

Advanced Techniques in Neurosurgery
August 17 – 19, 2023
The Viticus Center - Oquendo Campus | Las Vegas, NV

DAY 1 Thursday, August 17, 2023		
Time	Topic	Presenter(s)
7:00-7:30 am	Registration <i>Faculty to premeet from 7-7:30</i>	
7:30-7:40 am	Welcome & Introductions	<i>Dr. Amanda Taylor, Dr. Fred Winger</i>
7:40-8:30 am	AO Principles of Fracture Management <ul style="list-style-type: none"> • Determination of presence of fracture • Principles of stabilization • Indications for different stabilization techniques in spine 	<i>Dr. Sharon Kerwin</i>
8:30-9:20 am	Available Techniques for Fracture Stabilization <ul style="list-style-type: none"> • Review use of selection of implant size and drilling • Review screws and PMMA • Review SOP use • Review polyaxial screw use 	<i>Dr. Sharon Kerwin</i>
9:20-9:35 am	Break	
9:35-10:25 am	Indications for CT Planning and 3D Printing in Spinal Stabilization and Thoracolumbar Stabilization, Screws and PMMA <ul style="list-style-type: none"> • Review CT Planning software for implants • Review mechanisms for 3D printing • Understand anatomical challenges of thoracolumbar stabilization • Learn appropriate corridors for thoracolumbar stabilization 	<i>Dr. Amanda Taylor, Dr. Fred Winger</i>

Sponsored by



Lab Partners



Advanced Techniques in Neurosurgery
August 17 – 19, 2023
The Viticus Center - Oquendo Campus | Las Vegas, NV

DAY 1 (continued) Thursday, August 17, 2023		
Time	Topic	Presenter(s)
10:25-11:00 am	Lateral Corpectomy and Durotomy <ul style="list-style-type: none"> Recognize when these approaches might be useful Recognize anatomical landmarks and practical approaches 	<i>Dr. Nick Jeffery</i>
11:00 am – 1:00 pm	Lab: Laboratory Overview, Review Instrumentation, Thoracolumbar Stabilization, Lateral Corpectomy, Durotomy <ul style="list-style-type: none"> Demonstrate and perform all approaches Identify important bony landmarks Utilize 3D printed jigs for implant placement Attempt implant placement without jigs 	<i>Dr. Sharon Kerwin, Dr. Nick Jeffery, Dr. Amanda Taylor, Dr. Fred Winger, Dr. William Thomas, Dr. Simon Platt</i>
1:00-1:50 pm	Lunch	
1:50-2:20 pm	Lumbosacral Decompression and Stabilization with Polyaxial Implant Systems <ul style="list-style-type: none"> Recognize indications for stabilization Recognize anatomical landmarks and practicalities Review operation of polyaxial systems Compare alternative procedures at the lumbosacral junction 	<i>Dr. Fred Winger</i>
2:20-2:50 pm	L7 Foraminotomy <ul style="list-style-type: none"> Recognize indications for this procedure Learn challenges and advantages of procedure 	<i>Dr. Nick Jeffery</i>

Sponsored by



Lab Partners



Advanced Techniques in Neurosurgery
August 17 – 19, 2023
The Viticus Center - Oquendo Campus | Las Vegas, NV

DAY 1 (continued) Thursday, August 17, 2023		
Time	Topic	Presenter(s)
2:50-5:20pm	<p>Lab: Laboratory Overview, Review Instrumentation, LS Decompression and Stabilization; Foraminotomy; Demo</p> <ul style="list-style-type: none"> • Perform approach for lumbosacral stabilization • Perform approach for lateral foraminotomy • Learn how to operate a polyaxial system • Perform polyaxial implantation 	<p><i>Dr. Sharon Kerwin, Dr. Nick Jeffery, Dr. Amanda Taylor, Dr. Fred Wininger, Dr. William Thomas, Dr. Simon Platt</i></p>
5:20-5:50 pm	<p>Review of CT Planning and Overview of Planning Software Up and Distribution of CT Study</p> <ul style="list-style-type: none"> • Review case provided to planning example • Transform CT study into 3-dimensional images for planning 	<p><i>Dr. Amanda Taylor, Dr. Fred Wininger</i></p>
5:50 pm	<p>Welcome Reception <i>Faculty to debrief first 15 minutes</i></p>	

Sponsored by



Lab Partners



Advanced Techniques in Neurosurgery
August 17 – 19, 2023
The Viticus Center - Oquendo Campus | Las Vegas, NV

DAY 2 Friday, August 18, 2023		
Time	Topic	Presenter(s)
7-7:30 am	Faculty meet to prepare for Day 2	
7:30-7:45 am	Questions So Far	<i>Dr. Amanda Taylor, Dr. Fred Winger</i>
7:45-8:35 am	Craniocervical junction: Stabilization of atlantoaxial subluxation, review of concurrent abnormalities <ul style="list-style-type: none"> • Demonstrate patient positioning and surgical approach to ventral aspect of the atlantoaxial joint • Select and apply appropriate implants for screw and PMMA stabilization • Review use of 3D printed models for surgical planning 	<i>Dr. Fred Winger</i>
8:35-9:35 am	Cervical Stabilization, Utilization of SOP, Caudal Cervical Spondylomyelopathy (CCSM) <ul style="list-style-type: none"> • Review the approach to ventral cervical spine for implant fixation • Recognize advantages and disadvantages of SOP system • Discuss the use of distraction with intervertebral spacers 	<i>Dr. Amanda Taylor, Dr. Sharon Kerwin</i>
9:35-9:45 am	Break	
9:45 am – 12:15 pm	Lab: Laboratory Overview, Review Instrumentation, Cervical Stabilization, Atlantoaxial Stabilization, CCSM <ul style="list-style-type: none"> • Practice implant placement on 3D AA models • Identify and utilize anatomical landmarks to guide implant placement • Select and place screws for ventral atlanto-axial fixation with screws and PMMA within cadaver • Demonstrate ventral surgical approach to the cervical region • Utilize SOP system to stabilize caudal cervical vertebrae 	<i>Dr. Sharon Kerwin, Dr. Nick Jeffery, Dr. Amanda Taylor, Dr. Fred Winger, Dr. William Thomas, Dr. Simon Platt</i>

Sponsored by



Lab Partners



Advanced Techniques in Neurosurgery
August 17 – 19, 2023
The Viticus Center - Oquendo Campus | Las Vegas, NV

DAY 2 (continued) Friday, August 18, 2023		
Time	Topic	Presenter(s)
12:15-1:00 pm	Lunch	
1:00-1:50 pm	Dorsal Cervical Decompression and Cervical Hemilaminectomy <ul style="list-style-type: none"> Review approaches for both surgeries Review tips for cervical hemilaminectomy previously unpublished Visualize landmarks for cervical hemilaminectomy 	<i>Dr. Amanda Taylor</i>
1:50-2:20 pm	Ventral Slot with Mag <ul style="list-style-type: none"> Review advantages of magnification in ventral slots Review available forms of magnification 	<i>Dr. Fred Winger</i>
2:20-2:30 pm	Break	
2:30-5:00 pm	Lab: Laboratory Overview, Review Instrumentation, Dorsal Cervical Stabilization and Decompression, Cervical Hemilaminectomy, Ventral Slot, Optional MM/NN Biopsy <ul style="list-style-type: none"> Perform approach to lateral cervical region and hemilaminectomy Perform dorsal cervical approach and decompression Perform ventral slot with aid of magnification Optional – perform nerve and muscle biopsy 	<i>Dr. Sharon Kerwin, Dr. Nick Jeffery, Dr. Amanda Taylor, Dr. Fred Winger, Dr. William Thomas, Dr. Simon Platt</i>
5-5:15 pm	Faculty Debrief	
5:30 pm	Informal Cocktail Hour	

Sponsored by



Lab Partners



Advanced Techniques in Neurosurgery
August 17 – 19, 2023
The Viticus Center - Oquendo Campus | Las Vegas, NV

DAY 3 Saturday, August 19, 2023		
Time	Topic	Presenter(s)
7-7:30 am	Faculty meet to prepare for Day 3	
7:30-7:45 am	Questions So Far	<i>Dr. Amanda Taylor, Dr. Fred Winger</i>
7:45-8:15 am	VP Shunting <ul style="list-style-type: none"> • Be familiar with VP shunt systems • Learn tips for surgical technique to avoid shunt failure • Recognize the indications for shunt placement • Managing common complications 	<i>Dr. William Thomas</i>
8:15-9:15 am	Brain Surgeries: Transfrontal, Rostrotentorial, Alternative Methods <ul style="list-style-type: none"> • Assess the suitability of approaches for surgical access • Demonstrate appropriate patient positioning & surgical approach • Select/apply appropriate materials for closure • Describe anatomic landmarks for skin incision, muscle dissection and osteotomy • Determine whether zygomatic osteotomy may be necessary • Create an appropriate post-operative monitoring and treatment plan for veterinary patients undergoing these surgeries 	<i>Dr. Simon Platt</i>
9:15-9:20 am	Break	
9:20 am – 12:00 pm	Lab: Laboratory Overview, Review Instrumentation, VP Shunt, Transfrontal, Rostrotentorial <ul style="list-style-type: none"> • Perform VP shunt placement • Perform rostrotentorial and transfrontal approaches • Practice approach for zygomatic osteotomy 	<i>Dr. Sharon Kerwin, Dr. Nick Jeffery, Dr. Amanda Taylor, Dr. Fred Winger, Dr. William Thomas, Dr. Simon Platt</i>

Sponsored by



Lab Partners



Advanced Techniques in Neurosurgery
August 17 – 19, 2023
The Viticus Center - Oquendo Campus | Las Vegas, NV

DAY 3 (continued) Saturday, August 19, 2023		
Time	Topic	Presenter(s)
12:00-12:45 pm	Lunch	
12:45-1:15 pm	Foramen Magnum Decompression with Titanium Mesh <ul style="list-style-type: none"> • Review indications for foramen magnum decompression • Review anatomy of region • Learn technique for application of titanium mesh over craniectomy 	<i>Dr. William Thomas</i>
1:15-2:05 pm	Minimally Invasive Technique <ul style="list-style-type: none"> • Learn indications for minimally invasive spinal surgery • Review instrumentation for minimally invasive techniques • Review advantages of minimally invasive techniques 	<i>Dr. Richard Chua</i>
2:05-2:20 pm	Break	
2:20-4:20 pm	Lab: Laboratory Overview, Review Instrumentation, Foramen Magnum Decompression, Minimally Invasive Techniques <ul style="list-style-type: none"> • Perform Foramen Magnum Decompression • Review minimally invasive spine approaches 	<i>Dr. Sharon Kerwin, Dr. Nick Jeffery, Dr. Amanda Taylor, Dr. Fred Winger, Dr. William Thomas, Dr. Simon Platt</i>
4:20 pm	Closing Remarks and Course Wrap Up	<i>Dr. Amanda Taylor, Dr. Fred Winger</i>

Sponsored by



Lab Partners

