



## Principles of Fracture Repair January 23-25, 2022

### Day 1

08:00 *Breakfast and Course Welcome*

08:30 *Course objectives*

08:35 Principles of bone healing with direct and indirect reduction

09:15 Pins, principles & technique of insertion; cerclage wires: principles of application

10:00 *Break*

10:15 Bone plates and screws

11:00 **Laboratory 1 - Plastic Bone Tibia:** Direct reduction long oblique/spiral tibial shaft fracture;  
Application of cerclage wire and lag screws

12:00 *Working Lunch Discussion*

12:45 Radial fractures; surgical approach direct and indirect reduction

1:30 **Laboratory 2 - Plastic Bone Radius (Direct & Indirect Reduction)**

- Direct reduction transverse distal radius fracture with T – plate
- Indirect reduction of comminuted radial shaft fracture with Plate-Rod

3:30 *Break*



3:45 **Laboratory 3 – Cadaver #1 Radius (Direct & Indirect Reduction)**

- Direct reduction distal transverse fracture with T – Plate (absolute stability) – LEFT radius
- Indirect reduction communicated radius fx with plate / rod (relative stability) – RIGHT radius

5:45 Discussion of Take-Home Points and Key Concepts

6:00 *End of day 1*

**Day 2**

07:45 *Breakfast*

08:15 Radiographic Review Session – Radius Fractures

09:15 Femoral shaft fractures: surgical approach, direct/indirect reduction techniques

10:00 *Break*

10:15 **Laboratory 4 – Femur Plastic Bone (Direct & Indirect Reduction)**

- Direct reduction oblique femur diaphyseal fx w/ lag screw/neutralization plate
- Indirect reduction of comminuted femur diaphyseal fx with Plate-Rod

12:15 Morning in Review & Discussion of Key Concepts

12:30 *Working Lunch Discussion*

1:15 **Laboratory 5 – Cadaver #1 Femur (Direct & Indirect Reduction)**

- Direct reduction oblique femur diaphyseal fx w/ lag screw/neutralization plate (LEFT femur)
- Indirect reduction of comminuted femur diaphyseal fx with Plate-Rod (RIGHT femur)

3:30 *Break*

3:45 Tibia Shaft fractures: surgical approach, direct/indirect reduction techniques

4:15 Proximal tibial physeal fracture: pin and tension band fixation

4:30 **Laboratory 6 – Stifle Plastic Bone Models (tension band fixation of tibial tuberosity avulsion)**

5:30 Discussion of Take-Home Points and Key Concepts

6:00 *End of day 2*

### **Day 3**

7:45 *Breakfast*

08:15 Radiograph review session – Femur fractures

09:15 Bone grafting made simple: How, when and why?

09:45 **Laboratory 7 – Tibia Plastic Bone (Direct & Indirect Reduction)**

- Direct reduction oblique femur diaphyseal fx w/ lag screw/neutralization plate
- Indirect reduction of comminuted femur diaphyseal fx with Plate-Rod

10:30 **Laboratory 8 – Cadaver #1 Tibia (Direct & Indirect Reduction)**

- Direct reduction oblique femur diaphyseal fx w/ lag screw/neutralization plate (LEFT Tibia)
- Indirect reduction of comminuted femur diaphyseal fx with Plate-Rod (RIGHT Tibia)

12:00 Perioperative patient management and complications

12:30 *End of course*

*To be followed by TPLO directly after lunch*