

**BIOMEDICAL & VETERINARY SCIENCES  
GRADUATE PROGRAM**



**ANNOUNCES**

The Master of Science Seminar and Examination of

**Christopher Dominic**

**“Ruby Joint Stabilization System as a Suitable  
Method of Extracapsular Repair”**

**Thursday, May 27th, 2021  
9:00AM**

**Zoom: <https://virginiatech.zoom.us/j/85951651759>**



### **Bio**

Canadian from Newfoundland, Canada. Complete BSc with Major in Biochemistry from Memorial University of Newfoundland and Labrador in 2013. Graduated from the Atlantic Veterinary College with a Doctor of Veterinary Medicine 2017. Completed a 1-year rotating internship at the Ontario Veterinary College in 2018. Began a Residency in Small Animal Surgery at the VMCVM in 2018. Following residency completion, I am moving to Calgary, Alberta with my wife to join a private practice.

### **Funded by**

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Products  
VMCVM Office of Research and Graduate Studies

## **Lay Language Abstract**

Cranial cruciate ligament disease is a common pathology of the canine stifle. Loss of this ligament results in instability of the stifle that results in pain and osteoarthritis, and can lead to damage of other intra-articular structures like the menisci. An abundant number of surgical procedures are described, with the goal of surgery being the restoration of normal stifle stability and function. A common surgical procedure for treatment is the lateral suture technique, which is an extracapsular method of stabilization. This procedure faces many complications; however, it remains a popular choice of stabilization due to its lower cost and less invasive nature. The Ruby Joint Stabilization procedure is a method of extracapsular repair that aims to restore stifle stability and circumvent several complications that plague the lateral suture. This cadaveric study sought to investigate how motion of the normal canine stifle compared to that of the cranial cruciate ligament deficient stifle with the Ruby Joint Stabilization System applied. The results of this investigation demonstrated that the Ruby Joint Stabilization System adequately restored stifle motion to a level that could yield clinically acceptable results, as was demonstrated in a previously published clinical investigation of this technique.

## **Publications**

Dominic C, Lanz OI, Muro N, et al. Titanium-Alloy Anchoring System as a Suitable Method of Extracapsular Repair. *Front Vet Sci.* 2020;7:592742. Published 2020 Dec 17.

## Presentations

1. Osteochondritis dissecans of the shoulder: arthrotomy vs arthroscopy. Comparison of the literature examining surgical approaches to fragment removal.
2. Folded-flap palatoplasty: an overview of brachycephalic airway syndrome and staphylectomy techniques
3. Regenerative therapies for osteoarthritis.
4. Effects of Ruby System application on stifle stability in an ex-vivo, cadaveric model
5. Communication between medical professionals: the benefits of collaborative efforts between medical disciplines (human and veterinary) and what can be achieved through shared knowledge
6. Ureteral and Cystic Calculi in the Dog

## Examination Graduate Committee

### **Major Advisor/Chair:**

Otto I. Lanz, DVM, DACVS  
Professor of Surgery  
Department of Small Animal Clinical Sciences

### **Graduate Advising Committee Members:**

Noelle Muro, DVM, MS, DACVS-SA  
Private Practice

Dominique Saweyre, BVSc, MS, DACVS-SA  
Department of Small Animal Clinical Sciences

Theresa Pancotto, DVM, MS, DACVS-SA  
Department of Clinical Sciences (Auburn)





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