

AO Spine NA Course— Advanced Concepts in Cervical Spine



Course Description

This educational activity takes place over 1.5 days and is designed to provide the orthopedic spine surgeon and neurosurgeon with a comprehensive update on the latest state-of-the-art techniques in the management of cervical myelopathy/deformity which are now a major health problem in the United States. Cervical myelopathy is a condition where the spinal cord in the neck is compressed, affecting the signals from the brain to the body. It can be caused by aging, injury, infection, inflammation, tumors, or congenital narrowing of the spinal canal.

A distinguished faculty will present their experience, techniques and pearls of wisdom regarding current treatments and procedures. The goal of the activity is to provide an update to senior fellows and practicing surgeons along with topics of interest to their practice and the challenges they face. The course will have lectures, case discussions and hands-on synthetic exercises.

Tuition

Fellow: \$1,200.00 | Attending: \$1,500.00

Course Chairpersons



Co-Chairperson
Richard Bransford, MD



Co-Chairperson
Michael Fehlings, MD, PhD, FRCS, FACS

Learning Objectives

Upon completion, participants should be able to:

- Apply evidence-based guidelines in the treatment of cervical myelopathy
- Select the most optimal intervention/treatment plan to address differences in patients, and relevant diagnoses made
- Demonstrate procedural skills to successfully manage surgical treatment of patients with cervical myelopathy
- Develop strategies to treat complications related to cervical myelopathy

Upcoming Courses



AO Spine NA Seminar—
Part II ABOS Oral Board Review
June 22, 2024 | Chicago, IL



AO Spine NA Course— Principles and Treatment
of Spinal Disorders for Residents
October 25 - 26, 2024 | Irvine, CA



AO Spine NA Seminar— Managing Complications:
Clinically, Ethically and Legally
November 22 - 23, 2024 | San Diego, CA

Visit aona.org to learn more.

Questions? Contact Member Relations

memberrelations@aona.org | 610-993-5100

REGISTER



Jointly Provided by AO North America and University of Toronto Spine Program

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of AO North America and University of Toronto Spine Program. The AO North America is accredited by the ACCME to provide continuing medical education for physicians.

University of Toronto Spine Program gratefully acknowledges funding for its educational activities from the DePuy Synthes, Canada.

This live activity has been approved for *AMA PRA Category 1 Credit™*.

AO North America, Inc., gratefully acknowledges funding for its educational activities from the AO Foundation. The AO Foundation receives funding for education from Synthes GmbH.

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AO Spine NA Course – Advanced Concepts in Cervical Spine



June 7, 2024 - June 8, 2024

Toronto, CANADA, Ontario, Canada

This educational activity takes place over 1.5 days and is designed to provide the orthopedic spine surgeon and neurosurgeon with a comprehensive update on the latest state-of-the-art techniques in the management of cervical myelopathy/deformity which are now a major health problem in the United States. Cervical myelopathy is a condition where the spinal cord in the neck is compressed, affecting the signals from the brain to the body. It can be caused by aging, injury, infection, inflammation, tumors, or congenital narrowing of the spinal canal.

A distinguished faculty will present their experience, techniques and pearls of wisdom regarding current treatments and procedures. The goal of the activity is to provide an update to senior fellows and practicing surgeons along with topics of interest to their practice and the challenges they face. The course will have lectures, case discussions and hands-on synthetic exercises.

Event Summary

Tuition:

Level Name: Participant - Spine

Pricing Tier: Fellow

Tuition: \$2,200.00

Level Name: Participant - Spine

Pricing Tier: Attending

Tuition: \$2,500.00

Course Prerequisite(s):

No Prerequisites

Venue:

University of Toronto Surgical Skills
Center

Phone Number: 416) 586-4800

www.uoftssc.com

Language(s):

English

Directly Provided by:**Professional Level Prerequisite(s):**

No Prerequisites

CME



- AO North America is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Designation Statement - AO North America designates this live educational activity for a maximum of [Hours Pending] **AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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:

- Apply evidence-based guidelines in the treatment of cervical myelopathy.
- Select the most optimal intervention/treatment plan to address differences in patients, and relevant diagnoses made.
- Demonstrate procedural skills to successfully manage surgical treatment of patients with cervical myelopathy.
- Develop strategies to treat complications related to cervical myelopathy.

Faculty



Bransford, Richard - Co-Chairperson

MD
Professor
Spine Fellowship Director
Department of Orthopedics and Sports Medicine
Department of Neurosurgery
Harborview Medical Center
University of Washington

Seattle, Washington

Rick Bransford is a board certified orthopedist and spine surgeon at the University of Washington working at Harborview Medical Center in Seattle, Washington. He has been there since 2003 on faculty having done his residency there as well (1996-2001), a spine fellowship also at UW (2001-2002) and then going to Sydney, Australia for a Pediatric Orthopedic fellowship (2002-2003). He is currently a full professor, the spine fellowship director, and head of spine research. He has published about 90 peer-reviewed articles and been involved in over 30 book chapters. Rick grew up in East Africa and started observing surgery with his dad at the age of 6. He still returns to East Africa on a regular basis on a mission and humanitarian basis. Currently Rick is chair of AO Spine North America Education Committee, Chair of the AO TK Cervical Expert Group, and chair of the AO Spine Global Diploma Program. He is also a member of the AO Spine Trauma Knowledge Forum. He is chair-elect of the AO Spine International Education Commission with his term starting in July 2023.



Fehlings, Michael - Co-Chairperson

MD, PhD, FRCS, FACS
Professor of Neurosurgery
Co-Director UT Spine Program
Vice Chair Research, Department of Surgery
University of Toronto
Toronto, Ontario

At the University of Toronto, Dr. Michael Fehlings is Vice Chair Research for the Department of Surgery, Co-Director of the Spine Program, the Robert Campeau-Charles Tator Chair in Brain and Spinal Cord Research, a Professor of Neurosurgery. Having established a multidisciplinary Spinal Program at Toronto Western Hospital, he combines an active clinical practice in complex spinal neurosurgery with a vibrant, translationally-oriented research program. This research focuses preclinically on translationally relevant models of spinal cord and brain injury, including developmental brain injury, and clinically on disorders of the spine/spinal cord. He has developed cervical and thoracic models of spinal cord injury to facilitate translational research. The lab is currently working with induced pluripotent stem cells (iPSCs) and neural stem cells (NSCs) with a focus on combinatorial therapies as the most likely way in which stem cells will ultimately be used in a clinical setting. Dr. Fehlings is currently involved in clinical trials of therapies including the sodium blocker, Riluzole, and the use of stem cells in spinal cord injury. With over 1100 highly-cited publications, impacting clinical practice and research directions, he is established as a leading international expert investigating CNS repair and regeneration for brain and spinal cord injury. Dr. Fehlings' scientific impact has been recognized with numerous international awards and with appointments as a Fellow of the Royal Society and a Fellow of the Canadian Academy of Health Sciences.



Harrop, James - Lecturer

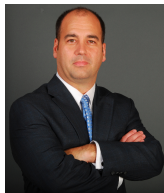
MS, MD
Professor
Division Director, Spine and Peripheral Nerve Surgery
Neuroscience Enterprise Director of Quality Improvement
Departments of Neurological and Orthopedic Surgery
Jefferson Medical College
Philadelphia, Pennsylvania

Dr. Harrop is Professor of Neurological and Orthopedic Surgery at the Sidney Kimmel Medical College of Thomas Jefferson University in Philadelphia, PA. He is the Director of the Neurosurgery Department Spine and Peripheral Nerve Surgery Program and Neurosurgical Chief of the TJHU Spine Service. In addition he is the Neurosurgical director of the Delaware Valley Model SCI Center which is designated as one of the nation's 13 Model Spinal Cord Injury Centers by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). He has recently completed his Masters in Quality Improvement and Patient Safety. (MSHQS) He completed his neurosurgical residency at Thomas Jefferson University Hospital, of which 6-month was a designated rotation in pediatric neurosurgery at the Children's Hospital of Philadelphia. He also completed a combined neurosurgical and orthopedic spine fellowship at the Cleveland Clinic in 2002. Dr Harrop's actively involved in academic research and has over 350 peer-reviewed publications and over 150 chapters on spinal disorders. As well as his research is funded through numerous agencies including NIH, DOD, PICORI, NACTN. He is actively involved in numerous organizations and including PNS, CSRS, LSRS Jim and his wife, Elyse, enjoy traveling with their two children Matthew and Casey.



Jacobs, Brad - Lecturer

MD, FRCS
Chair, Calgary Spine Program
Associate Professor
University of Calgary
Calgary, Alberta

**Massicotte, Eric - Lecturer**

MD, MSc, MBA, FRCSC
Associate Professor, University of Toronto
Medical Director of Back & Neck Program, Altum Health
Co-Director Multidisciplinary Metastatic Spine Clinic
Toronto, Ontario

Dr. Massicotte has focused his academic neurosurgical career in Toronto since his faculty appointment in 2002. As an Associate Professor with the University of Toronto, he recently completed an MBA to further advance his role as medical director for Back & Neck at Altum Health a division of University Health Network (UHN). Special interest in education and patient outcome for better delivery of care his collaboration with multiple colleagues have contributed to over 70 publications in peer-reviewed articles and numerous international speaking engagements.

**Moore, Tim - Lecturer**

MD
Professor
Department of Orthopaedic Surgery
Case Western Reserve University
School of Medicine
MetroHealth Medical Center
Cleveland, Ohio

Dr. Moore did his orthopaedic surgery residency at Cleveland Clinic Foundation, orthopaedic spine surgery fellowship at University of Wisconsin Madison and has worked at MetroHealth Medical Center since his fellowship. He specializes in degenerative cervical disorders, spine trauma and general orthopaedic trauma. He is Professor of Orthopaedic and Neurosurgery at Case Western University School of Medicine. He is an active member in CSRS, LSRS, NASS, OTA and is a fellow in AAOS.

**Wilson, Jefferson - Lecturer**

MD, PhD, FRCS(C)
University of Toronto
Associate Professor
St. Michael's Hospital
Neurosurgeon
Toronto, Ontario

Dr. Jefferson Wilson is a surgeon-scientist at St. Michael's Hospital and Associate Professor in the Department of Surgery at the University of Toronto. He currently holds the Labatt Endowed Chair in Neurosurgery at Unity Health. Dr. Wilson's clinical practice is focused on the surgical management of complex disorders of the spine and spinal cord. He also leads a clinical research program investigating both traumatic and non-traumatic spinal cord injury, with a specific interest in the development of predictive models and algorithms to help guide treatment and forecast outcomes. His research has been supported through several grants from organizations including the Canadian Institutes of Health Research, the Christopher and Dana Reeve Foundation, AOSpine, Neurosurgery Research and Education Foundation and the Cervical Spine Research Society. Dr. Wilson currently chairs a national evidence based spine surgery course for residents and fellows and serves on the editorial boards of Journal of Neurosurgery Spine.

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.

The opinions or views expressed in this live continuing medical education activity are those of the faculty and do not necessarily reflect the opinions or recommendations of AO North America or any commercial supporter. The certificate provided pertains only to the participants' completion of the course.

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.

Acknowledgment

In-Kind Support

AO North America gratefully acknowledges in-kind support for equipment and technical staff from DePuy Synthes.

Educational Grant

AO North America gratefully acknowledges funding for its education activities from the AO Foundation. The AO Foundation receives funding for education from Synthes GmbH.

Full Program				
Start Time	End Time	Moderator	Agenda Item	Lecturer
Friday, June 7, 2024				
15:00	16:00		Registration	
16:00	16:15		Welcoming Remarks from AO Spine NA and UT Spine Program	Bransford, Richard; Fehlings, Michael
16:15	16:45		Keynote Lecture—Degenerative Cervical Myelopathy: State of the Art	Fehlings, Michael
16:45	17:00		Outcomes Assessment	Kalsi-Rayna, S.
17:00	17:15		Break	
17:15	18:45		Fireside Chat with Case Discussions	All Faculty
18:45	18:45		Course Adjourns for the Day	
Saturday, June 8, 2024				
07:00	07:45		Breakfast	
07:45	07:50		Introduction to the Day	Bransford, Richard; Fehlings, Michael
07:50	08:30	Harrop, James	Spinal Cord Injury	
07:50	07:55		Case Presentation	Wilson, Jefferson
07:55	08:05		Group Discussion on Nuances	
08:05	08:25		EBM/Literature Review/Tips & Tricks	Fehlings, Michael
08:25	08:30		Case Resolution	Wilson, Jefferson
08:30	09:00	Bransford, Richard	Craniocervical Pathology	
08:30	08:35		Case Presentation	Moore, Tim
08:35	08:47		Group Discussion on Nuances	
08:47	08:55		EBM/Literature Review/Tips & Tricks	Jacobs, Brad
08:55	09:00		Case Resolution	Moore, Tim
09:00	09:30	Moore, Tim	Cervicothoracic Junction Pathology	
09:00	09:05		Case Presentation	Bransford, Richard
09:05	09:17		Group Discussion on Nuances	
09:17	09:25		EBM/Literature Review/Tips & Tricks	Massicotte, Eric
09:25	09:30		Case Resolution	Bransford, Richard
09:30	10:00	Massicotte, Eric	Cervical Deformity	
09:30	09:35		Case Presentation	Jacobs, Brad
09:35	09:47		Group Discussion on Nuances	
09:47	09:55		EBM/Literature Review/Tips & Tricks	Moore, Tim
09:55	10:00		Case Resolution	Jacobs, Brad
10:00	10:30		Coffee Break	
10:30	11:00	Wilson, Jefferson	Cervical Tumors	
10:30	10:35		Case Presentation	Fehlings, Michael
10:35	10:47		Group Discussion on Nuances	
10:47	10:55		EBM/Literature Review/Tips & Tricks	Harrop, James
10:55	11:00		Case Resolution	Fehlings, Michael

11:00	11:30	Jacobs, Brad	Cranio-cervical Trauma	
11:00	11:05		Case Presentation	Harrop, James
11:05	11:17		Group Discussion on Nuances	
11:17	11:25		EBM/Literature Review/Tips & Tricks	Bransford, Richard
11:25	11:30		Case Resolution	Harrop, James
11:30	12:00	Bransford, Richard	Sub-axial Trauma	
11:30	11:35		Case Presentation	Jacobs, Brad
11:35	11:47		Group Discussion on Nuances	
11:47	11:55		EBM/Literature Review/Tips & Tricks	Wilson, Jefferson
11:55	12:00		Case Resolution	Jacobs, Brad
12:00	12:45		Lunch/Change into Scrubs	
12:45	13:00		Orientation to Cadaver Lab	
13:00	14:00		Anterior Cervical Lab with Access to Upper and Lower Cervical Spine, Tricks in Optimizing Lordosis, and Vertebral Artery Exposure	All Faculty
14:00	16:00		Posterior Cervical Lab with Occipital C1-C2 instrumentation, Sub-axial Pedicle Screws versus Lateral Mass Fixation, Facet Osteotomies, Laminoplasty and Vertebral Artery Access	All Faculty
16:00	16:30	Wilson, Jefferson	Common Complications and How to Handle Them	Massicotte, Eric
16:30	17:00		Q & A / Wrap Up / Evaluations	Bransford, Richard; Fehlings, Michael