

Job Description for Position

Job Title:	Clinical Research Veterinarian
Reports To (Title):	Associate Director

Project Description:

The Veterinary Services and Compliance (VSC) department and the Animal Facilities Department (AF), which includes the campus animal facilities of McMaster University and all satellite facilities operated by the Central Animal Facility (CAF), work as a team, hand in hand supporting a corporate animal care and use policy of responsible use of animals in research and teaching. Animal research must be justified and approved in order to obtain knowledge essential to preventing and treating human and animal disease, minimizing any pain and suffering. The VSC department oversees all issues surrounding animal health and welfare. Teaching for the purpose of scientific development and technical education is done in order to ensure competent animal use.

The VSC also oversees and operates the Animal Research Ethics Board (AREB). This is a Presidential board of 20 members, primarily researchers, that review all Animal Utilization Protocols (AUPs) for McMaster University and all its affiliated members. The incumbent is a member of AREB, which annually reviews in excess of 220 AUPs and at least 200 – 300 amendments. A research ethics board for the use of animals in research is provincially legislated in Ontario.

The animal facilities, under the auspices of McMaster University, are required to comply with all agencies overseeing and/or regulating the use of laboratory animals in Canada to ensure continuous operation and obtain funding for animal-based research to the University. This requires compliance, overseen by the VSC department, with the Canadian Council on Animal Care (CCAC) who issue Good Animal Practice certification, and is funded by and acts on behalf of the Canadian Institute for Health Research (CIHR), the National Sciences and Engineering Council (NSERC) and the Social Sciences and Humanities Research Council of Canada (SSHRC) to ensure public funds are issued only to academic institutions meeting acceptable standards of animal care. New CCAC guidelines are introduced on a regular basis and McMaster University, in particular the VSC department, must institute new or amended policies and procedures to adhere to these changing guidelines and regulations. Licensing is also required under the provincial Animals for Research Act administered by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and is dependent on acceptable levels of compliance with animal care standards. As well the federal Criminal Code has sections pertaining to humane treatment of animals. Also directly applicable are federal biosafety (Health Canada) and provincial workplace safety guidelines and regulations (Occupational Health and Safety Act). Also the head of VSC department oversees and is responsible for compliance with the Controlled Drug Regulations managed by Health Canada.

The animal care program at McMaster consists of seven facilities overseen from a regulatory and compliance perspective by the VSC department and operated by the Central Animal Facility (CAF) staff and resources. The Animal Facilities runs on a >\$5M budget and the VSC veterinary and compliance staff and the AF management, administrative and technical staff provide management, animal care services and administrative support for all seven facilities. Included are the specialized areas of animal care such as the Level 3 biohazard unit, quarantine facilities and facilities using "clean room" technology.

Collectively the seven animal facilities cover more than 75,000 square feet. These facilities house in excess of 30,000 animals in over 100 rooms in 7 buildings over 4 campuses. Each animal must be monitored at least daily (including weekends and statutory holidays) for health and welfare by qualified staff. All needs of the animals including husbandry, treatment and research protocol management involve varying degrees of intervention and levels of participation by the VSC and AF staff in the projects. These are outlined below.

The TMG VSC management staff includes Director/University Veterinarian, Veterinary Research Pathologist, Associate Director, and a Clinical Research Veterinarian. There is also an Ethics Office and Compliance Officer as part of the VSC department.

The incumbent assists the VSC and AF in ensuring that highly trained, competent technical and management staff are available seven days a week. The Clinical Research Veterinarian, in association with the other veterinary staff, provide clinical and surgical services as well as pathology services to maintain a disease-free animal facility environment, all necessary monitoring of animal health and welfare, and ensure that anesthetic, surgical and other specialized equipment is functioning properly and being properly sterilized and available to provide for the health assessment and treatment of all animals housed in all the facilities. The TMG staff must ensure regulatory compliance for all facilities as well as provide supplies and guidance for facility design, research protocol development/management.

The incumbent must also oversee the health and welfare of all animals through an internally developed Quality Assurance and Health Monitoring Program utilizing the available veterinary and specially trained technical staff. As well the incumbent is an important position to assist in the implementation of new CCAC guidelines and policies that are being developed and delivered to institutions constantly.

Most of the animals used in the various animal facilities are genetically engineered mice, many of which are immuno-suppressed and susceptible to infectious agents that are normally not regarded as pathogenic. These animals are kept in special, high technology environments and caging systems that are considered disease-free or ultraclean. This ultraclean status is very dependent upon the people who work in these areas following very carefully the special standard operating procedures (SOPs) that are in place.

There is an animal researcher training program with hundreds of annual registrants in one or more of the 25 different courses required under the CCAC core curriculum guideline. Everyone who wishes to interact in any way with research animals is required to attend at least some of these courses. These courses are developed, assessed, modified and taught by the appropriate veterinary, and technical, staff to ensure that all animal researchers are educated and competent on the most up-to-date animal research techniques.

Due to the nature of the work performed in a biomedical research facility, it is necessary to develop, assess, modify and train all Staff on the scope of the AREB's Crisis Management Program. All staff are required to participate in the program and communication and on-call devices are provided to TMG staff to assist in this endeavour.

All facilities are secured using state-of-the-art security systems to ensure the integrity of both the research and the health and safety of the animals and staff from the threats from animal activist

groups. Every person accessing the animal facilities must be carefully screened for his/her sensitivity and suitability to work in this environment and must understand and adhere to the policies and procedures developed in the McMaster University AREB's Crisis Management Program. Access to the facility is granted only after training is successfully completed. All breaches are investigated and in cases of repeated violation, privileges can be removed. The CAF works closely with all protection services units including Campus Security, Hospital Security and local authorities. VSC ensures that the Animal Facilities meet all the required security features.

Job Summary:

The Clinical Veterinarian is accountable to the Associate Director for clinical and surgical care and welfare of all animals under the auspices of McMaster University's animal care program. The Clinical Veterinarian provides clinical and research consultations and services, diagnostic problem solving and teaching/training to researchers, students and staff. The incumbent assists in the oversight necessary to ensure regulatory compliance and professional research oversight in the animal care program for research and teaching animals in the McMaster University and affiliated hospitals and institutes under confidentially approved ethics protocols and granted research projects. The CRV performs audits, supervises equipment, coordinates the QA Program with the Associate Director and the Operations Manager, supports the GEM program, supervises the pharmacy and participates in on call veterinary services.

Accountabilities:

1. **Clinical Care and Surgery** –coordinates, performs, and follows-up on clinical care, surgical and anaesthesia services to animals under the animal care program for all McMaster University Animal Facilities including emergency services. Oversight of the veterinary health care, all Treatment, Monitor and Post Approval Monitoring logs for the facilities. Supervises technical staff working on clinical and surgical projects. **Clinical Research Veterinarian** must have knowledge of fresh water and marine fish, reptiles and amphibians, skills normally held by an exotic veterinarian. Clinical diagnostics, treatments and tank management skills are imperative. The aquatic facilities can hold many hundred fish at one time and are spread through Biology, Psychology and at times the Nuclear research facility.
2. **Quality Assurance Program** –coordinates the QA program with other veterinary and technical staff to provide health monitoring, quarantine facilities and import/export approvals for all McMaster University facilities. Advises on disease outbreaks and prescribes treatment and disease eradication protocols for viral, bacterial and parasitic problems in consultation with other veterinary staff. Reviews and approves the weekly new order health certificates from commercial vendors. Participates in Post Approval Monitoring (PAM) program and Standard Operating Procedures (SOP) program.
3. **Educational Animal Training Programs** – advises on and participates in the surgical educational programs including the CMAS, ATOM, and surgical resident training programs. Delivers courses and participates in the review of the animal facilities training program at all facilities. The incumbent will be a representative for teaching protocols submitted to AREB and will deliver ethics lectures to laboratory groups using animals in teaching labs.
4. **Research/Regulatory Support** –provides consultation services to all researchers for existing or new research protocols. Gives expert advice in developing appropriate methodologies for using animals in biomedical research. Assists in the preparation and review of Animal Utilization

Proposals (AUPs) prior to submission to the AREB for review and approval. Participates on AREB. All ethics work and protocol development and grant consultation are **strictly confidential in nature**. Provides support and assistance to the Associate Director and University Veterinarian on maintaining regulatory compliance under CCAC and OMAFRA for all facilities. Participates with the OMAFRA inspection and with the CCAC Assessment program. Advises on and participates in development of all new regulatory policies and guidelines that must be implemented into the McMaster program. Participates in the Post Approval Monitoring Program and authors and reviews Standard Operating Procedures as needed. Incumbent is a member of the **Animal Research Ethics Board**.

5. **Veterinary Pharmacy** - On behalf of the University Veterinarian, the Clinical Research Veterinarian assists the Associate Director in compliance with all forms for drug requests, dispenses controlled drugs for treatments, monitors usage and maintains records of the veterinary pharmacy
6. **Supports the Genetically Engineered Mouse (GEM) program**- McMaster facilities house over 250 different genetically engineered mouse strains. The Clinical Research Veterinarian will oversee complex breeding program for in excess of 250 different GEM strains, fish and reptiles and contribute clinical information for the GEM database. Provide advice and assistance with complex breeding programs.
7. **Veterinary Audits** – conducts audits and produces reports on all McMaster Animal Facilities on a regular basis. The generated report describes potential compliance issues that must be addressed by the CAF, Facilities Services or the particular research lab.
8. **Equipment and Supervision** - Provides oversight of equipment to ensure safe and proper use of the facilities. Provides supervision of assigned CAF technical staff rotating through the facilities with oversight of all clinical services. Reviews and develops standard operating procedures for the animal facilities as coordinated by the PAM/Training Coordinator. Conducts post approval monitoring on an as needed basis.
9. **On Call** - participates with other veterinary staff in on-call rotations for all McMaster University animal facilities. This includes after hours, weekends, and holidays.

Qualifications:	
Education:	<ul style="list-style-type: none"> ▪ Undergraduate degree ▪ Doctor of Veterinary Medicine with valid licence to practice in Ontario. ▪ Post Doctoral degree in Laboratory Animal Medicine or equivalent experience
Experience:	<ul style="list-style-type: none"> ▪ 3 -5 years' experience in laboratory animal medicine required. ▪ American College of Laboratory Animal Medicine certification is an asset

Qualifications:	
Knowledge/Skills:	<ul style="list-style-type: none"> • Ability to discern good sense and judgement. Proven surgical skills. Good manual dexterity. • Ability to accurately apply math principals to calculate drug dosages. • Possess excellent time management skills and able to meet deadlines through efficient use of skills. Proven excellent interpersonal and communications skills. • Able to participate as an effective team member. Excellent organizational skills. • Able to forward plan to meet future requirements. • Professional knowledge of operating room equipment and procedures. • Working knowledge of facility infrastructure and use of all equipment required to complete tasks.

Dimensions:	
Staff Supervised	<ul style="list-style-type: none"> ▪ Direct supervision of staff and students during operational duties.
Financial Accountability	<ul style="list-style-type: none"> ▪ Participates and is responsible for budgeting process for veterinary services and the Quality Animal Program.. Animal based research at McMaster represents in excess of \$13 million in annual funding.
External Impact and Relationships	<ul style="list-style-type: none"> ▪ Participates in ensuring that McMaster University remains in compliance with numerous federal and provincial regulatory bodies, acts, public responsibilities and accountabilities as well as animal welfare laws. Maintains confidentiality of all research projects.
Operational	<ul style="list-style-type: none"> ▪ Clinical and ethical responsibility for in excess of 30,000 animals, works with over 40 employees, over 120 faculty and hundreds of students for all facilities. ▪ Surgical Educational program, PAM/SOP program, controlled drugs.
Administrative	<ul style="list-style-type: none"> ▪ Attendance at weekly facility management meetings, participate in monthly AREB and/or subcommittees meetings upon request, and participate on any Healthy and Safety or Biosafety committees upon invitation to such committees.
Programs or Projects Managed	<ul style="list-style-type: none"> ▪ Animal Educational program, AREB Animal care program, Quality Assurance program, Post Approval Monitoring program, Biosafety program.
Other (specify)	<ul style="list-style-type: none"> ▪ Provides surgical and procedural services on animals.

Working Conditions:	
Physical Effort:	<ul style="list-style-type: none"> ▪ Office administrative work, physical work handling large animals and surgery (standing for long periods at select times)
Physical Environment:	<ul style="list-style-type: none"> ▪ Animal facilities – operation of a large variety of equipment, working safely with chemicals, biohazards and radiation
Sensory Attention:	<ul style="list-style-type: none"> ▪ Precise sensory attention, hand eye coordination, surgical and technical skills required
Mental Stress:	<ul style="list-style-type: none"> ▪ High level of mental stress, particularly in surgery and managing multiple priorities

Leadership Capabilities:

At McMaster we believe in the ongoing cultivation of human potential, leveraging the diverse talents of our employees and recognizing that everyone has the opportunity to be a leader in their own role. McMaster’s core leadership capabilities are designed to nurture employee engagement through best people practices. All leaders will demonstrate these leadership capabilities:

<p>Takes a Strategic Approach</p> <ul style="list-style-type: none"> ▪ Promotes McMaster culture and values ▪ Understands global trends and impact ▪ Anticipates challenges, risks and outcomes ▪ Gathers key information and resources ▪ Enables strategic plans through role 	<p>Communicates and Collaborates</p> <ul style="list-style-type: none"> ▪ Identifies opportunities to collaborate with others ▪ Generates trust and an inclusive environment ▪ Listens with insight and respect ▪ Leverages internal and community networks ▪ Provides meaningful recognition 	<p>Drives Results</p> <ul style="list-style-type: none"> ▪ Advances the University strategy ▪ Delivers with integrity ▪ Balances priorities to achieve success ▪ Accepts responsibility and accountability for results ▪ Takes prudent risks which enable innovation ▪ Operates with fiscal responsibility
<p>Champions Change and Innovation</p> <ul style="list-style-type: none"> ▪ Acts as a positive change agent ▪ Illustrates resilience and adaptability ▪ Is bold in championing innovations ▪ Identifies and fosters opportunities for continuous improvement ▪ Seeks and utilizes feedback 	<p>Develops People</p> <ul style="list-style-type: none"> ▪ Engages in personal, team and leader development ▪ Celebrates and promotes diversity ▪ Actions learning to enhance value of work ▪ Inspires others using a coach approach ▪ Provides balanced and timely feedback 	<p>Invests in Relationships</p> <ul style="list-style-type: none"> ▪ Enhances the university brand, reputation and financial success ▪ Builds relationships using a service model approach ▪ Creates positive student, employee and partner experiences ▪ Participates actively in community engagement ▪ Demonstrates creativity in resolving issues