

CENTER FOR BLOOD OXYGEN TRANSPORT & HEMOSTASIS

Small Animal Surgery and Physiology Core

CORE SERVICES

NON-SURGICAL CONSULTATION

- Animal protocol/amendments preparing for IACUC submission and revision
- Animal model, surgery procedures and microsurgery procedures consultation
- Post-Surg animal care
- Survival animal surgery facility/suit (inside lab)
- Satellite facility

SURGICAL SERVICES

- Oral Intubation for mechanical ventilation (rat, rabbit)
- Anesthesia induction and maintenance (isoflurane, ketamine)
- Multiple Vessels cannulation (femoral A/V line, jugular V line, carotid A line) (mouse, rat, guinea pig, rabbit)
- Vital signs monitoring (HR, RR, SaO₂, Temp) during surgery with small animal physiological monitoring system or PowerLab 16 channel recorder (rodent, rabbit)
- Cardiac output measurement with thermocouple system (rabbit)
- Invasive arterial/central venous pressure monitoring
- Medicine administration (i.p.; sc; i.m.; i.v.)
- Tissue/organ oxygenation measurement with OxyLED fiberoptic phosphometer
- Telemetry implantation (BP, Temp, RR, activity) consult detail on monitoring and recording (rabbit)
- Survival surgery including laparotomy with nephrectomy, ovariectomy, splenectomy, partial liver resection et al
- Rabbit hemorrhagic shock with resuscitation model
- Rabbit exchange transfusion model
- Rat asphyxia cardiac arrest with resuscitation model
- Blood collection/sampling; tissue/organ harvesting with whole body perfusion and Fixation
- Animal euthanization
- Special design animal model

MISSION

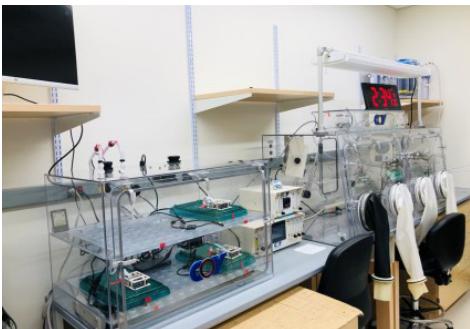
The Small Animal Surgery and Physiology (SASP) core resource primarily supports experimental models that focus on (but not be limited to) cardio-pulmonary and vascular physiology and oxygen transport at the whole organism, isolated organ and tissue level. Significant experience and technical mastery in small animal surgical preparations (rodent, hamster, rabbit). The SASP core supports 8-10 CBOTH PIs and serve as a consultant in protocol design and IACUC submission as well as support each stage of experimental preparation and data analysis. The core is fully equipped with a full array of state-of-the-art anesthetic and surgical instrumentation



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CORE INSTRUMENTATION



Coy - Custom Fabricated Hypoxia Chamber



PowerLab 16 channel recorder with accessory (cardiac output kit, bridge amp, ECG kit, pressure transducer kit)

- DSI Telemetry PhysioTel Digital System
- OxyLite Pro and OxyFlo Pro
- Metabolic monitoring system

CONTACT



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