

## 8<sup>th</sup> Spine Deformity Solutions: A Hands-On Course

From the Scoliosis Research Society  
June 28-30, 2017 • Nijmegen, Netherlands  
Radboud Universitair Medisch Centrum

### Final Program

Wednesday, June 28, 2017

Van Der Valk Hotel Nijmegen-Lent

Registration and reception at 7:30 pm with Fireside Chats to follow

Thursday, June 29 and Friday, June 30, 2017

Radboud Universitair Medisch Centrum

#### **Program Times:**

Wednesday, 7:30pm-9:00pm

Thursday, 7:30am-5:30pm

Friday, 7:30am-5:00pm

#### **Course Chairs**

Ahmet Alanay, MD

*Acibadem University School of Medicine, Istanbul, Turkey*

Marinus De Kleuver, MD, PhD

*Radboud University Hospital, Nijmegen, Netherlands*

Munish C. Gupta, MD

*Washington University, St. Louis, MO, USA*

<b>Faculty</b>	<b>Institution</b>	<b>Conflict(s) of Interest Disclosed</b>
Ahmet Alanay, MD	Acibadem University School of Medicine, Istanbul, Turkey	No Relationships
René M. Castelein, MD, PhD	University Medical Center, Utrecht, Netherlands	K2M (a)
Marinus De Kleuver, MD, PhD	Radboud University Hospital, Nijmegen, Netherlands	AO Spine (a,e); DePuy Synthes (d); Medtronic (a); Netherlands Health Insurance Innovation Fund (a)
John R. Dimar, II, MD	Norton Leatherman Spine Center, Louisville, KY, USA	No Relationships
Meriç Enercan, MD	Istanbul Spine Center, Istanbul, Turkey	No Relationships
Munish C. Gupta, MD	Washington University, St. Louis, MO, USA	DePuy Synthes (b,d,g); Johnson & Johnson (c); Orthofix (b,d); Pfizer (c); Proctor & Gamble (c)
Henry F.H. Halm, MD	Schoen Klinik, Neustadt, Germany	NuVasive (b, g); Silony Medical (b)
Dezsoe J. Jeszenszky, MD	Schulthess Klinik, Zurich, Switzerland	DePuy Synthes (b, g)

Ibrahim Obeid, MD	CHU Bordeaux Pellegrin Hospital, Bordeaux, France	Alphatec Spine (g); Clariance (g); DePuy Synthes (a,b); Medtronic (b); Spineart (g)
Ferran Pellisé, MD, PhD	Hospital Vall d'Hebron, Barcelona, Spain	DePuy Synthes (a,b); Kisco (b); Medtronic (a); Zimmer Biomet (b)
Rolf B. Riise, MD	Rikshospitalet Oslo University Hospital, Oslo, Norway	No Relationships
Christopher I. Shaffrey, MD	University of Virginia Medical Center, Charlottesville, Virginia	K2M (b); Medtronic (b,g); NuVasive (b,c); Stryker Spine (b); Zimmer Biomet (g)

**Disclosure Key:**

- a – grants/research support
- b – consultant
- c – stock/shareholder (self-managed)
- d – speaker’s bureau
- e – advisory board or panel (industry)
- f – salary, contractual services (industry)
- g – other financial or material support (royalties, patents, etc.)

**Meeting Overview/Description**

The Hands-On Course will provide an opportunity for participants to expand their knowledge and improve their skills through training and discussions with leading spinal deformity surgeons from around the world. Registration will be limited to ensure access to faculty, small group interaction for better learning, and opportunities for hands-on work. Ten hours of the course will be devoted to lab work. Topics and lab sessions will cover all areas of the spine and a variety of conditions and techniques.

**Learning Outcomes/Objectives**

As a result of participating in this activity, participants should be able to:

- Identify appropriate options for cervical and adult deformity reconstruction
- Employ techniques to avoid complications in spinal deformity surgery
- Develop skills in complex cervical deformity correction
- Identify the appropriate indications and demonstrate skills for the correct placement of spinopelvic instrumentation.
- Compare and contrast open and less invasive treatment options for thoracolumbar spinal deformity.
- Integrate techniques for posterior and anterior lumbo-sacral deformity corrections.
- Demonstrate skills for performing basic and complex spinal osteotomies for spinal deformity correction.
- Identify the optimal surgical plan for spinal deformity corrective surgery, and confirm obtaining the correction desired.

**Target Audience**

Spine surgeons (orthopaedic and neurological surgeons), residents and fellows.

### **Disclosure of Conflict of Interest**

It is the policy of SRS to insure balance, independence, objectivity and scientific rigor in all of their educational activities. In accordance with this policy, SRS identifies conflicts of interest with instructors, content managers and other individuals who are in a position to control the content of an activity. Conflicts are resolved by SRS to ensure that all scientific research referred to, reported, or used in a CME activity conforms to the generally accepted standards of experimental design, data collection and analysis.

### **Insurance/Liabilities and Disclaimer**

SRS will not be held liable for personal injuries or for loss or damage to property incurred by participants.

Course participants are encouraged to take out insurance to cover loss incurred in the event of cancellation, medical expenses or damage to or loss of personal effects when traveling outside of their own countries.

SRS cannot be held liable for any hindrance or disruption of course proceedings arising from natural, political, social or economic events or other unforeseen incidents beyond its control. Registration of a participant or guest implies acceptance of this condition.

The materials presented at this activity are made available for educational purposes only. The material is not intended to represent the only, nor necessarily best, methods or procedures appropriate for the medical situations discussed, but rather is intended to present an approach, view, statement or opinion of the faculty that may be helpful to others who face similar situations.

SRS disclaims any and all liability for injury or other damages resulting to any individual attending a scientific meeting and for all claims that may arise out of the use of techniques demonstrated therein by such individuals, whether these claims shall be asserted by a physician or any other person.

### **Language**

Presentations and course materials will be provided in English.

### **No Smoking Policy**

The Surgical Skills Centre and Le Meridian Hotel are smoke free facilities. Smoking is not allowed in either building at any time.

### **Attire**

Casual attire and scrubs are appropriate for the course. Scrubs will **NOT** be provided at the lab, only disposables will be provided. Please bring your own scrubs if you wish to wear them.

### ***Corporate Supporters***

We are pleased to acknowledge and thank those companies that provided financial and in-kind support to SRS for this hands-on course. These companies provided educational grants to support costs for facility rental, Cadavers, and other course expenses as well as necessary instrumentation and implants for the hands-on lab sessions.

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**FINAL PROGRAM**

<b>Wednesday, June 28, 2017</b>	
7:30pm	Participant registration, Welcome Reception and Fireside Chats
8:00pm	<p><b>Theme of the Fireside Chats:</b> Radiographic Evaluation and Planning for Correction of Spinal Deformity</p> <ol style="list-style-type: none"> <li>1) <b>Adult Deformity</b> – <i>Pellise</i>, Dimar, Obeid</li> <li>2) <b>Pediatric Deformity</b> – <i>Castelein</i>, Halm, Jeszenszky, Riise</li> <li>3) <b>Cervical Deformity</b> – <i>Shaffrey</i>, Enercan</li> </ol>
<b>Thursday, June 29, 2017</b>	
	Breakfast at Hotel
7:30am	Bus Departs for Radboud Univeristair
7:55am	Welcome
<b>SESSION 1: THORACOLUMBAR OPEN AND MINIMALLY INVASIVE POSTERIOR TECHNIQUES</b> <b>Lectures (10 mins + 5 mins discussion)</b> <b>Moderator: Munish Gupta, MD</b>	
8:00am	Fixation of Thoracic, Lumbar, Sacrum and Pelvis <ul style="list-style-type: none"> <li>• Hooks</li> <li>• Pedicle Screws</li> <li>• Iliac Screws</li> <li>• S2AI Screws Fixation and Thoracic Lumbar and Sacrum and Pelvis</li> </ul> <i>Rene Castelein, MD, PhD</i>
8:15am	Minimally Invasive Stabilization of the Thoracolumbar Spine with Percutaneous Screws and Navigation <i>Ahmet Alanay, MD</i>
8:30am	Direct Lateral (trans psoas) and Oblique Lateral Approach to the Lumbar Spine-Degenerative Condition <i>Ibrahim Obeid, MD</i>
8.45am	Proceed to the Cadaver Lab & change of clothing
9:00-10:20am	<b>Lab Session 1 – Rotation 1 (change tables after 90 mins)</b>
<i>Group 1</i>	6 stations, cadaver prone, without C-arm

	Insertion of Hooks, Pedicle Screws, Sacro-Pelvic Fixation Thoracic-Lumbar-Ilium. Open, anatomy based Left side of the spine only
<i>Group 2</i>	6 stations cadaver lateral decubitus + C arm Lateral Lumbar Approach, from left side MIS Screws, left side only S2Ala-Ilium Screws, left side only (Each group does two discs in the upper lumbar spine) (L1-2-3)
10:20- 10:40am	<b>BREAK</b>
10:40am- 12.00pm	<b>Lab Session 1 – Rotation 2</b>
Group 2	6 stations, cadaver prone Insertion of Hooks, Pedicle Screws, Sacro-Pelvic Fixation. Thoracic-Lumbar-Ilium. Open, anatomy based Right side of the spine only
Group 1	6 stations cadaver lateral decubitus + C arm Lateral Lumbar Approach, from left side MIS Screws, right side only S2Ala-Ilium Screws, right side only (Each group does two discs in the lower lumbar spine ) (L3-4-5)
Noon- 1:00pm	Lunch
<b>SESSION 2: OSTEOTOMIES AND PELVIC FIXATION</b> <b>Lectures (10 mins + 5 mins discussion)</b> <b>Moderator: Ahmet Alanay, MD</b>	
1:00pm	Posterior Column Osteotomies Including Wide Release Ponte and Smith-Peterson Osteotomy <i>Rolf Riise, MD</i>
1:15pm	Pedicle Subtraction Osteotomy <i>Marinus De Kleuver, MD, PhD</i>
1:30pm	Vertebral Column Resection <i>Dezsoe Jeszenszky, MD</i>
1:45pm	Complications of Osteotomies <i>Munish Gupta, MD</i>
2.00pm	Proceed to the Cadaver Lab & change of clothing
2:15pm	<b>Session 2</b> 12 stations, all cadavers prone No rotation
Session 2A 2:15-3:45	Posterior Column Osteotomies, Ponte Multiple Levels Between L1- L5 and Smith-Peterson Osteotomy and PSO in the Lumbar Spine (Osteotomy at L3, participants

pm	share left/right side)
Session 2B 3:45-5:15 pm	Posterior Column Osteotomies, Ponte and Smith-Peterson Osteotomy at Multiple Levels and Vertebral Column Resection of the Thoracic Spine (at T9)
5:30pm	Adjourn & shuttle back to hotel
	Faculty dinner, participants free night out
<b>Friday, June 30, 2017</b>	
	Breakfast at hotel
7:30am	Bus Departs for Radboud Univeristair
7.55am	Welcome
<b>SESSION 3: CERVICAL DEFORMITY</b> <b>Lectures (10 mins + 5 mins discussion)</b> <b>Moderator: Christopher Shaffrey, MD</b>	
8:00am	Anterior Cervical Discectomies and Corpectomies- Indications, Approach and Execution <i>Meric Enercan, MD</i>
8:15am	Occipital and Cervical Fixation with Cervical Pedicle Screws, and Lateral Mass Screws Indications, Approach and Execution <i>Ibrahim Obeid, MD</i>
8:30 am	Planning and Execution for Cervical Osteotomies <i>Christopher Shaffrey, MD</i>
8:45 am	Complications of Cervical Spine <i>Christopher Shaffrey, MD</i>
9:00 am	Discussion
9:15 am	Proceed to Cadaver Lab & change of clothing
9:30 am	Session 3 12 stations No body rotation
Session 3A 9:30 – 10:45 am	12 stations, cadaver supine: Anterior Approaches to the Cervical Spine and Cervicothoracic Junction
10:45am	Break – lab staff to turn the cadaver to prone position
Session 3B 11:00am – 12:15 pm	12 stations: Posterior Cervical Reconstruction from Occipital to T2 Deformity and Correction Techniques-C7PSO
12:15- 1:15pm	Lunch
<b>SESSION 4: ANTERIOR AND LATERAL APPROACH-thoracic &amp; LUMBAR SPINE</b> <b>Lectures (10mins + 4mins discussion)</b> <b>Moderator: Marinus De Kleuver, MD, PhD</b>	

1:15pm	Anterior Trans pleural Thoracic Approaches-Deformity, Tumor, Trauma; Lateral (Flank)Thoracolumbar -Lumbar Retroperitoneal Approach for Anterior Column Reconstruction and Release <i>Henry Halm, MD</i>
1:35pm	Anterior Techniques with Anterior Lumbar Interbody Fusion, Retroperitoneal Anterior Approach to L5-S1, L4-5 and L3-4 <i>John Dimar, MD</i>
1:50pm	Complications of Anterior and Lateral Surgery: How to Deal with Them. <i>John Dimar, MD</i>
2:05pm	Complications of Posterior Instrumentation (Open and Minimally Invasive Surgery) <i>Rene Castelein, MD, PhD</i>
2:20pm	Non-Neurologic Complications of Spine Surgery <i>Ferran Pellise, MD, PhD</i>
2:35	Break, Proceed to Cadaver Lab & change of clothing
Session 4 3:00pm	Anterior Thoracic Transpleural Approach (Mid-Thoracic) Anterior Lumbosacral Retroperitoneal Approach + ALIF L5-S1 & Exposure L4-5
4:30	Open Question & Answer Wrap Up Session
5:00	Adjourn & shuttle back to hotel