

## Tuesday SEPTEMBER 21

- 3:30 PM – 5:00 PM Board of Directors Meeting
- 5:00 PM – 8:00 PM **Welcome Reception**
- 6:00 PM – 7:30 PM **Introduction and Opening Lectures**
- “Cell-based Therapies for COVID” (Dan Weiss)
  - “Bone Regeneration through Integration of Growth Factor Signaling” (Kurt Hankenson)

## Wednesday SEPTEMBER 22

- 8:00 AM – 8:45 AM **Breakfast at the TMI**
- 8:45 AM – 10:30 AM **Introduction and Keynote Lectures**
- “One Health Collaborations Accelerate Medical Progress” (Sue VandeWoude)
  - “Building a Program in Regenerative Therapies through Collaboration and Recognizing Translational Opportunities” (Wayne McIlwraith)
  - “Cellular Therapies for OA – Defining the Mechanism of Action” (Frank Barry)
- 10:30 AM – 10:45 AM **Morning break**
- 10:45 AM – 12:20 PM **Immunomodulation**
- “Activated Stromal Cells for Management of Drug-resistant Infections” (Steve Dow)
  - “Intra-articular administration of TLR-3 Activated Allogeneic Mesenchymal Stroma Cells Significantly Reduces Bacterial Burden and Pro-inflammatory Biomarkers in Synovial Fluid in an Equine Model of Multidrug Resistant Staphylococcal Septic Arthritis” (Lynn Pezzanite\*)
  - “Comparing the Immunomodulatory Properties of Equine BM-MSCs Culture Expanded in Autologous Platelet Lysate, Pooled Platelet Lysate, Fetal Bovine Serum, and Xenogen-free Supplemented Culture Media” (Kyla Ortved)
  - “Comparing Allogeneic Adipose-derived Mesenchymal Stem Cells to Prednisone for the Treatment of Feline Inflammatory Bowel Disease” (Tracy Webb)
  - “Comparison of Canine Placenta and Adipose-derived Mesenchymal Stem/Stromal Cells Immunomodulatory Properties: Applications to Inflammatory Brain Disease.” (Kaitlin Clark\*)

12:20 PM – 1:15 PM

***Lunch at the TMI***

1:15 PM – 3:30 PM

**Bioengineering**

- “Thinking Outside the Cell – Understanding Regenerative and Tumor Collagen Microenvironments to Improve Bioengineering Strategies” (Susan Volk)
- “Being Well-rounded Makes a Difference: MSC Spheroids Show Improved Efficacy in Treating Joint Inflammation” (Jennifer Barrett)
- “Ten Years of Bone Regeneration in Dogs Using rhBMP2: What Have We Learned so Far?” (Boaz Arzi)
- “Tissue Engineering of Canine Cartilage from Surgically Debrided Osteochondritis Dissecans Fragments” (Natalia Vapniarsky)
- “An Injectable Neurogenic Hydrogel for Restoring Salivary Gland Function After Radiation Damage” (Chelsea Bahney)
- “A Novel Comparative Wound Healing Model Reveals Tissue Regeneration is Enabled in the Absence of Fibroblast Inflammatory Priming” (Holly Sparks)

3:30 PM – 3:45 PM

***Afternoon break***

3:45 PM – 5:30 PM

**Pluripotent Cells Plus**

- “Canine Induced Pluripotent Stem Cells – State of the Field” (Amir Kol)
- “The Effect of Administration of Platelet-rich Plasma and Triamcinolone Acetate in Combination on Inflamed Equine Osteochondral and Synovial Explants in Co-culture” (Sophie Boorman\*)
- “Cellular and humoral Immunogenicity Investigation of Local Single and Repeated Equine Allogeneic Mesenchymal Stem Cell Treatments in Horses Suffering from Joint and Tendon Disease” (Eva Depuydt\*)
- “Inflammatory Cytokines Induce Epithelial Barrier Dysfunction in a Bovine Intestinal Organoid Model” (Charles Crawford\*)
- “Characterization of Canine Allogeneic Uterine-derived Stromal Cells Intended for Therapeutic Use” (Linda Black)

5:30 PM – 6:30 PM

Poster Judging Session

# Thursday **SEPTEMBER 23**

8:00 AM – 9:00 AM ***Breakfast at the TMI***

9:00 AM – 11:00 AM **Keynote Lectures: Collaboration in Regenerative Medicine**

- “Regenerating the Salivary Gland after Radiation: Translation from Mouse to Dog to Man” (Nicole Ehrhart and Chelsea Bahney)
- “From Horses to Humans: Studying OA and Cartilage Repair in Horses and People” (Laurie Goodrich and Constance Chu)

11:00 AM – 11:15 AM ***Morning break***

11:15 AM – 12:15 PM **Selected Oral Presentations**

- “Proof of Concept Evaluation of Canine Multipotent Adult Progenitor Cells (ML-223) in Canine Cartilage Disease Models” (Mark Hurtig)
- “Approaches to generation of stem cell derived insulin-secreting cells (ISCs) for the management of canine diabetes” (Francis Karanu)
- “Efficacy of Intravenous infusion of Feline Allogeneic Uterine Tissue-derived Regenerative Cells for Treatment of Chronic Kidney Disease in Cats: a Pilot Study” (Shelly Zacharias)
- “Expanding the Horizons of Mesenchymal Stem Cell Therapy: Challenges, Safety, and Utility of MSC Therapy in Exotic Animal Species” (Valerie Johnson)

12:15 PM – 1:15 PM ***Lunch at the TMI***

1:15 PM – 3:45 PM **Extracellular Vesicles and Organoids**

- “Extracellular Vesicles – the Next Frontier in Veterinary Medicine” (Andrew Hoffman)
- “Potential Roles for Extracellular Vesicles and Organoids in Regenerative Medicine” (Fiona Hollinshead)
- “Mini-organs in Dogs, Cats, Turtles, and Snakes – New Tools for New Treatments” (Jon Mochel and Karin Allenspach-Jorn)
- “Characterization and Immunomodulatory Properties of Extracellular Vesicles Isolated from Bone Marrow-derived Mesenchymal Stem Cells” (Angela Gaesser\*)
- “Regeneration of Equine MSC-derived Cartilage: Efforts Toward Functional Tissue Engineering” (Cristobal Lopez-Jimenez\*)
- “The Use of Biologic Therapies by Equine Large Animal Specialists” (Lyndsay Knott\*)

- 3:45 PM – 4:00 PM **Afternoon break**
- 4:00 PM – 5:30 PM **Large Animal Panel**
- Moderated by Laurie Goodrich
  - Panelists: Erin Contino, Tim Ober, Kyla Ortved, Mark Revenaugh, and Katie Seabaugh
- 6:00 PM – 8:30 PM Reception and Awards Presentation (Probst Brewery)

## Friday **SEPTEMBER 24**

- 7:00 AM – 8:00 AM **Breakfast at the TMI**
- 8:00 AM – 9:45 AM **Next Steps**
- “Looking into the Future of Regenerative Medicine for Human Musculoskeletal Injuries” (Jason Dragoo)
  - “FDA: Animal Cells, Tissues, and Cell- and Tissue-based Products” (Lynne Boxer)
  - “New Visions for JAVMA and AJVR” (Lisa Fortier)
- 9:45 AM – 10:00 AM **Morning break**
- 10:00 AM – 12:30 PM **Commercialization Session** (e.g. “How I Built This”)
- Wayne McIlwraith
  - Jan Spaas and Holger Richly
  - Thomas Koch
- 12:30 PM – 12:45 PM Closing Remarks

*\*New Investigator*