

Third-Party Review of Animal Research at Lawson Research Institute

Executive Summary

On Tuesday, December 16, 2025, St. Joseph's Health Care London and the Lawson Research Institute commissioned and hosted an independent third-party review of animal research activities conducted within the hospital, with a particular focus on canine-based cardiovascular research. The review was initiated following public, media, and governmental concerns alleging deficiencies in animal care and ethical oversight. The objective of the review was to assess regulatory compliance, public transparency, employee processes for reporting concerns, and the scientific justification for canine research.

Based on extensive document review, interviews with senior leadership, investigators, veterinarians, and Animal Care Committee (ACC) members, as well as an on-site inspection of the vivarium, including observing the animals, the review panel found no evidence of non-compliance with provincial or national regulations, nor any deficiencies in animal welfare or facility operations. All animal research reviewed was conducted in accordance with the Animals for Research Act, Canadian Council on Animal Care (CCAC) policies, CALAM Standards of Veterinary Care and applicable institutional requirements. Oversight by the Western University Animal Care Committee was found to be robust, independent, and effective, with multiple layers of post-approval monitoring, veterinary oversight, and external inspection.

The review did, however, identify gaps in institutional governance, alignment, and communication between the hospital, Lawson Research Institute, and Western University, particularly with respect to transparency, public communication, and the process by which the decision to halt canine research was made and implemented. The panel concluded that while the animal care and scientific practices met or exceeded required standards, there were deficiencies in clarity of roles, institutional approval processes, and coordinated communication.

Finally, the review affirmed that the historical use of canine models in advanced cardiac imaging research at Lawson was scientifically well-justified, ethically reviewed, and aligned with best practices at the time the studies were designed and approved. This research has led to significant impacts on clinical care and patients worldwide. Extensive consideration of alternatives was documented within Animal Use Protocols and through peer-reviewed grant processes. No evidence was found that canine research at Lawson was conducted unnecessarily, inappropriately, or without due consideration of scientific, ethical, and welfare factors.

The panel recommends the development and timely implementation of a revised policy framework between Lawson Research Institute, St. Joseph's Health Care London, and

Western University. This framework should clearly define authority, institutional approval processes, transparency expectations, escalation pathways, and crisis-response mechanisms.

1. Compliance of Animal Research with Regulations and Standards

Scope of Review

The panel reviewed documentation from Western University's Animal Care Committee, CCAC assessment reports, OMAFA inspection materials, approved Animal Use Protocols (AUPs), veterinary and procedural records, and related standard operating procedures. In addition, the panel conducted interviews with hospital and university leadership, ACC leadership and members, veterinarians, principal investigators, and animal care staff, and undertook an on-site visit to the vivarium and associated facilities.

Findings

The panel determined that animal research conducted at Lawson Research Institute complied fully with all applicable regulatory, ethical, and professional standards. Specifically:

- All reviewed studies were approved and overseen by the Western University Animal Care Committee, an established and independent body responsible for animal care oversight across the university and its affiliated hospital sites.
- Animal care and use met the requirements of the Animals for Research Act as well as CCAC policies and guidelines.
- Multiple external and internal inspections—including a special inspection by the Ontario Ministry of Agriculture, Food and Agribusiness (OMAFA) and a special site visit by the CCAC—identified no deficiencies in animal welfare, infrastructure, or facility operations.
- Allegations of animal welfare non-compliance raised through media and advocacy channels were formally investigated by the ACC through documentation review, interviews, and site visits, and were determined to be unsubstantiated.

The vivarium was observed to be well maintained, professionally staffed, and operated with evident attention to animal welfare, enrichment, record-keeping, and veterinary oversight. During the site visit, the two remaining dogs were found to be healthy, appropriately housed, and receiving high-quality veterinary and husbandry care. The panel observed clear empathy, professionalism, and technical competence among animal care personnel.

Governance and Policy Gaps

While operational compliance and animal welfare standards were consistently strong, the review identified governance and policy gaps arising primarily from an outdated 2013 Memorandum of Understanding between Lawson Research Institute and Western University. The absence of a clearly articulated, contemporary joint policy framework contributed to ambiguity regarding:

- Institutional authority and approval of animal studies at the hospital level, distinct from ACC approval.
- Roles and responsibilities of hospital leadership versus the Animal Care Committee in routine oversight and in response to incidents.
- Processes for coordinated decision-making, public communication, and management of research interruptions or suspensions.

Recommendations:

- The panel was advised that a revised MOU and associated policies are currently in development. The panel strongly supports their timely completion and formal adoption.

2. Public Transparency

Scope of Review

The panel spoke with key leaders regarding public criticism that focused on perceptions that animal research at Lawson was conducted in a secretive or non-transparent manner. This perception persisted even though the research was publicly funded, subject to peer review, and extensively published in the scientific literature. The panel also sought advice and opinions over the handling of the concerns in the public and the involvement of key leaders at both the hospital and the University in this process.

Findings

The panel found that:

- Research activities, methods, and outcomes were publicly reported through peer-reviewed publications, grant disclosures, and academic presentations.
- There was no evidence of intentional secrecy, concealment, or avoidance of regulatory oversight.
- There was no institutional strategy for communicating the purpose, oversight, ethical review, and societal benefits of animal research to the public.

- There were questions raised on the degree of coordination of the response to criticisms in the media between the hospital, and the ACC at the University.

The panel heard a wide range of opinions on appropriate transparency practices and communication with the public across individuals and groups at both Lawson Research Institute and Western University. This led to substantial differences in expectations on appropriate messaging. Western University is exploring enhanced transparency initiatives related to animal research and it will be important to establish and implement more formalized policies at the hospital and Lawson Research Institute. The absence of a clear transparency framework and differences in communication objectives amplified reputational risk and allowed external narratives, often lacking scientific or regulatory context, to dominate public discourse.

Recommendations

- Develop and implement a transparency policy appropriate for the Lawson Research Institute and St. Joseph's Health Care London. Efforts should be made to align this policy closely with that at Western University.
- Proactively communicate the ethical review process, regulatory oversight, model selection rationale, and application of the principles of Replacement, Reduction, and Refinement (3Rs).
- Engage animal care experts, veterinarians, and investigators directly in public education and stakeholder engagement.

3. Employee Processes and Knowledge for Reporting Concerns

Scope of the Review

The review team investigated existing process for reporting within Lawson and coordination with the hospital and the University in this process. Western University maintains comprehensive policies and procedures for reporting animal welfare concerns across all its sites, including safe disclosure mechanisms. Reporting pathways are visibly posted in the vivarium and include direct contact information for the Animal Care Committee and veterinary services.

Findings

The panel found that:

- Formal mechanisms for reporting animal welfare concerns exist and are appropriate.

- Staff have utilized both formal and informal channels to raise concerns; these concerns were reviewed and addressed.
- The Animal Care Committee has clear, well-established processes for responding to and investigating reports and has applied these processes appropriately in prior instances, including those relevant to the current review.
- Anonymous reporting options are limited and may discourage some staff from submitting concerns, particularly in high-profile or contentious situations.

The review also identified partial misalignment between hospital-level processes and university-level ACC procedures, which may have contributed to confusion regarding escalation pathways, accountability, and institutional responsibility.

Recommendations

- Enhance reporting mechanisms to include clearly supported anonymous options (e.g., QR-based or third-party reporting tools).
- Standardize education, onboarding, and refresher training regarding reporting responsibilities and protections for all staff working in or supporting animal facilities.
- Integrate hospital-level policies with ACC processes to ensure clarity, consistency, and promotion of safe reporting for staff.

4. Alternatives to Canine Research

Scope of the review

The panel conducted an in-depth review of institutional documentation, Animal Use Protocols, peer-reviewed publications, and interviews with investigators and ACC members to evaluate the scientific and ethical justification for the use of canine models in cardiovascular imaging research, as well as the consideration of alternative approaches. This assessment was informed substantially by detailed analyses prepared by members of the review panel with expertise in translational cardiovascular research.

Regulatory and Review Framework

All studies involving canine models at Lawson Research Institute were reviewed and approved by the Western University Animal Care Committee in accordance with national and institutional requirements. Each protocol required explicit justification for species selection, including documented consideration of non-animal methods and alternative animal models, consistent with the principles of Replacement, Reduction, and Refinement (3Rs). In addition, these studies underwent independent scientific merit review through competitive, peer-reviewed grant funding processes.

Rationale for the Canine Model

The reviewed research programs focused on clinically relevant questions in ischemia–reperfusion injury, myocardial infarction, post-infarction remodeling, and the development of heart failure, with a particular emphasis on advanced cardiac imaging using PET, MRI, and hybrid PET/MRI platforms. Canine models were selected based on specific characteristics that closely mirror adult human coronary artery disease, including:

- Coronary anatomy and collateral circulation comparable to humans with chronic ischemic disease.
- Myocardial wall thickness and cardiac size compatible with clinical imaging resolution.
- Electrophysiological stability suitable for longitudinal and survival studies.
- Direct compatibility with human clinical imaging systems and protocols.

These characteristics are not fully replicated in small-animal models, which, while valuable for mechanistic studies, lack the anatomical and physiological fidelity required for advanced translational imaging and device validation.

Consideration of Alternative Models

Small-animal models (e.g., rodents and rabbits) were appropriately used for early-stage and mechanistic investigations but were insufficient for the translational objectives pursued in these programs. Swine models represent an increasingly viable alternative for selected cardiovascular studies and are being actively adopted by investigators at Lawson and collaborating institutions. Swine offer advantages such as coronary artery size compatible with interventional tools and predictable infarct size; however, they also present limitations, including higher arrhythmogenicity, housing and handling constraints, and challenges in modeling chronic coronary disease.

In vitro and *ex vivo* systems, while valuable adjuncts, cannot yet replicate the integrated physiological, inflammatory, and remodeling processes required for the research questions addressed.

Recommendations:

- Work with scientific experts at Lawson and at collaborating institutions on strategies to advance research through alternative models.

Impact on Scientific Staff and Scientific Impact of the Lawson Research Institute

Although beyond the direct scope of this review, the panel heard from researchers that the cessation of canine research has had significant consequences for investigators,

research teams, and the broader research enterprise. Decisions of this magnitude benefit from a clear institutional approach to provide transitional support to affected groups. The panel heard that such initiatives are underway and the panel strongly supports these efforts to maintain research excellence, protect scientific careers, support trainees, and signal institutional commitment to ethically conducted, peer-reviewed research.

Recommendations:

- Continue efforts to provide structured transitional support for impacted principal investigators, including:
 - Transitional support to stabilize affected research programs and protect trainees and staff.
 - Access to senior scientific mentorship and strategic guidance to support model transitions, grant re-submissions, and program redesign.
 - Active institutional advocacy and communications support to help investigators present their work accurately to the scientific community, funders, collaborators, and where appropriate the public.
 - Clear signaling from institutional leadership that ethically conducted, peer-reviewed animal research is valued and supported.

Overall Conclusions and Key Recommendations

The third-party review concludes that animal research at Lawson Research Institute met all regulatory, ethical, and welfare standards, and that allegations of mistreatment were unfounded. The primary issues identified relate not to animal care or scientific conduct, but to governance, alignment, transparency, communication, and the management of institutional responses to the public controversy.

Key recommendations include:

1. **Finalize and implement a revised joint governance and policy framework** between Lawson Research Institute, St. Joseph's Health Care London, and Western University, clearly defining authority, institutional approval processes, roles and responsibilities, and escalation pathways.
2. **Develop a transparency strategy in alignment with Western University** for animal research that proactively explains ethical review, regulatory oversight, model selection, and societal benefit, and that actively involves Animal Care Committee leadership and subject-matter experts.
3. **Establish a framework for coordinated proactive communication and crisis response with Western University.**

4. **Strengthen and harmonize reporting mechanisms and staff education** related to animal welfare concerns, including enhanced anonymous reporting options and standardized training across hospital and university environments.

Collectively, these actions are important for maintaining public trust, supporting ethical and scientifically rigorous research, safeguarding investigator careers and training environments, and preserving the institutional reputation of Lawson Research Institute, St. Joseph's Health Care London, and Western University as leaders in responsible biomedical research.

3rd Party Review Members



Dr. Bradly G. Wouters (Feb 16, 2026 08:28:07 EST)

Dr. Brad Wouters – EVP Science and Research, UHN



Badru Moloo DVM (Feb 16, 2026 11:13:59 EST)

Dr. Badru Moloo – Senior Director and Program Head, Animal Resource Centre, UHN



Dr. Maria Terrabras Casas (Feb 16, 2026 09:57:59 EST)

Dr. Maria Terrabras Casas, Clinician Scientist, Sunnybrook Health Sciences Centre



Martin Cole (Feb 16, 2026 09:05:58 EST)

Martin Cole. Past Senior Inspector with Ontario Humane Society and experienced member of CCAC assessments

Appendix A: Selected Literature on Large-Animal Models in Cardiovascular Research

- Dixon JA, Spinale FG. Large animal models of heart failure: a critical link in the translation of basic science to clinical practice. *Circ Heart Fail.* 2009;2(3):262–271.
- Canty JM Jr, Suzuki G. Myocardial perfusion and contraction in acute ischemia and chronic ischemic heart disease. *J Mol Cell Cardiol.* 2012;52(4):822–831.
- Reimer KA, Jennings RB. The wavefront phenomenon of myocardial ischemic cell death. *Lab Invest.* 1979;40(6):633–644.
- Bloor CM, White FC. Functional development of the coronary collateral circulation during coronary artery occlusion in the conscious dog. *Am J Pathol.* 1972;67(3):483–500.
- Parikh M, Pierce GN. Considerations for choosing an optimal animal model of cardiovascular disease. *Can J Physiol Pharmacol.* 2024;102(2):75–85.
- Khan MS et al. A canine model of chronic ischemic heart failure. *Am J Physiol Heart Circ Physiol.* 2023;324(6):H751–H761.
- Rahman A et al. Large animal models of cardiac ischemia-reperfusion injury. *Zool Res.* 2023;44(3):591–603.
- Pilz PM et al. Large and small animal models of heart failure with reduced ejection fraction. *Circ Res.* 2022;130(12):1888–1905.