




AO VET NA Masters Course—Small Animal Minimally Invasive Osteosynthesis Traumatology (with animal anatomic specimens)

 January 13, 2022 - January 15, 2022
Las Vegas, Nevada, USA

Minimally Invasive Osteosynthesis (MIO) has successfully improved human orthopedic outcomes for more than two decades. Yet, despite evidence of faster bone healing, lower morbidity, faster functional recovery, and fewer complications; MIO has not been fully embraced by the veterinary orthopedic community at large.

This 3-day AO VET NA Masters-level course is meant to help change this. It fills the current void in continuing education courses and allows veterinary orthopedic surgeons to learn the biological basis of MIO, its surgical techniques, new implants, advanced imaging and radioprotection techniques from the absolute top experts in this field today. Such exposure will undoubtedly lead to both improved management of fractures in companion animals and improved outcomes.

If you care about providing the best outcomes for your small animals, you should register for this course and begin applying MIO in your clinical practice.

Target Audience

This course is open to surgery residents and practicing veterinarians with orthopedic experience. Familiarity with locking implant instrumentation and techniques will be assumed.

Prerequisites for Attendance:

AO VET Small Animal Principles Course (Mandatory Requirement)

AO VET Small Animal Advanced Course (Highly Recommended)

AO VET Small Animal Masters Course (Desirable)



Event Summary

Tuition:

Level Name: Participant - Veterinary
Pricing Tier: Attending
Tuition: \$2,200.00

Level Name: Participant - Veterinary
Pricing Tier: Resident
Tuition: \$2,200.00

Course Prerequisite(s):

- Principles of Small Animal Fracture Management

Venue: Language(s):

No English

Venue: Directly Provided by:



Professional Level Prerequisite(s):

- Residency Year 2
- Residency Year 3
- Residency Year 4
- Residency Year 5
- Residency Year 6
- Residency Year 7
- Residency Year 8
- Fellow
- Practicing

CME

- Activity will be certified for continuing education.

The Continuing Medical Education (CME) mission of AO North America (AONA®) is to provide comprehensive multidisciplinary needs based education to surgeons, fellows, and residents in the specialties of orthopedic, hand, craniomaxillofacial, spine, neurosurgery, and veterinary surgery in the areas of trauma (i.e.), operative reduction and fixation), degenerative disorders, deformities, tumors, and reconstruction.

Expected results of AONA's CME activities for surgeons, fellows, and residents are to:

- **Increase their knowledge base and surgical skill level**
- **Improve competence by applying advances of knowledge in patient care in the areas of trauma, degenerative disorders, deformities, tumors, and reconstructive surgical techniques**
- **Address practice performance gaps by improving management of aspects of traumatic injuries and musculoskeletal disorders (i.e., pre-operative planning to post-operative care)**

Learning Objectives

Upon completion, participants should be able to:

- Define and explain MIO principles
- Describe and integrate new reduction and fixation techniques used to reduce one's surgical footprint
- Differentiate indirect from direct fragment manipulation and assess their effect on the soft tissue envelope
- Associate the biological benefits of remote percutaneous plate osteosynthesis and the need to provide adequate mechanical stability at the fracture site
- Recognize MIO challenges and limitations and realize when a shift to open reduction internal fixation (ORIF) and open but do not touch (OBDNT) technique is required
- Assess the impact of new technologies (implants and advanced imaging) in successfully performing MIO
- Evaluate the risk / benefit of intraoperative fluoroscopy during MIO
- Implement effective protective measures to decrease radiation exposure to the surgical team (ALARA -As Low As Reasonably Achievable)
- Recognize the importance of monitoring radiation exposure

Faculty



Dejardin, Loic - Chairperson

DVM, MSc, DACVS, DECVS
Wade O. Brinker Endowed Chair of Veterinary Surgery
Professor – Small Animal Orthopaedic Surgery
ACVS Founding Fellow – MIS Orthopaedics Small Animals
College of Veterinary Medicine
Michigan State University

East Lansing, Michigan

Dr. Déjardin is the Wade Brinker Endowed Chair of Veterinary Surgery. He is Professor of Small Animal Orthopaedic Surgery at MSU and a Founding Fellow of the ACVS MIS SA Orthopaedic Surgery Fellowship. Dr. Déjardin graduated from Toulouse, France and completed his Surgical Residency then MS at MSU. Déjardin authored ~100 research proposals (~\$8M), nine inventions and holds five patents on an interlocking nail and a targeting device for minimally invasive osteosynthesis as well as an anatomic distal femoral locking plate and an ingress-egress suction device. He received several prestigious awards in both veterinary and human medicine as well as in engineering, including the O'Donoghue Sports Injury Research Award (AOSSM), the Zandman Award (Soc. Exp. Mechanics), Distinguished Postdoctoral Veterinary Alumnus Award (MSU) and the Pfizer-Zoetis Award for Excellence in Research. His publications include >250 peer-reviewed scientific papers and abstracts, 20 book chapters and ~550 presentations in the US, Europe, Latin America and Asia. As an AO Foundation International Faculty former Trustee committed to continuing education worldwide, Déjardin regularly speaks at national and international meetings and courses. Dejardin is a member of the AO Technical Commission and former member of the AO Small Animal Expert Group as well as the Veterinary Global Expert Group. He started a Minimally Invasive Osteosynthesis (MIO) program at MSU in the early 2000s' and developed a novel interlocking nail suited for MIO, well as a new technology devised for the MIO of sacroiliac luxations. From 2009 to 2022, Déjardin created and chaired the first comprehensive AO VET Master Course on MIO. His clinical interests include traumatology, MIO, revision surgery and total joint replacements. His research activity focuses on biomechanics, implant and instrument design, development of new surgical techniques, elbow and ankle total joint replacement, as well as kinetics. Since 2015, Dr. Déjardin has taken a leadership role in advancing robotics and navigation in veterinary orthopaedics and traumatology.



Perry, Karen - Co-Chairperson

BVMS, CertSAS, DECVS, MSc, FHEA, FRCVS
Professor in Small Animal Orthopedics
The Ohio State University
Department of Veterinary Clinical Sciences
Veterinary Medical Center
601 Vernon L. Tharp Street
Columbus, Ohio

Karen Perry graduated from The Royal (Dick) School of Veterinary Studies, Edinburgh in 2005. After a short period in mixed practice and an internship in small animal orthopedics Dr. Perry returned to the R(D)SVS to complete a residency in small animal surgery from 2007 to 2010. Following achievement of ECVS status in 2011, Dr. Perry joined the Royal Veterinary College (RVC), London as a lecturer in small animal orthopedics. During her tenure at the RVC, Dr. Perry completed a postgraduate certificate in veterinary education and became a Fellow of the Higher Education Academy. After four years at the RVC Dr. Perry moved to Michigan State University where she became a Tenured Professor in Small Animal Orthopedics. In 2022, Dr. Perry was also named the Pat Carrigan Professor of Feline Health. Dr. Perry's passion for veterinary education led her to pursue further qualifications in this ever-expanding field. In 2019, whilst at MSU, Dr. Perry completed her Masters of Science in Veterinary Education, the thesis of which focused on the importance of feedback during veterinary residency programs. Due to her knowledge in education, Dr. Perry was elected to serve on the AO VET NA education committee and is currently the chair of this committee. Dr. Perry has published widely in the veterinary literature with her main research interests being feline orthopedics, traumatology and the correction of limb deformities associated with patellar luxation. Dr. Perry, an International AO Faculty, created the first AO Master Course in Feline Orthopedics and has presented her work throughout the world including in Colombia, Brazil, Mexico, Russia, Italy, Spain, Poland and the UK. In 2026, Dr. Perry transitioned to The Ohio State University where she is currently a Tenured Professor in Small Animal Orthopedics.



Bruecker, Kenneth - Evaluator

DVM, MS, DACVS, DACVSMR
Dr.
Continuing Orthopedic Veterinary Education (COVE)
Ventura, California

Dr. Kenneth A. Bruecker, DVM, MS Diplomate American College of Veterinary Surgeons Diplomate American College of Veterinary Sports Medicine and Rehabilitation Dr. Bruecker is the Founder of the Veterinary Medical and Surgical Group and Founder of Continuing Orthopedic Veterinary Education (COVE). www.covesurgery.com Dr. Bruecker is a board certified surgeon and also board certified in veterinary sports medicine and rehabilitation with special interests in orthopedics and spinal surgery. He has authored over 100 textbook chapters, journal articles, scientific manuscripts, veterinary and pet owner educational materials. He has been an innovator in the development of new surgical techniques and orthopedic implants. He has been performing arthroscopy for over 25 years. Due to his expertise in spinal surgery, orthopedics and arthroscopy he has been invited to educate and train veterinarians throughout the world. His commitment to the education of veterinarians, technicians and pet owners earned him the California Veterinary Medical Association's Veterinarian of the Year in 2004 as well as Viticus Hands-On Educator in 2022.

**Agnello, Kimberly - Lecturer**

DVM, MS, DACVS, DACVSMR
 Professor of Small Animal Orthopedic Surgery
 ACVS Founding Fellow, Minimally Invasive Surgery (Orthopedics)
 University of Pennsylvania School of Veterinary Medicine
 Department of Clinical Studies - VHUP
 Philadelphia, Pennsylvania

Dr. Agnello received her veterinary degree from Cornell University, School of Veterinary Medicine and completed a small animal surgery residency at the University of California. She is a Diplomate of the American College of Veterinary Surgeons and the American College of Veterinary Sports Medicine and Rehabilitation. She is currently faculty in small animal orthopedic surgery at University of Pennsylvania. Dr. Agnello's clinical and research interests include minimally invasive surgery, angular limb deformity correction, and clinical trials for the treatment of osteoarthritis.

**Barnes, Katherine - Lecturer**

DVM, MS, DACVS
 Clinical Associate Professor
 Texas A&M University
 College Station, Texas

Dr. Barnes is currently a Clinical Associate Professor of Small Animal Orthopedic Surgery at Texas A&M University. She obtained her DVM from Oregon State University in 2011 followed by an internship at Cornell University, and a 3-year surgery residency at Virginia Tech. She is a diplomate of the American College of Veterinary Surgeons with research and clinical interests that include fracture repair, arthroscopy, 3D printing, and the role of rehab in the treatment and recovery of surgical patients.

**Guiot, Laurent - Lecturer**

DVM, DACVS, DECVS
 Orthopedic Surgeon
 ACCESS Bone & Joint Center
 ACCESS Specialty Animal Hospital - Los Angeles
 Los Angeles, California

Dr. Laurent Guiot is a world-class orthopedic surgeon with a passion for excellence. He obtained his degree in veterinary medicine from the University of Liege (Belgium) in 2004 and completed a general internship in small animal medicine and surgery at the same institution. Laurent then worked for one year in Paris where he was in charge of the general surgery program. He rejoined academia in 2006 as an international surgical fellow at Michigan State University where he also completed a three-year residency program with a strong emphasis in orthopedic surgery and focus in minimally invasive osteosynthesis under Dr. Loic Dejardin's mentorship. He became boarded by the American and European Colleges of Veterinary Surgeons in 2011. Following his residency, Laurent became an assistant professor of orthopedic surgery in the Department of Small Animal Clinical Sciences and an attending orthopedic surgeon at the Veterinary Teaching Hospital at Michigan State University. He was then recruited to lead the creation of a new orthopedic surgery facility for the Ohio State University in Dublin, Ohio. In 2016, he created the Bone & Joint Center at ACCESS in Los Angeles with Dr. Reunan Guillou. This center is establishing itself as one of the prime location for advanced orthopedics and includes a comprehensive total joint replacement center, a strong minimally invasive orthopedic surgery program, and a tertiary referral service for revision cases. Dr. Guiot's major interest is orthopedic trauma and minimally invasive orthopedic surgery. He routinely presents his work internationally and is an active member of major national and international orthopedic programs including the Veterinary Orthopedic Society, the AO, and the Orthopedic Research Society. Laurent is committed to the improvement of patient care through the development of surgical techniques, instrumentation, and implants used for the treatment of orthopedic patients.

**Karlin, William. (Mike) - Lecturer**

DVM, MS, DACVS
 Assistant Professor
 Orthopedic Surgery
 Department of Clinical Sciences
 Cummings School of Veterinary Medicine
 Tufts University
 North Grafton, Massachusetts

Dr. Karlin is currently an Assistant Professor in Small Animal Orthopedic Surgery at the Cummings School of Veterinary Medicine at Tufts University. He earned his DVM degree at Kansas State University College of Veterinary Medicine in 2006. He went on to complete a three-year residency program and Masters Degree at the University of Illinois in Equine Surgery in 2010. He then worked in private practice at two equine surgical referral centers for several years before completing the requirements for dual certification in Small Animal Surgery, at Lauderdale Veterinary Specialists. Dr. Karlin was the first surgeon to pass the requirements for dual certification through ACVS becoming a diplomate of the American College of Veterinary Surgeons (ACVS) in both small animal and large animal. His areas of clinical and research interest include arthroscopy, fracture healing, fracture repair, and orthopedic implants including minimally invasive methods, total joint replacement, osteoarthritis, and assessment and correction of limb deformity.

**Tomlinson, James - Lecturer**

BSc, DVM, MVSc, DACVS
 Professor Emeritus of Small Animal Orthopedic Surgery
 Department of Veterinary Medicine and Surgery
 College of Veterinary Medicine
 University of Missouri
 Columbia, Missouri

AO NA Disclaimer Information

Faculty Disclosure:

It is the policy of AO North America to abide by the Accreditation Council for Continuing Medical Education Standards for Commercial Support. Standard 2: "Disclosures Relevant to Potential Commercial Bias and Relevant Financial Relationships of Those with Control over CME Content," requires all planners, including course directors, chairs, and faculty, involved in the development of CME content to disclose their relevant financial relationships prior to participating in the activity. Relevant financial relationships will be disclosed to the activity audience. The intent of the disclosure is not to prevent a faculty with a relevant financial or other relationship from teaching, but to provide participants with information that might be of importance to their evaluation of content. All potential conflicts of interest have been resolved prior to the commencement of this activity.

Off-Label / Experimental Discussions:

Some medical devices used for teaching purposes and/or discussed in AO North America's educational activities may have been cleared by the FDA for specific uses only or may not yet be approved for any purpose. Faculty may discuss off-label, investigational, or experimental uses of products/devices in CME certified educational activities. Faculty have been advised that all recommendations involving clinical medicine in this CME activity are based on evidence that is accepted within the profession of medicine as adequate justification for their indications and contraindications in the care of patients.

All scientific research referred to, reported or used in this CME activity in support or justification of a patient care recommendation conforms to the generally accepted standards of experimental design, data collection and analysis.

Disclaimer:

AONA does not endorse nor promote the use of any product/device of commercial entities. Equipment used in this course is for teaching purposes only with the intent to enhance the learning experience.

Conflict of Interest Resolution Statement:

When individuals in a position to control or influence the development of the content have reported financial relationships with one or more commercial interests, AO North America utilizes a process to identify and resolve potential conflicts to ensure that the content presented is free of commercial bias.

Liability Statement:

AO North America faculty and staff assume no personal liability for the techniques or the use of any equipment and accessories used for teaching purposes in the laboratory. The certificate provided pertains only to the participants' completion of the course and does not, in any way, attest to the proficiency of the participants' clinical experience.

Laboratory Waiver:

To participate in this surgical skills course, you will be required to sign a waiver of liability prior to the course. In order to participate, AONA's policy mandates that every individual must wear appropriate protective garments provided by AO NA during the lab sessions. Participants who do not sign the waiver and wear protective garments will not be allowed to participate in the laboratory sessions.

Human Anatomic Specimens:

This course will involve exposure to and contact with human anatomic specimens. These specimens are being utilized for purposes of teaching and learning and are to be treated with the utmost respect. Participants should be familiar with and understand the potential risks involved and will be required to observe all customary safety procedures.

Animal Anatomic Specimens:

This course will involve exposure to and contact with animal anatomic specimens. These specimens are being utilized for purposes of teaching and learning and are to be treated with the utmost respect. Participants should be familiar with and understand the potential risks involved and will be required to observe all customary safety procedures.

Acknowledgment

Educational Grant

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