

47TH

FORTY-SEVENTH ANNUAL MEETING

OF THE

CERVICAL SPINE RESEARCH SOCIETY



FOUNDED 1973

November 20, 2019

**The Marriott Marquis
New York City, NY**

Education Committee Chair Michael D. Daubs, MD

Education Committee Paul M. Arnold, MD • Wayne K. Cheng, MD • Clinton J. Devin, MD
John C. France, MD • Michael C. Gerling, MD • Steven S. Hughes, MD • Douglas G. Orndorff, MD
Kristen E. Radcliff, MD • Gregory Schroeder, MD • Neill M. Wright, MD

President Alexander Vaccaro, MD, PhD, MBA

CSRS 24th Instructional Course

Course Objectives:

- Review appropriate anatomy of the Cervical Spine.
- Compare the methods for diagnosis of neck disorders.
- Evaluate Operative and non-Operative Treatment options for Cervical Spine disorders.
- Recognize and respond to complications of surgical Treatment.
- Exchange information on Cervical Spine research, diagnosis and Treatment with both US and international surgeons.

WEDNESDAY, NOVEMBER 20Broadway Ballroom, 6th Floor

7:45 am - 7:49 am

Welcome and Introduction*Michael D. Daubs, MD*

7:50 am - 8:58 am

SESSION I: Trauma*Moderator: John France, MD*

7:50 am - 7:51 am

Introduction by Moderator*John France, MD***CASE 1**

7:52 am - 7:53 am

OccipitoCervical Dissociation- Presentation*John France, MD*

7:54 am - 8:03 am

OccipitoCervical Dissociation- Discussion*Panel Faculty*

8:04 am - 8:08 am

OccipitoCervical Dissociation- Literature Review*Carlo Bellabarba, MD*

8:09 am - 8:13 am

OccipitoCervical Dissociation- Conclusion*Panel Faculty***CASE 2**

8:14 am - 8:15 am

Hangmann's Fracture- Presentation*John France, MD*

8:16 am - 8:25 am

Hangmann's Fracture- Discussion*Panel Faculty*

8:26 am - 8:30 am

Hangmann's Fracture- Literature Review*Brandon Lawrence, MD*

8:31 am - 8:35 am

Hangmann's Fracture – Conclusion*Panel Faculty***CASE 3**

8:36 am - 8:37 am

Ankylosed Spine Fracture- Presentation*John France, MD*

8:38 am - 8:47 am

Ankylosed Spine Fracture- Discussion*Panel Faculty*

8:48 am - 8:52 am

Ankylosed Spine Fracture- Literature Review*Timothy Moore, MD*

8:53 am - 8:58 am

Ankylosed Spine Fracture- Conclusion*Panel Faculty*

8:59 am - 10:05 am

SESSION II: Degenerative Cervical Disorders*Moderator: Paul Anderson, MD*

8:59 am - 9:05 am

Pseudoarthrosis of ACDF How to Workup and Treat- Diagnosis and Cause, Workup, Patient optimization, Patient selection and outcomes*Clint Devin, MD*

WEDNESDAY, NOVEMBER 20

Broadway Ballroom, 6th Floor

- 9:06 am - 9:07 am Pseudoarthrosis of ACDF How to Workup and Treat- Case Presentation 2 Level ACDF with Symptomatic Nonunion
Clint Devin, MD
- 9:08 am - 9:14 am Pseudoarthrosis of ACDF How to Workup and Treat- Anterior Approach Is Best
Wellington Hsu, MD
- 9:15 am - 9:21 am Pseudoarthrosis of ACDF How to Workup and Treat- Posterior Approach Is Best
Mohamad Bydon, MD
- 9:22 am - 9:31 am Discussion
Panel Faculty
- 9:32 am - 9:38 am Failed Disc Arthroplasty- Diagnosis, Workup, Imaging
Jason Savage, MD
- 9:39 am - 9:40 am Failed Disc Arthroplasty- Case Presentation of Failed CDA with Images/Exam
Douglas Orndorff, MD
- 9:41 am - 9:47 am Failed Disc Arthroplasty- Anterior Approach for Revision with Either New Disc Replacement/ACDF
Pierce Nunley, MD
- 9:48 am - 9:54 am Failed Disc Arthroplasty- Combined Anterior/Posterior Approach, or Just Posterior Approach
Domagoj Coric, MD, FAANS
- 9:55 am - 10:05 am Discussion
Panel Faculty
- 10:06 am - 10:36 am **Exhibit Hall, Westside Ballroom, 5th Floor**
Break
- 10:37 am - 11:47 am **SESSION III: Complications**
Moderators: Paul Arnold, MD, and Steven S. Hughes, MD
- 10:37 am - 10:40 am New Post-Operative Deficit
John France, MD
- 10:41 am - 10:50 am Discussion
Panel Faculty
- 10:51 am - 10:54 am Post-Operative Epidural Hematoma
Jacob Buchowski, MD, MS
- 10:55 am - 11:04 am Discussion
Panel Faculty
- 11:05 am - 11:08 am C5 Palsy
Bruce Darden, MD
- 11:09 am - 11:18 am Discussion
Panel Faculty

WEDNESDAY, NOVEMBER 20Broadway Ballroom, 6th Floor

- 11:19 am - 11:22 am **Vertebral Artery Injury**
Paul Anderson, MD
- 11:23 am - 11:32 am **Discussion**
Panel Faculty
- 11:33 am - 11:36 am **Dural Tear Anterior/Posterior**
Carlo Bellabarba, MD
- 11:37 am - 11:47 am **Discussion**
Panel Faculty
- 11:48 am - 12:48 pm **Exhibit Hall, Westside Ballroom, 5th Floor**
Lunch
- 12:49 pm - 1:57 pm **SESSION IV: Decision Making and Dilemmas**
Moderators: Kristen E. Radcliff, MD, and Neill M. Wright, MD
- 12:49 pm - 12:56 pm **Myelomalacia/Cord Compression without Clinical Findings**
W. Ryan Spiker, MD
- 12:57 pm - 1:04 pm **Cervical Stenosis with Mild Clinical Findings**
Langston Holly, MD, FAANS
- 1:05 pm - 1:12 pm **Lumbar Patient with Cervical Myelopathy On Exam**
Michael Kelly, MD
- 1:13 pm - 1:22 pm **Discussion**
Panel Faculty
- 1:23 pm - 1:30 pm **Fusion Evaluation with Metal Interbody Implants**
Han Jo Kim, MD
- 1:31 pm - 1:38 pm **A Review of the Clinical Research on Various Cellular Biologics**
Harvey Smith, MD
- 1:39 pm - 1:46 pm **Role of Neurophysiology Monitoring in Cervical Spine Surgery- Update on Medicolegal State- standard or Option**
Vincent Traynelis, MD
- 1:47 pm - 1:57 pm **Discussion**
Panel Faculty
- 1:58 pm - 3:08 pm **SESSION V: New Technologies/Innovation**
Moderators: Wayne K. Cheng, MD, and Michael C. Gerling, MD
- 1:58 pm - 2:05 pm **Focus on Adjacent Segment Disease: Biomechanics, Bioscience, Prevalence Studies**
Peter Passias, MD
- 2:06 pm - 2:07 pm **Case Presentation I: "Two Level Cervical Disk Herniation in Young Adult."**
Michael Gerling, MD
- 2:08 pm - 2:17 pm **2-Level TDR Is the Best Option As It Minimizes ASD**
Alpesh Patel, MD, FACS

WEDNESDAY, NOVEMBER 20

Broadway Ballroom, 6th Floor

- 2:18 pm - 2:27 pm **2-Level ACDF Is the Most Reliable Option**
John Rhee, MD
- 2:28 pm - 2:37 pm **2- Level Hybrid Constructs Are the Best of Both Worlds**
K. Daniel Riew, MD
- 2:38 pm - 2:45 pm **Stretching Indications for TDR, Failures and How to Avoid Them**
Themistocles Protopsaltis, MD
- 2:46 pm - 2:47 pm **Case Presentation II: “Split ACDF causing ASD / DDD” at Mid-Level**
Wayne Cheng, MD
- 2:48 pm - 2:57 pm **Panel Discussion**
Panel Faculty
- 2:58 pm - 3:08 pm **Discussion**
Panel Faculty
- 3:09 pm - 3:39 pm **Exhibit Hall, Westside Ballroom, 5th Floor**
Break
- 3:40 pm - 4:50 pm **SESSION VI: Master Techniques, Tips, and Pearls**
Moderator: Michael Daubs, MD
- 3:40 pm - 3:49 pm **Anterior Cervical Approach: Tips from an Otolaryngologist**
Joe Muscarella, DO
- 3:50 pm - 3:59 pm **Anterior Odontoid Fixation**
Andrew Dailey, MD, FAANS
- 4:00 pm - 4:09 pm **Posterior Occipital- C1-C2 Fixation**
Tom Mroz, MD
- 4:10 pm - 4:19 pm **Laminoplasty**
Jeff Wang, MD
- 4:20 pm - 4:29 pm **Cervical Corpectomy**
K. Daniel Riew, MD
- 4:30 pm - 4:39 pm **Posterior Cervical Osteotomy**
Darrel Brodke, MD
- 4:40 pm - 4:49 pm **Discussion**
Panel Faculty
- 4:51 pm - 5:00 pm **Closing Remarks**
Michael D. Daubs, MD