## Conference Program | Friday 8 April 2016

### 7.15 - 8.15am
**Depuy Synthes Breakfast Session 1**  
Rooms 203 / 204, Level 2  
Breakfast from 7.00  
Implant-based correction: Early Australian experience

### 8.00 - 8.45am
**Arrival Tea & Coffee**  
Melbourne Room 1, Level 2

### 8.45am
**Conference Opening**  
Dr Peter Woodland & A/Prof Richard Williams

### 9.00 - 10.00am
**Free Paper Session 1**  
Cervical Spine  
See abstracts pages 36 - 39

Chair - Prof Brian Freeman  
Rooms 203 / 204, Level 2

1. **Is navigation required to avoid vertebral artery injury in C1/2- fusion?**  
   *Prof Veit Rohde*

2. **Subaxial cervical unilateral facet joint fractures: A comparison of the functional, clinical and radiological outcomes of non-operative and surgical management**  
   *Ms Rebecca Lewis*

3. **Impact of age on patient outcomes after total disc replacement or anterior cervical discectomy and fusion: Comparison at 5-year follow-up**  
   *Dr Armen Khachatryan*

4. **Stand-alone interbody devices in the treatment of cervical spine disease**  
   *Dr Scott Blumenthal*

5. **Does cervical kyphosis affect implant choice and outcomes: Results from 5 year data comparing ACDF to TDR**  
   *Dr Armen Khachatryan*

6. **Assessment of subsidence using quantitative motion analysis on first 30 patients using additive manufactured titanium truss interbody cervical cages.**  
   *Dr Cameron Carmody*

### 9.48am
**Combined Discussion**

### 10.00am
**Morning Tea**  
Melbourne Room 1, Level 2

### 10.30 - 11.30am
**Society Session**  
See abstracts page 40

Chair - A/Prof Richard Williams  
Rooms 203 / 204, Level 2

1. **Billing practices / MBS costs**  
   *Dr Roy Carey*

2. **MBS Review**  
   *Dr Peter Wilde*

3. **Spine Surgery within compensation systems: The past and the future**  
   *Dr Ian Harris*
11.30 - 12.30pm FREE PAPER SESSION 2 | TRAUMA  See abstracts pages 41 - 45
Chair - A/Prof Susan Liew  | Rooms 203 / 204, Level 2
11.30 2.1 Redefining traumatic central cord syndrome: Does injury morphology or neurology provide better discrimination of neurological outcomes?
Mr Jin Tee
11.38 2.2 Early decompression following cervical spinal cord injury:
Examining the process of care from accident scene to surgery in Australia and New Zealand
Dr Camila Battistuzzo
11.46 2.3 The nexus criteria are insufficient to exclude cervical spine fractures in older blunt trauma patients
Mr Gabriel Paykin
11.54 2.4 Subaxial cervical facet dislocation:
A 10 year clinical and radiographic review from a single centre
Mr Ryan Quarrington
12.02 2.5 Pedicle screw fixation, reduction and stabilization for thoraco-lumbar fractures without major neurologic deficit: A comparison of minimally invasive and open techniques
Dr Francis Brooks
12.10 2.6 Spinal cord injury impacts bone endocrine functions
Dr Jillian Clark
12.18 COMBINED DISCUSSION
12.30pm LUNCH | Melbourne Room 1, Level 2
1.30 - 3.00pm SYMPOSIUM 1 | See abstracts page 46
Chair - Dr Peter Woodland  | Rooms 203 / 204, Level 2
1.30 Distilling utility from innovation: A South African perspective
Prof Robert Dunn
2.00 Spinal osteotomy: Clinical outcome, pitfalls and complications
Prof Bobby KW Ng
2.30 DEBATE Minimally invasive lumbar spinal fusion techniques are the way of the future
Prof Bobby KW Ng | The case for
Prof Robert Dunn | The case against
DISCUSSION
3.00pm AFTERNOON TEA | Melbourne Room 1, Level 2
3.30 - 5.30pm | FREE PAPER SESSION 3 | DEGENERATIVE LUMBAR  
See abstracts pages 47 - 54

Chair - A/Prof Richard Williams  |  Rooms 203 / 204, Level 2

3.30
3.1 Indirect decompression of the neural elements by a lateral lumbar interbody cage: 
Radiological & clinical results  
Dr Charlie Bouthors

3.38
3.2 Analysis of hospital length of stay following lumbar anterior / posterior combined fusion
Are there a disadvantage associated with shorter stays?  
Dr Scott Blumenthal

3.46
3.3 Who benefits most from individualised physiotherapy versus advice for low back disorders:
Effect modifier analysis of randomised controlled trial data  
Dr Andrew Hahne

3.54
3.4 Lumbar discectomy patients at high risk of reherniation: Massive defects in a primary lumbar
Discectomy population  
Prof Claudius Thomé

4.02
3.5 Does pre-operative magnetic resonance imaging of the lumbar multifidus muscle predict
Clinical outcomes following lumbar spinal decompression for symptomatic spinal stenosis?  
Dr Mario Zotti

4.10
3.6 Interspinous process spacers versus traditional decompression for lumbar spinal stenosis:
Systematic review and meta-analysis  
Mr Kevin Phan

4.18 | COMBINED DISCUSSION

4.30
3.7 ALIF integrated screw cages: Intrinsic load generation, subsidence and torsional stability  
Mr Yusuf Assem

4.38
3.8 Individualised physiotherapy versus advice for people with low back disorders:
A 2-year follow-up of a randomised controlled trial  
Mr Luke Surkitt

4.46
3.9 Is there a standard for operative magnification for simple discectomy?  
Dr Francis Brooks

4.54
3.10 Individualised functional restoration versus advice for lumbar disc herniation with associated
Radiculopathy: A randomised controlled trial  
Dr Andrew Hahne

5.02
3.11 Classification & agreement of sagittal balance and lumbopelvic compensations in adults with scoliosis  
Mr Larry Cohen

5.10
3.12 Prognostic factors for people with low back pain receiving physiotherapy  
Mr Matt Richards

5.18 | COMBINED DISCUSSION

5.30 - 7.00pm | WELCOME RECEPTION  | Melbourne Room 1, Level 2
7.15 - 8.15am  NUVASIVE BREAKFAST SESSION 2  |  Rooms 203 / 204
Breakfast from 7.00  |  Why alignment matters

8.00 - 8.30am  ARRIVAL TEA & COFFEE  |  Melbourne Room 1, Level 2

8.30 - 10.00am  FREE PAPER SESSION 4  |  TUMOUR; NEW TECHNOLOGY  Abstracts pages 56 - 62
Chair -  Dr Gerald Quan  |  Rooms 203 / 204, Level 2

8.30  4.1  Metastatic spine tumours: An audit of operative management in a regional centre
Dr Neil Mackay

4.2  Withdrawn

8.38  4.3  The influence of histological subtype in predicting survival of lung cancer patients
with spinal metastases
Miss Kimberly-Anne Tan

8.46  4.4  Molecular mechanisms behind growth and invasion of spinal metastases from
human breast cancer in a mouse model
Miss Zumana Khair

8.54  4.5  Is spinal surgery safe in octogenarians?
Dr Harrison Mihailidis

9.02  COMBINED DISCUSSION

9.10  4.6  Biomechanical analysis of S2AI fixation in long posterior fusion constructs
Dr Chester E Sutterlin III

9.18  4.7  A prospective, randomized clinical trial investigating an anular closure device:
Interim safety analysis
Prof Claudius Thomé

9.26  4.8  Early clinical results of cortical versus traditional open pedicle screw techniques
in posterior lumbar interbody fusion
Dr Paul Licina

9.34  4.9  Complications associated with the anterior approach to the lumbar spine:
Analysis of 2,881 consecutive cases during a 6-year period
Dr Scott Blumenthal

9.42  4.10  Accuracy of robot-assisted versus fluoroscopy guided pedicle screw insertion for
metastatic spinal disease: A matched cohort comparison
Prof Veit Rohde

9.50  COMBINED DISCUSSION

10.00am  MORNING TEA  |  Melbourne Room 1, Level 2
**CONFERENCE PROGRAM | SATURDAY 9 APRIL 2016**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker(s)</th>
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| 10.30 - 11.10am | PRESIDENT’S SESSION | See abstract page 63  
Chair - Dr Peter Woodland | Rooms 203 / 204, Level 2  
The futility of surgery for burst fractures  
Dr David Jaffray |

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tr>
<td>11.10</td>
<td>5.1</td>
<td>A biomechanical analysis of growing rods used in the management of early onset scoliosis using a robotic testing facility</td>
<td>Dr Graham Irvin</td>
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<td>11.18</td>
<td>5.2</td>
<td>Back pain and adolescent idiopathic scoliosis: A descriptive, correlational study</td>
<td>Dr Jean Theroux</td>
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<tr>
<td>11.26</td>
<td>5.3</td>
<td>Maintenance of spine flexibility with the use of semi-constrained growing rods for early onset scoliosis in children</td>
<td>Dr Geoff Askin</td>
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<tr>
<td>11.34</td>
<td>5.4</td>
<td>Perioperative complications associated with spinal fusion in Rett syndrome</td>
<td>Mrs Maree Izatt</td>
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<td>11.42</td>
<td>5.5</td>
<td>A critically appraised topic assessing the effect of physiotherapeutic scoliosis-specific exercises on Cobb angle progression in adolescent idiopathic scoliosis</td>
<td>Ms Rebecca Harding</td>
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<td>11.50</td>
<td>5.6</td>
<td>The early onset scoliosis biobank initiative</td>
<td>Ms Monique Garcia</td>
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<td>11.58</td>
<td>5.7</td>
<td>When does compensation for lumbar stenosis become a clinical sagittal plane deformity?</td>
<td>Dr Aaron Buckland</td>
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<td>12.06</td>
<td>5.8</td>
<td>School screening for scoliosis: A review of the world literature and the place of the National Self-Detection Program for scoliosis (NSDP)</td>
<td>Dr Andrew Cree</td>
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<td>12.14</td>
<td>5.9</td>
<td>Analysis of pedicle morphometry in adolescent idiopathic scoliosis</td>
<td>Dr Colin Davis</td>
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<td>12.22</td>
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<td>COMBINED DISCUSSION</td>
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<tr>
<td>12.30pm</td>
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<td>LUNCH</td>
<td>Melbourne Room 1, Level 2</td>
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## Conference Program | Saturday 9 April 2016

### 1.30 - 3.00pm SYMPOSIUM 2  
See abstracts page 70

Chair - **Dr Rob Kuru**  | Rooms 203 / 204, Level 2

1.30 Where 3rd world meets 1st world: A spine surgeon’s playground  
**Prof Robert Dunn**

2.15 Anterior spinal fusion for thoracolumbar scoliosis  
**Prof Bobby KW Ng**

### 3.00pm  
**AFTERNOON TEA**  | Melbourne Room 1, Level 2

### 3.30 - 4.30pm THE GETTING OF WISDOM  
See abstracts page 71

Chair - **Dr Peter Woodland**  | Rooms 203 / 204, Level 2

3.30 Making a little mistake pay  
**Dr Peter Turner**

3.50 Looking for balance  
**Dr Kevin Seex**

4.10 The business of medicine  
**Dr Paul Licina**

### 4.30 - 6.00pm SSA BUSINESS MEETING

### 7.00 - 11.00pm SSA CONFERENCE GALA DINNER

*Rivers Edge Events | 18 - 38 Siddeley St, Melbourne*

Rivers Edge Events is a fifteen minute walk from MCEC however coaches are available and will depart from MCEC, Hilton and the Grand Hotel at 6.45pm.
### Sunday 10 April 2016

**7.15 - 8.15am**  
**SIGNUS AUSTRALIA BREAKFAST SESSION 3**  
*Room 203 / 204*  
**Chair:** Mr Tiew Han  
**Improving osseointegration in the spinal surgery with intervertebral fusion implants**  
**Presenters:** Prof Bill Walsh, Mr Erik Siedler, Mr Michael Wong, Mr Andrew Miles

**8.00 - 8.30am**  
**ARRIVAL TEA & COFFEE**  
*Foyer 2.3, Level 2*

**8.30 - 10.00am**  
**FREE PAPER SESSION 6**  
**NEW TECHNOLOGY; COMPLICATIONS**  
*Pages 74 - 81*  
**Chair:** Dr Peter Wilde  
**Rooms 203 / 204, Level 2**

- **6.1** Complications of anterior spine surgery: A two year retrospective study of a two surgeon practice  
  **Dr Laurence McEntee**

- **6.2** Mechanical and geometric analysis of fenestration design for polymethylmethacrylate augmented pedicle screw fixation  
  **Dr Michael Selby**

- **6.3** Evaluation of clinical and radiological outcome following XLI for single-level low grade lumbar spondylothesis: Emphasis on sagittal balance and deformity correction  
  **Dr Li Kuan Chang**

- **6.4** Complications of cortical screw fixation in the lumbar spine: A 3-year learning curve  
  **Dr Tharsa Thillainadesan**

- **6.5** Management of unstable fractures of the ankylosed spine using a minimally invasive surgica technique: A comparative cohort study  
  **Dr Francis Brooks**

- **6.6** Clinical outcomes of Oblique Lumbar Interbody Fusion (OLIF)  
  **Mr Charles Howard**

- **6.7** Combined aortoiliac and anterior lumbar spine reconstruction  
  **Dr Laurence McEntee**

- **6.8** Factors influencing the need for revision lumbar discectomy: How important is annular defect size?  
  **Dr Paul Licina**

- **6.9** Risk of total hip arthroplasty dislocation after spinal deformity correction  
  **Dr Aaron Buckland**

- **6.10** Subsidence following Anterior Lumbar Interbody Fusion (ALIF): A prospective radiographic study  
  **Dr Prashanth Rao**

- **6.11** The viscoelastic LP-ESP lumbar disc prosthesis with 6 degrees of freedom: A 5 year prospective study in 88 patients. The concept of “silent block prosthesis” fulfills our expectations in terms of clinical outcomes and restitution of range of motion and centers of rotation  
  **Prof Jean Yves Lazennec**

**9.58**  
**COMBINED DISCUSSION**

**10.10am**  
**MORNING TEA**  
*Foyer 2.3, Level 2*
0.30 7.1 Ex vivo loading of 4WEB truss anterior lumbar interbody implant induces strains consistent with mechanobiological maintenance of bone homeostasis
Dr Cameron Carmody

0.38 7.2 Intervertebral cage position influences lordosis in lumbar spine reconstruction with Posterior Lumbar Interbody Fusion (PLIF): A controlled cadaveric study
Dr Peter Robertson

0.46 7.3 Creating lordosis in transforaminal and posterior lumbar interbody fusion (TLIF/PLIF): The impact of surgical technique - A controlled cadaveric study
Dr Peter Robertson

0.54 7.4 The effect of degeneration on the six degree of freedom mechanical properties of human spine segments
Miss Dhara Amin

1.02 COMBINED DISCUSSION

1.10 7.5 How does vibration disrupt the disc? A mechanical and microanatomical investigation
Dr Peter Robertson

1.18 7.6 Loading the entire vertebral endplate leads to a four-fold increase in compressive strength
Dr Chester E Sutterlin III

1.26 7.7 Multi-level histological analysis of an ovine cervical spine intervertebral disc degeneration mode
Dr Christopher Colloca

1.34 7.8 Determinants of segmental lordosis in lumbar interbody fusion using a biomimetic spinal construct
Dr Shanu Gambhir

1.42 7.9 Changes in tissue diffusion and anisotropy following mechanical loading of ovine anulus fibrosus: A pilot study using magnetic resonance imaging
Dr J Paige Little

1.50 COMBINED DISCUSSION

12.00 - 12.30pm AWARDS & CONFERENCE CLOSE