ISSLS Instructional Course  
Santiago de Chile, March 17-18, 2014  

*Meeting hosts: Roberto Postigo and Robert Gunzburg*

<table>
<thead>
<tr>
<th>ISSLS Faculty</th>
<th>Local Faculty</th>
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<tr>
<td>Ch. Cedraschi (Switzerland)</td>
<td>G. Arriagada</td>
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<td>C. Colloca (USA)</td>
<td>A. Chahin</td>
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<td>R. Gunzburg (Belgium)</td>
<td>A. Dowling</td>
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<td>R. Guyer (USA)</td>
<td>B. Marre</td>
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<td>S. Hu (USA)</td>
<td>S. Mobarec</td>
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<td>M. Nordin (USA)</td>
<td>M. Molina</td>
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<td>T. Oxland (Canada)</td>
<td>S. Pantoja</td>
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<td>M. Szpalski (Belgium)</td>
<td>M. Perez</td>
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Monday, March 17

8:00-8:05  Introduction.

**Basics**

8:05-8:15  History of ISSLS
*Dr. M. Szpalski*

8:15-8:30  Biomechanics of the lower back
*Dr. T. Oxland*

8:30-8:45  Biomechanics of frequently used spinal implants
*Dr. T. Oxland*

8:45-8:55  What does biomechanics tell us about adjacent level changes in the lumbar spine?
*Dr. T. Oxland*

8:55-9:05  Do we need scientific journals?
*Dr. R. Gunzburg*

9:05-9:15  Discussion

9:15-9:45  **Coffee break**

**Low back Pain Module**

9:45-10:00  The role of neuromuscular system in low back pain
*Dr. C. Colloca*

10:00-10:15  Introduction to the bio-psyhosocial model
*Dr. Ch. Cedraschi*

10:15-10:30  Psychological aspects for surgical triage
*Dr. Ch. Cedraschi*

10:30-10:45  Lumbar spinal manipulation, biomechanical responses
*Dr. C. Colloca*

10:45-11:00  Discussion

11:00-11:15  To fuse or not to fuse the lumbar spine, what are outcomes from RCTs
*Dr. M. Nordin*

11:15-11:30  Adjacent segment disease: reality or fiction
*Dr. M. Szpalski*

11:30-11:45  Limitations of TDR
*Dr. S. Hu*

11:45-12:00  What is 'dynamic fusion'
*Dr. R. Guyer*

12:00-12:10  Discussion

12.10-14.15  **Lunch Workshops**

**Lumbar stenosis Module**

14:15-14:30  Lumbar stenosis: etypoathogenesis, diagnosis
*Dr. R. Gunzburg*

14:30-14:45  Lumbar stenosis natural history. Is there a place for conservative treatment?
*Dr. A. Silva*

14:45-15:00  Lumbar stenosis: conservative decompression
*Dr. R. Gunzburg*

15:00-15:15  Intracanal symptomatic synovial cyst: management
*Dr. B. Marre*

15:15-15:45  Case presentation and panel discussion.
*Dr. J. Urrutia*
15.45-16.15 Coffee break
16:15-16:30 A low cost model for referral to surgery in rural and nonrural areas  
   Dr. M. Nordin
16:30-16:45 Hemostasis in spinal surgery  
   Dr. M. Szpalski
16:45-17.00 Lumbar stenosis: posterolateral vs TLIF vs 360 in monosegmental lumbar fusions  
   Dr. A. Chahin
17:00-17:15 Lumbar stenosis: multilevel decompression and fusion  
   Dr. A. San Martin
17:15-17:30 Degenerative spondylolisthesis  
   Dr S. Hu
17:30-17:45 Back pain after fusion surgery: epidemiology, etiology and treatment options  
   Dr. M. Molina
17:45-18:00 Bone grafting in lumbar spine surgery  
   Dr A. Silva
18:00-18:15 BMP, still a place for it in spinal surgery?  
   Dr. R. Guyer
18:15-18:30 Case presentation and panel discussion

Tuesday, March 18

Aging Spine

8:00-8:15 Osteoporosis: the role of the spinal surgeon in diagnosis and treatment  
   Dr. A. Chahin
8:15-8:30 Biomechanical challenges of spinal fixation in the aging spine  
   Dr. T. Oxland
8:30-8:45 Avoiding implant failures in osteoporotic patients  
   Dr. D. Witt
8:45-9:00 Vertebral osteoporotic fracture: treatment selection conservative, MISS, open?  
   Dr. S. Mobarec
9:00-9:15 Conservative treatment of osteoporotic fractures: how, when, who?  
   Dr. M. Valencia
9:15-9:30 Vertebroplasty and kyphoplasty outcomes in blinded and un-blinded randomized trials  
   Dr. M. Nordin
9:30-9:45 Complications of VOF.: management and avoidance  
   Dr. R. Yurak
9:45-10:00 Case presentation and panel discussion  
   Dr. R. Postigo
10:00-10:30 Coffee break

Sagittal Imbalance

10.30-10:45 The concept of spinal balance.  
   Dr S. Hu
10:45-11:00 Spinal balance and spondylolisthesis. Is it important in planning surgery?  
   Dr. S. Pantoja
11:00-11:15 Adult degenerative scoliosis: diagnosis, Treatment options and indications  
   Dr S. Hu
11:15-11:30 Adult degenerative scoliosis: surgical treatment  
   Dr. S. Pantoja
11:30-11:45 Surgical treatment of sagittal imbalance  
   Dr R. Postigo
11:45-12:00 Case presentation and panel discussion: adult degenerative scoliosis treated by surgery  
   Dr. S. Pantoja
12:00-12:15 Case Presentation and panel discussion: sagittal imbalance treated with PSO
12.15-14:00  Lunch Workshops

Minimally Invasive Lumbar Spine surgery

14:00-14:15  Percutaneous screws and radiation: to patient and surgeon.
  Dr. R. Guyer
14:15-14:30  Endoscopic disc surgery: limitations and advantages
  Dr. A. Dowling
14:30-14:45  MISS foraminotomy for cervical spine
  Dr. A. Dowling
14:45-15:00  MISS tube disc surgery
  Dr. C. Thibaut
15:00-15:15  MISS decompression without fusion: indications and technique
  Dr. A. San Martin
15:15-15:30  MISS decompression and fusion; indications and technique
  Dr. R. Postigo
15:30-15:45  XLIF - TLIF - PLF anterior fusion: is anyone better than the others? Analysis of literature
  Dr. M. Perez
15:45-16:00  Interspinous spacers: is there a place for them still?
  Dr. G. Arriagada
16:00-16:15  Round table: case presentation; MISS TLIF+ Pedicular screws in degenerative spondylolisthesis
  Dr. R. Postigo
16:15-16:30  Case presentation and floor discussion: disc herniation treated by percutaneous endoscopic surgery
  Dr A. Dowling
16:30-16:45  Case presentation and floor discussion: degenerative scoliosis treated by XLIF
  Dr. M. Perez
16:45-17:00  Final conclusions. Acknowledgment
  Dr. R. Gunzburg