

# **VOS 2019 PROGRAM**

**Saturday, February 9<sup>th</sup> – Registration and Welcome Reception**  
*Sponsored by Zoetis*

**Room: Peak 4/5**

7:00-9:00 PM Registration and Wine & Cheese Reception

**Sunday, February 10th – Evening Session**  
**Orthopedics I**  
***Sponsored by Intrauma***

**Room: Peak 4/5**

**Moderator: Jeff Godwin**

3:45 PM	President's Welcome and Foundation Message	J. Godwin
4:00	3746: Evaluation of the Process and Materials of 3-D Printed Bone Models for Use in Education and Presurgical Planning Purposes	S. Malek
4:15	3716: Limb Sparing in Dogs Using Individualized 3D-Printed Endoprostheses and Cutting Guides for Distal Radial Osteosarcoma: A Pilot Study	B. Seguin
4:30	3789: Use of Patient-Specific 3D Printed Drill Guides for the Placement of a Coxofemoral Toggle Pin	B. G. Darrow
4:45-5:15	Break	
5:15	SOTI: NGD: Update on Citregen Science	R. Tran
5:30	3770: Use of an Amikacin-Infused Collagen Sponge Concurrent with Implant Removal for Treatment of TPLO Surgical Site Infection in 30 Cases	S. W. Frederick
5:45	3769: Comparison of Activity Levels Derived from Two Accelerometers in Dogs with Osteoarthritis-Associated Pain: Implications for Clinical Trials	S. Mejia
6:00-7:00	Jacques Jenny Lecture: Keeping the Team on the Field. A 20-year Experiment with the Milwaukee Brewers. Sponsored by Intrauma	B. Raasch
7:00-8:30	Exhibitors Showcase Sponsored by GeoSurgical	

**Monday, February 11<sup>th</sup> – Morning Session**  
**Orthopedics II**  
*Sponsored by Johnson and Johnson, Medical Devices Companies*

**Room: Peak 4/5**

**Moderator: Alan Cross**

6:45 AM	Past Presidents' Breakfast benefitting the VOS Education Foundation <i>Sponsored by VOS</i>	
7:00	3745: In Vitro Comparison of a Novel Plateless Tibial Plateau Leveling Osteotomy Implant to a Locking Plate for Maintenance of Osteotomy Position and Biomechanical Stability	S. Kidd
7:15	3793: Effects of Marker Cluster Combinations on the Calculated Three-Dimensional Kinematics of the Canine Stifle Joint	M. Lu
7:30	3762: Ex-Vivo Mechanical Properties of the 2.5mm Mini Pushlock	A. H. Peura
7:45-8:15	Break	
8:15	SOTI: Implantable Devices in Veterinary Medicine: Research, Development and Ethics	M. Conzemius
8:30	3817: Comparing the Functional Recovery of Dogs Undergoing TPLO Surgery with Stifle Arthroscopy or Arthrotomy: A Pilot Study	S. A. Martinez
8:45	3791: Use of an Intraoperative Distraction Device as an Aid for the Open Reduction and Fixation of Chronic Lateral Humeral Condylar Fractures in Dogs	B. E. Shessel
9:15-10:15	Resident-In-Training Session – Imperial Ballroom – Sponsored by AOVET North America	
9:30-3:30	Lab: Sponsored by Biovision/Owl Manor Veterinary – Peak 17	

**Monday, February 11<sup>th</sup> – Morning Session**  
**Equine Orthopedics I**  
***Sponsored by GeoSurgical***

**Room: Imperial Ballroom**

**Moderator: José García-López**

- |            |  |                      |
|------------|--|----------------------|
| 6:45 AM    | Past Presidents' Breakfast benefitting the VOS Education Foundation<br><i>Sponsored by VOS</i>             |                      |
| 7:00       | 3705: The Relationship between Sagittal Hoof Balance and Hindlimb Lameness in the Horse                    | L. M. Pezzanite      |
| 7:15       | 3740: Corticocancellous Bone Autograft in the Treatment of a Third Metacarpal Bone Non-Union in a Foal     | C. Gillespie-Harmon  |
| 7:30       | 3747: Clinical and Radiographic Features of Septic Phytitis in Foals                                       | D. G. Suarez-Fuentes |
| 7:45-8:15  | Break  |                      |
| 8:15       | 3754: Second Harmonic Generation (SHG) Imaging of Equine Flexor Tendon Fascicular Structure during Healing | M. Stewart           |
| 8:30       | 3772: Evidence of Subchondral Lesions Preceding Proximal Sesamoid Bone Fracture in Thoroughbred Racehorses | S. K. Shaffer        |
| 8:45       | 3786: Standing Trans Cyst-like Lesion Screw Application in the Proximo-Medial Radius of a Horse            | K. G. Glass          |
| 9:15-10:15 | Resident-In-Training Session – Imperial Ballroom – Sponsored by AOVET North America                        |                      |
| 9:30-3:30  | Lab: Sponsored by Biovision/Owl Manor Veterinary – Peak 17   |                      |

**Monday, February 11th – Evening Session**  
**Sports Medicine and Rehabilitation**  
*Sponsored by Johnson and Johnson, Medical Devices Companies*

**Room: Peak 4/5**

**Moderator: Janet Van Dyke**

4:00	3719: Scientific Principles for Post-CCL Repair Rehabilitation: An Evidence-Based Approach	K. Kirkby Shaw
4:15	3743: Survey of 156 Police Dogs in New Zealand: Functional Assessment and Canine Orthopedic Index	W. Baltzer
4:30	3806: Gait and Electromyographic Alterations Due to Early Onset of Injury and Eventual Rupture of the Cranial Cruciate Ligament in Dogs: A Pilot Study	C. Adrian
4:45	3767: Horizontal Shear Forces of Dirt and Synthetic Arena Surfaces	C. M. Rohlf
5:00-5:15	Break	
5:15	SOTI: Owl Manor: Good Manufacturing Practices of Regenerative Medicine Products	B. King
5:30	3780: The Incidence of Musculoskeletal Injuries in Avalanche Search and Rescue Dogs in North America	S. A. Martinez
5:45	3712: Carpal Hyperextension in Agility Dogs	A. E. Castilla
6:00-7:00	Jacques Jenny Lecture: Common Sports Injuries in the Human Athlete. <i>Sponsored by Arthrex</i>	B. Raasch

**Monday, February 11th – Evening Session**  
**Equine Orthopedics II**  
*Sponsored by Sontec*

**Room: Imperial Ballroom**

**Moderator: Matt Stewart**

4:00 PM	3796: Effect of Increasing Fracture Site Stiffness on Bone-Pin Interface Stress in the Equine Distal Limb Transfixation Cast: A Finite Element Analysis	T. B. Lescun
4:15	3795: Tearing of the Palmar Aspect of the Intersesamoidean Ligament as Primary Pathology of the Digital Tendon Sheath: An Endoscopic Diagnosis in Two Horses	A. P. Bathe
4:30	3807: Case Series: Scapulohumeral Arthrodesis in Four Shetland Ponies	L. I. M. Kadic
4:45	3823: Successful Closed Reduction and Conservative Management with Traumatic Elbow Luxation and Medial Collateral Ligament Rupture in an Equid	E. M. Collar
5:00-5:15	Break	
5:15 Peak 4/5	SOTI: Owl Manor: Good Manufacturing Practices of Regenerative Medicine Products	B. King
5:30	3814: Description of the Anatomical Landmarks for Measuring Intravertebral and Intervertebral Sagittal Diameter Ratios on Equine Cervical Radiographs	D. G. Suarez-Fuentes
5:45	3826: Distal Tibial Osseous Cyst-like Lesions in Association with OCD Lesions of the Distal Intermediate Ridge in Three Horses	A. P. Bathe
6:00-7:00 Peak 4/5	Jacques Jenny Lecture: Common Sports Injuries in the Human Athlete. <i>Sponsored by Arthrex</i>	B. Raasch

**Tuesday, February 12<sup>th</sup> – Morning Session**  
**Bloomberg Awards**  
*Sponsored by Boehringer-Ingelheim, New Generation Devices,  
VOS Past Presidents, Orthomed, AO Vet, Securos and IMEX*

**Room: Peak 4/5**

**Moderator: José García-López**

7:00	3700: Mechanical Comparison of Small Interlocking Nail Systems in Torsion Using a Feline Bone Model Surrogate	D. M. Marturello
7:15	3720: The Effect of Short and Long-Term NSAID Administration on Osteotomy Healing in Dogs	H. M. Gallaher
7:30	3749: Evaluation of Threaded External Skeletal Fixation Pin Insertion with and without Predrilling in Avian Bone	G. Lam
7:45-8:15	Break	
8:15	3808: Role of Cartilage and Bone Matrix Regulation in Early Equine Osteochondrosis	S. K. Grissom
8:30	3718: Silicone Cannula Guards for Canine Stifle Arthroscopy Reduce Iatrogenic Cartilage Injury	I. Cortes III
8:45	3771: Determination of Optimal Torque for Cortical Bone Screw Fixation in Equine Third Metacarpal Bone	J. Whyard
9:00	3784: Efficiency and Accuracy of 3D Printed Patient-Specific Guides for Angular Limb Deformity Correction in Dogs	C. C. De Armond
9:30-3:30	Lab: Sponsored by Arthrex – Peak 17	

**Tuesday, February 12<sup>th</sup> - Evening Session**  
**Complications and Corrections**  
*Sponsored by Veterinary Transplant Services*

**Room: Peak 4/5**

**Moderator: Reunan Guillou**

4:00	SOTI: Arthrex: How Human Development of Products Affects Vet Medicine	C. Adams
4:15	Invited Lecture: Drilling; not so fast	T. B. Lescun
5:00-5:15	Break	
5:15	Invited Lecture: Orthopedic Failures and Revision Strategies	C. Hudson
6:00	Jacques Jenny Lecture: Arthritis and the Athlete. Treatment to Avoid Joint Replacement. <i>Sponsored by: Arthrex</i>	B. Raasch



**Wednesday, February 13<sup>th</sup> – Morning Session**  
**Orthopedics III**  
*Sponsored by Arthrex*

**Room: Peak 4/5**

**Moderator: Caleb Hudson**

7:00	3761: Ex Vivo Mechanical Testing of Various Suture Patterns for Use in Plating as a Repair Method for Tendon Rupture	M. J. Hale
7:15	3760: Ex Vivo Biomechanical Comparison of Two Anchoring Systems and Two Suture Patterns for Calcanean Tendon Attachment to the Calcaneus in Dogs	W. M. Karlin
7:30	SOTI: Zoetis – The Role of NGF in OA Pain & Potential for Future Therapy	R. Palmer
7:45-8:15	Break	
8:15	SOTI: Everost – The Use of Advanced Material and Designs in Veterinary Medicine	H. Wotten
<b><i>Rapid Fire Poster Presentations</i></b>		
8:30	3797: Metastatic Progression of Osteosarcoma Following Intravenous Administration of Mesenchymal Stromal Cells Can be Ameliorated with Cisplatin	R. Rose
8:33	3723: Percutaneous Fluoroscopically Guided Lag Screw Fixation for Sacroiliac Luxation	J. Naiman
8:36	3752: Reduction of Excessive Tibial Plateau Angle Using a Hinged Fixator and Distraction Osteogenesis	S. MacArthur
8:39	3768: Comparison of Cross-Sectional Geometrical Properties and Bone Density between Saint-Bernard and Other Giant Breed Dogs	S. Mejía
8:42	3830: Surgical Approaches for Minimally Invasive Interlocking Nailing Osteosynthesis (MINO) in Dogs	B. Minto
8:45	3773: Infectious Sacroiliitis in Conjunction with <i>Brucella canis</i> in a Dog	J. Forbes
8:48	3763: Use of a Novel Osteotomy Guide (BoneTractor) for Closing Wedge Osteotomies: Ex Vivo Evaluation of Osteotomy Accuracy	S. Shamir
8:51	3828: Tendon Plating for Revision of Tibial Tuberosity Fragmentation in Two Dogs	A. Sterman
8:54	3736: Three-Dimensional Computer-Assisted Surgical Planning and Use of 3-Dimensional Printing in the Repair of a Complex Articular Femoral Fracture in a Dog	G. Lam
8:57	3812: Study of the Biocompatibility of Chitosan Gel Associated to Glycerol Phosphate for the Healing of Experimentally Induced Radial Defects in Rabbits ( <i>Oryctolagus cuniculus</i> )	B. Minto

**Wednesday, February 13<sup>th</sup> – Morning Session**  
**Equine Orthopedics III**  
*Sponsored by Zoetis*

**Room: Imperial Ballroom**  
**Moderator: Ashlee Watts**

7:00	3713: Duration of Effect of Liposomal Bupivacaine in an Induced Equine Lameness Model	K. M. Le
7:15	3810: 3D Printed Guides for Surgical Planning and Treatment of Pathologies within the Equine Hoof	E. Perez
7:30	SOTI: Everest – The Use of Advanced Material and Designs in Veterinary Medicine	H. Wotten
7:45-8:15	Break	
8:15	SOTI: Zoetis – The Role of NGF in OA pain & Potential for Future Therapies	R. Palmer
8:30	Invited Lecture: Matrix dysregulation and the molecular era of tendon therapeutics	A. Watts

**Wednesday, February 13<sup>th</sup> - Day**

10:30	Ski Race <i>Sponsored by BioMedtrix</i>	
12:00	Mountain Picnic <i>Sponsored by Everest</i>	Peak 17—Beaver Run Conference Center

**Wednesday February 13<sup>th</sup> - Evening Session**  
**Imaging Rounds**  
***Sponsored by Sound***

**Room: Peak 4/5**

**Moderator: Rachel Pollard**

- |           |   |                       |
|-----------|---|-----------------------|
| 4:00-6:00 | Small Animal Imaging Rounds   | R. Pollard<br>R. King |
| 4:45-5:15 | Break   |                       |
| 6:15-9:30 | Poster Session and Foundation Night. Poster Session 6:15 – 8:15. Peak 15-16.<br>Comedy night will immediately follow the poster session. Peak 17.<br>Sponsored by Partners in Veterinary Therapeutics |                       |
| 6:15-9:45 | Foundation Night Kid’s Party – Peak 14<br><i>Sponsored by VOS</i>   |                       |

**Thursday, February 14<sup>th</sup> – Morning Session**  
**Regenerative Medicine**  
***Sponsored by Aratana***

**Room: Peak 4/5**

**Moderator: Ashlee Watts**

7:00	3757: In Vitro Osteogenesis in Autologous and IPS-Derived Canine Mesenchymal Stromal Cells Is Modulated by Dexamethasone and Bone Morphogenic Protein-2	S. B. Gasson
7:15	3788: Osterix over-Expression Is Insufficient to Stimulate Osteogenesis in Equine Adipose-Derived MSCs	M. Stewart
7:30	3839: Optimizing a Critical Gap Femoral Defect Model for Objective Assessment of Bone Regeneration in Dogs	W. B. Saunders
7:45-8:15	Break	
8:15	3738: Long-Term Fate of Decellularized Allografts Used for Cranial Cruciate Ligament Reconstruction in Dogs	J. Biskup
8:30	3739: Randomized, Controlled, Prospective Clinical Trial of the Effects of Autologous Greater Omentum Free Graft Versus No Graft in Dogs Treated with TPLO for Cranial Cruciate Ligament Rupture	W. Baltzer
8:45	3777: Intracapsular Cranial Cruciate Ligament Reconstruction in a Lapine Model Using an Autogenous Semitendinosus Graft: Technique Description	A. H. Fauron

## Thursday, February 14<sup>th</sup> – Evening

4:00-5:30	Business Meeting	Imperial Ballroom
6:30-7:30	No Host Cocktail	Colorado Ballroom
7:30	Banquet – <b>Thursday, February 14<sup>th</sup></b> – Awards and Entertainment	Colorado Ballroom

**Friday, February 15<sup>th</sup> – Morning Session**  
**Orthopedics IV**  
***Sponsored by Veterinary Instrumentation***

**Room: Peak 4/5**

**Moderator: Laurent Guiot**

7:00	3728: Comparing the Complication Rate of Different TPLO Fixation Systems in Dogs over >45.4kg (100lbs)	K. W. Chiu
7:15	Invited Lecture: Nanotechnology and osseointegration	T. B. Lescun
7:45-8:15	Break	
8:15	3825: Long-Term Follow-up of Conservative Management of Sacroiliac Luxation in Dogs	C. N. Stecyk
8:30	3785: Evaluation of External Skeletal Fixator Constructs in a Bone Model of the Tibiotarsus of Red-Tailed Hawks ( <i>Buteo jamaicensis</i> )	R. A. Hersh-Boyle
8:45	3827: Evaluation of the Effect of Cannabidiol on Osteoarthritis-Associated Pain in Dogs - a Pilot Study	S. Mejia

**Friday, February 15<sup>th</sup> – Evening Session**  
**Orthopedics V**  
***Sponsored by: Veterinary Orthopedic Implants***

**Room: Peak 4/5**

**Moderator: Caleb Hudson**

4:00	3840: Outcome of Tibial Tuberosity Avulsion Repaired By Pin (Kirschner Wire) Fixation with or without a Tension Band	A. L. Moyer
4:15	3753: Biomechanical Comparison of Two Conical Coupling Plate Constructs for Cat Tibial Fracture Stabilization	S. L. MacArthur
4:30	3841: Effect of Epitendinous Suture Placement for Flexor Tendon Repair in Combination with Three-Loop Pulley and Locking Loop Suture Patterns in a Canine Cadaveric Model	A. B. Putterman
4:45	3766: Gastrocnemius Muscle-Tendon Unit Tension Affects Cranial Tibial Translation	S. M. Stover
5:00-5:15	Break	
5:15	3815: Retrospective Evaluation of Radiographic Outcome Following Surgical Stabilization of Humeral Condylar Y Fractures in Dogs	J. M. Kuzminsky
5:45	3779: Introduction of a Novel Absorbable Bone Anchor Using Bonewelding Technology: First Clinical Cases	R. Schuenemann