

Course program

# AOSpine Advanced Courses

- The degenerative cervical spine and spinal trauma
- The degenerative cervical spine, deformities and tumors
- The degenerative lumbar spine and spinal trauma
- The degenerative lumbar spine, deformities and tumors

December 13–17, 2010 Davos, Switzerland



## AOSpine Mission

Our purpose and responsibility is to shape our members skills and understanding of spine principles; to establish new values and incentives for the creation of knowledge, the sharing of wisdom, and the development of new tools and techniques that improve patient care, patient outcomes, and the cost effectiveness of spine surgery. [Excellence in Spine](#)

## Content

- 2 AOSpine Mission
- 3 Welcome to Davos
- 4 Course description
- 4 Aims of the modules
- 5 Chairpersons
- 5 Educational Director
- 6 Faculty
- 7 Program guide
- 8 Course venue overview
- 9 Course organization
- 9 Contact
- 9 Venue
- Scientific program**
- 10 Sunday, December 12, 2010
- 10 Monday, December 13, 2010
- 12 Tuesday, December 14, 2010
- 14 Plenary Day—Wednesday, December 15, 2010
- 16 Thursday, December 16, 2010
- 18 Friday, December 17, 2010
- 20 Course information
- 21 Business center
- 21 Wireless network
- 22 Exhibitions
- 23 Transportation
- 23 Sponsors

# Welcome to Davos, Grüezi und Willkommen in Davos

Dear Colleagues,

On behalf of AOSpine International, we would like to welcome you to the AOSpine Davos Courses 2010. As our most established educational event—the very origins of AOSpine Education are based in Davos—this event combines all the best of AOSpine Education from the roots of the AO organization, progressing to the modern AOSpine educational activities. The Davos Courses are a perfect combination of highly interactive learning opportunities combined with social activities, all set in an enchanting environment.

Four simultaneous advanced courses will feature interactive modules allowing participants to participate in two course topics of their interest including **lumbar degeneration, cervical degeneration, deformity, tumors, and trauma**. Participants will have an opportunity to learn from and interact with world-class international faculty in interactive case-based presentations, hands-on practical workshops, discussion forums, etc.

One of the highlights of the week will be the plenary day on Wednesday where the current controversies in spine surgery will be debated and discussed among faculty and participants, which we are sure will generate a very exciting discussion.

We have assembled a team of internationally renowned faculty representing all of the five AOSpine regions, and it is their goal to share their knowledge and present a highly interactive educational program in a truly unique academic environment. Participants are encouraged to take an active part in discussions, lectures, and presented cases to discuss the controversies, raise important topics, and learn about the different treatments from both the faculty and fellow participants from all over the globe. Please bring your own cases and ideas to the courses, as there will be ample opportunity for detailed discussions. We also invite you to enjoy the magical atmosphere of Davos, while interacting with faculty and other participants from all over the world. We are looking forward to meeting you.

Sincerely,



**Jeffrey Wang**  
Educational Director  
AOSpine Davos Courses 2010



**Luiz Vialle**  
Chairperson  
AOSpine International

## Course description

### Advanced Courses

Four simultaneous advanced courses are available—each offering a predefined combination of two modules from a total of five pathology areas: cervical degeneration, lumbar degeneration, deformities, tumors, and trauma. Two of these topics are offered in one course week.

Practical workshops with faculty instructors using artificial bone modules and audiovisual support will highlight techniques featured in each module.

### Plenary day

The plenary day at the midpoint of the course week is a combined session where participants of all courses will focus on current controversies in spinal surgery and participate in a lively debate and discussion on modern topics and novel technologies.

### Objectives of plenary day

Participants will be able to:

- Engage in debates and discussions on four controversial main topics, such as, spondylolisthesis, cervical disc herniation, lumbar degenerative disease, and biological aspects
- Compare ideas and treatment preferences of novel technology in certain spinal pathologies where there is high controversy
- Judge on integration of new technology compared to widely accepted traditional procedures
- Evaluate the merits and the disadvantages of current treatment options

## Aims of the modules

### Degenerative cervical spine module

The module degenerative cervical spine focuses on the most frequent pathologies that surgeons face in their daily practice, and also addresses complex cases. The module aims to meet participants' needs for the benefit of their patients.

### Degenerative lumbar spine module

This module comprehensively addresses the degenerative lumbar spine. Participants will learn about possible causes, controversies of diagnosis, and state-of-the-art treatment options.

### Deformities and tumors module

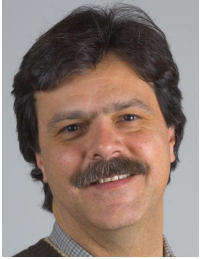
This course module comprehensively addresses pediatric and adult spinal deformities as well as spinal tumors. Participants will become familiar with contemporary investigation, classification systems, and state-of-the-art treatment options in both of these complex fields of spinal surgery.

### Spinal trauma module

This course module comprehensively addresses the most common spinal fracture patterns from the craniocervical junction to the sacrum. Participants will learn state-of-the-art treatment options and also discuss management options for pathological fractures.

## Chairpersons

### Degenerative cervical spine module



**Roberto Chapa**  
Hospital de Ortopedia y Traumatologia  
Monterrey, Mexico

### Deformities and tumors module



**Richard Williams**  
Princess Alexandra Hospital  
Brisbane, Australia

### Spinal trauma module



**Christopher Gerber**  
Newcastle General Hospital  
Newcastle, United Kingdom

### Degenerative lumbar spine module



**Magdy Youssef**  
Ain Shams University  
Cairo, Egypt

## Educational Director



**Jeffrey Wang**  
UCLA Spine Center  
Santa Monica, USA

## Faculty

<b>Abdel-Wanis</b>	Mohamed	Egypt	<b>Menon</b>	Venugopal	Oman
<b>Al-Zayed</b>	Zayed	Saudi Arabia	<b>Moraes</b>	Osmar	Brazil
<b>Anderberg</b>	Leif	Sweden	<b>Ochoa</b>	Germán	Colombia
<b>Ashman</b>	Bryan	Australia	<b>O'Dowd</b>	John	United Kingdom
<b>Assaker</b>	Richard	France	<b>Ohana</b>	Nissim	Israel
<b>Atallah</b>	Firas	Lebanon	<b>Postigo</b>	Roberto	Chile
<b>Aydinli</b>	Ufuk	Turkey	<b>Qiu</b>	Yong	China
<b>Balsano</b>	Massimo	Italy	<b>Restrepo</b>	Ricardo	Colombia
<b>Barbagallo</b>	Giuseppe	Italy	<b>Reyes-Sanchez</b>	Alejandro	Mexico
<b>Bas</b>	Teresa	Spain	<b>Rhines</b>	Laurence	USA
<b>Bellabarba</b>	Carlo	USA	<b>Riew</b>	K Daniel	USA
<b>Bertagnoli</b>	Rudolf	Germany	<b>Sadao Iutaka</b>	Alexandre	Brazil
<b>Boriani</b>	Stefano	Italy	<b>Schnake</b>	Klaus	Germany
<b>Brodke</b>	Darrel	USA	<b>Schuster</b>	James	USA
<b>Chapman</b>	Jens	USA	<b>Taricco</b>	Mario	Brazil
<b>Choma</b>	Theodore	USA	<b>Tay</b>	Bobby	USA
<b>Chou</b>	Dean	USA	<b>Tejeda</b>	Martin	Mexico
<b>Consciência</b>	José	Portugal	<b>Valacco</b>	Marcelo	Argentina
<b>DeVine</b>	John	USA	<b>Van Schaeysbroeck</b>	Patrick	Belgium
<b>Dittmar</b>	H Michael	Mexico	<b>Vela</b>	Pablo	Colombia
<b>Fehlings</b>	Michael	Canada	<b>Vialle</b>	Emiliano	Brazil
<b>France</b>	John	USA	<b>Vijay Kumar</b>	Gomatam	India
<b>Gore</b>	Satishchandra	India	<b>Villas</b>	Carlos	Spain
<b>Goulet</b>	Benoit	Canada	<b>Walia</b>	Bipin	India
<b>Härtl</b>	Roger	USA	<b>Weinstein</b>	Stuart	USA
<b>Hilibrand</b>	Alan	USA	<b>Wiechert</b>	Karsten	Germany
<b>Horsting</b>	Philip	Netherlands	<b>Wolinsky</b>	Jean-Paul	USA
<b>Howes</b>	John	United Kingdom	<b>Wong</b>	Hee Kit	Singapore
<b>Huang</b>	Kuo-Yuan	Taiwan	<b>Wood</b>	Kirkham	USA
<b>Iwasaki</b>	Motoki	Japan	<b>Woodard</b>	Eric	USA
<b>Janssen</b>	Michael	USA			
<b>Kandziora</b>	Frank	Germany			
<b>Kawakami</b>	Mamoru	Japan			
<b>Klezi</b>	Zdenek	United Kingdom			
<b>Licina</b>	Paul	Australia			
<b>Lund</b>	Teija	Finland			
<b>Mayer</b>	Michael	Germany			

# Program guide

## Program and badge color

The advanced courses are color-coded corresponding to the color of your badge.

**Purple**

The degenerative cervical spine and spinal trauma

**Green**

The degenerative cervical spine, deformities and tumors

**Yellow**

The degenerative lumbar spine and spinal trauma

**Red**

The degenerative lumbar spine, deformities and tumors

## Number on your badge

The number on your badge refers to the table you will be working on during the practical workshops.

## Letter on your badge

The Spine & Wine case discussions are divided into four groups. The letter on your badge (A, B, C, or D) corresponds to the group you are allocated to.

The Spine & Wine case discussions take place in the Hotel Belvedere in the following rooms:

- Group A—Room Rotary
- Group B—Room Spina
- Group C—Room Ducan
- Group D—Room Vinothek

Please check the map on page 9 for the Hotel Belvedere (8 minutes walk).

## Course venue overview

	The degenerative cervical spine and spinal trauma	The degenerative lumbar spine, deformities, and tumors	The degenerative cervical spine, deformities, and tumors	The degenerative lumbar spine and spinal trauma
Sunday, December 12	14:00–17:00 <b>Registration of participants</b> Congress Center, House A—Main entrance level, Room Flüela			
	17:00–18:00 <b>Opening ceremony</b> Congress Center, House A1—Room Davos			
	18:00–20:00 <b>Welcome cocktail "Founders Reception"</b> Congress Center, House A1—Foyer			
Monday, December 13	07:30–12:00 <b>Registration of participants</b> Congress Center, House B3—Foyer			
	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Pischa	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Jakobshorn	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Rinerhorn	08:00–18:40 <b>Scientific program</b> Congress Center, House B Room Parsenn
	19:00–20:00 <b>Spine &amp; Wine</b> <sup>1</sup> Hotel Belvedere Group A—Room Rotary Group B—Room Spina	19:00–20:00 <b>Spine &amp; Wine</b> <sup>1</sup> Hotel Belvedere Group C—Room Ducan Group D—Room Vinothek		
	19:00–21:00 <b>Meet the faculty</b> <sup>2</sup> Hotel Belvedere			
Tuesday, December 14	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Pischa	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Jakobshorn	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Rinerhorn	08:00–18:45 <b>Scientific program</b> Congress Center, House B Room Parsenn
			19:00–20:00 <b>Spine &amp; Wine</b> <sup>1</sup> Hotel Belvedere Group A—Room Rotary Group B—Room Spina	18:45–19:45 <b>Spine &amp; Wine</b> <sup>1</sup> Hotel Belvedere Group C—Room Ducan Group D—Room Vinothek
Wednesday, December 15	08:00–12:00 <b>Plenary day: Controversies in spine surgery</b> Congress Center, House B3—Room Parsenn/Pischa			
	21:00–01:00 <b>AOSpine course party</b> <sup>3</sup> Hotel Belvedere, Vinothek			
Thursday, December 16	08:00–18:40 <b>Scientific program</b> Congress Center, House B Room Pischa	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Jakobshorn	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Rinerhorn	08:00–19:00 <b>Scientific program</b> Congress Center, House B Room Parsenn
Friday, December 17	08:00–16:45 <b>Scientific program</b> Congress Center, House B Room Pischa	08:00–17:00 <b>Scientific program</b> Congress Center, House B Room Jakobshorn	08:00–17:00 <b>Scientific program</b> Congress Center, House B Room Rinerhorn	08:00–17:00 <b>Scientific program</b> Congress Center, House B Room Parsenn
	19:00–23:30 <b>Banquet</b> Congress Center			

**1 Spine & Wine: Case discussions:** These evening sessions are designed to give the participants the possibility to discuss their own cases with faculty in small groups

**2 Meet the faculty:** A good opportunity for participants and faculty to meet and exchange in a social environment—including drinks and snacks

**3 AOSpine course party:** Mid-week celebration in order to get to know fellow participants, faculty, and staff better—including drinks, music and karaoke

## Course organization

**AOSpine International**  
 Stettbachstrasse 6  
 8600 Dübendorf  
 Switzerland  
 Phone +41 44 200 24 25  
 Fax +41 44 200 24 12  
 Web www.aospine.org

## Contact

Martina Geisselhardt [mgeisselhardt@aospine.org](mailto:mgeisselhardt@aospine.org)  
 Ivana Vrcic [ivrcic@aospine.org](mailto:ivrcic@aospine.org)

## Venue



### Congress Center Davos

Talstrasse 41  
 7270 Davos Platz  
 Switzerland  
 Phone: +41 81 415 21 76  
 Fax: +41 81 415 21 69

### AOSpine Information Desk—opening hours

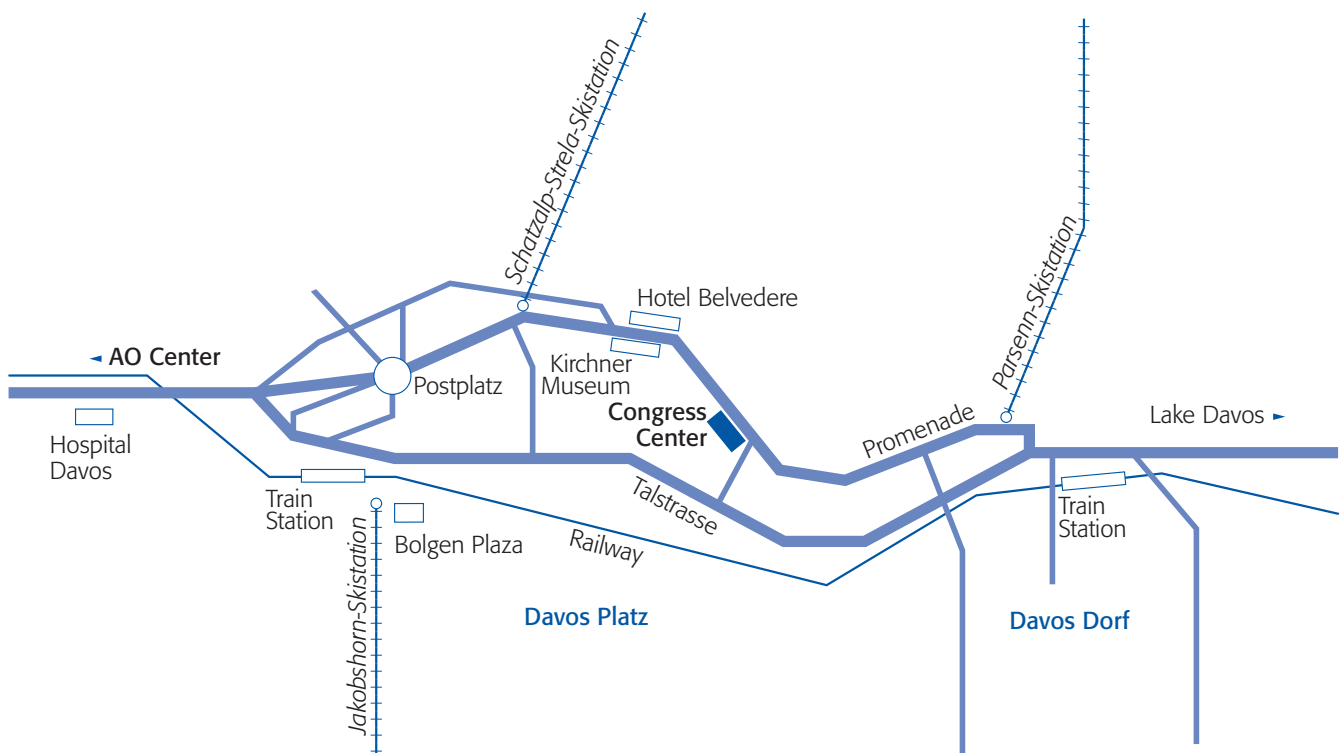
Congress Center, House B

Sunday, December 12	14:00–17:00
Monday, December 13	07:30–19:00
Tuesday, December 14	07:30–12:00/16:00–19:00
Wednesday, December 15	07:30–14:00
Thursday, December 16	07:30–19:00
Friday, December 17	07:30–17:00

### AO Foundation Welcome Desk—opening hours

Congress Center, Main entrance

Sunday, December 12	08:00–17:30
Monday, December 13	07:30–19:00
Tuesday, December 14	07:30–19:00
Wednesday, December 15	07:30–19:00
Thursday, December 16	07:30–19:00
Friday, December 17	07:30–17:00



Local buses leave every 10 minutes from the Congress Center.

Sunday, December 12, 2010	
TIME	AGENDA ITEM
	Location: Congress Center, Room Flüela
14:00–17:00	Registration of participants
	Location: Congress Center, Room Davos
17:00–18:00	Opening ceremony
	Location: Congress Center, Foyer
18:00–20:00	Welcome cocktail "Founders Reception"

Sunday, December 12, 2010	
TIME	AGENDA ITEM
	Location: Congress Center, Room Flüela
14:00–17:00	Registration of participants
	Location: Congress Center, Room Davos
17:00–18:00	Opening ceremony
	Location: Congress Center, Foyer
18:00–20:00	Welcome cocktail "Founders Reception"

Sunday, December 12, 2010	
TIME	AGENDA ITEM
	Location: Congress Center, Room Flüela
14:00–17:00	Registration of participants
	Location: Congress Center, Room Davos
17:00–18:00	Opening ceremony
	Location: Congress Center, Foyer
18:00–20:00	Welcome cocktail "Founders Reception"

Sunday, December 12, 2010	
TIME	AGENDA ITEM
	Location: Congress Center, Room Flüela
14:00–17:00	Registration of participants
	Location: Congress Center, Room Davos
17:00–18:00	Opening ceremony
	Location: Congress Center, Foyer
18:00–20:00	Welcome cocktail "Founders Reception"

Monday, December 13, 2010		
TIME	AGENDA ITEM	WHO
	Location: Congress Center, Room Paisenn	
08:00–08:05	Introduction	C Gerber
08:05–10:00	<b>Injuries to the craniocervical junction and cervical spine</b>	B Ashman, C Gerber
08:05–08:20	<b>Case presentation</b>	D Brodke
	Occipital condyle fracture	
08:20–08:30	Discussion	
08:30–08:50	Management of C1 fractures	N Ohana
08:50–09:00	Discussion	
09:00–09:20	C2 fractures—differences in management in the elderly and younger population	E Vielle
09:20–09:30	Discussion	
09:30–09:50	Surgical treatment of atlas fractures	L Anderberg
09:50–10:00	Discussion	
10:00–10:30	COFFEE BREAK	
10:30–12:00	<b>Interactive workshop</b>	C Gerber, F Kandziora
10:30–12:00	<b>Practical exercise</b>	L Anderberg, B Ashman, C Bellabarba, D Brodke, M Felings, J O'Dowd, N Ohana, A Sadao Iutaka, K Schmale, J Schuster, E Vielle
	Occipitocervical fixation, including C1 and C2 screws	
12:00–16:00	LUNCH BREAK	

Monday, December 13, 2010		
TIME	AGENDA ITEM	WHO
	Location: Congress Center, Room Rinerhorn	
08:00–09:00	<b>Adult deformity</b>	T Bas
08:00–08:20	Corrective procedures in cervical ankylosing spondylitis	K D Riew
08:20–08:40	Operative strategy in adult scoliosis	R Williams
08:40–09:00	Sagittal rebalancing in the elderly patient	J Chapman
09:00–10:00	<b>Adult deformity cases</b>	J Howes
09:00–09:15	<b>Case presentation</b>	K D Riew
	Complex cervical deformity	
09:15–09:30	<b>Case presentation</b>	P Horsting
	Adult scoliosis correction	
09:30–09:45	<b>Case presentation</b>	R Williams
	Adult kyphotic deformity	
09:45–10:00	<b>Case presentation</b>	J Chapman
	Spinopelvic fixation	
10:00–10:30	COFFEE BREAK	
10:30–12:00	<b>Pediatric deformity</b>	P Horsting
10:30–11:00	Current concepts in AIS correction	S Weinstein
11:00–11:20	Growing rods in small children	J Howes
11:20–11:40	Achieving sagittal balance in AIS	T Bas
	pedicle screw constructs	
11:40–12:00	Curve decompensation	K V Menon
12:00–16:00	LUNCH BREAK	
16:00–17:30	<b>Pediatric deformity cases</b>	K V Menon
16:00–16:15	<b>Case presentation</b>	T Bas
	Congenital deformity	
16:15–16:30	<b>Case presentation</b>	J Howes
	Infantile idiopathic scoliosis	

Monday, December 13, 2010		
TIME	AGENDA ITEM	WHO
	Location: Congress Center, Room Jakobshorn	
08:00–09:30	<b>Degenerative lumbar spine</b>	S Gore
08:00–08:15	Degenerative lumbar spine—is it a disease, aging, or genetics?	M Kawakami
08:15–08:30	Applied neurophysiology—identifying the source of pain	S Gore
	Do we really know it? How to identify the source of pain	
08:30–08:45	Imaging tools and their clinical correlation—are we treating the MRI scan?	H K Wong
08:45–09:00	LBP: Evaluation, diagnostic algorithm—practical guidelines	Z Klezl
09:00–09:15	LBP: Nonoperative management—are we rushing into surgery?	M Youssef
09:15–09:30	LBP: Surgical management—when to operate? The evidence for surgical management options	T Lund
09:30–10:00	COFFEE BREAK	
10:00–11:00	<b>Fusion</b>	R Restrepo
10:00–10:15	Applied biomechanics—back to the basics	M Youssef
10:15–10:30	Lumbar spine fixation options—rigid or semi-rigid? Screw augmentation in osteoporotic spine	T Choma
10:30–10:45	Posterolateral fusions—still the gold standard?	J Consciência
10:45–11:00	Interbody fusions—are they too rigid?	R Postigo
11:00–12:00	<b>Fusion</b>	R Postigo
11:00–11:15	Minimal access fusion surgery—reality or fancy surgery?	R Restrepo

Monday, December 13, 2010		
TIME	AGENDA ITEM	WHO
	Location: Congress Center, Room Píscha	
08:00–09:30	<b>Axial cervical pain</b>	G V Kumar
08:00–08:15	Nonoperative treatment: when and for how long (including measurement)?	C Villas
08:15–08:30	Are cervical blocks or infiltrations necessary before surgical treatment?	P Van Schaebroeck
08:30–08:45	Total disc replacement: outcomes—how many levels?	B Tay
08:45–09:00	Fusion continues to be the solution—options	B Coulet
09:00–09:15	Adjacent segment degeneration—can we avoid this?	A Reyes-Sanchez
09:15–09:30	Questions and discussion—take-home message	G V Kumar
09:30–10:00	COFFEE BREAK	
10:00–11:00	<b>Cervical radiculopathy</b>	R Chapa
10:00–10:10	We can treat and resolve with foraminal injections	B Waïla
10:10–10:20	The role of minimally invasive surgery	B Tay
10:20–10:30	Decompression alone—anterior or posterior?	M Taricco
10:30–10:40	Fusion is necessary—stand alone interbody devices	G V Kumar
10:40–10:50	Is this the case for disc replacement?	P Vela
10:50–11:00	Questions and discussion—take-home message	R Chapa
11:00–12:00	<b>Spondylotic myelopathy</b>	G Barbagallo
11:00–11:10	Assessment of the patient with spondylotic myelopathy	P Van Schaebroeck

16:00–17:00	<b>Injuries to the craniocervical junction and cervical spine</b>	N Ohana, K Schmale
16:00–16:20	Treatment of disco-ligamentous injuries of the cervical spine	C Bellabarba
16:20–16:30	Discussion	F Kandziara
16:30–16:50	Injury to the pediatric spine	
16:50–17:00	Discussion	
17:00–17:10	COFFEE BREAK	
17:10–18:40	<b>Injuries to the craniocervical junction and cervical spine</b>	J O'Dowd, N Ohana
17:10–17:30	Surgery in acute spinal injury	M Fehlings
17:30–17:40	Discussion	
17:40–18:00	Medical treatment of spinal cord injury	J Schuster
18:00–18:10	Discussion	
18:10–18:30	Posttraumatic syringomyelia	L Anderberg
18:30–18:40	Discussion	
Location: Hotel Belvedere		
19:00–21:00	<b>Meet the faculty (optional for participants)</b>	

16:30–16:45	<b>Case presentation</b> Neuromuscular scoliosis	M Balsano
16:45–17:00	<b>Case presentation</b> Pediatric kyphotic deformity	S Weinstein
17:00–17:15	<b>Case presentation</b> Adolescent idiopathic scoliosis	K V Menon
17:15–17:30	<b>Case presentation</b> Syringomyelia	J-P Wolinsky
17:30–19:00	<b>Interactive workshop</b>	R Williams
17:30–19:00	<b>Practical exercise</b> Scoliosis correction	T Bas, J Howes, K V Menon, S Weinstein
Location: Hotel Belvedere		
19:00–21:00	<b>Meet the faculty (optional for participants)</b>	

11:15–11:30	Enhancement of fusion—avoid nonunion	Z Klezl
11:30–11:45	Fusion related complications—don't blame screws	M Tejada
11:45–12:00	The evidence—to fuse or not to fuse?	M Valacco
12:00–16:00	LUNCH BREAK	
16:00–17:30	<b>Nonfusion</b>	J Consciência
16:00–16:15	Adjacent segment disease—reality or marketing tool?	T Lund
16:15–16:30	Lumbar arthroplasty—is it still useful?	R Assaker
16:30–16:45	Inert spinous devices—temporary measure or definitive solution?	J Consciência
16:45–17:00	Pedicle-based dynamic stabilization and facet replacements—promising or on the decline?	M Tejada
17:00–17:15	The evidence—is nonfusion better?	R Härtl
17:15–17:30	Lumbar disc regeneration—is repair possible?	M Kawakami
17:30–19:00	<b>MISS</b>	R Härtl
17:30–17:45	MISS—philosophy and limitations	S Gore
17:45–18:00	Microscopic discectomy—still the gold standard?	M Valacco
18:00–18:15	Possibilities with interlaminar endoscopic surgery	R Härtl
18:15–18:30	Limitations of transforaminal endoscopic surgery	S Gore
18:30–18:45	Percutaneous disc surgery and nucleoplasty—are they really effective?	M Valacco
18:45–19:00	Nuclear, annular repair and replacement—is this the future?	M Kawakami
19:00–19:15	Walk to Hotel Belvedere	
Location: Hotel Belvedere		
19:15–20:00	<b>Spine &amp; Wine</b>	
19:15–20:00	Case discussions	
	<b>Group C: Room Ducan</b>	R Assaker, T Choma, S Gore, T Lund
	<b>Group D: Room Vinothek</b>	R Härtl, Z Klezl, R Postigo, R Restrepo
20:00–21:00	<b>Meet the faculty (optional for participants)</b>	

11:10–11:25	Surgical treatment—anterior, posterior, or combined	A Reyes-Sanchez
11:25–11:35	Frequent complications and how to resolve these	C Villas
11:35–11:50	Is laminoplasty better?	B Coulet
11:50–12:00	Questions and discussion—take-home message	G Barbagallo
12:00–16:00	LUNCH BREAK	
16:00–17:30	<b>Reconstruction for cervical spine</b>	M Taricco
16:00–16:15	When is surgery indicated in cervical rheumatoid arthritis?	B Walla
	Anterior or posterior?	
16:15–16:30	When are odontoid resections necessary? Indications/complications	M Taricco
16:30–16:45	Anterior treatment of lower cervical spinal kyphosis	P Vela
16:45–17:00	Is posterior surgery better?	P Licina
17:00–17:15	Cervicothoracic junctional kyphosis—treatment	E Woodard
17:15–17:30	Questions and discussion—take-home message	M Taricco
17:30–19:00	<b>Cervical spine complications</b>	B Walla
17:30–17:40	Postoperative dysphagia—assessment and management	R Chapa
17:40–17:50	Vertebral artery injuries—how to avoid and manage	O Moraes
17:50–18:00	Complications after cervical deformity corrective surgery	M Iwasaki
18:00–18:10	Postsurgical hematoma—management	G Barbagallo
18:10–18:20	Injuries for cervical instrumentation C1–C2	M Iwasaki
18:20–18:30	Failed total disc replacement—treatment	B Coulet
18:30–18:45	Adjacent level degeneration—fusion or TDR	A Hillbrand
18:45–19:00	Questions and discussion—take-home message	B Walla
19:00–19:15	Walk to Hotel Belvedere	
Location: Hotel Belvedere		
19:15–20:00	<b>Spine &amp; Wine</b>	
19:15–20:00	Case discussions	
	<b>Group A: Room Rotary</b>	G Barbagallo, M Taricco, P Van Schaeuybroeck, B Walla
	<b>Group B: Room Spina</b>	M Iwasaki, G V Kumar, A Reyes-Sanchez, C Villas
20:00–21:00	<b>Meet the faculty (optional for participants)</b>	

Tuesday, December 14, 2010			
TIME	AGENDA ITEM	WHO	WHO
Location: Congress Center, Room Paisenn			
08:00–09:30	<b>Thoracolumbar and sacral fractures</b>	C Bellabarba, A Sadao Iitaka	C Bellabarba, A Sadao Iitaka
08:00–08:20	Classification of thoracolumbar fractures		C Bellabarba
08:20–08:30	Discussion		
08:30–08:50	Indications for surgery		B Ashman
08:50–09:00	Discussion		
09:00–09:20	Anterior, posterior, or combined approach?		K-Y Huang
09:20–09:30	Discussion		
09:30–10:00	COFFEE BREAK		
10:00–12:00	<b>Thoracolumbar and sacral fractures</b>	J Schuster, E Valle	J Schuster, E Valle
10:00–10:20	Sacral fractures		F Kandziora
10:20–10:30	Discussion		
10:30–10:50	Treatment of fractures in ankylosing spondylitis		K-Y Huang
10:50–11:00	Discussion		
11:00–11:20	Malignant spinal fractures		K Schmake
11:20–11:30	Discussion		
11:30–12:00	Case presentations		J O'Dowd
12:00–16:00	LUNCH BREAK		
16:00–17:00	<b>Osteoporotic fractures</b>	M Fehlings, K-Y Huang	M Fehlings, K-Y Huang
16:00–16:20	Medical management		C Gerber
16:20–16:30	Discussion		
16:30–16:50	Surgical management		A Sadao Iitaka
16:50–17:00	Discussion		
17:00–17:10	COFFEE BREAK		
17:10–18:45	<b>Osteoporotic fractures</b>	D Brodke, F Kandziora	D Brodke, F Kandziora
17:10–17:30	Vertebroplasty vs kyphoplasty—the evidence		K Schmake
17:30–17:40	Discussion		
17:40–18:00	Osteoporotic fractures with lumbar spinal stenosis		J O'Dowd
18:00–18:10	Discussion		

Tuesday, December 14, 2010			
TIME	AGENDA ITEM	WHO	WHO
Location: Congress Center, Room Rinerhorn			
08:00–09:30	<b>Tumor clinical cases</b>	J-P Wolinsky	J-P Wolinsky
08:00–08:15	<b>Case presentation</b> Upper cervical tumor resection		J-P Wolinsky
08:15–08:30	<b>Case presentation</b> Late loss of spinal balance after tumor resection		R Williams
08:30–08:45	<b>Case presentation</b> Low-grade chondrosarcoma of the spine		M Abdel-Wanis
08:45–09:00	<b>Case presentation</b> Local recurrence of primary spinal tumor		S Boriani
09:00–09:15	<b>Case presentation</b> Intradural tumor		J-P Wolinsky
09:15–09:30	<b>Case presentation</b> Sacral chordoma		Y Qiu
09:30–10:00	COFFEE BREAK		
10:00–10:30	<b>Tumor debate—treatment of solitary renal cell metastasis</b>	S Boriani	S Boriani
10:00–10:10	The case for palliative surgery		U Aydinli
10:10–10:20	The case for en bloc spondylectomy		M Abdel-Wanis
10:20–10:30	The case for spinal stereotactic radiosurgery		D Chou
10:30–12:00	<b>Control of primary spinal tumors</b>	R Williams	R Williams
10:30–11:00	Reconstruction options in primary spinal tumor resection		S Boriani
11:00–11:20	Spinal cord blood supply—vertebral resection limits		M Balsano
11:20–11:40	Spinopelvic reconstruction options		J-P Wolinsky
11:40–12:00	Intradural tumor resection		D Chou
12:00–16:00	LUNCH BREAK		
16:00–17:00	<b>Tumor clinical cases</b>	D Chou	D Chou
16:00–16:15	<b>Case presentation</b> Giant cell tumor of the spine		S Boriani
16:15–16:30	<b>Case presentation</b> Tumoral vertebroplasty		Y Qiu
16:30–16:45	<b>Case presentation</b> Spinal metastasis		M Abdel-Wanis
16:45–17:00	<b>Case presentation</b> Osteoid osteoma and osteoblastoma of the spine		U Aydinli

Tuesday, December 14, 2010			
TIME	AGENDA ITEM	WHO	WHO
Location: Congress Center, Room Jakobshorn			
08:00–09:00	<b>Degenerative disc disease</b>	R Assaker	R Assaker
08:00–09:00	<b>Case presentations</b>		
	• Possible treatment options		
	• Controversial issues—fusion/nonfusion		
	• LBP and black disc		
	• MISS		
	<b>Case 1</b> —LBP and black disc		K Wiechert
	<b>Case 2</b> —LBP treated by fusion		M Tejada
	<b>Case 3</b> —LBP treated by TDR		T Choma
	<b>Case 4</b> —LBP treated by hybrid in two levels pathology		R Assaker
09:00–10:00	<b>Lumbar disc herniation</b>	M Valacco	M Valacco
09:00–10:00	<b>Case presentations</b>		
	• Algorithm for decision making		
	• Microscopic discectomy		
	• MISS		
	<b>Case 1</b> —Microscopic discectomy		R Postigo
	<b>Case 2</b> —Transforaminal endoscopic discectomy		S Gore
	<b>Case 3</b> —Interlaminar endoscopic discectomy		R Härtl
10:00–10:30	COFFEE BREAK		
10:30–12:00	<b>Interactive workshop</b>	T Choma, Z Klezl	T Choma, Z Klezl
10:30–12:00	<b>Practical exercises</b>		
	• Instrumented TLIF		R Assaker, J Consciência, S Gore, R Restrepo, K Wiechert, M Youssef
	• Stand-alone anterior cage		
12:00–16:00	LUNCH BREAK		
16:00–17:30	<b>Degenerative stenosis and instability</b>	T Lund	T Lund
16:00–17:30	<b>Case presentations</b>		
	• Degenerative canal stenosis		
	• Degenerative scoliosis		
	• Degenerative spondylolisthesis		
	<b>Case 1</b> —Canal stenosis without instability		T Lund
	<b>Case 2</b> —Canal stenosis		H K Wong
	<b>Case 3</b> —Canal stenosis with degenerative scoliosis		R Postigo
	<b>Case 4</b> —Canal stenosis with degenerative scoliosis		R Restrepo
	<b>Case 5</b> —Spondylolisthesis		M Valacco
	<b>Case 6</b> —Spondylolisthesis		T Choma

Tuesday, December 14, 2010			
TIME	AGENDA ITEM	WHO	WHO
Location: Congress Center, Room Pischa			
08:00–09:00	<b>Noninstrumented surgery in cervical axial pain</b>	B Tay, M Taricco	B Tay, M Taricco
08:00–09:00	<b>Case presentations</b>		
	• Nonoperative treatment—why and for how long in these patients?		
	• Can these patients be treated using minimal access surgery?		
	• Fusion is still better than the noninstrumented surgery at this time		
	Discussion		R Chapa, A Reyes-Sanchez, P Van Schaejbroeck, B Walla
09:00–10:00	<b>Fusion or motion preserving surgery in cervical radiculopathy</b>	P Vela, C Villas	P Vela, C Villas
09:00–10:00	<b>Case presentations</b>		
	• We can solve with infiltration		P Vela, C Villas
	• When we perform decompressive noninstrumented surgery—is fusion necessary?		
	• Evaluating the results and complications of these procedures		
	Discussion		G Barbaggio, B Coulet, P Van Schaejbroeck, G V Kumar
10:00–10:30	COFFEE BREAK		
10:30–12:00	<b>Myelopathic reconstructive surgery</b>	R Chapa, B Walla	R Chapa, B Walla
10:30–12:00	<b>Case presentations</b>		
	• The best surgical approach to treat these cases (anterior, posterior, combined, or laminoplasty)		
	• How to avoid and manage complications		
	Discussion		M Iwasaki, M Taricco, G V Kumar, C Villas
12:00–16:00	LUNCH BREAK		

18:10–18:30	Postoperative management of the spinal injured patient	M Fehlings
18:30–18:40	Discussion	
18:40–18:45	Closing remarks	C Gerber
18:45–19:00	Walk to Hotel Belvedere	
Location: Hotel Belvedere		
19:00–19:45	<b>Spine &amp; Wine</b>	
19:00–19:45	Case discussions	
	<b>Group C: Room Ducan</b>	J France, K-Y Huang F Kandziora
	<b>Group D: Room Vinothek</b>	L Anderberg, B Ashman, C Gerber

17:00–17:30	<b>Deformity debate—treatment of adolescent idiopathic scoliosis</b>	J Howes
17:00–17:10	The case for bracing	S Weinstein
17:10–17:20	The case for anterior correction	K V Menon
17:20–17:30	The case for posterior correction	Z Al-Zayed
17:30–19:00	<b>Metastatic spine disease</b>	J Chapman
17:30–17:50	Scoring systems of metastatic spinal disease—which one(s) should we use?	J-P Wolinsky
17:50–18:10	Operative decision making in metastatic spinal disease	J Chapman
18:10–18:30	Quality of life after surgical treatment of spinal metastases	D Chou
18:30–18:45	The role of vertebroplasty in metastatic spine disease	M Abdel-Wanis
18:45–19:00	Metastatic lung carcinoma—a different problem?	R Williams
19:00–19:15	Walk to Hotel Belvedere	
Location: Hotel Belvedere		
19:15–20:00	<b>Spine &amp; Wine</b>	
19:15–20:00	Case discussions	
	<b>Group A: Room Rotary</b>	J Chapman, R Williams
	<b>Group B: Room Spina</b>	K V Menon, S Weinstein

17:30–19:00	<b>The aging spine and complications of lumbar surgery</b>	Z Klezl
17:30–19:00	<b>Case presentations</b>	
	• Recurrent disc herniation	
	• Hardware failure	
	• Nonunion	
	• Infection	
	• Osteoporotic spine	
	<b>Case 1—</b> Recurrent disc herniation	Z Klezl
	<b>Case 2—</b> Nonunion	R Härtl
	<b>Case 3—</b> Osteoporotic spine	T Choma
	<b>Case 4—</b> Infection	H K Wong
	<b>Case 5—</b> Failed TDR—revision or fusion	R Assaker
	<b>Case 6—</b> Hardware failure	M Tejada

16:00–17:30	<b>Complications</b>	G Barbagallo, P Van Schaeysbroeck
16:00–17:30	<b>Case presentation</b>	G Barbagallo, P Van Schaeysbroeck
	Complications in cervical surgery	
	Discussion	M Iwasaki, O Moraes, B Tay, P Vela
17:30–19:00	<b>Interactive workshop</b>	R Chapa, G V Kumar
17:30–19:00	<b>Practical exercises</b>	G Barbagallo, B Goulet, M Iwasaki, O Moraes, A Reyes-Sanchez, P Vela, C Villas, B Walla
	• Stand-alone cervical caging	
	• Cervical disc prosthesis	

## Plenary Day—Wednesday, December 15, 2010

TIME	AGENDA ITEM	WHO
Location: Congress Center, Room Parsenn/Pischa		
<b>Plenary Day—Controversies in spine surgery (all courses combined)</b>		
<b>08:00–09:15</b>	<b>Spondylolisthesis</b>	<b>J Wang</b>
08:00–08:05	Case presentation	J Wang
08:05–08:15	Argument for decompression alone	L Vialle
08:15–08:25	Argument for decompression and fusion	J France
08:25–08:35	Argument for interspinous spacers	C Gerber
08:35–08:45	Argument for decompression and dynamic stabilization	K Wiechert
08:45–08:55	Argument for facet replacement	D Brodke
08:55–09:15	Discussion and audience vote	
<b>09:15–09:55</b>	<b>Cervical disc herniation</b>	<b>J Wang</b>
09:15–09:20	Case presentation	J Wang
09:20–09:30	Argument for ACDF	A Hilibrand
09:30–09:40	Argument for cervical arthroplasty	K D Riew
09:40–09:55	Discussion and audience vote	
09:55–10:10	COFFEE BREAK	
<b>10:10–11:25</b>	<b>Lumbar degenerative disease</b>	<b>J Wang</b>
10:10–10:15	Case presentation	J Wang
10:15–10:25	Argument for nonoperative treatment	J O'Dowd
10:25–10:35	Argument for lumbar fusion	R Chapa
10:35–10:45	Argument for lumbar arthroplasty	J Chapman
10:45–10:55	Argument for dynamic stabilization	R Williams
10:55–11:05	Argument for nucleus replacement	E Woodard
11:05–11:25	Discussion and audience vote	
<b>11:25–12:00</b>	<b>Biologics</b>	<b>J Wang</b>
11:25–11:30	Lumbar case presentation	J Wang
11:30–11:40	BMP's are not the future: other options	R McGuire
11:40–11:50	BMP's are the future	M Fehlings
11:50–12:00	Discussion and audience vote	
Location: Hotel Belvedere, Vinothek		
<b>21:00–01:00</b>	<b>AOSpine course party (social event—optional)</b>	

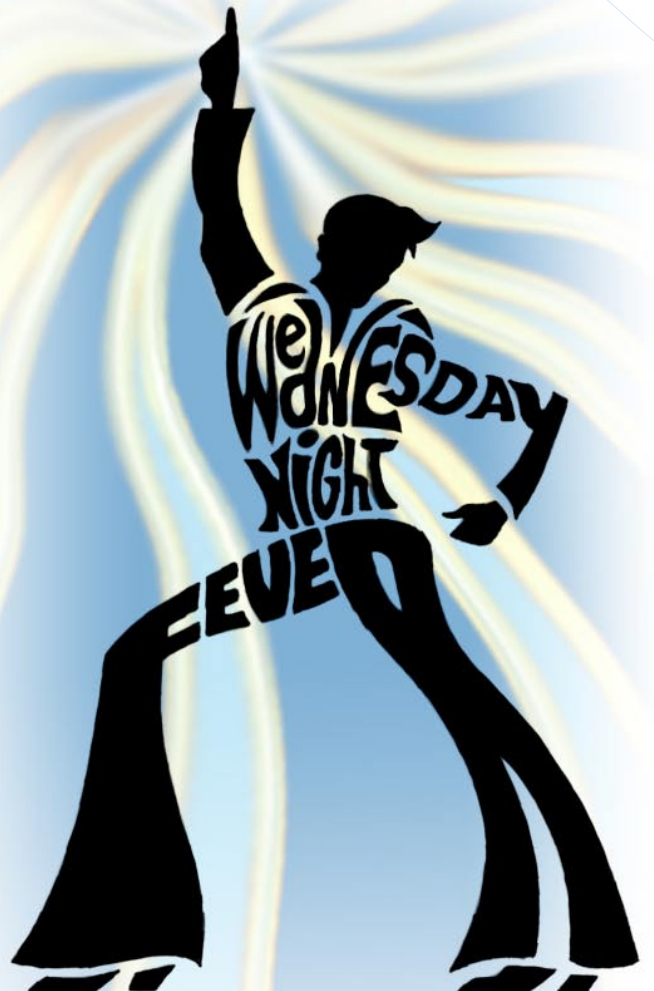
# Lets have an AOSpine party

Wednesday, December 15, 2010  
Warm-up 21:00

Hotel Belvedere, Vinothek

Drinks, snacks, dancing and  
KARAOKE!

...see you there!



Thursday, December 16, 2010		
TIME	AGENDA ITEM	WHO
Location: Congress Center, Room Parsenn		
08:00–09:30	<b>Degenerative lumbar spine</b>	S Gore
08:00–08:15	Degenerative lumbar spine—is it a disease, aging, or genetics?	M Kawakami
08:15–08:30	Applied neurophysiology—identifying the source of pain	S Gore
	Do we really know it? How to identify the source of pain	
08:30–08:45	Imaging tools and their clinical correlation—	H K Wong
	are we treating the MRI scan?	
08:45–09:00	LBP: Evaluation, diagnostic algorithm—practical guidelines	Z Klezl
09:00–09:15	LBP: Nonoperative management—are we rushing into surgery?	M Youssef
09:15–09:30	LBP: Surgical management—when to operate? The evidence for surgical management options	T Lund
09:30–10:00	COFFEE BREAK	
10:00–11:00	<b>Fusion</b>	R Restrepo
10:00–10:15	Applied biomechanics—back to the basics	M Youssef
10:15–10:30	Lumbar spine fixation options—rigid or semi-rigid? Screw augmentation in osteoporotic spine	T Choma
10:30–10:45	Posterolateral fusions—still the gold standard?	J Consciencia
10:45–11:00	Interbody fusions—are they too rigid?	R Postigo
11:00–12:00	<b>Fusion</b>	R Postigo
11:00–11:15	Minimal access fusion surgery—really or fancy surgery?	R Restrepo
11:15–11:30	Enhancement of fusion—avoid nonunion	Z Klezl
11:30–11:45	Fusion related complications—don't blame screws	M Tejeda
11:45–12:00	The evidence—to fuse or not to fuse?	M Valacco
12:00–16:00	LUNCH BREAK	
16:00–17:30	<b>Nonfusion</b>	J Consciencia
16:00–16:15	Adjacent segment disease—reality or marketing tool?	T Lund
16:15–16:30	Lumbar arthroplasty—is it still useful?	R Assaker

Thursday, December 16, 2010		
TIME	AGENDA ITEM	WHO
Location: Congress Center, Room Rnerhorn		
08:00–09:30	<b>Axial cervical pain</b>	G V Kumar
08:00–08:15	Nonoperative treatment: when and for how long (including measurements)?	C Villas
08:15–08:30	Are cervical blocks or infiltrations necessary before surgical treatment?	P Van Schaevebroeck
08:30–08:45	Total disc replacement: outcomes—how many levels?	B Tay
08:45–09:00	Fusion continues to be the solution—options	B Goulet
09:00–09:15	Adjacent segment degeneration—can we avoid this?	A Reyes-Sanchez
09:15–09:30	Questions and discussion—take-home message	G V Kumar
09:30–10:00	COFFEE BREAK	
10:00–11:00	<b>Cervical radiculopathy</b>	R Chapa
10:00–10:10	We can treat and resolve with foraminal injections	B Wallia
10:10–10:20	The role of minimally invasive surgery	B Tay
10:20–10:30	Decompression alone— anterior or posterior?	M Tarocco
10:30–10:40	Fusion is necessary—stand alone interbody devices	G V Kumar
10:40–10:50	Is this the case for disc replacement?	P Vela
10:50–11:00	Questions and discussion—take-home message	R Chapa
11:00–12:00	<b>Spondylotic myelopathy</b>	G Barbaggio
11:00–11:10	Assessment of the patient with spondylotic myelopathy	P Van Schaevebroeck
11:10–11:25	Surgical treatment— anterior, posterior, or combined	A Reyes-Sanchez
11:25–11:35	Frequent complications and how to resolve these	C Villas
11:35–11:50	Is laminoplasty better?	B Goulet
11:50–12:00	Questions and discussion—take-home message	G Barbaggio
12:00–16:00	LUNCH BREAK	

Thursday, December 16, 2010		
TIME	AGENDA ITEM	WHO
Location: Congress Center, Room Jakobshorn		
08:00–09:00	<b>Adult deformity</b>	T Bas
08:00–08:20	Corrective procedures in cervical ankylosing spondylitis	K D Riew
08:20–08:40	Operative strategy in adult scoliosis	R Williams
08:40–09:00	Sagittal rebalancing in the elderly patient	J Chapman
09:00–10:00	<b>Adult deformity cases</b>	J Howes
09:00–09:15	<b>Case presentation</b> Complex cervical deformity	K D Riew
09:15–09:30	<b>Case presentation</b> Adult scoliosis correction	P Horsting
09:30–09:45	<b>Case presentation</b> Adult kyphotic deformity	R Williams
09:45–10:00	<b>Case presentation</b> Spinopelvic fixation	J Chapman
10:00–10:30	COFFEE BREAK	
10:30–12:00	<b>Pediatric deformity</b>	K Wood
10:30–11:00	Current concepts in AIS correction	S Weinstein
11:00–11:20	Growing rods in small children	J Howes
11:20–11:40	Achieving sagittal balance in AIS: pedicle screw constructs	T Bas
11:40–12:00	Curve decompensation	K V Menon
12:00–16:00	LUNCH BREAK	
16:00–17:30	<b>Pediatric deformity cases</b>	K V Menon
16:00–16:15	<b>Case presentation</b> Congenital deformity	T Bas
16:15–16:30	<b>Case presentation</b> Infantile idiopathic scoliosis	J Howes
16:30–16:45	<b>Case presentation</b> Neuromuscular scoliosis	M Balsano
16:45–17:00	<b>Case presentation</b> Pediatric kyphotic deformity	S Weinstein
17:00–17:15	<b>Case presentation</b> Adolescent idiopathic scoliosis	K V Menon
17:15–17:30	<b>Case presentation</b> Syringomyelia	J-P Wolinsky

Thursday, December 16, 2010		
TIME	AGENDA ITEM	WHO
Location: Congress Center, Room Pischa		
08:00–08:05	Introduction	C Gerber
08:05–10:00	<b>Injuries to the craniocervical junction and cervical spine</b>	B Ashman, C Gerber
08:05–08:20	<b>Case presentation</b> Occipital condyle fracture	D Brodke
08:20–08:30	Discussion	
08:30–08:50	Management of C1 fractures	N Ohana
08:50–09:00	Discussion	
09:00–09:20	C2 fractures—differences in management in the elderly and younger population	E Vialle
09:20–09:30	Discussion	
09:30–09:50	Surgical treatment of atlas fractures	L Anderberg
09:50–10:00	Discussion	
10:00–10:30	COFFEE BREAK	
10:30–12:00	<b>Interactive workshop</b>	J France, C Gerber
10:30–12:00	<b>Practical exercise</b> Occipitocervical fixation, including C1 and C2 screws	L Anderberg, B Ashman, C Bellabarba, D Brodke, M Fehlings, J O'Dowd, N Ohana, A Sadao Iitaka, K Schmacke, J Schuster, E Vialle
12:00–16:00	LUNCH BREAK	
16:00–17:00	<b>Injuries to the craniocervical junction and cervical spine</b>	N Ohana, C Gerber
16:00–16:20	Treatment of disco-ligamentous injuries of the cervical spine	C Bellabarba
16:20–16:30	Discussion	
16:30–16:50	Injury to the pediatric spine	J France
16:50–17:00	Discussion	
17:00–17:10	COFFEE BREAK	
17:10–18:40	<b>Injuries to the craniocervical junction and cervical spine</b>	J O'Dowd, N Ohana
17:10–17:30	Surgery in acute spinal injury	M Fehlings

16:30–16:45	Interspinous devices—temporary measure or definitive solution?	M Mayer
16:45–17:00	Pedicle-based dynamic stabilization and facet replacements—promising or on the decline?	M Tejada
17:00–17:15	The evidence—is nonfusion better?	M Mayer
17:15–17:30	Lumbar disc regeneration—is repair possible?	M Kawakami
17:30–19:00	<b>MISS</b>	S Core
17:30–17:45	MISS—philosophy and limitations	M Mayer
17:45–18:00	Microscopic discectomy—still the gold standard?	M Mayer
18:00–18:15	Possibilities with interlaminar endoscopic surgery	R Härtl
18:15–18:30	Limitations of transforaminal endoscopic surgery	S Core
18:30–18:45	Percutaneous disc surgery and nucleoplasty—are they really effective?	M Valacco
18:45–19:00	Nuclear, annular repair and replacement—is this the future?	M Kawakami

16:00–17:30	<b>Reconstruction for cervical spine</b>	M Taricco
16:00–16:15	When is surgery indicated in cervical rheumatoid arthritis? Anterior or posterior?	B Wallia
16:15–16:30	When are odontoid resections necessary? Indications/complications	M Taricco
16:30–16:45	Anterior treatment of lower cervical spinal kyphosis	P Vela
16:45–17:00	Is posterior surgery better?	P Licina
17:00–17:15	Cervicothoracic junctional kyphosis—treatment	E Woodard
17:15–17:30	Questions and discussion—take-home message	M Taricco
17:30–19:00	<b>Cervical spine complications</b>	B Wallia
17:30–17:40	Postoperative dysphagia—assessment and management	R Chapa
17:40–17:50	Vertebral artery injuries—how to avoid and manage	O Moraes
17:50–18:00	Complications after cervical deformity corrective surgery	M Iwasaki
18:00–18:10	Postsurgical hematoma—management	G Barbagallo
18:10–18:20	Injuries for cervical instrumentation C1-C2	M Iwasaki
18:20–18:30	Failed total disc replacement—treatment	B Coulet
18:30–18:45	Adjacent level degeneration—fusion or TDR	A Hillbrand
18:45–19:00	Questions and discussion—take-home message	B Wallia

17:30–19:00	<b>Interactive workshop</b>	R Williams
17:30–19:00	<b>Practical exercise</b> Scoliosis correction	T Bas, J Howes, K V Menon, S Weinstein

17:30–17:40	Discussion	J Schuster
17:40–18:00	Medical treatment of spinal cord injury	
18:00–18:10	Discussion	L Anderberg
18:10–18:30	Posttraumatic syringomyelia	
18:30–18:40	Discussion	

Friday, December 17, 2010		AGENDA ITEM	WHO
TIME	AGENDA ITEM	WHO	
Location: Congress Center, Room Parsenn			
08:00–09:00	<b>Degenerative disc disease</b>	R Assaker	
08:00–09:00	<b>Case presentations</b>		
	<ul style="list-style-type: none"> <li>Possible treatment options</li> <li>Controversial issues—fusion/nonfusion</li> <li>LBP and black disc</li> <li>MISS</li> </ul>		
	<b>Case 1</b> —LBP and black disc		K Wlechert
	<b>Case 2</b> —LBP treated by fusion		M Tejada
	<b>Case 3</b> —LBP treated by TDR		M Mayer
	<b>Case 4</b> —LBP treated by hybrid in two levels pathology		R Assaker
09:00–10:00	<b>Lumbar disc herniation</b>	M Valacco	
09:00–10:00	<b>Case presentations</b>		
	<ul style="list-style-type: none"> <li>Algorithm for decision making</li> <li>Microscopic discectomy</li> <li>MISS</li> </ul>		
	<b>Case 1</b> —Microscopic discectomy		M Mayer
	<b>Case 2</b> —Transforaminal endoscopic discectomy		S Core
	<b>Case 3</b> —Interlaminar endoscopic discectomy		R Härtl
10:00–10:30	COFFEE BREAK		
10:30–12:00	<b>Interactive workshop</b>	M Mayer, M Tejada	
10:30–12:00	<b>Practical exercises</b>		
	<ul style="list-style-type: none"> <li>Instrumented TLIF</li> <li>Stand-alone anterior cage</li> </ul>		
			R Härtl, R Postigo, R Restrepo, M Valacco, K Wlechert, M Youssef
12:00–14:00	LUNCH BREAK		
14:00–15:30	<b>Degenerative stenosis and instability</b>	T Lund	
14:00–15:30	<b>Case presentations</b>		
	<ul style="list-style-type: none"> <li>Degenerative canal stenosis</li> <li>Degenerative scoliosis</li> <li>Degenerative spondylolisthesis</li> </ul>		
	<b>Case 1</b> —Canal stenosis without instability		T Lund
	<b>Case 2</b> —Canal stenosis		H K Wong
	<b>Case 3</b> —Canal stenosis with degenerative scoliosis		R Postigo
	<b>Case 4</b> —Canal stenosis with degenerative scoliosis		R Restrepo
	<b>Case 5</b> —Spondylolisthesis		M Valacco
	<b>Case 6</b> —Spondylolisthesis		T Choma

Friday, December 17, 2010		AGENDA ITEM	WHO
TIME	AGENDA ITEM	WHO	
Location: Congress Center, Room Rmerhorn			
08:00–09:00	<b>Noninstrumented surgery in cervical axial pain</b>	B Tay, M Tarocco	
08:00–09:00	<b>Case presentations</b>	B Tay, M Tarocco	
	<ul style="list-style-type: none"> <li>Nonoperative treatment—why and for how long in these patients?</li> <li>Can these patients be treated using minimal access surgery?</li> <li>Fusion is still better than the noninstrumented surgery at this time</li> </ul>		
	Discussion		R Chapa, A Reyes-Sanchez, P Van Schaeybroeck, B Walla
09:00–10:00	<b>Fusion or motion preserving surgery in cervical radiculopathy</b>	P Vela, C Villas	
09:00–10:00	<b>Case presentations</b>		
	<ul style="list-style-type: none"> <li>We can solve with infiltration</li> <li>When we perform decompressive noninstrumented surgery—is fusion necessary?</li> <li>Evaluating the results and complications of these procedures</li> </ul>		
	Discussion		G Barbagallo, B Goulet, G V Kumar, P Van Schaeybroeck
10:00–10:30	COFFEE BREAK		
10:30–12:00	<b>Myelopathic reconstructive surgery</b>	R Chapa, B Walla	
10:30–12:00	<b>Case presentations</b>		
	<ul style="list-style-type: none"> <li>The best surgical approach to treat these cases (anterior, posterior, combined, or laminoplasty)</li> <li>How to avoid and manage complications</li> </ul>		
	Discussion		M Iwasaki, M Tarocco, G V Kumar, C Villas
12:00–14:00	LUNCH BREAK		

Friday, December 17, 2010		AGENDA ITEM	WHO
TIME	AGENDA ITEM	WHO	
Location: Congress Center, Room Jakobshorn			
08:00–09:30	<b>Tumor clinical cases</b>	J-P Wolinsky	
08:00–08:15	<b>Case presentation</b>	L Rhines	
	Upper cervical tumor resection		
08:15–08:30	<b>Case presentation</b>	R Williams	
	Late loss of spinal balance after tumor resection		
08:30–08:45	<b>Case presentation</b>	M Abdel-Wanis	
	Low-grade chondrosarcoma of the spine		
08:45–09:00	<b>Case presentation</b>	S Boriani	
	Local recurrence of primary spinal tumor		
09:00–09:15	<b>Case presentation</b>	J-P Wolinsky	
	Intradural tumor		
09:15–09:30	<b>Case presentation</b>	Y Qiu	
	Sacral chordoma		
09:30–10:00	COFFEE BREAK		
10:00–10:30	<b>Tumor debate—treatment of solitary renal cell metastasis</b>	S Boriani	
10:00–10:10	The case for palliative surgery	U Aydinli	
10:10–10:20	The case for en bloc spondylectomy	M Abdel-Wanis	
10:20–10:30	The case for spinal stereotactic radiosurgery	L Rhines	
10:30–12:00	<b>Control of primary spinal tumors</b>	R Williams	
10:30–11:00	Reconstruction options in primary spinal tumor resection	S Boriani	
11:00–11:20	Spinal cord blood supply—vertebral resection limits	M Balsano	
11:20–11:40	Spinopelvic reconstruction options	J-P Wolinsky	
11:40–12:00	Intradural tumor resection	D Chou	
12:00–14:00	LUNCH BREAK		
14:00–15:00	<b>Tumor clinical cases</b>	D Chou	
14:00–14:15	<b>Case presentation</b>	S Boriani	
	Giant cell tumor of the spine		
14:15–14:30	<b>Case presentation</b>	Y Qiu	
	Tumoral vertebralplasty		
14:30–14:45	<b>Case presentation</b>	M Abdel-Wanis	
	Spinal metastasis		
14:45–15:00	<b>Case presentation</b>	U Aydinli	
	Osteoid osteoma and osteoblastoma of the spine		

Friday, December 17, 2010		AGENDA ITEM	WHO
TIME	AGENDA ITEM	WHO	
Location: Congress Center, Room Pischa			
08:00–09:30	<b>Thoracolumbar and sacral fractures</b>	C Bellabarba, A Sadao Iutaka	
08:00–08:20	Classification of thoracolumbar fractures	C Bellabarba	
08:20–08:30	Discussion		
08:30–08:50	Indications for surgery	B Ashman	
08:50–09:00	Discussion		
09:00–09:20	Anterior, posterior, or combined approach?	K-Y Huang	
09:20–09:30	Discussion		
09:30–10:00	COFFEE BREAK		
10:00–12:00	<b>Thoracolumbar and sacral fractures</b>	J Schuster, E Vialle	
10:00–10:20	Sacral fractures	C Gerber	
10:20–10:30	Discussion		
10:30–10:50	Treatment of fractures in ankylosing spondylitis	J France	
10:50–11:00	Discussion		
11:00–11:20	Malignant spinal fractures	A Sadao Iutaka	
11:20–11:30	Discussion		
11:30–12:00	Case presentations	J O'Dowd	
12:00–14:00	LUNCH BREAK		
14:00–15:00	<b>Osteoporotic fractures</b>	M Fehlings, K-Y Huang	
14:00–14:20	Medical management	C Gerber	
14:20–14:30	Discussion		
14:30–14:50	Surgical management	A Sadao Iutaka	
14:50–15:00	Discussion		
15:00–15:10	COFFEE BREAK		
15:10–16:45	<b>Osteoporotic fractures</b>	B Ashman, D Brodke	
15:10–15:30	Vertebroplasty vs kyphoplasty—the evidence	J France	
15:30–15:40	Discussion		
15:40–16:00	Osteoporotic fractures with lumbar spinal stenosis	J O'Dowd	
16:00–16:10	Discussion		
16:10–16:30	Postoperative management of the spinal injured patient	M Fehlings	

15:30–17:00	<b>The aging spine and complications of lumbar surgery</b>	Z Klezl
15:30–17:00	<p><b>Case presentations</b></p> <ul style="list-style-type: none"> <li>• Recurrent disc herniation</li> <li>• Hardware failure</li> <li>• Nonunion</li> <li>• Infection</li> <li>• Osteoporotic spine</li> </ul> <p><b>Case 1</b>—Recurrent disc herniation  <b>Case 2</b>—Nonunion  <b>Case 3</b>—Osteoporotic spine  <b>Case 4</b>—Infection  <b>Case 5</b>—Failed TDR—revision or fusion  <b>Case 6</b>—Hardware failure</p> <p>Location: Congress Center</p> <p>19:00–23:00 <b>Course banquet (optional)</b></p>	<p>M Mayer                      Z Klezl                      T Choma                      H K Wong                      M Mayer                      M Tejada</p>

14:00–15:30	<b>Complications</b>	G Barbagallo, P Van Schaevbroeck
14:00–15:30	<p><b>Case presentation</b></p> <p>Complications in cervical surgery</p> <p>Discussion</p> <p><b>Interactive workshop</b></p>	<p>G Barbagallo, P Van Schaevbroeck                      M Iwasaki, O Moraes, B Tay, P Vela                      R Chapa, G V Kumar</p>
15:30–17:00	<p><b>Practical exercises</b></p> <ul style="list-style-type: none"> <li>• Stand-alone cervical caging</li> <li>• Cervical disc prosthesis</li> </ul>	<p>G Barbagallo, R Bertagnoli, B Goulet, M Iwasaki, O Moraes, A Reyes-Sanchez, P Vela, C Villas, B Wallia</p>
Location: Congress Center		
19:00–23:00 <b>Course banquet (optional)</b>		

15:00–15:30	<b>Deformity debate—treatment of adolescent idiopathic scoliosis</b>	R Williams
15:00–15:10	The case for bracing	S Weinstein
15:10–15:20	The case for anterior correction	K V Menon
15:20–15:30	The case for posterior correction	Z Al-Zayed
15:30–17:00	<b>Metastatic spine disease</b>	J Chapman
15:30–15:50	Scoring systems of metastatic spinal disease—which one(s) should we use?	J-P Wolinsky
15:50–16:10	Operative decision making in metastatic spine disease	J Chapman
16:10–16:30	Quality of life after surgical treatment of spinal metastases	D Chou
16:30–16:45	The role of vertebroplasty in metastatic spine disease	M Abdel-Wanis
16:45–17:00	Metastatic lung carcinoma—a different problem?	R Williams
Location: Congress Center		
19:00–23:00 <b>Course banquet (optional)</b>		

16:30–16:40	Discussion	C Gerber
16:40–16:45	Closing remarks	
Location: Congress Center		
19:00–23:00 <b>Course banquet (optional)</b>		

## Course information

### Course fee

AOSpine Advanced Course CHF 2'700.–

AOSpine members are eligible for a discount of 10%.

Included in course fee are conference bag with documentation, coffee breaks, cocktail reception, course certificate.

### Accreditation

AOSpine Courses are accredited for continuing medical education (CME) programs. The number of credit points or hours varies from country to country. The final information and number of credit points will be distributed with the course certificate.

### Course certificate

Please claim your certificates at the AOSpine information desk on Friday, December 17.

### Evaluation guidelines

All AOSpine courses apply the same evaluation process, either ARS (audience response system) or paper and pencil questionnaires. This will help AOSpine to ensure that we continue to meet your training needs. In some regions, CME accreditation is dependent on the participant's evaluation results.

### Intellectual property

Course materials, presentations, and case studies are the intellectual property of the course faculty. All rights are reserved. Check hazards and legal restrictions on [www.aospine.org/disclaimers.apxs](http://www.aospine.org/disclaimers.apxs)

→ **Recording, photographing, or copying of lectures, practical exercises, case discussions, or any course materials is strictly forbidden. Participants violating intellectual property will be dismissed.**

### Security

Security check at the entrance of the building. Wearing of a name tag is compulsory during lectures, workshops, and group discussions.

### No insurance

The course organization does not take out insurance to cover any individual against accidents, thefts or other risks.

### Mobile phone use

Mobile phone use is not allowed in the lecture halls and in other rooms during educational activities. Please be considerate of others by turning off your mobile phone.

### Dress code

Course: casual or sportswear

Banquet: formal

Davos is a mountain resort. Warm clothes and suitable shoes are advisable.

### Banquet

Friday, 19:00 at the Congress Center

Banquet cards can be purchased/returned at the information desk until Monday evening. Afterwards reimbursement is no longer possible.

A bus will pick you up at 18:45. Please see "bus meeting points for the banquet".

### Hotels

Participants who have not booked a package including hotel should settle their hotel bill directly when checking out.

### HRG travel office

Will support you with flight's confirmation or re-booking during coffee break.



## Business center

There is one business center in the Congress Center which is accessible to everybody.

### Services

- Internet and email access
- Printing possibility
- [www.aospine.org](http://www.aospine.org)  
AO Course website offering course-related information.

### Location

On floor A2

### Opening hours

30 minutes before the first course of the day starts until  
30 minutes after the last course ends

### Disclaimer

The use of your own computer in the Business Center network is inherently not secure. We strongly recommend that you take appropriate actions to protect your computer against unauthorized use or theft (eg, Firewall, VPN-Connection, VirusScanner, etc). AO cannot be held responsible for any data loss or theft.

For further information or support please contact:

AO Foundation

Phone +41 81 414 28 70

Email [it.support@aofoundation.org](mailto:it.support@aofoundation.org)

## Wireless network

A special wireless network is accessible and free for everybody.

### Services

- Internet and email access
- [www.aospine.org](http://www.aospine.org)  
AO Course website offering course-related information.

### Locations

At public places in the Congress Center

## Exhibitions

### AO World

Visit the AO World in the main foyer, home of the new world of the AO Specialties: AOTrauma, AOSpine, AOCMF, and AOVEL. At the specialty exhibits you can explore membership opportunities, the award winning Surgery Reference, examine our print and electronic publications, learn about the ground-breaking activities occurring within AO, and discover the research, development, fellowship, and other opportunities available to you. You can also visit with the Clinical Investigation and Documentation (CID), the AO Research Institute Davos, the TK Office and AO GCTM.

Come on into the AO World and sign up to become eligible for the award of an exquisite Bucherer watch, an iPod, or other exciting give-aways.

### AO Research Institute Davos (ARI) "Café Chamonix"

'Improving patient care through scientific advancement'

Meet with our team, establish contacts, freely discuss your clinical problems, ideas, and learn about the latest results from the AO Research Institute Davos (ARI). Enjoy a local beer or local non-alcoholic drink during the evening, served by an ARI employee or from an ARI Medical Research Fellow.

R&D areas including contributions to AO Foundation's Specialties and their Clinical Priority Programs (CPP's) and to the AO Exploratory Research Board's Collaborative Research Programs (CRP's):

#### Exploratory

- Large bone defect healing/regeneration
- Mechanisms, bone induction/repair, bone substitute, implant design
- Acute cartilage injury/regeneration
- Mechanisms, inflammation, replacement, implant design
- Small mechanically defined fixation implant sets for rodent research

#### CMF

- Evaluation of accuracy of CAD/CAM fabricated splints for orthognathic surgery
- Workflow for custom-made CAD/CAM titanium plates based on virtually planned maxillofacial reconstruction
- Surface modification of PEEK to improve tissue integration to devices such as CMF patient specific implants

#### Spine

- Increasing osseointegration of PEEK materials
- Disc repair/regeneration
- Irrigation procedures for increased patient safety in vertebroplasty
- Annulus fibrosus rupture

#### Trauma

- R&D of dynamizable implants & biofeedback technology
- Minimizing infection risk through implant design
- Intra-operative assessment of bone quality
- Fracture treatment in osteoporotic bone: augmentation techniques and prophylaxis
- Osteosynthesis SKILL training technology
- Osteosynthesis training kit
- Guided implant placement
- Evaluation of RIA as a tissue collector device

#### Veterinary

- External fixation implant for large animals

#### Multidisciplinary

- Human morphology service center which supports medical image processing and analysis, computed preoperative planning, database of CT scans and 3D bone models
- Ex-vivo testing using advanced biomechanical models
- Implant design using the Finite Element Method
- Analysis of implant-specific functional anchorage with CT-technology
- In vivo and in vitro quantification of bone turnover and scaffold degradation
- Controlling tissue healing and easing implant removal with implant surfaces

### Industry exhibitions

Visit our industry partner Synthes as well as a number of industry providers who will demonstrate the latest advances in their technologies: BrainLab, Siemens, Mathys Orthopädie, Storz, Synbone

# Transportation

Special bus for course participants

## Monday to Friday

11:50/12:15 Congress Center—Mountain Railways  
15:35 Mountain Railways—Congress Center

## Wednesday

12:20 Congress Center—AO Center  
13:30 AO Center—Congress Center

## Thursday

12:30 Congress Center—AO Center  
13:30 AO Center—Congress Center

## Friday

18:45 Hotels—Congress Center  
from 23:00 Congress Center—Hotels

**For other times:** Local buses run every 10 minutes

## Bus meeting points for the banquet

- Flüela (Bünda, Victoria)
- Seehof (Parsenn)
- Meierhof (Solaria, Zauberberg)
- Dischma (Cresta, Edelweiss, Sonnenberg)
- Belvédère (Panorama)
- Central
- Schweizerhof (Europe)
- Posthotel (ArtHaus)
- National (Esplanade, Strela)
- Sunstar Park (Club Hotel)
- Grischa (Larix)

# Sponsors

We would like to thank our partner **Synthes** for their support without which this event would not be possible.



A special thank to our main sponsor:

**SIEMENS**  
medical

We also extend a thank you to the following co-sponsors:



The AOSpine community—delivering the knowledge, experience, and evidence to improve patient care, patient outcomes, and ensure cost effective spine surgery.