

NSpine

innovative spine education™



6th Major Multi-Disciplinary Conference

Porto May 31st - June 3rd

CONFERENCE PROGRAMME



Topic: Keynotes Tuesday / Chair: Bronek Boszczyk (Germany)

8:00	Nemours - optimising paediatric spine care	Suken Shah (USA)
8:20	Lessons of life as a spine surgeon	Max Aebi (Switzerland)
8:40	High performance teams - if the operating team were a band	Dan Resnick (USA)
9:00-9:30 Break		



Topic: Acute Spine Trauma / Chair: Ian Vlok (South Africa)

9:30	Assessing the polytrauma patient with spine injury and surgical timing	Ricardo Rodrigues-Pinto (Portugal)
9:45	Ganga spine trauma imaging protocol - how CT radiation can be minimized or avoided	BT Pushpa (India)
10:00	Considerations in high velocity /energy injury mechanisms	Alex van der Horst (South Africa)
10:15	Evaluation & considerations in traumatic spine injury of the elderly	Max Aebi (Switzerland)
10:30	Update on screening criteria in cervical spine injury	Schalk Burger (South Africa)
10:45	Cervical spine immobilization (Halo, Philly vs Miami J, Traction)	Ian Zondagh (South Africa)
11:00	T-L fracture classification systems - application today	Ian Vlok (South Africa)
11:15	Understanding the mechanics and patterns of TL fractures	Max Aebi (Switzerland)
11:30	Discussion	
12:00-13:30 Break		



Lunch Workshop Topic: Delegate Case Forum: Trauma Panel / Chair: Ricardo Rodrigues-Pinto (Portugal)

12:20 lunch workshop	Delegate case TBD	Ricardo Rodrigues-Pinto (Portugal)
12:40 lunch workshop	Delegate case TBD	Max Aebi (Switzerland)
13:00 lunch workshop	Delegate case TBD	Alex van der Horst (South Africa)
12:00-13:30 Break		



Topic: Cervical Trauma 1 / Chair: Max Aebi (Switzerland)

13:30	Diagnosing and managing vertebral artery dissection in cervical spine trauma	Schalk Burger (South Africa)
13:45	Spinal injuries in professional sports – management and return to play	Johan Davis (South Africa)
14:00	Cervical reduction - tips and tricks	Nick Kruger (South Africa)
14:15	Cervical traction table – perfecting closed cervical reduction	Sanesh Miseer (South Africa)
14:30	The use of anterior only surgery in bifacet- and uniaxial dislocation	Nick Kruger (South Africa)
14:45	Practicality of skeletal traction in low income countries	Sanesh Miseer (South Africa)
15:00	Neglected cervical fractures and dislocations	Johan Davis (South Africa)
15:15	Complex subaxial fractures	David Welsh (South Africa)
15:30	Discussion	
16:00-16:30 Break		



Topic: Trauma Case Discussion Forum: Paediatric cervical trauma - decision making challenges in extreme cases / Chair: Alex van der Horst (South Africa)

16:30	Case discussion - Neurologically intact dens dislocation.	Ian Vlok (South Africa)
16:45	Case discussion - Gunshot neck in child - time sensitive surgery and intervention	Sanesh Miseer (South Africa)
17:00	Case discussion - Cervical instability after dogbite	Ian Vlok (South Africa)
17:15	Case discussion - C2 Physeal injury in a 4 year old	Sanesh Miseer (South Africa)
17:30	Case discussion - C2 fracture after helicopter accident - conservative or active intervention	Alex van der Horst (South Africa)
17:45	Case discussion - Fall from a tree - Occipito-cervical dislocation	Ian Vlok (South Africa)
18:00 Close		



Topic: Early Onset Scoliosis 1 / Chair: Laurel Blakemore (USA)

9:30	Classification of EOS and Growth Friendly Strategies	Laurel Blakemore (USA)
9:45	Assessment of maturation in the management of EOS and AIS	Kenneth Cheung (Hong Kong)
10:00	Casting - how I do it and when	Ralf Stücker (Germany)
10:15	Bracing vs casting vs growth modulation surgery - my experience	Peter Newton (USA)
10:30	Use of VEPTR in the very young child	Ralf Stücker (Germany)
10:45	Active surgical growth modulation technique in my practice	René Castelein (Netherlands)
11:00	My long-term experience with MCGR	Kenneth Cheung (Hong Kong)
11:15	My long-term experience with MCGR	Ralf Stücker (Germany)
11:30	Discussion	

12:00-13:30 Break



Lunch Workshop Topic: NSpine Lunch Symposium: AIS decision making and emerging technology
Chair: Nuno Alegrete (Portugal)

12:20 lunch workshop	Selecting between bracing and Apifix	Nuno Alegrete (Portugal)
12:40 lunch workshop	Apifix - evidence, technique and my experience	Biren Desai (Germany)
13:00 lunch workshop	VBT - Apifix - Fusion / combinations and decision making	Baron Lonner (USA)

12:00-13:30 Break



Topic: Early Onset Scoliosis 2 / Chair: Peter Newton (USA)

13:30	The role and technique of Halo traction in my practice	Ralf Stücker (Germany)
13:45	Passive surgical growth modulation techniques in my practice	Peter Newton (USA)
14:00	Challenges in instrumenting the young child	Jwalant Mehta (UK)
14:15	Revisions in growth modulation surgery	Laurel Blakemore (USA)
14:30	Muscle splitting techniques in syndromic EOS deformity correction of young children	Areena D'Souza (Germany)
14:45	VBT - decision making in young children	Stefan Parent (Canada)
15:00	Is there a role for converting growth modulation to VBT	Laurel Blakemore (USA)
15:15	The role of early definitive fusion without growth modulation	Firoz Miyanji (Canada)
15:30	Discussion	

16:00-16:30 Break



Topic: Adolescent Idiopathic Scoliosis 1 / Chair: Per Trobisch (Germany)

16:30	Natural history of AIS - when is "no treatment" an option / what curve can be accepted	René Castelein (Netherlands)
16:45	Traction radiograph in assessing flexibility in AIS	Keyur Akbari (India)
17:00	Shoulder balance and structural proximal curves - considerations for surgical strategy	Laurel Blakemore (USA)
17:15	Selective thoracic fusion for AIS - when it works	Michael Ruf (Germany)
17:30	Selective lumbar fusion for AIS - when it works	René Castelein (Netherlands)
17:45	Discussion	

18:00 Close



Topic: Paediatric Cervical Deformity / Chair: Firoz Miyanji (Canada)

9:30	Understanding early development of the craniocervical spine as basis for congenital deformity	G Balamurali (India)
9:45	Surgical strategies for complex craniocervical malformations	Suken Shah (USA)
10:00	Surgical considerations in complex subaxial congenital malformations	Michael Ruf (Germany)
10:15	Challenges in paediatric post-radiation / intraspinal surgery kyphosis	Suken Shah (USA)
10:30	Challenges in congenital cervico-thoracic deformity	Firoz Miyanji (Canada)
10:45	Managing paediatric cervical deformity in spinal infections	Rob Dunn (South Africa)
11:00	Technical pearls in anterior paediatric cervical spine surgery	Michael Ruf (Germany)
11:15	Technical pearls in posterior paediatric cervical spine surgery	Firoz Miyanji (Canada)
11:30	Discussion	

12:00-13:30 Break



Topic: Spondylolysis and Olisthesis / Chair: Dietrich Schlenzka (Finland)

13:30	Pathophysiology of spondylolysis and olisthesis revisited	Dietrich Schlenzka (Finland)
13:45	Minimally Invasive Pars Repair Options	Matteo Pejrona (Italy)
14:00	Spondylolysis in Elite Athletes	Robert Dunn (South Africa)
14:15	Outcomes of Non-Surgical Treatment of Pars Fractures in Adolescents	Dietrich Schlenzka (Finland)
14:30	Evolving concepts in the management of spondylolisthesis	Dan Resnick (USA)
14:45	Mid-grade spondylolisthesis in the child - treatment options	Robert Dunn (South Africa)
15:00	High grade spondylolisthesis strategies	Suken Shah (USA)
15:15	X-ALIF in lateral spondylolisthesis surgery	Gergely Bodon (Germany)
15:30	Discussion	

16:00-16:30 Break



Topic: Dysraphic / Congenital / Syndromic Paediatric Deformity 1 / Chair: Suken Shah (USA)

16:30	Anatomical changes in vertebra in dystrophic scoliosis due to neurofibromatosis and its implications on surgical safety	BT Pushpa (India)
16:45	Thoracic meningocele in patients with NF 1	Ashraf Elsayed (UK) tbc
17:00	Neurofibromatosis and spinal deformity - surgical strategies	Suken Shah (USA)
17:15	Scoliosis correction in myelomeningocele children	Areena D'Souza (Germany)
17:30	Update on cause and treatment of Chiari Malformations	Paulo Pereira (Portugal)
17:45	Discussion	

18:00 Close



Topic: Adult Deformity 1 / Chair: Michael Selby (Australia)

9:30	Evaluating adult deformity patients for surgical correction	Michael Selby (Australia)
9:45	Corrective posterior lumbar osteotomy techniques in degenerative adult deformity	Matteo Pejrona (Italy)
10:00	Optimising lordosis through L5/S1 anterior reconstruction - technical aspects	Daniel Chan (Singapore)
10:15	Advanced lateral access deformity correction	Michael Selby (Australia)
10:30	Open anterior thoracolumbar reconstruction in complex adult deformity	Daniel Chan (Singapore)
10:45	Vertebral body tethering in adult degenerative scoliosis	Baron Lonner (USA)
11:00	Predictive parameters and outcome in adult deformity surgery	Matteo Pejrona (Italy)
11:15	Single position surgery in adult deformity	Gergely Bodon (Germany)
11:30	Discussion	

12:00-13:30 Break



Lunch Workshop Topic: NSpine Lunch Symposium: TB related Deformity
Chair: Daniel Chan (Singapore)

12:20 lunch workshop	Challenging TB deformity cases from my practice	Kenneth Cheung (Hong Kong)
12:40 lunch workshop	Challenging TB deformity cases from my practice	Rob Dunn (South Africa)
13:00 lunch workshop	Challenging TB deformity cases from my practice	G Balamurali (India)

12:00-13:30 Break



Topic: Adult Deformity 2 / Chair: Michael Selby (Australia)

13:30	Anaesthetic aspects in preparing for adult deformity surgery	Robert Nowicki (UK)
13:45	Surgical strategies in correcting thoracic kyphosis	Michael Selby (Australia)
14:00	Correction strategies in ankylosing spondylitis	Michael Ruf (Germany)
14:15	Challenging deformity case from my practice	René Castelein (Netherlands)
14:30	Subaxial osteotomy in severe cervical kyphosis	Abolfazl Rahimizade (TBC)
14:45	Combined anterior-posterior correction of cervical and cervicothoracic deformity	Michael Ruf (Germany)
15:00	Pelvic instrumentation and "bedrock" sacroiliac fusion in adult deformity	Michael Selby (Australia)
15:15	Managing the new generation of blood thinners in spine surgery	Robert Nowicki (UK)
15:30	Discussion	

16:00-16:30 Break



Topic: Adult Deformity 3 / Chair: Matteo Pejrona (Italy)

16:30	TLIF and PLIF options in adult degenerative deformity correction	Nuno Neves (Portugal)
16:45	All posterior vertebrectomy in adult deformity correction	Robert Dunn (South Africa)
17:00	Optimising rod patterns to avoid failure in adult deformity	Matteo Pejrona (Italy)
17:15	Salvage strategies in proximal junctional failure	Michael Selby (Australia)
17:30	Complications in adult deformity surgery	Matteo Pejrona (Italy)
17:45	Discussion	

18:00 Close



Topic: Cervical Degeneration and Arthroplasty / Chair: Paul Thorpe (UK)

9:30	Overview of biomechanical concepts in disc arthroplasty and emerging technology	Paul Thorpe (UK)
9:45	Surgical pearls in cervical disc arthroplasty	Dan Resnick (USA)
10:00	Review of evidence and personal experience for multi-level disc arthroplasty	Nuno Neves (Portugal)
10:15	Cervical arthroplasty in athletes	Paul Thorpe (UK)
10:30	Decision making between cervical arthroplasty and fusion	Dan Resnick (USA)
10:45	The case for ACDF over TDR	Ciaran Bolger (Ireland)
11:00	Posterior cervical techniques in radiculopathy	Jake Timothy (UK)
11:15	Revision surgery in cervical arthroplasty	Paul Thorpe (UK)
11:30	Discussion	

12:00-13:30 Break



Topic: Thoracic Surgical Techniques / Chair: Ciaran Bolger (Ireland)

13:30	Retropleural thoracic disc surgery	Ciaran Bolger (Ireland)
13:45	Mini-open thoracic spine procedures	Jake Timothy (UK)
14:00	Techniques of crossing and splitting the diaphragm in reconstructive spine surgery	Daniel Chan (Singapore)
14:15	Anterior access to the cervicothoracic junction	Jake Timothy (UK)
14:30	Managing OPLL and related ossification condition in the thoracic spine	G Balamurali (India)
14:45	Posterior costotransversectomy techniques	Paulo Pereira (Portugal)
15:00	Spinal epidural abscess management	G Balamurali (India)
15:15	Spinal epi / subdural haematoma management	Ciaran Bolger (Ireland)
15:30	Discussion	

16:00-16:30 Break



Topic: Cervical Myelopathy / Chair: Dan Resnick (USA)

16:30	Anterior approaches to the cervical spine – from C1 to T1	Kenneth Cheung (Hong Kong)
16:45	Anterior surgical strategies in cervical myelopathy	Dan Resnick (USA)
17:00	Posterior surgical strategies in cervical myelopathy	Kenneth Cheung (Hong Kong)
17:15	Processus spinous splitting limited width laminectomy	Gergely Bodon (Germany)
17:30	Treatment options in basilar invagination	G Balamurali (India)
17:45	Discussion	

18:00 Close



Topic: Keynotes Wednesday / Chair: Laurel Blakemore (USA)

8:00	My life in spinal cord injuries - where we came from and what is on the horizon	Harvinder Chhabra (India)
8:20	Lessons of life as a spine surgeon	Réne Castelein (Netherlands)
8:40	Lessons of life as a spine surgeon	Kenneth Cheung (Hong Kong)

9:00-9:30 Break



Topic: Cervical Trauma 2 / Chair: Johan Davis (South Africa)

9:30	Practicalities of managing combined head and spine trauma	Dan Resnick (USA)
9:45	Atlas fractures - surgical strategies, with or without C2	Johan Davis (South Africa)
10:00	Odontoid fractures - decision making and surgical techniques	Sanesh Miseer (South Africa)
10:15	Odontoid fractures in the elderly	Johan Davis (South Africa)
10:30	Neglected hangman fractures	Abolfazl Rahimizade (Iran)
10:45	Fluoroscopically assisted percutaneous C1-C2 transarticular fixation in odontoid fractures	Diogo Catelas (Portugal)
11:00	Condylar fractures	Schalk Burger (South Africa)
11:15	Cervicothoracic traumatic injuries – surgical tips and tricks	Alex van der Horst (South Africa)
11:30	Discussion	

12:00-13:30 Break



Lunch Workshop Topic: Delegate Case Forum: Deformity Panel / Chair: Michael Selby (Australia)

12:20 lunch workshop	Delegate case TBD	Nuno Alegrete (Portugal)
12:40 lunch workshop	Delegate case TBD	Masood Shafafy (UK)
13:00 lunch workshop	Delegate case TBD	Michael Selby (Australia)

12:00-13:30 Break



Topic: Paediatric Spine Trauma / Chair: Laurel Blakemore (USA)

13:30	Cervical spine clearance in paediatric trauma patients	Alex Disch (Germany)
13:45	When (and how) to immobilise or apply traction in paediatric cervical spine trauma patients	Laurel Blakemore (USA)
14:00	Epidemiology of paediatric cervical spine injuries	Nuno Neves (Portugal)
14:15	My experience and strategies in managing spinal cord injury in the child	Rob Dunn (South Africa)
14:30	My experience and strategies in managing spinal cord injury in the child	Randal Betz (USA)
14:45	C2 synchondrosis injury in preschool children	Abolfazl Rahimizade (Iran)
15:00	Surgical strategies in paediatric cervical spine injuries	Johan Davis (South Africa)
15:15	Paediatric thoracolumbar trauma - diagnosis, injury patterns and treatment options	Sanesh Miseer (South Africa)
15:30	Discussion	

16:00-16:30 Break



Topic: Trauma Case Discussion Forum: Lumbar fractures / Chair: Ian Zondagh (South Africa)

16:30	Case discussion - challenging case from my practice	Nuno Neves (Portugal)
16:45	Case discussion - challenging case from my practice	Philip Horsting (Netherlands)
17:00	Case discussion - L5S1 gunshot	Ian Zondagh (South Africa)
17:15	Case discussion - challenging case from my practice	Alex Disch (Germany)
17:30	Case discussion - Lumbar intracanal bullet	David Welsh (South Africa)
17:45	Case discussion - thoracolumbar spondyloptosis	Sanesh Miseer (South Africa)

18:00 Close



Topic: Adolescent Idiopathic Scoliosis 2 / Chair: Suken Shah (USA)

9:30	Fine-tuning end-vertebra balance and sagittal profile in AIS - surgical pearls	Suken Shah (USA)
9:45	Selective anterior fusion in AIS	Philip Horsting (Netherlands)
10:00	Vertebral Body Tethering in Adolescent Idiopathic scoliosis with more than 2 year follow-up - systematic review and meta-analysis	Aurélien Courvoisier (France)
10:15	VBT - decision making in teenagers	Baron Lonner (USA)
10:30	Borderline indications for VBT	Aurélien Courvoisier (France)
10:45	Alternative indications for anterior non-fusion procedures	Randal Betz (USA)
11:00	Reasons for VBT failure	Per Trobisch (Germany)
11:15	Revision strategies in construct failures and overcorrection after VBT	Peter Newton (USA)
11:30	Discussion	

12:00-13:30 Break



Lunch Workshop Topic: NSpine Lunch Symposium: VBT / Chair: Aurélien Courvoisier (France)

12:20 lunch workshop	Outlook on motion preserving scoliosis surgery - where will we be in the next decade	Per Trobisch (Germany)
12:40 lunch workshop	Requirements for the ideal motion preserving scoliosis implant	Stefan Parent (Canada)
13:00 lunch workshop	Challenges in implementing novel scoliosis implants	René Castelein (Netherlands)

12:00-13:30 Break



Topic: Adolescent Idiopathic Scoliosis 3 / Chair: Stefan Parent (Canada)

13:30	Technical steps in mini-open thoracic and lumbar VBT	Michael Selby (Australia)
13:45	Thoracoscopic technique and limits for VBT	Firoz Miyanji (Canada)
14:00	Effect of non-fusion anterior scoliosis correction on thoracic and lumbar sagittal parameters in AIS - is it detrimental ?	Keyur Akbari (India)
14:15	Hybrid VBT-fusion constructs	Baron Lonner (USA)
14:30	Retrospective matched cohort study in non-fusion anterior scoliosis correction	Keyur Akbari (India)
14:45	Incidental spine and extraspinal anomalies in routine MRI spine of patients with AIS	BT Pushpa (India)
15:00	Is there a longterm spinal cord perfusion concern in multilevel segmental ligation	Firoz Miyanji (Canada)
15:15	Thromboprophylaxis in paediatric deformity surgery - evidence, risks, benefits	Jwalant Mehta (UK)
15:30	Discussion	

16:00-16:30 Break



Topic: Adolescent Idiopathic Scoliosis 4 / Chair: Per Trobisch (Germany)

16:30	Novel semi-rigid posterior AIS correction with composite implants	Areena D'Souza (Germany)
16:45	Reduction techniques in stiff AIS curves	Baron Lonner (USA)
17:00	Vertebral column resection in kyphoscoliosis correction - how I do it	Jwalant Mehta (UK)
17:15	Screw / hook placement and rod rotation / translation in deformity correction - how I do it / technique and patterns	Aurélien Courvoisier (France)
17:30	Technical steps in reconstructive posterior concave costoplasty	Areena D'Souza (Germany)
17:45	Discussion	

18:00 Close



Topic: Dysraphic / Congenital / Syndromic Paediatric Deformity 2 / Chair: Ralf Stücker (Germany)

9:30	Chest and spine growth and consequences of early fusion	Laurel Blakemore (USA)
9:45	Sacral agenesis - treatment strategies	Jwalant Mehta (UK)
10:00	Managing congenital lumbar kyphosis in young children	Ralf Stücker (Germany)
10:15	Challenges in hemivertebra resection - strategy and timing	Masood Shafafy (UK)
10:30	Managing complex combined dysraphism and scoliosis	Rob Dunn (South Africa)
10:45	Managing rigid thoracic kyphosis in ambulatory children	Stefan Parent (Canada)
11:00	Challenges in managing conjoined ribs in congenital spinal deformity	Firoz Miyanji (Canada)
11:15	Is there a role for growth modulation in congenital or dysraphic deformity	René Castelein (Netherlands)
11:30		

12:00-13:30 Break



Lunch Workshop Topic: NSpine Lunch Symposium: Early Childhood Fusion / Chair: Ralf Stücker (Germany)

12:20 lunch workshop	Is there a role for release and growth modulation of congenital fusions in the young child	Firoz Miyanji (Canada)
12:40 lunch workshop	Longterm effects of early childhood fusion procedures	Michael Ruf (Germany)
13:00 lunch workshop	Achieving optimal spine length in young children with severe spinal deformity	Ralf Stücker (Germany)

12:00-13:30 Break



Topic: Neuromuscular Scoliosis / Chair: Masood Shafafy (UK)

13:30	Neuromuscular scoliosis in muscular dystrophy and spinal muscular atrophy - surgical timing and strategies	Masood Shafafy (UK)
13:45	Semi-flexible scoliosis correction in mobile cerebral palsy	Areena D'Souza (Germany)
14:00	Spine surgery challenges in major curves in cerebral palsy	Michael Ruf (Germany)
14:15	Advanced techniques and the use of halo-pelvic traction in large magnitude curves	Masood Shafafy (UK)
14:30	When to instrument to the pelvis or lumbar spine in neuromuscular scoliosis	Michael Ruf (Germany)
14:45	Neurosurgical techniques in managing spasticity	G Balamurali (India)
15:00	Combined deformity correction and dorsal rhizotomy in cerebral palsy	Masood Shafafy (UK)
15:15	Expansile thoracoplasty for thoracic hyperlordosis in cerebral palsy	Areena D'Souza (Germany)
15:30	Discussion	

16:00-16:30 Break



Topic: Dysraphic / Congenital / Syndromic Paediatric Deformity 3 / Chair: Kenneth Cheung (Hong Kong)

16:30	Paediatric spinal deformity correction in bone formation disorders	René Castelein (Netherlands)
16:45	Paediatric deformity in achondroplasia - treatment options and strategies	Stefan Parent (Canada)
17:00	Role of Combined Selective Dorsal rhizotomy and posterior correction of spastic neuromuscular scoliosis	Masood Shafafy (UK)
17:15	Surgical challenges in uncommon syndromic spinal deformity	Patrick Kiely (Ireland)
17:30	Surgical techniques in Scheuermann kyphosis	Stefan Parent (Canada)
17:45	Discussion	

18:00 Close



Topic: Spinal Cord Injury 1 / Chair: Ricardo Rodrigues-Pinto (Portugal)

9:30	Medical management of SCI – current guidelines and evidence	Ian Vlok (South Africa)
9:45	Minimalism but comprehensiveness in Spinal Cord Injury Management	Harvinder Chhabra (India)
10:00	The role of the MRI in Acute SCI	Doris Maier (Germany)
10:15	Clinical assessment in acute spinal cord injury	Ricardo Rodrigues-Pinto (Portugal)
10:30	Biomarkers in spinal cord injury research - an unmet need	Lukas Grassner / Doris Maier (Germany)
10:45	Timing of surgery in spinal cord injury	Harvinder Chhabra (India)
11:00	Expansile duroplasty for acute spinal cord injury	David Welsh (South Africa)
11:15	Acute traumatic central cord syndrome without associated cervical spine fracture: Conservative Vs Surgical Management	Harvinder Chhabra (India)
11:30	Discussion	

12:00-13:30 Break



Topic: Spinal Cord Injury 2 / Chair: Doris Maier (Germany)

13:30	Role of EARLY rehabilitation in improving outcome in acute SCI	Doris Maier (Germany)
13:45	Management of the paralytic abdomen in acute SCI	Harvinder Chhabra (India)
14:00	Bedsore in SCI – economic impact	Nick Kruger (South Africa)
14:15	Management of complex decubital ulcers in spinal cord injury	Doris Maier (Germany)
14:30	Optimising hand and arm function in tetraplegia	Harvinder Chhabra (India)
14:45	SCI - considerations for return to sports	Doris Maier (Germany)
15:00	Advances in sexual rehabilitation in SCI	Harvinder Chhabra (India)
15:15	Current developments in spinal cord stimulation	TBD
15:30	Discussion	

16:00-16:30 Break



Topic: Spinal Cord Injury 3 / Chair: Harvinder Chhabra (India)

16:30	Medicolegal challenges in SCI	Nick Kruger (South Africa)
16:45	Postramatic spinal deformity - treatment strategies	Ricardo Rodrigues-Pinto (Portugal)
17:00	Prevention and management of posttraumatic syringomyelia	Paulo Pereira (Portugal)
17:15	Managing spasticity following spinal cord injuries	Harvinder Chhabra (India)
17:30	End of life in SCI	Nick Kruger (South Africa)
17:45	Discussion	

18:00 Close



Topic: Lumbar Degeneration and Arthroplasty / Chair: Kenneth Cheung (Hong Kong)

9:30	Pathophysiology of lumbar intervertebral disc degeneration, what have I learnt in the past 20 years	Kenneth Cheung (Hong Kong)
9:45	Advanced imaging in disc degeneration	BT Pushpa (India)
10:00	Is preoperative fat infiltration in lumbar spine muscles associated with worse clinical outcome after lumbar interbody fusion	Tiago Barbosa (Portugal)
10:15	Minimally invasive nucleus replacement	Michael Hess (Germany)
10:30	Theatre set-up and midline arthroplasty technique	Biren Desai (Germany)
10:45	Update on evidence and long-term follow-up for lumbar disc replacement	Nuno Neves (Portugal)
11:00	Hybrid and multi-level solutions in lumbar disc arthroplasty	Biren Desai (Germany)
11:15	OLIF in anterior reconstruction	Kenneth Cheung (Hong Kong)
11:30	Discussion	

12:00-13:30 Break



Topic: G-Spine Emerging Technology / Chair: Biren Desai (Germany)

13:30	Advances in 3D printed cage design to facilitate osteoinduction	Robert Schultz (Aesculap)
13:45	Advances in edplate design in osteoconductive interbody fusion devices	Syntropiq (TBD)
14:00	Carbon composite technology in spinal implants	Coligne (TBD)
14:15	Advances in posterior dynamic fixation	Surgalign (TBD)
14:30	Surgify smart bone cutting technology	Surgify (TBC)
14:45	Smart vacuum positioning in spine surgery	Schuchmann (TBC)
15:00	Our vision of spine surgery in the next decade	(TBC)
15:15	Improving pedicle screw purchase with woven anchors	Woven (TBC)
15:30	Discussion	

16:00-16:30 Break



Topic: G-Spine Emerging Technology

16:30		
16:45		
17:00		
17:15		
17:30		
17:45		

18:00 Close

Topic: Keynotes Thursday

8:00	Solutions to spine care in severely resource limited environment	Ian Vlok (South Africa)
8:20	Lessons of life as a spine surgeon	Randal R Betz (USA)
8:40	Lessons of life as a spine surgeon	Dietrich Schlenzka (Finland)
9:00-9:30 Break		



Topic: Thoracolumbar - Pelvic Trauma 1 / Chair: Ian Zondagh (South Africa)

9:30	Effective bracing in T-L and Lumbar fractures	Ian Zondagh (South Africa)
9:45	Less invasive posterior reduction and stabilisation in TL fractures	Stefan Hauck (Germany)
10:00	Anterior column reconstruction in trauma - when and how	Nick Kruger (South Africa)
10:15	Thoracoscopic spondylosis of fresh unstable thoracolumbar spinal fractures	Stefan Hauck (Germany)
10:30	Single-stage Posterior Reconstruction of Unstable Thoracolumbar Burst Fractures	Bruno Santiago (Portugal)
10:45	Dealing with traumatic dural disruption and neural tissue prolapse in thoracolumbar fractures	David Welsh (South Africa)
11:00	Delayed presentation of spinal trauma	Alex van der Horst (South Africa)
11:15	Update on vertebral augmentation techniques in trauma	Stefan Hauck (Germany)
11:30	Discussion	
12:00-13:30 Break		



Lunch Workshop Topic: Delegate Case Forum: Degenerative Panel / Chair: Paulo Pereira (Portugal)

12:20 lunch workshop	Delegate case TBD	Marcio Ramalha Cunha (Brazil)
12:40 lunch workshop	Delegate case TBD	Paulo Pereira (Portugal)
13:00 lunch workshop	Delegate case TBD	Ciaran Bolger (Ireland)
12:00-13:30 Break		



Topic: Thoracolumbar - Pelvic Trauma 2 / Chair: Sanesh Miseur (South Africa)

13:30	Non-missile penetrating injuries of the spine	Ian Vlok (South Africa)
13:45	Sepsis in traumatic spinal injuries - management strategies	David Welsh (South Africa)
14:00	Acute and delayed projectile injuries to the spine: Management challenges and lessons learnt	Ian Vlok (South Africa)
14:15	Spinal fractures in ankylosing spondylitis	Sanesh Miseur (South Africa)
14:30	Insufficiency fractures	Schalk Burger (South Africa)
14:45	Managing combined spine and pelvic injuries	Stefan Hauck (Germany)
15:00	Lumbo pelvic dissociation: indications and techniques for fixation	Sanesh Miseur (South Africa)
15:15	Traumatic sacral fractures	Ian Zondagh (South Africa)
15:30	Discussion	
16:00-16:30 Break		



Topic: Trauma Case Discussion Forum: Thoracic Fractures / Chair: Alex van der Horst (South Africa)

16:30	Case discussion - challenging case from my practice	Stefan Hauck (Germany)
16:45	Case discussion - challenging case from my practice	Bruno Santiago (Portugal)
17:00	Case discussion - Long level coronal thoracic fractures	Johan Davis (South Africa)
17:15	Case discussion -Thoracic instrumentation in severe obesity	Alex van der Horst (South Africa)
17:30	Case discussion - High thoracic fracture that is neurologically incomplete - go long?	Ian Vlok (South Africa)
17:45	Case discussion - post-traumatic kyphosis in thoracic fractures	David Welsh (South Africa)
18:00 Close		



Topic: Neuromonitoring 1 / Chair: Winfried Roth (Germany)

9:30	Neuromonitoring in spine surgery - biophysical principles of MEP and SSEP	Fa Langer (Germany)
9:45	Anaesthetic considerations in neuromonitoring cases - optimising anaesthetic for signalintensity	Winfried Roth (Germany)
10:00	Advanced neuromonitoring techniques in spine surgery	Fa Langer (Germany)
10:15	Neuromonitoring in the very young child - is it different?	Fa Langer (Germany)
10:30	Neuromonitoring in patients with epilepsy - what is the risk?	Fa Langer (Germany)
10:45	Epidural analgesia and neuromonitoring	Fabian Geiselbrecht (Germany)
11:00	Bite injury in use of MEP monitoring	Robert Nowicki (UK)
11:15	Intraoperative Neuromonitoring of pelvic nerves	Fa Langer (Germany)
11:30	Discussion	

12:00-13:30 Break



Lunch Workshop Topic: Fa Langer Lunch Symposium: Neuromonitoring Incidents
Chair: Patrick Kiely (Ireland)

12:20 lunch workshop	Strategies to reduce neurologic injury during deformity correction surgery	Kenneth Cheung (Hong Kong)
12:40 lunch workshop	Interpreting IONM alerts during surgery for AIS	Randal Betz (USA)
13:00 lunch workshop	Surgical team actions in neuromonitoring signal loss	Patrick Kiely (Ireland)

12:00-13:30 Break



Topic: Neuromonitoring 2 / Chair: Randal Betz (USA)

13:30	Identifying neurological high risk deformity cases	Kenneth Cheung (Hong Kong)
13:45	Surgical strategy in the child with spine deformity and neurological compromise	Patrick Kiely (Ireland)
14:00	MEP loss - how low can you go ?	Randal Betz (USA)
14:15	Conducting wake-up tests for monitoring loss	Robert Nowicki (UK)
14:30	Surgical decision making and salvage strategy in high grade intraoperative signal loss	Masood Shafafy (UK)
14:45	Perioperative management of the child with neurological deficit following surgery	Randal Betz (USA)
15:00	Returning to theatre following signal loss	Patrick Kiely (Ireland)
15:15	Using neuromonitoring in neurosurgical spine procedures to avoid deficit	Fa Langer (Germany)
15:30	Discussion	

16:00-16:30 Break

Topic: Neuromonitoring 2 / Chair: Fa Langer (Germany)

16:30	Hands-on demonstration and tutorial	Fa Langer (Germany)
16:45	Hands-on demonstration and tutorial	Fa Langer (Germany)
17:00	Hands-on demonstration and tutorial	Fa Langer (Germany)
17:15	Hands-on demonstration and tutorial	Fa Langer (Germany)
17:30	Hands-on demonstration and tutorial	Fa Langer (Germany)
17:45	Hands-on demonstration and tutorial	Fa Langer (Germany)

18:00 Close





Topic: Cervical and Intraspinal Tumours / Chair: G Balamurali (India)

9:30	Intraspinal tumours - what the surgeon needs to look for on imaging	Paulo Pereira (Portugal)
9:45	Recognising and treating spinal meningioma	G Balamurali (India)
10:00	Surgical strategies in challenging ependymomas	Jake Timothy (UK)
10:15	MIS surgery for spinal cord tumours	G Balamurali (India)
10:30	Evolving MIS endoscopic techniques in tumour resection	Marcio Ramalha Cunha (Brazil)
10:45	Know your enemy - behaviour of different spine metastasis types	Alex Disch (Germany)
11:00	Indications and strategies for separation surgery	Paulo Pereira (Portugal)
11:15	Ablation technology in spinal metastasis	Alex Disch (Germany)
11:30	Discussion	

12:00-13:30 Break



Topic: Spinal Metastasis / Chair: Dan Resnick (USA)

13:30	When and how to use carbon implants in spinal tumour surgery	Alex Disch (Germany)
13:45	Management strategies in metastatic tumour recurrence	Bruno Santiago (Portugal)
14:00	When is aggressive en-bloc excision still indicated in spinal metastasis	Alex Disch (Germany)
14:15	Assessing craniocervical spine tumours and surgical planning	Ciaran Bolger (Ireland)
14:30	Technical advances in craniocervical reconstructive techniques	Bruno Santiago (Portugal)
14:45	Balancing tumour clearance and surgical morbidity in craniocervical surgery	Marcio Ramalha Cunha (Brazil)
15:00	Handling of the vertebral artery in cervical spine tumour surgery	Dan Resnick (USA)
15:15	Transoral microsurgical or endoscopic transnasal craniocervical surgery - when to choose which	Ciaran Bolger (Ireland)
15:30	Discussion	

16:00-16:30 Break



Topic: Primary and Paediatric Spine Tumours / Chair: Alex Disch (Germany)

16:30	Overview of paediatric spine tumours and current management concepts	Laurel Blakemore (USA)
16:45	Treatment options in Ewings Sarcoma	Alex Disch (Germany)
17:00	All-posterior total en-bloc spondylectomy for treatment of lumbar vertebral Ewing Sarcoma	Sara E Diniz (Portugal)
17:15	Reconstructive tumour surgery of the spine in children	Alex Disch (Germany)
17:30	Challenges of treating paediatric spine tumours in children with substantial growth expectation	Laurel Blakemore (USA)
17:45	Discussion	

18:00 Close



Topic: Spinal Endoscopy / Chair: Miguel Loureiro (Portugal)

9:30	Spine endoscopy in Azores Islands - a challenge how and why we started	Luis Soares (Portugal)
9:45	Advances in transforaminal endoscopic techniques	Frank Hassel (Germany)
10:00	Endoscopic transforaminal lumbar discectomy / preliminary clinical results	Sara E. Diniz (Portugal)
10:15	Advances in interlaminar endoscopic techniques	Miguel Loureiro (Portugal)
10:30	Utilising endoscopic techniques in combined adult deformity and neural compression	Frank Hassel (Germany)
10:45	State of the art microsurgical techniques in the lumbar spine - what the endoscope cannot do	Ciaran Bolger (Ireland)
11:00	Emerging possibilities in biportal endoscopy	Frank Hassel (Germany)
11:15	Complications in endoscopic spine surgery	Miguel Loureiro (Portugal)
11:30	Discussion	

12:00-13:30 Break



Topic: Lateral MIS Surgery / Chair: Navin Verghese (UK)

13:30	Theatre set-up and lateral L5/S1 ALIF technique	Jake Timothy (UK)
13:45	Theatre set-up and pre- and transpoas lateral access techniques	Navin Verghese (UK)
14:00	MIS lateral thoracolumbar techniques	Jake Timothy (UK)
14:15	Theatre set-up and combined posterior / lateral single position surgery	Navin Verghese (UK)
14:30	Vascular complications in lateral surgery - strategies	Jake Timothy (UK)
14:45	Radiologic and clinical outcomes using "target" view fluoroscopic technique for inserting 311 percutaneous pedicle screws	Jeff Golan (USA)
15:00	Combining endoscopy and fusion	Miguel Loureiro (Portugal)
15:15	Minimising dural leaks in MIS surgery	G Balamurali (India)
15:30	Discussion	

16:00-16:30 Break



Topic: Anaesthesia Aspects of Paediatric Deformity Surgery / Chair: Robert Nowicki (UK)

16:30	Blood management in children	Fabian Geiselbrecht (Germany)
16:45	Analgesia in the very young child	Winfried Roth (Germany)
17:00	Epidural catheter analgesia after paediatric spine deformity surgery	Fabian Geiselbrecht (Germany)
17:15	Perioperative iv and oral pain management in children	Winfried Roth (Germany)
17:30	Effect of enhanced recovery pathway resulting in reduced length of stay and opioid consumption after non-fusion anterior scoliosis surgery for AIS	Keyur Akbari (India)
17:45	Discussion	

18:00 Close

Topic: Keynotes Friday

8:00	The challenge of effective surgical training	Bronek Boszczyk (NSpine)
8:20	Spinal training in the time of Covid - How far behind are we?	Ian Vlok (South Africa)
8:40	TBD	Portuguese Spine Society
9:00-9:30 Break		



Topic: Spine Trauma Cases - as bad as it gets / Chair: South African Spine Society

9:30	Case discussion - challenging case from my practice	South African Spine Society
9:45	Case discussion - challenging case from my practice	Stefan Hauck (Germany)
10:00	Case discussion - challenging case from my practice	Alex Disch (Germany)
10:15	Case discussion - challenging case from my practice	Ricardo Rodrigues-Pinto (Portugal)
10:30	Case discussion - challenging case from my practice	South African Spine Society
10:45	Case discussion - challenging case from my practice	Stefan Hauck (Germany)
11:00	Case discussion - challenging case from my practice	Alex Disch (Germany)
11:15	Case discussion - challenging case from my practice	South African Spine Society
11:30	Case discussion - challenging case from my practice	



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Topic: Deformity Cases - Challenging Case Discussion / Chair: Portuguese Spine Society

9:30	Case discussion - challenging case from my practice	Nuno Alegrete (Portugal)
9:45	Case discussion - challenging case from my practice	Bronek Boszczyk (Germany)
10:00	Case discussion - challenging case from my practice	Kenneth Cheung (Hong Kong)
10:15	Case discussion - challenging case from my practice	Laurel Blakemore (USA)
10:30	Case discussion - challenging case from my practice	Nuno Alegrete (Portugal)
10:45	Case discussion - challenging case from my practice	Bronek Boszczyk (Germany)
11:00	Case discussion - challenging case from my practice	Kenneth Cheung (Hong Kong)
11:15	Case discussion - challenging case from my practice	Laurel Blakemore (USA)
11:30	Case discussion - challenging case from my practice	



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Topic: Degenerative & infection Cases - Challenging Case Discussion / Chair: Portuguese Spine Society

9:30	Case discussion - challenging case from my practice	Nuno Neves (Portugal)
9:45	Case discussion - challenging case from my practice	Jake Timothy (UK)
10:00	Case discussion - challenging case from my practice	Navin Verghese (UK)
10:15	Case discussion - challenging case from my practice	Miguel Loureiro (Portugal)
10:30	Case discussion - challenging case from my practice	Nuno Neves (Portugal)
10:45	Case discussion - challenging case from my practice	Jake Timothy (UK)
11:00	Case discussion - challenging case from my practice	Navin Verghese (UK)
11:15	Case discussion - challenging case from my practice	Miguel Loureiro (Portugal)
11:30	Case discussion - challenging case from my practice	

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