



[JOR](#) | [JOR Spine](#) | [Section Website](#) | [Past Section Newsletters](#) | [Linkedin](#)

## January 2026

### In this Issue:

[LOOKING AHEAD ORS 2026](#)

[WEBINAR RECAP](#)

[JOR ARTICLES OF INTEREST](#)

[INSPIRATION CORNER:  
EMRACE THE 3RS](#)

[ONE MEDICINE, ONE  
ORTHOPAEDICS, ONE  
COMMUNITY](#)

### Looking Ahead: ORS 2026



As we start 2026, we turn our attention to the **ORS 2026 Annual Meeting, March 27-31, in Charlotte, NC**. Our Section has many exciting sessions planned, including the following.

**Workshop:** [\*Addressing Overlooked Variables in Preclinical Fracture Repair Research for Improved Translation.\*](#)

**Section Scientific Meeting:** [\*Animal Models of Orthopaedic Infection: Design, Relevance, and Translational Value.\*](#)

[Register for the 2026 ORS Annual Meeting](#)

### Webinar Recap

If you missed our Section's webinars last year, you can find a recap of each and links to the recordings below.

**Animal Models for Tendon Research -  
Comparative Considerations for  
Optimizing Translational Validity**

**Animal Models of Aging 101:  
Insights, Limits, and  
Future Directions**

[Watch Webinar](#)

This webinar highlighted how different animal and engineered models advance tendon research and translational relevance. Sushmitha Durgam, MS, PhD, DACVS, emphasized the horse as a uniquely powerful model due to its human-like tendon structure, naturally occurring injuries, and clinical imaging capabilities. She compared surgical and collagenase injury models and outlined strengths and limitations of large-animal approaches. Keith Baar, PhD presented complementary rodent and engineered tendon models for studying load regulation, tendinopathy, rupture repair, and molecular mechanisms. Together, the talks underscored the value of integrating large animal, small animal, and engineered in vitro systems to optimize translational validity in tendon research.

[Watch Webinar](#)

This webinar explored the complexities of using aging animal models in musculoskeletal research, emphasizing the need for clearer definitions, greater consistency, and stronger translational relevance across studies. Brian Diekman, PhD highlighted how differences in age selection, biological variability, and practical constraints can significantly influence the interpretation of aging studies, particularly in knee osteoarthritis. Makarand V. Risbud, PhD presented complementary insights into intervertebral disc degeneration, detailing how aging, cellular senescence, inflammation, and epigenetic regulation shape disc pathology. Together, the talks highlighted the opportunities and limitations of current aging models and called for increased consensus in designing, interpreting, and translating preclinical studies.

## JOR Articles of Interest



### **Ciprofloxacin Treatment in Juvenile Mice Involves Neuronal Activation and Mimics Physical Features of Human Disease**

This study in juvenile mice shows that the commonly used antibiotic ciprofloxacin can trigger tendon changes similar to early fluoroquinolone-related tendinopathy in humans.

[Read More](#)

### **Identification of Antibodies to Chondrocyte and Synoviocyte Antigens in Equine Osteoarthritis**

Innate immune responses are now recognized as important drivers of osteoarthritis (OA), but far less is known about how the adaptive immune system contributes to the ongoing, low-grade inflammation seen in the disease.

[Read More](#)

## Inspiration Corner: Embrace the 3Rs



The 3R principle (replace, reduce, refine), introduced by Russell and Burch in 1959, serves as a framework for ethically using animals in research and enhancing scientific quality and integrity in studies involving animals.

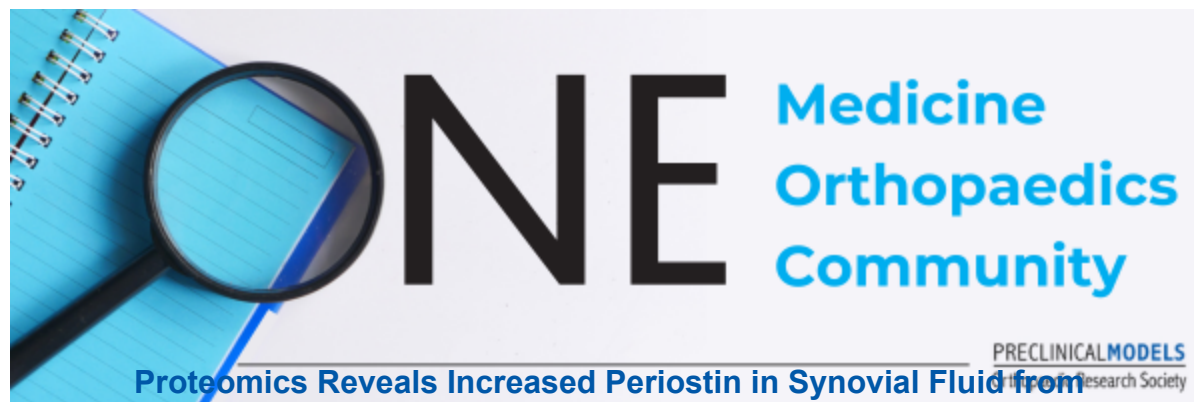
### **Food for Thought: Monitoring and Reporting Post-Operative Pain in Rodent Models**

**Brought to you by: Annemarie Lang, DVM, PhD, Assistant Professor, Department of Orthopaedic Surgery, University of Michigan**

Accurately monitoring and reporting post-operative pain in rodent studies remains a persistent challenge across biomedical research—and our field is no exception. From bone fracture and vertebral injury models to OVX and mechanically induced osteoarthritis, many of the models we rely on involve moderate-severity procedures accompanied by perioperative pain. Yet approaches to measuring, interpreting, and reporting pain vary widely, limiting our ability to compare studies, reproduce findings, and ensure that experimental outcomes align with clinically meaningful recovery.

[Read More](#)

## **One Medicine, One Orthopaedics, One Community**



### **Proteomics Reveals Increased Periostin in Synovial Fluid from Canine and Human Anterior Cruciate Ligament Injury**

This feature highlights exciting topics and scientists from the field of comparative medicine to foster translational science. **Brought to you by: Lynn Pezzanite, DVM, PhD**

Posttraumatic osteoarthritis (PTOA) occurs commonly following anterior cruciate ligament (ACL) injury in both dogs and humans, frequently affecting young, athletic patients. While ACL reconstruction in people has been associated with less severe radiographic changes compared to nonsurgical interventions, factors contributing to the development and progression of PTOA following ACL injury

remain poorly understood. To address this, researchers at Cornell University College of Veterinary Medicine, the University of California, Davis School of Veterinary Medicine, Weill Cornell Medical College, and the Hospital for Special Surgery, New York evaluated differentially expressed proteins that may serve as candidate biomarkers or potential therapeutic targets to further define disease pathogenesis following ACL injury.

[Read More](#)



**Orthopaedic Research Society**

9400 W. Higgins Road, Ste. 225

Rosemont, Illinois 60018

(847) 823-5770

[ors@ors.org](mailto:ors@ors.org)

**Connect with ORS on Social Media:**

[Facebook](#)

[Twitter \(X\)](#)

[LinkedIn](#)

[TikTok](#)

[Instagram](#)

[Bluesky](#)