

UBC ANIMAL CARE COMMITTEE

POLICY 020

SURGICAL (SURVIVAL) OOCYTE COLLECTION FROM XENOPUS LAEVIS

Date Originally Approved: January 28, 2013

PURPOSE: This document covers the policies for the surgical (survival) collection of oocytes from *Xenopus laevis* to standardize the procedures used to collect the oocytes and to maintain procedure and post-procedure monitoring documents.

RESPONSIBILITIES: It is the responsibility of the Principal Investigator named on the Animal Care Protocol to ensure that all persons working under his/her supervision (employees or students) responsible for providing care and monitoring breeding animals have the knowledge and training necessary to do so competently. It is the responsibility of the investigator to ensure that animals are undergoing procedures in a way that follows this policy and that all staff are properly trained in the anesthesia and sterile surgical procedures of amphibians.

POLICIES:

- For surgical collection of oocytes, the total number of laparotomies per frog must be limited to **5 (five)** recovery surgeries with a possible 6th procedure as a non recovery procedure.
- Recovery surgical procedures and oocyte collection must only be performed on frogs that are clinically healthy and showing normal appearance and behaviour.
- A **minimum of 2 months** must elapse between surgical oocyte collections from any one animal.
- For repeated collections from the same animal, the surgical oocyte collection should alternate between the left and right ovaries.
- The most cranial incision must be at least 5 mm below the termination of the sternum (to reduce the chances of damaging the liver or heart when the incision is made).
- Surgeries must be performed by trained personnel using appropriate general anesthesia and analgesia and must be performed aseptically.
- Hypothermia is not an acceptable anesthetic or adjunct to anesthetic.
- Appropriate sterile suture material (absorbable, monofilament – such as Monocryl for the internal ovary and muscle; non-absorbable, monofilament – such as Prolene for the skin) must be used. Swaged on taper needles are recommended. The skin sutures must be removed 10-14 days after surgery once the incision is healed. If complications with the surgical incision are noted, veterinary consultation should be sought or the animal should be euthanized.

- A written record of the surgical and anesthetic details (surgery date, location of incision, drugs, dosages, routes of administration of all drugs, all intra- and post operative observations and any complications) must be completed and maintained for each animal and for each surgery on each animal and must be readily accessible in the animal holding area. The record keeping and monitoring must comply with the UBC Animal Care Committee Policy #17 (Policy on Monitoring of Animals used for Research, Teaching and Testing). http://www.ors.ubc.ca/sites/research.ubc.ca/files/uploads/documents/ORS/animalcare/017_Monitoring_Policy.pdf
- Appropriate post-surgical care of the animals must include **at least once daily observation and documentation** (including weekends and holidays) that pays particular attention to swimming behaviour, appearance of skin, eating behaviour, and surgical incision healing and daily records must include all treatments, observations, any complications and date of suture removal.
- Identification of individual animals must be recorded on the cage/enclosure card and on all surgical and monitoring documents.

REFERENCES:

SOP ACC-2013-01: Survival Surgical Oocyte Removal from *Xenopus Laevis*

<http://www.ors.ubc.ca/contents/animal-care-sops-guidelines>

UBC Guidelines for the Care and Use of the African Clawed Frog *Xenopus laevis*

<http://www.ors.ubc.ca/contents/animal-care-sops-guidelines>