



Assistant Professor of Soft  
Tissue and Oncologic Surgery

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IPSAV (Internship in Veterinary  
Applied Sciences), University of  
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### Title: Surgical Oncology and Biomedical Engineering

#### Research emphasis:

Dr. Traverson's research interests focus on surgical oncology and biomedical engineering applications in this field, especially limb-sparing procedures for appendicular osteosarcoma, customized 3D printed implants for complex surgical reconstructions, minimally invasive ablation therapies, and sustained release drug delivery systems.

Through her veterinary thesis, Dr. Traverson was involved in a translational research project aimed to develop a novel bone cement for the healing of critical size defects, and she later conducted research related to the development of orthopedic resorbable metallic implants as part of her master of sciences.

#### Selected publications:

Balaguer T, Fellah BH, Boukhechba F, **Traverson M**, Mouska X, Ambrosetti D, Dadone B, Michiels JF, Amri EZ, Trojani C, Boulter JM, Gauthier O, Rochet N. **Combination of blood and biphasic calcium phosphate microparticles for the reconstruction of large bone defects in dog: A pilot study.** J Biomed Mater Res A. 2018 Jul;106(7):1842-1850. doi: 10.1002/jbm.a.36384. Epub 2018 Mar 24.

**Traverson M**, Lussier B, Huneault L, Gatineau M. **Comparative outcomes between ameroid ring constrictor and cellophane banding for treatment of single congenital extrahepatic portosystemic shunts in 49 dogs (1998-2012).** Vet Surg. 2018 Feb;47(2):179-187. doi: 10.1111/vsu.12747. Epub 2017 Dec 16.

**Traverson M**, Heiden M, Stanciu LA, Nauman EA, Jones-Hall Y, Breur GJ. **In vivo evaluation of biodegradability and biocompatibility of Fe30Mn alloy.** Vet Comp Orthop Traumatol. 2018 Jan;31(1):10-16. doi: 10.3415/VCOT-17-06-0080. Epub 2018 Jan 11.

#### Application:

- Surgical Oncology
- Canine model of osteosarcoma
- Biomedical engineering
- 3D printing

#### Collaboration potential:

- Limb-sparing surgery
- Reconstructive surgery
- 3D printed surgical implants
- Biomaterials & novel therapy testing