



Event program

AOTrauma Courses—Basic and Advanced Principles of Fracture Management—Self-directed Learning Modules

Wednesday, December 4, 2019

Participants will choose their own program by selecting two of the following 4 modules:

Morning modules:

- Approaches—upper extremity
- Intramedullary nailing—principles made easy
- Associated shaft and articular fractures

Afternoon modules:

- Approaches—lower extremity
- Avoiding and treating complications
- Management of bone disease and fracture

Chairpersons

Nir Cohen

Rabin Medical Center - Beilinson
Campus
Petah Tikva, Israel

Vincenzo Giordano

Serviço de Ortopedia e Traumatologia
Prof. Nova Monteiro – Hospital
Municipal Miguel Couto
Rio de Janeiro, Brazil

Christian Candrian

Ospedale Civico Lugano
Lugano, Switzerland

Faculty

Approaches—upper extremity

Ying-Chao	Chou	Chang Gung Memorial Hospital Linkou Branch	Taoyuan	Taiwan
Nir	Cohen	Rabin Medical Center- Beilinson Campus	Petah Tikva	Israel
Marcis	Radzins	Hospital Of Traumatology and Orthopaedics, Clinic OrtoMed	Riga	Latvia
Martin	Richardson	University of Melbourne,	Melbourne	Australia
Johan	Scheer	University Hospital Linköping	Linköping	Sweden
Frédéric	Vauclair	CHUV	Lausanne	Switzerland

Intramedullary nailing—principles made easy

Sushrut	Babhulkar	Sushrut Institute of Medical Sciences	Nagpur	India
Paulo	Barbosa	Hospital Quinta D'Or	Rio de Janeiro	Brazil
Gregory	Della Rocca	University of Missouri	Columbia	USA
Sergei	Fischer	Universidade Federal do Paraná - Hospital do Trabalhador	Curitiba	Brazil
Vincenzo	Giordano	Serviço de Ortopedia e Traumatologia Prof. Nova Monteiro - Hospital Municipal Miguel Couto	Rio de Janeiro	Brazil
Näder	Helmy	Bürgerspital Solothurn	Solothurn	Switzerland
Mark	Lee	University of California, Davis	Sacramento	USA
Jong-Keon	Oh	Korea University Guro Hospital	Seoul	South Korea
An	Sermon	University Hospitals Gasthuisberg, Leuven, Belgium	Leuven	Belgium
Philipp	Stillhard	Kantonsspital Graubünden	Chur	Switzerland

Associated shaft and articular fractures

Christian	Candrian	Ospedale Civico Lugano	Lugano	Switzerland
Juan	Concha Sandoval	Universidad del Cauca	Popayan	Colombia
Adel	Ebrahimpour	Taleghani Hospital	Tehran	Iran
Marcos	Leonhardt	instituto de ortopedia e traumatologia do HCFMUSP	Sao Paulo	Brazil
Eric	Moghadamian	University of Kentucky	Lexington	USA
Jochen	Müller	ospedale regionale Lugano	Lugano	Switzerland
Chang-Wug	Oh	Kyungpook National University Hospital,	Daegu	South Korea
Dan	Putineanu	Cliniques Universitaires St. Luc	Brussels	Belgium
Moritz	Tannast	Klinik für Orthopädische Chirurgie	Bern	Switzerland

Approaches—lower extremity

Mazen	Abdalla	An-Najah University Hospital	Nablus	Palestine
Christian	Candrian	Ospedale Civico Lugano	Lugano	Switzerland
Jochen	Müller	Ospedale Regionale Lugano	Lugano	Switzerland
Danilo	Taype Zamboni	Hospital Italiano de Buenos Aires	Lanus	Argentina
Jayne	Ward	University Hospital Coventry and Warwickshire	Coventry	UK
Christian	Willy	Bundeswehr Krankenhaus Berlin	Berlin	Germany

Avoiding and treating complications

Juan	Concha Sandoval	Universidad del Cauca	Popayan	Colombia
Vincenzo	Giordano	Serviço de Ortopedia e Traumatologia Prof. Nova Monteiro - Hospital Municipal Miguel Couto	Rio de Janeiro	Brazil
Kodi	Kojima	University of Sao Paulo	Sao Paulo	Brazil
John	McMaster	John Radcliffe Hospital	Oxford	UK
Marinis	Pirpiris	Epworth Hospital	Richmond	Australia
Spence	Reid	Pennsylvania State University College of Medicine, Milton S. Hershey Medical Center	Hershey	USA
Tito	Rocha	Instituto Nacional de Ortopedia e Traumatologia	Rio de Janeiro	Brazil
Michael	Sirkin	New Jersey Medical School	Newark	USA
Leonid	Solomin	Vreden Russian Research Institute of Traumatology	St.Petersburg	Russian Federation
Andrey	Volna	Ilyinsky Hospital	Ilyinskoe	Russian Federation

Management of bone disease and fracture

Matheus	Azi	Hospital Manoel Victorino	Salvador	Brazil
Igor	Belenkiy	Alexandrovskiy City Hospital	St Petersburg	Russian Federation
Lorin	Benneker	Inselspital, University of Bern	Bern	Switzerland
Nir	Cohen	Rabin Medical Center- Beilinson Campus	Petah Tikva	Israel
Mark	Hatton	Nottingham University Hospitals	Nottingham	UK
Eric	Moghadamian	University of Kentucky	Lexington	USA
John	Munz	University of Texas Health Science Center at Houston	Houston	USA
Mauro	Núñez	Hospital del Trauma	San José	Costa Rica
Chang-Wug	Oh	Kyungpook National University Hospital,	Daegu	South Korea
Kongkhet	Riansuwan	Faculty of Medicine Siriraj Hospital, Mahidol University	Bangkok	Thailand
John	Scolaro	University of California, Irvine	Orange	USA
An	Sermon	University Hospitals Gasthuisberg, Leuven, Belgium	Leuven	Belgium
Yoram	Weil	Hadassah Hebrew University Medical Center	Jersalem	Israel

Approaches—upper extremity (first morning option)

TIME	AGENDA ITEM	WHO
	LOCATION: Davos 1	
Module	Approaches and positioning of upper extremity trauma made easy	Moderator: N Cohen
	<p>Upon completion of this module, participants will be able to:</p> <ul style="list-style-type: none"> • Describe the different ways to position patients for surgery of the upper extremity • Apply the different surgical approaches used for the upper extremity based on their indications • Identify structures at risk for the different surgical exposures • Recognize the limitations of the different surgical exposures of the upper extremity • Explain how to obtain intraoperative imaging 	
08:00–08:05	Introduction	N Cohen
08:05–08:15	Soft-tissue in upper extremity trauma	YC Chou
08:15–08:40	Approaches to the shoulder: <ul style="list-style-type: none"> • Deltopectoral • Deltoid split 	M Richardson
08:40–09:05	Approaches to the humerus: <ul style="list-style-type: none"> • Anterolateral • Posterior 	N Cohen
09:05–09:30	Approaches to the elbow: <ul style="list-style-type: none"> • Lateral • Medial 	F Vauclair
09:30–09:50	Approaches to the forearm: <ul style="list-style-type: none"> • Volar/Henry • Dorsal/Thompson 	J Scheer
09:50–10:10	Approaches to the distal radius: <ul style="list-style-type: none"> • Flexor carpi radialis (FCR) • Dorsal (volar lateral) 	M Radzins
10:10–10:40	COFFEE BREAK	
10:40–11:40	Practical exercise—demonstration of supine, prone, beach chair, and lateral positions for upper extremity surgery with intraoperative imaging	N Cohen, M Radzins, J Scheer
11:40–12:00	Questions and closing remarks	N Cohen
12:00–13:30	LUNCH BREAK	

Intramedullary nailing—principles made easy (second morning option)

TIME	AGENDA ITEM	WHO
	LOCATION Aspen 2	
Module	Intramedullary (IM) nailing—principles made easy	Moderator: V Giordano
	<p>Upon completion of this module, participants will be able to:</p> <ul style="list-style-type: none"> • Treat fractures and other musculoskeletal problems with IM nailing when indicated • Select the IM nailing procedure based on the fracture, the patient, and the best available evidence • Prepare the patient for the IM nailing procedure and plan and provide postoperative care • Recognize IM canal anatomy and the correct entry point for common situations • Achieve reduction for diaphyseal fractures and maintain reduction during IM fixation 	
08:00–08:05	Welcome and introduction	V Giordano
08:05–08:20	Biomechanical principles and nail design—how does it work?	A Sermon
08:20–08:35	Patient positioning and reduction for nailing	P Stillhard
08:35–08:50	Entry points selection—how to avoid complications?	S Babhulkar
08:50–09:05	Case-based lecture—reduction techniques for diaphyseal fractures—nailing	P Barbosa
09:05–10:05	<p>Plenary case discussions</p> <ul style="list-style-type: none"> • Tibial shaft fracture • Femoral shaft fracture • Proximal femoral fracture 	N Helmy
10:05–10:25	COFFEE BREAK	
10:25–10:40	Fractures of the proximal 1/3 of the femur—tips to improve implant positioning and results	JK Oh
10:40–10:55	Segmentary fracture of the femur shaft—how to ream the intercalary fragment	S Fischer
10:55–11:10	Fracture around a fixed femoral stem—‘extreme nailing’ fixation—when and how	M Lee
11:10–11:25	Nailing under plate—a good option for periplate fracture in the femur	V Giordano
11:25–11:40	Questions from the participants	V Giordano
11:40–11:55	Limits of indications for tibial fractures and “Poller screw” technique	G Della Rocca

11:55–12:00	Evaluation and summary	V Giordano
12:00–13:30	LUNCH BREAK	

Associated shaft and articular fractures (third morning option)

TIME	AGENDA ITEM	WHO
	LOCATION Schwarzhorn	
Module	Associated shaft and articular fractures—rationale for the management	Moderator: C Candrian
	<p>Upon completion of this module, participants will be able to:</p> <ul style="list-style-type: none"> • Identify the injury pattern and its associated musculoskeletal problems • Apply correct principles for fracture approach and reduction • Discuss the management options and the adequate strategy of fracture fixation • Avoid pitfalls and complications related to the injury itself 	
08:00–08:05	Welcome and introduction	C Candrian
08:05–08:20	Associated distal clavicle and glenoid neck fracture	P M Sutter
08:20–08:35	Associated proximal and shaft humeral fracture	J Concha Sandoval
08:35–08:50	Associated distal humeral and forearm shaft fracture	M Leonhardt
08:50–09:40	Case-based discussion—complex distal and shaft humeral fracture	D Putineanu
09:40–10:00	COFFEE BREAK	
10:00–10:15	Associated acetabular and femoral shaft fracture	M Tannast
10:15–10:30	Associated femoral neck and shaft fracture	CW Oh
10:30–10:45	Associated distal femoral and tibial shaft fracture	C Candrian
10:45–11:00	Associated tibial shaft and posterior malleolar fracture	J Müller
11:00–11:55	Case-based discussion—complex femoral shaft and tibial plateau fracture	E Moghadamian
11:55–12:00	Evaluation and summary	C Candrian
12:00–13:30	LUNCH BREAK	

Approaches—lower extremity (first afternoon option)

TIME	AGENDA ITEM	WHO
	LOCATION Davos 1	
Module	Approaches and positioning of lower extremity trauma made easy	Moderator: C Candrian
	<p>Upon completion of this module, participants will be able to:</p> <ul style="list-style-type: none"> • Describe the different ways to position patients for surgery of the lower extremity • Explain how to obtain imaging for intraoperative use • List the different surgical approaches used in trauma surgery for the lower extremity and their indications • Explain the limitations of exposures for the different approaches of the lower extremity 	
13:30–13:35	Introduction	C Candrian
13:35–13:50	Soft-tissue in lower limb trauma	J Ward
13:50–14:10	Approaches to the hip: <ul style="list-style-type: none"> • Kocher • Anterior—Smith-Peterson • Lateral—Watson-Jones 	D Taype Zamboni
14:10–14:20	Approaches to the femoral shaft: <ul style="list-style-type: none"> • Lateral extensile 	M Abdalla
14:20–14:30	Supine approaches to the knee: <ul style="list-style-type: none"> • Anterolateral • Medial 	C Candrian
14:30–14:50	Prone approaches to the knee: <ul style="list-style-type: none"> • Posteromedial • Direct posterior 	C Willy
14:50–15:10	Approaches to the ankle: <ul style="list-style-type: none"> • Anterolateral • Posteromedial 	J Müller
15:10–15:40	COFFEE BREAK	
15:40–16:40	Practical exercise—demonstration of supine, prone, and lateral positions for lower extremity surgery with intraoperative imaging	C Candrian, J Müller, M Abdalla
16:40–17:10	Questions and closing remarks	C Candrian

Avoiding and treating complications

(second afternoon option)

TIME	AGENDA ITEM	WHO
	LOCATION Aspen 2	
Module	Avoiding and treating complications of fracture management	Moderator: V Giordano
	<p>Upon completion of this module, participants will be able to:</p> <ul style="list-style-type: none"> • Identify and discuss the methods of staged fracture care • Apply operative care according to the location and soft-tissue condition of the fracture • Recognize the indications and contraindications of osteotomy in the management of malunion • Identify and discuss the indications for amputation 	
13:30–13:35	Introduction	V Giordano
13:35–13:55	What complications does damage control orthopedics avoid?	T Rocha
13:55–14:15	Do you need to stage all periarticular fractures?	M Sirkin
14:15–14:35	What to do when periarticular wounds break down and fractures become infected?	J Concha Sandoval
14:35–14:55	The management of open bony deficits—the place of shortening—Masquelet and transport	K Kojima
14:55–15:15	The place of external fixation in definitive management of delayed presentation of open limb injuries	A Volna
15:15–15:35	Osteotomies in the correction of diaphyseal injuries	S Reid
15:35–15:55	Questions and answers	V Giordano
15:55–16:15	COFFEE BREAK	
16:15–16:35	Amputations or salvage—how to decide?	J McMaster
16:35–16:55	Osteotomies in the correction of articular fractures	L Solomin
16:55–17:15	Repair or replace?—Options for cartilage resurfacing	M Pirpiris
17:15–17:45	Questions and closing remarks	V Giordano

Management of bone disease and fracture

(third afternoon option)

TIME	AGENDA ITEM	WHO
	LOCATION Schwarzhorn	
Module	Management of bone disease and fracture	Moderator: N Cohen
	<p>Upon completion of this module, participants will be able to:</p> <ul style="list-style-type: none"> • Define the normal physiology of bone modeling and remodeling • Explain the differences between normal bone turnover and some common bone diseases • Discuss the current protocols for those bone diseases • Identify the problems of fracture-related infection • List the existing options for the management of fracture-related infection 	
13:30–13:35	Introduction	N Cohen
13:35–13:55	Case-based discussion—the fracture doesn't heal—why?	J Scolaro
13:55–14:10	Bone turnover—an overview	M Azi
14:10–14:25	The diamond concept—is it affected by bone remodeling disorders?	E Moghadamian
14:25–14:40	Assessing the risk of bone disease and fracture—is there a rationale for that?	M Nuñez
14:40–14:55	Metastatic fractures—do I need to do anything special?	N Cohen
14:55–15:10	Osteoporotic fractures—what's hot, what's not?	L Benneker
15:10–15:25	Atypical femoral fractures—pearls and pitfalls	CW Oh
15:25–15:40	Medical management of bone remodeling disorders—what really works?	C Kammerlander
15:40–16:00	COFFEE BREAK	
16:00–16:20	Case-based discussion—infection after osteosynthesis—should I keep the implant?	I Belenkiy
16:20–16:35	Recommendations for the treatment of post-osteosynthesis osteomyelitis—is there any algorithm?	Y Weil
16:35–16:50	Antibiotic treatment and clinical strategies for post-osteosynthesis osteomyelitis	A Sermon
16:50–17:05	Surgical approaches for post-osteosynthesis osteomyelitis	M Hatton

17:05–17:15	The role of cement beads and cement spacers in the treatment of bone defects associated with post-osteosynthesis osteomyelitis	M Azi
17:15–17:30	Questions and closing remarks	N Cohen