SCOLIOSIS RESEARCH SOCIETY Spine Deformity Solutions: A Hands-On Course

June 18-20, 2025 | Nijmegen, the Netherlands

Radboud University Medical Center (RADBOUD UNIVERSITY MEDICAL CENTER)

FINAL PROGRAM

MEETING OVERVIEW

Meeting 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 is limited to ensure that every participant can closely interact with faculty, small group interaction for better learning, and opportunities for hands-on work. Nine hours of the course will be devoted to lab work. Topics and lab sessions will cover all anatomic areas of the spine with focus on instrumentation and complex corrective procedures. There will be 4 half day modules including posterior cervical spine, plus an optional Saturday morning in depth cervical module (on a first come first come registration basis).

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 for the use of spinopelvic instrumentation
- Demonstrate skills for the correct placement of spinopelvic instrumentation
- Integrate techniques for posterior and anterior lumbo-sacral deformity corrections
- Demonstrate knowledge and skills for performing basic and complex spinal osteotomies

Course Overview

Pre-Recorded Lectures (SRS BrightSpace system)

- Fixation of Thoracic, Lumbar, Sacrum, and Pelvis (Hooks, Pedicle Screws, Iliac Screws, and S2Ala-Ilium Screws Fixation)
- How to Reduce Complication Rates: PJK and Revision Surgery
- How to Reduce Complication Rates: Pseudo and Revision surgery
- Osteotomies, three column osteotomy, Ponte, smith-peterson-osteotomy: Indications and Technique
- Pelvic fixation
- Occipital and Cervical Fixation with Cervical Pedicle Screws and Lateral Mass Screws
- Principles and Treatment of Cervical Deformity and Cervical Alignment



Faculty Chairs

Marinus de Kleuver, MD, PhD Nijmegen, the Netherlands

Martin Pouw, MD, PhD Nijmegen, the Netherlands

Nijmegen Faculty

Karel de Bree, MD

Lars van der Loo, MD

Philip Horsting, MD

Allard Hosman, MD, PhD

Dirk Schrander, M.D.

Faculty

Laurel Blakemore, MD

President Scoliosis Research Society Fairfax, Virginia, United States

Andrew Bowey, FRCS (Tr&Orth) *Newcastle Upon Tyne, United Kingdom*

Dong-Gune Chang, MD, PhD Seoul. Korea

Ashley Cole, MD Sheffield, United Kingdom

Alexandre Fogaça Cristante, MD, PhD Sao Paulo, Brazil

Emmanuelle Ferrero, MD, PhD Paris. France

Heiko Koller, MD, PhD Bad Abbach, Germany

Martin Repko, MD, PhD Brno, Czech Republic

Dominique Rothenfluh, MD, PhD *President Spine Society of Europe Lausanne, Switzerland*

Tom PC Schlösser, MD, PhD Utrecht, Netherlands

Caglar Yilgor, MD Istanbul, Turkey



GENERAL MEETING INFORMATION

Target Audience

Residents, fellows and orthopaedic and neurosurgeons who have an interest in and are involved in spinal deformity management and treatment.

Language

English is the official language of the course, and all presentations and course materials will be provided in English.

Attire

Business casual attire is appropriate for the Fireside Chats. Casual attire and scrubs are appropriate for the lecture and lab sessions. Scrubs, disposables, and lead aprons will be provided at the lab. *Thyroid protection will not be provided at the lab. Participants will need to provide their own thyroid shields if they need or want them.*

Accreditation Statement

The Spine Deformity Solutions: A Hands-On Course, Nijmegen, Netherlands 18/06/2025 - 20/06/2025, has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with **15.5 European CME credits** (ECMEC®s). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity."

Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 CreditsTM. Information on the process to convert EACCME® credit to AMA credit can be found at https://edhub.ama-assn.org/pages/applications.

Live educational activities, occurring outside of Canada, recognised by the UEMS-EACCME® for ECMEC®s are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada.

Claiming Credit

Attendees can claim EACCME® credits exclusively online at www.srs.org/sds following the submission of the course evaluation.

Special Needs

If you have health issues for which you may require special accommodations, please notify the SRS staff onsite. We will make every effort to accommodate any special needs.

FDA Statement (United States)

Some drugs and medical devices demonstrated during this course have limited FDA labeling and marketing clearance. It is the responsibility of the physician to be aware of drug or device FDA labeling and marketing status.



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.

Disclosure of Financial Relationships

Financial Relationships

| Marinus de Kleuver | Medtronic (b) | | |
|------------------------------|--|--|--|
| Laurel Blakemore | Shriners Hospital for Children (b) | | |
| Andrew Bowey | Medtronic (b, d); Globus (d) | | |
| Emmanuelle Ferrero | Medtronic (d); Implanet (b); Spineart (d) | | |
| Philip Horsting | J&J MedTech (b) | | |
| Dominique Rothenfluh | NuVasive (d); Medtronic (d); DePuy Synthes (d) | | |
| Tom PC Schlösser | SRS (a); Annafonds (a); EUROSPINE Executive Committee (e) | | |
| Caglar Yilgor | Medtronic (b) | | |
| All other individuals in cor | trol of content have no relevant financial relationships to disclose. All relevant financial | | |
| | relationships have been mitigated. | | |

a – grants/research support; b – consultant; c – stock/shareholder (self-managed); d – speaker's bureau;





LOCATION INFORMATION | RADBOUD UNIVERSITY MEDICAL CENTER

Wednesday, June 18 | Registration and Fireside Chat Case Discussions

Faculty Club, Huize Heyendael

Geert Grooteplein Noord 9, 6525 EZ Nijmegen, Netherlands

<u>Directions by Car</u> <u>Directions by Public Transport</u>

Thursday, June 18 and Friday, June 20 | Lecture Sessions and Practical Exercises

Studiecentrum

Geert Grooteplein 21 (route 74 - 142) 6525 EZ Nijmegen, Netherlands

<u>Directions by Car</u> <u>Directions by Public Transport</u>

MEETNG ROOMS

Huize Heyendael

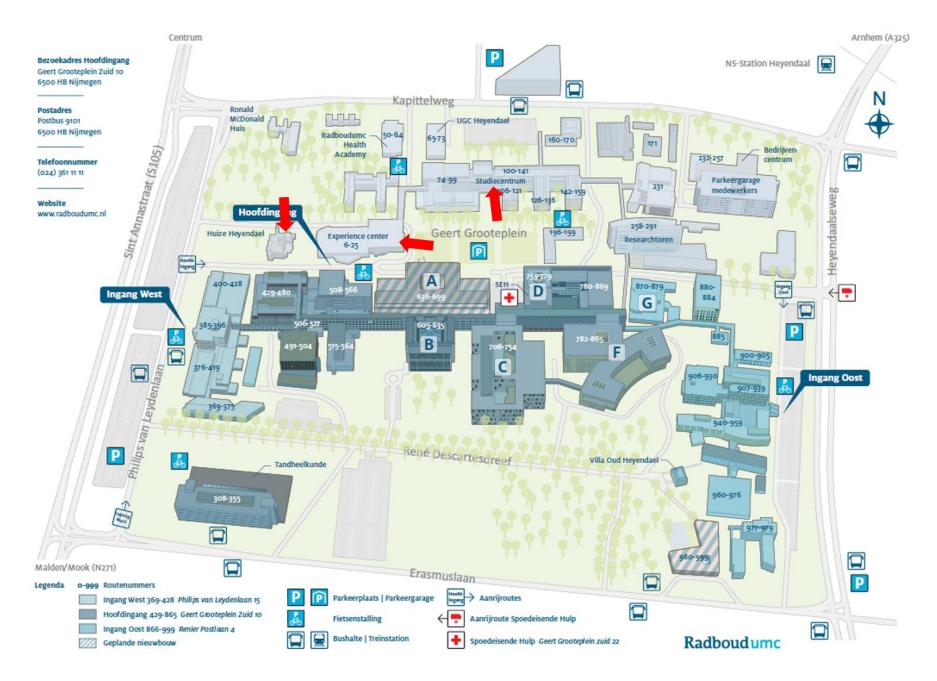
| ROOM | FUNCTION | |
|---------------|---|--|
| Entrance Way | Registration Check-In | |
| Marijnenkamer | Fireside Chat Room 1 | |
| van Agtkamer | Faculty Pre Course Meeting & Fireside Chat Room 2 | |

Studiecentrum

| ROOM | ROUTE* | FUNCTION | |
|-----------------|-----------|------------------------------------|--|
| Hippocrateszaal | Route 77 | Lecture Room | |
| Lounge | Route 77 | Refreshment Breaks | |
| De Haardt | Route 77 | Lunch Breaks | |
| Lab A | Route 103 | Stations 1-5, with fluoroscope | |
| Lab B | Route 103 | Stations 6-10, without fluoroscope | |
| Moulin A | Route 124 | Workshop Room 1 | |
| Moulin C | Route 124 | Workshop Room 2 | |
| Moulin B & C | Route 124 | Dressing Room | |

^{*}At RUMC, all rooms (or departments with a group of rooms) have a specific route-number. When you enter a building, you can follow the route numbers, starting from the entrance to the room you are looking for.







Huize Heyendael, Radboud University Medical Center

16:30-17:00

Faculty Shuttle to Huize Heyendael

Faculty pick-up at Hotel

17:00-17:30

Faculty Pre-Course Meeting | Marijnenkamer

17:30-18:30

Welcome Reception & Participant Registration | Room: Huize Heyendael - De Salon

After check-in, attendees will be directed to their designated fireside chat rooms for small group case discussions.

Light dinner and beverages will be available inside the discussion rooms.

Dress code: informal/casual civilian clothes

18:30-20:30

Case Discussions: Pediatric & Adult Spine Deformity (2 Concurrent Sessions)

Theme: Radiographic Evaluation and Planning for Correction of Spinal Deformity

18:30-20:30 Case discussions Pediatric & Adult Spine Deformity

Incl. welcome, housekeeping rules, explanation of course format

Group 1: Marijnenkamer

Moderator: Dominique Rothenfluh, MD, PhD and Alexandre Fogaça Cristante, MD, PhD

Faculty: Marinus de Kleuver, MD, PhD; Karel de Bree, MD; Philip Horsting, MD; Laurel Blakemore, MD; Ashley

Cole, MD; Heiko Koller, MD, PhD; Caglar Yilgor, MD

Group 2: Van Agtkamer

Moderator: Martin Repko, MD, PhD and Emmanuelle Ferrero, MD, PhD

Faculty: Martin Pouw, MD, PhD; Lars van der Loo, MD; Allard Hosman, MD, PhD; Andrew Bowey, FRCS

(Tr&Orth); Dong-Gune Chang, MD, PhD; Tom PC Schlösser, MD, PhD

20:30-21:00

Faculty Shuttle Provided to Hotel Blue



Studiecentrum, Radboud University Medical Center

7:15

Faculty Shuttle to Studiecentrum

7:30-8:00

Changing Rooms Available | Room Moulin B & C

Small lockers will be available to store your belongings

Change from civilian clothes to surgical scrubs and personal protective equipment (these will be provided)

7:30-8:00

Welcome and Coffee in Lounge | Route 77

8:00-8:50

Session 1: Thoracolumbar Open Posterior Techniques | Room: Hippocrateszaal - Route 77

Moderator: Marinus de Kleuver, MD, PhD

| | 8:00-8:10 | Course Welcome, explanation of | f course program | , & Introduction of the Team |
|--|-----------|--------------------------------|------------------|------------------------------|
|--|-----------|--------------------------------|------------------|------------------------------|

Marinus de Kleuver, MD, PhD

8:10-8:20 Minimally Invasive Stabilization of the Thoracolumbar Spine (with Percutaneous Screws and/or Navigation)

Tom PC Schlösser, MD, PhD

8:20-8:30 Direct Lateral (Trans Psoas) and Oblique Lateral Approach to the Lumbar Spine for Degenerative Conditions

Dong-Gune Chang, MD, PhD

8:30-8:40 Discussion

8:40-8:45 Moment of Remembrance

Denise Doormerik, MD

8:45-8:50 Introduction to the practical exercise 1

Martin Pouw, MD, PhD

8:50-8:55

Proceed to lab and put on disposable surgical gowns | Route 103

Changing rooms and lockers for valuables are available

Personal Protective Equipment (PPE): Scrubs, gowns, masks, eye protection, gloves & lead aprons are all provided.

Thyroid protection is NOT provided

Group B first, group A to follow after 5 mins

8:55 - 10:30

Practical Exercise 1A-B, Rotation 1

Lab Room A (Stations 1-5) - Cadavers 1-5 in lateral decubitus position<u>, **left**</u> side up

Station 1-5 XLIF left sided approach L1-2-3 plus image intensifier

Lab Room B (Stations 6-10) - Cadavers 6-10 prone position

Station 6-10: posterior Th10—sacrum exposure and open free hand placing pedicle screws (optional: iliac fixation), no image intensifier



Studiecentrum, Radboud University Medical Center

10:30 - 10:45

Group Photo Lab staff to reposition the cadavers (30 minutes)

10:45 - 11:00

Refreshment Break | Route 77 Lab staff to reposition the cadavers (30 minutes)

11:00 - 12:40

Practical Exercise 1A-B, Rotation 2

Lab Room A (Stations 1-5, with image intensifier) - Cadavers 6-10 in lateral decubitus position, <u>left</u> side up Station 6-10: XLIF left sided approach L1-2-3, plus image intensifier

Lab Room B (Stations 6-10) - Cadavers 1-5 prone position

Station 1-5 posterior Th10—sacrum exposure and open free hand placing pedicle screws (optional: iliac fixation), no image intensifier

12:40 - 14:15

Lunch & Non-CME Industry Workshops

See Industry Workshop descriptions here.

12:40- 13:10 Group 1: Moulin A

Group 2: Moulin C

13:10 - 13:45 Lunch

13:45 - 14:15 Group 2: Moulin A

Group 1: Moulin C

14:20-14:55

Session 2: Osteotomies and Pelvic Fixation | Room: Hippocrateszaal - Route 77

Moderator: Marinus de Kleuver, MD, PhD

14:20-14:30 Pedicle Subtraction Osteotomy (PSO)

Andrew Bowey, FRCS (Tr&Orth)

14:30-14:40 Vertebral Column Resection (VCR)

Ashley Cole, MD

14:40-14:50 Discussion

14:50-14:55 Introduction to the practical exercise 2

Martin Pouw, MD, PhD

14:55-15:00

Proceed to Lab | Route 103



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15:00-17:30

Practical Exercise 2: Posterior Spinal Osteotomies (All Cadavers Prone Position)

Lab Room A (Stations 1-5); Lab Room B (Stations 6-10)

Posterior Column Osteotomies, Ponte multiple levels between L1-L5, Smith-Peterson Osteotomy (SPO), Pedicle Subtraction Osteotomy (PSO) in the Lumbar Spine (at L3), Vertebral Column Resection (VCR) of the Thoracic Spine (at T9). Participants share left/right side.

15:30-16:15

Beverage Available in Lounge | Route 77

17:30

Change Clothes | (Lab staff to turn cadavers to supine position)

17:35

Faculty Shuttle Provided to Hotel

19:00-21:00

Faculty and Industry Dinner (by invitation only).

Participant free night out.



PROGRAM FRIDAY, JUNE 20, 2025

Studiecentrum, Radboud University Medical Center

7:15

Faculty Shuttle to Lab

7:30-8:00

Changing Rooms Available | Room Moulin B & C

Change from civilian clothes to surgical scrubs, SEE PROGRAM THURSDAY

7:30-8:00

Welcome and Coffee in Lounge | Route 77

8:00-8:35

Session 3: Cervical Deformity: Indications, Approach, and Execution | Room: Hippocrateszaal - Route 77

Moderator: Philip Horsting, MD

8:00-8:20 Posterior approaches to the cervical spine: approach, instrumentation and pitfalls

Heiko Koller, MD, PhD

8:20-8:30 Anterior approaches to the cervical spine

Karel De Bree, MD

8:30-8:35 Introduction to the practical exercise 3A & 3B

Martin Pouw, MD, PhD

8:35-8:45

Proceed to lab and dress into disposable Personal Protective Equipment (PPE) | Route 103

Personal Protective Equipment (PPE): Scrubs, gowns, masks, eye protection, gloves & lead aprons are all provided. Thyroid protection is NOT provided

8:45-10:30

Practical Exercise 3A: Anterior Approaches to the Cervical Spine and Cervicothoracic Junction (All Cadavers Supine Position)

Lab Room A (Stations 1-5); Lab Room B (Stations 6-10) - Route 103

Interbody Fusion and Corpectomy, optional Sternotomy, and Approach to Upper Thoracic Spine

10:30-10:50

Refreshment Break in Lounge | Route 77

(Lab staff to turn cadavers to prone position)

10:50-12:30

Practical Exercise 3B: Posterior Cervical Reconstruction from Occipital to T2 (All Cadavers Prone Position)

Lab Room A (Stations 1-5); Lab Room B (Stations 6-10)

Posterior Instrumentation: Occipital Plate, C3-7 lateral mass screws, Laminectomy, Laminoplasty, C3-C7 Pedicle Screws. Open Anatomy Based.



PROGRAM FRIDAY, JUNE 20, 2025

Studiecentrum, Radboud University Medical Center

12:30-14:05

Lunch & Non-CME Corporate Workshops

(Lab staff to turn cadavers to lateral position)

12:30-13:00 Group 1: Moulin A

Group 2: Moulin C

13:00-13:30 Lunch

13:30-14:00 Group 2: Moulin A

Group 1: Moulin C

14:05 - 14:50

Session 4: Anterior and Lateral Approach: Thoracic and Lumbar Spine | Room: Hippocrateszaal - Route 77

Moderator: Martin Repko, MD, PhD

14:05 – 14:15 Introduction to SRS & How to become a Member

Laurel Blakemore, MD

14:15-14:30 Anterior Transpleural Thoracic and Thoracolumbar- Lumbar Retroperitoneal Approach for Anterior Column

Reconstruction, Releases and Vertebral Body Tethering

Caglar Yilgor, MD

14:30-14:40 Discussion

14:40-14:50 Introduction to the practical exercise 4

Martin Pouw, MD, PhD

14:50 -14:55

Proceed to Lab | Route 103

14:55-16:45

Practical Exercise 4: Anterior Thoracolumbar Approaches (Cadavers Lateral Decubitus Position, Left Side Up)

Lab Room A (Stations 1-5); Lab Room B (Stations 6-10)

Anterior Thoracic Transpleural Approach (Mid-Thoracic) and thoracolumbar retroperitoneal approach. Cadavers in lateral decubitus position, left side up

15:30-16:15

Beverage Available in Lounge | Route 77

16:45-17:10

Open Question & Answer Wrap-up Session | Room: Hippocrateszaal - Route 77

17:10-17:15

Change Clothes and Adjourn

17:15

Faculty Shuttle Provided to Hotel



Please Note: CME Credits are not available for Industry Workshops

B.Braun

Location: Moulin C, route 124 Date: Thursday, June 19, 2025

Times: 12:40-13:10 (Group 2) and 13:45-14:15 (Group 1)

We are excited to unveil Ennovate® PolyLock®, a great advancement in surgery that enhances flexibility and performance by allowing screw adjustments tailored to specific procedures. This adaptability empowers surgeons to achieve unparalleled precision and efficiency for optimal patient outcomes.

Additionally, we proudly introduce our latest stand-alone interbody device, the ArcadiusXP C, designed for anterior cervical spine surgery. Utilizing cutting-edge technology, it offers improved stability and ease of use, demonstrating our commitment to advancing healthcare and supporting surgeons in delivering exceptional patient care.

Join us on this innovative journey and be part of a transformative era in surgical technology!

Globus Medical

Location: Moulin A, route 124 Date: Friday, June 20, 2025

Times: 12:30-13:00 (Group 1) and 13:30-14:00 (Group 2)

Advancing complex procedures with enabling technology.

Hear from Mr Stephen McGillion on the application of ExcelsiusGPS in complex procedures in his practice followed by a hands-on experience.

Presenter: Mr. Stephen McGillion, Consultant Orthopeadic Spinal Surgeon

Johnson & Johnson MedTech

Location: Moulin C, route 124 Date: Friday, June 20, 2025

Times: 12:30-13:00 (Group 2) and 13:30-14:00 (Group 1)

A New Era in JNJ MedTech Spine: TriALTIS™ Spine System

Please join us for this brief introduction to the new look of Spine for Johnson and Johnson Med Tech featuring the TriALTIS Spine System, JNJ MedTech's next generation pedicle screw platform. Designed with three key principles in-mind, TriALTIS offers a comprehensive implant portfolio with advanced instrumentation designed for integration with enabling technology.

Presenter: Daniel Lisker and Isabel Farrarons

Medtronic

Location: Moulin A, route 124 Date: Thursday, June 19, 2025

Times: 12:40-13:10 (Group 1) and 13:45-14:15 (Group 2)

How planning can help drive the success of deformity surgery

A glimpse into Medtronic's AiBLE™ ecosystem and how utilisation of planning can help to contribute to the success of deformity surgery.

Presenter: Mr. Andrew James Bowey



CORPORATE SUPPORT

We are pleased to acknowledge and thank the 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.

B.Braun
Bioventus
Highridge Medical
Johnson & Johnson MedTech
Globus Medical, Inc.
Medtronic
VB Spine

FUTURE SRS MEETINGS

60th Annual Meeting

September 16-20, 2025 – Charlotte, North Carolina, USA

33rd IMAST

April 15-17, 2025 - Toronto, ON, Canada

Spine Deformity Solutions: A Hands-On Course

October 10-12, 2025 - Hong Kong

Scoliosis Research Society

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