



## **3<sup>rd</sup> Spinal Trauma Major Complications Course 2025**

**Date: 13.12.2025**

**Event location:**

Animal Facility University Hospital Zurich; Uni Irchel

**Organizing Committee:**

Michel Teuben, MD/PhD, Dept. of Traumatology, University Hospital Zurich

Roman Pfeifer, Prof/MD, Dept. of Traumatology University Hospital Zurich

Valentin Neuhaus, Prof/MD, Dept. of Traumatology University Hospital Zurich

Hans-Christoph Pape, Prof/MD, Dept. of Traumatology University Hospital Zurich

**Course language:**

English/Deutsch

**Accreditation:**

Schweizerische Gesellschaft für Spinale Chirurgie

Schweizer Gesellschaft für Chirurgie

### **Course Program:**

08.45 Registration (Entrance Building Y80, Campus Irchel)

09.00 **Introduction and epidemiology of major peri-operative complications**

09.15-10.15 Session 1 (Seminarroom 1<sup>st</sup> floor, Y80):

30min **Management of hardware malpositioning and concurrent injuries** Presenter: Prof. V. Neuhaus (Dept. of Trauma Surgery, USZ)  
Spleen  
Liver  
Diaphragm  
Kidney  
Lung

15min **Injuries to large vessels and the cardiac box**

Presenter: Dr. med. M. Schmiady (Dept. of Cardiac Surgery, USZ)  
Aorta, segmental arteries  
Vena Cava  
Heart  
Iliac arteries

15min **Hemodynamic instability during spinal fracture surgery**

Presenter: Dr. med. L. Gutzler (Dept. of Anesthesiology, USZ)

10.15-10.30 Coffee break

10.30-11.30 Session 2 (Seminarroom 1<sup>st</sup> floor, Y80):

15min **Spinal infections and complications**

Presenter: Prof. Dr. med. R. Pfeifer (Dept. of Trauma Surgery, USZ)

15min **Post-traumatic degeneration and correction surgery** (online)

Presenter: (tba) (Dept. of Spine Surgery, Spine and Scoliosis  
Center Bochum, Germany)

30min

**My worst case...**

Presenter: Ph.D. Dr. med. M. Teuben

11.30-12.30 **Lunch (Y80, Animal facility)**

12.30-12.45 **3D-Simulation (Hololens) and anatomy overview**

Presenter: Dr. med. S. Heining (Dept. of Trauma Surgery, USZ)

12.45-16.30 **Hands-On Course (Y80, Animal facility)**

*2 experimental animals parallel*

*groups of 6 participants and 1 instructor*

**Scenario 1:**

**Dorsal open approach and dura tear at the level L1/L5 (45min) and thoracic spine (Th8-10)**

**Scenario 2: Lateral thoracic and abdominal approaches and serial injuries**

1. Diaphragm injury and repair
2. Disc removal
3. Lung injury

**Scenario 3: Anterior approach abdomen**

1. ALIF approach
2. Liver laceration
3. Splenic laceration
4. Nephrectomy
5. Diaphragm repair
6. Bladder repair

**Scenario 4: Anterior approach thorax**

1. Clampshell on animal 1
2. Sternotomy on animal 2 (tisseal)
3. Pericard release
4. Cardiac injury

**Scenario 5: Crash scenario**

1. Aortic lesion/vena cava lesion
2. Manual heart massage

16.30

Closure

16.35-19.00 **Glühwein/-gin Apero (Campus Irchel)**



### **Course location:**

Campus Irchel

Center for Preclinical Development UZH/USZ

Universität Zürich, Strickhofstrasse 40a, 8057 Zürich

Building Y80 (Seminarroom on 1<sup>st</sup> floor and Animal facility)

