvals. Licence records must be kept for the duration of validity of the licence. LASEC will also conduct Post Approval Monitoring (PAM) with regular veterinary rounds and random checking of project compliance on behalf of the AEEC,

1.9 Researchers should only undertake procedures to which they are trained and competent, and should seek assistance and/or further training if necessary. It is the responsibility of Principal Investigators to ensure that their students/staff are licensed, adequately knowledgeable and trained in the procedures they are assigned to perform, as well as informed of AEEC requirements for that project/procedure.

1.10 Failure to follow University and Government regulation, including Hong Kong Law and/or The Code of Practice, may lead to project suspension, disciplinary action and/or prosecution (See reporting guidelines for Post-Approval Monitoring of Projects involving Animal Subjects below).

### **Reporting guidelines for Post-Approval Monitoring of Projects Involving Animal Subjects**

The Animal Experimentation Ethics Committee (AEEC) is responsible for issuing and monitoring animal experimentation approvals for all projects at CUHK that involve the use of experimental animals. The AEEC is empowered to inspect and approve all animal holding facilities and all areas where animal experimentation is conducted to ensure that they meet an appropriate standard. The AEEC can investigate any failure to comply with AEEC regulations and make recommendations to the Pro-Vice Chancellor (Research) and Research Committee for further investigation and action. Whilst the AEEC has the right to visit all CUHK animal facilities at any time, the day-to-day oversight and veterinary services of all CUHK animal facilities have been delegated to the Laboratory Animal Services Centre (LASEC) who have full authority to monitor compliance on behalf of the AEEC in all CUHK areas conducting animal experimentation.

The following details a guideline for handling different levels of non-compliance to AEEC regulations during Post-Approval Monitoring (PAM).

**Category A - Minor non-compliance.** (e.g. failure to complete cage cards legibly and in full, minor wounds to animals without treatment or corrective action, over stocking of cages).

A verbal reminder/advice to the user concerned will be given either in person or by telephone. Corrective action is expected within two working days. A follow-up e-mail will be issued to the user by the LASEC staff concerned, as a record.

**Category B - Moderate non-compliance** (e.g. failure to display a post-operative cage card and post-operative pain relief details, slight deviation from AEEC, unauthorized breeding, inappropriate housing of litters, failure to observe appropriate tumour size and/or presence of untreated ulceration, incorrect AEEC number displayed on cage card, moderate welfare concerns or on being issued more than 3 previous category A- minor non-compliance reminders).

A written notice will be issued to the Principal Investigator (PI) of the project by the Director of LASEC (or delegate). Corrective action must be taken within one working day or the Director of LASEC may suspend the project and treat the case as a category C - Serious non-compliance .

**Category C - Serious non-compliance** (e.g. Large deviation from the AEEC or license, serious welfare concerns, poor use of analgesia/anesthesia, failure to provide adequate food and/or water, use of unauthorized animals or animals of unknown disease status without permission, or on being issued more than 3 previous Category B - Moderate non-compliance notices).

A written warning will be issued to the PI of the project and copied to the PI's School/Department Head and AEEC Chair by the Director of LASEC. If the PI concerned is the School/Department Head, the written warning will be copied to the Faculty Dean.

The project is to be suspended immediately until a discussion is held between the PI, PI's School/Department Head, Chair of the AEEC and Director of LASEC so that corrective action and measures can be discussed and taken. If the Chair of the AEEC (or delegate), or the PI's School/Department Head are not satisfied with the outcome they may choose to report the case as a Category D- Major non-compliance .

**Category D - Major non-compliance** (e.g. Major deviation from the AEEC or unlicensed procedure which may cause pain or distress, animal cruelty, research misconduct, major welfare concern, use of unauthorized animals or substances which cause a disease outbreak, or on having more than 3 previous Category C – Serious non-compliance warnings).

The Director of LASEC will formally notify the AEEC Chair of the case in writing. The AEEC Chair will notify the Faculty Dean and School/Department Head of the PI concerned of the full investigation to be conducted by the AEEC. All research will be suspended until the investigation is complete and the committee's findings reported to the Pro-Vice Chancellor (Research) and Research Committee for further investigation and action.

*Note 1. Deviation from the licence issued under the Animals (Control of Experiments) Ordinance (Cap 340), or contravention of the Prevention of Cruelty to Animals Ordinance (Cap 169), is also subject to prosecution under Hong Kong law.*

*Note 2. In the event that any animal is found to be in pain or distress, a reasonable attempt will be made to contact the user. However, at the advice of a veterinarian or the Director of LASEC, animals may be treated or humanely euthanized without prior notice on welfare grounds. It is therefore in the researcher's interest to provide a mobile number on the cage card so that advice can be sought on tissue collection or other measurements before euthanasia.*

*Note 3. The classification of what constitutes minor, moderate, serious and major non-compliance will adhere as closely as possible to the examples described. For cases not covered in the examples, the Director of LASEC in consultation with the LASEC veterinary team will classify the case. The AEEC may periodically expand or change classification of the severity of non-compliance.*

*Note 4. All rooms or areas designated for animal holding and experimentation must meet international standards and be approved by the AEEC. Schools/Departments wishing to renovate existing, or open new animal areas are advised to seek advice from the Director of LASEC and the AEEC during the design phase to ensure compliance.*