



Conference Program Overview

FRIDAY 9 APRIL 2010	SATURDAY 10 APRIL 2010	SUNDAY 11 APRIL 2010
7.00am Breakfast <i>Industry Exhibition area</i>	7.00am Breakfast <i>Industry Exhibition area</i>	7.00am Breakfast <i>Industry Exhibition area</i>
8.30am FORMAL OPENING		8.00am BUSINESS MEETING 2
8.45am ORAL PAPERS I Scoliosis (2) Discussion Endoscopic scoliosis (4) Discussion	9.00am ORAL PAPERS 4A & 4B 4A: Cervical Spine (4) Discussion 4B: Basic Science (4) Discussion	9.00am ORAL PAPERS 6 Tumour/Trauma (1) Discussion Early Trauma (3) Discussion Trauma management / Outcome (3) Discussion
10.05am Morning Tea	10.45am Morning Tea	10.30am Morning Tea
10.35am ORAL PAPERS 2A & 2B 2A: Basic Disc (4) Discussion 2B: Disc Arthroplasty (4) Discussion	11.15am PRESIDENT'S SESSION Professor Paul Anderson Basic science of disc arthroplasty Professor Paul Anderson Clinical results and comparative effectiveness of cervical disc arthroscopy Mr Paul Mernagh Cervical disc arthroplasty in Australia: Incremental cost effectiveness - results of a formal economic model PANEL DISCUSSION	11.00am ORAL PAPERS 7 Minimally Invasive Surgery (3) Discussion Risks in Practice (2) Discussion 12.05pm AWARD PRESENTATIONS
12.20pm Lunch	12.45pm Lunch	12.35pm Conference closes
1.20pm EVIDENCE SYMPOSIUM Dr Adam La Caze Levels of evidence: A help or a hindrance Dr Peter McCombe Randomised placebo controlled trials of vertebroplasty: A critical analysis Professor Paul Anderson Randomised controlled trials of surgical treatment for lumbar disc herniation: A critical analysis Professor Kerrie Mengersen New & alternate statistical methods for evaluating clinical evidence PANEL DISCUSSION	1.45pm ORAL PAPERS 5 Back Pain (2) Discussion Back Pain (3) Discussion	1.00pm Bus transfer to airport for all departing delegates
3.20pm Afternoon Tea	2.50pm Afternoon Tea	
3.50pm ORAL PAPERS 3 Lumbar spine (4) Discussion Lumbar spine (3) Discussion	3.20pm MODERATED POSTER SESSION 4.00pm Session closes 4.20pm BUSINESS MEETING I	
5.21pm Session closes		
5.30 - 7.00pm Welcome Reception Industry Exhibition Hall C	6.45 - 7.00pm Buses depart for Conference Dinner at Airforce Museum	



Conference Program | **FRIDAY 9 APRIL 2010**

7.00am Light Breakfast in Industry Exhibition
8.30am Conference Opening

8.45am ORAL PAPER SESSION I | SCOLIOSIS | Chair Bruce McPhee

8.45am **I.1** Correction of main thoracic adolescent idiopathic scoliosis using pedicle screws:
The relationship between implant density and coronal and sagittal correction
Mr Gerald Quan*, **Mr Mike Gibson** *Austin Hospital, Melbourne, Vic, Australia*

8.53am **I.2** Predictors of serum chromium levels following stainless steel posterior spinal instrumentation for
adolescent idiopathic scoliosis
Dr Matthew Rackham*, **Dr Thomas Cundy**, **Ms Georgia Antoniou**, **Dr Brian Freeman**,
Dr Leanne Sutherland, **Dr Peter Cundy** *Women's and Children's Hospital, Adelaide, SA, Australia*

9.01am DISCUSSION

9.11am **I.3** The relationship between deformity correction & clinical outcomes after thoracoscopic scoliosis surgery:
A prospective series of 100 patients
A/Prof Clayton Adam*, **Mrs Maree Izatt**, **Dr Rob Labrom**, **Dr Geoff Askin**
Paediatric Spine Research Group, Queensland University of Technology, Brisbane, Qld, Australia

9.19am **I.4** Secondary curve behaviour in LENKE IC class adolescent idiopathic scoliosis following video
assisted thoracoscopic spinal fusion
Dr Mostyn Yong*, **Dr Eugene Verzin**, **Mrs Maree Izatt**, **A/Prof Clayton Adam**, **Dr Rob Labrom**, **Dr Geoff Askin**
Paediatric Spine Research Group, Queensland University of Technology, Brisbane, Qld, Australia

9.27am **I.5** CT analysis of sagittal plane parameters in adolescent idiopathic scoliosis treated by video-assisted
thoracoscopic spinal fusion and instrumentation
Dr Eugene Verzin*, **Mrs Maree Izatt**, **A/Prof Clayton Adam**, **Dr Rob Labrom**, **Dr Geoff Askin**
Paediatric Spine Research Group, Queensland University of Technology, Brisbane, Qld, Australia

9.35am **I.6** Fusionless scoliosis correction using shape memory alloy staples
Dr Eugene Verzin*, **Mrs Maree Izatt**, **A/Prof Clayton Adam**, **Dr Rob Labrom**, **Dr Geoff Askin**
Paediatric Spine Research Group, Queensland University of Technology, Brisbane, Qld, Australia

9.43am DISCUSSION

10.05am Morning tea



Conference Program | **FRIDAY 9 APRIL 2010** *continued*

10.35am ORAL PAPER SESSION 2A | BASIC DISC | Chair Mark Percy

- 10.35am **2.1** An appraisal of cell populations in an ovine model of disc degeneration
Mr Ronny Sims, Prof Barrie Vernon-Roberts, Prof Robert Moore*
The Adelaide Centre for Spinal Research, Institute of Medical and Veterinary Science, SA, Australia
- 10.43am **2.2** Allogeneic mesenchymal precursor cells injected into intervertebral discs attenuates degeneration and promotes restoration of extracellular matrix in an experimental ovine model of disc degeneration
Prof Robert Moore*, Prof Silviu Itescu, Dr Peter Ghosh, Prof Barrie Vernon-Roberts, Dr Tony Goldschlager, Dr Andrew Zannettino, Dr Stan Gronthos
The Adelaide Centre for Spinal Research, Institute of Medical and Veterinary Science, SA, Australia
- 10.51am **2.3** Torsion affects the herniation process in flexed discs
Dr Samuel Veres*, Dr Peter Robertson, Prof Neil Broom *The University of Auckland, New Zealand*
- 10.59am **2.4** Reconsidering structural integration in the nucleus-endplate region
Mr Kelly Wade*, Dr Peter Robertson, Prof Neil Broom *The University of Auckland, New Zealand*
- 11.07am **DISCUSSION**
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11.27am ORAL PAPER SESSION 2B | DISC ARTHROPLASTY | Chair Matthew Scott-Young

- 11.27am **2.5** Comparison of the movement of the instant axis of rotation between two types of mobile core total disc arthroplasty by numerical simulation
Dr Peter McCombe *St Andrews Hospital, Brisbane, Qld, Australia*
- 11.35am **2.6** Migration of disc arthroplasty device during physiotherapy exercises
Dr Ellen Frydenberg*, Dr William Evans, Dr Timothy Steel
Concord and St Vincents Hospitals, Sydney, NSW Australia
- 11.43am **2.7** Hybrid combined total disc replacement and fusion procedures in the lumbar spine:
Clinical and radiographic outcome
Dr Scott Blumenthal*, Dr Saqqa Samer, Dr Richard Guyer, Dr Jack Zigler, Dr Donna Ohnmeiss
Texas Back Institute, Plano, Texas, USA
- 11.51am **2.8** Artificial lumbar intervertebral disc replacement (ALIDR): Accepted practice or experimental surgery?
Prof Mark Percy *Queensland University of Technology, Brisbane, Qld, Australia*
- 11.59am **DISCUSSION**
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12.20pm Lunch



Conference Program | **FRIDAY 9 APRIL 2010** *continued*

1.20pm EVIDENCE SYMPOSIUM | Moderators | *Peter McCombe, William Sears*

1.20pm Introduction *Dr Peter McCombe*

1.25pm **1** Levels of evidence: A help or a hindrance *Dr Adam La Caze* | DISCUSSION

1.50pm **2** Randomised placebo controlled trials of vertebroplasty: A critical analysis *Dr Peter McCombe* | DISCUSSION

2.10pm **3** Randomised controlled trials of surgical treatment for lumbar disc herniation: A critical analysis
Prof Paul Anderson | DISCUSSION

2.35pm **4** New & alternative statistical methods for evaluating clinical evidence *Prof Kerrie Mengersen* | DISCUSSION

3.00pm **PANEL DISCUSSION**

3.20pm Afternoon tea

3.50 ORAL PAPER SESSION 3 | LUMBAR SPINE | Chair *Graeme Brazenor*

3.50pm **3.1** Evaluative comparison of physician-determined vs patient-determined outcomes in posterior lumbar fusion
Dr Markus Melloh, Dr Thomas Zweig, Dr Emin Aghayev, Dr Christoph Röder, Prof Jean-Claude Theis*
University of Otago, Dunedin, New Zealand

3.58pm **3.2** Clinical and radiological outcomes of an anterior lumbar plate for lumbar interbody fusion:
Two year results of a prospective study
Dr David Arden, Dr Russell Morcom, Dr Bernard LaRue, Dr Andrew Oakley, Prof Robert Fraser*
St Andrews Hospital, Adelaide, SA, Australia

4.06pm **3.3** Decompression and posterolateral instrumented fusion for degenerative L4/5 spondylolisthesis:
Is there benefit in routine fusion to the sacrum?
Dr Robert Lovell, Mrs Sanela Stanojevic, Dr Ben Goss, A/Prof Richard Williams*
Brisbane Spine Reference Centre, Qld, Australia

4.14pm **3.4** Adjacent segment disease following posterior lumbar interbody fusion: A retrospective review
Dr William Sears *Dalcross Hospital, Sydney, NSW, Australia*

4.22pm **DISCUSSION**

4.42pm **3.5** Outcomes of L5/S1 ALIF for the treatment of L5 radiculopathy due to foraminal stenosis
Dr Manesh Chug, Dr Rob Kuru, Dr Mitch Hansen* *Royal Newcastle Centre, Newcastle, Australia*

4.50pm **3.6** The efficacy of transforaminal injection of steroids for the treatment of lumbar radicular pain
*Dr Ali Ghahreman, Dr Richard Ferch, Prof Nikolai Bogduk** *John Hunter Hospital, Newcastle, NSW, Australia*

4.58pm **3.7** Development of a documentation instrument for conservative treatment of spinal disorders within
the framework of an international spine registry
Dr Markus Melloh, Johnny Kessler, Dr Thomas Zweig, Dr Emin Aghayev, Prof Jean-Claude Theis,*
Dr Christoph Röder *University of Otago, Dunedin, New Zealand*

5.06pm **DISCUSSION**

5.21pm Session closes

5.30 - 7.00pm Welcome Reception - Industry Exhibition Hall C



Conference Program | SATURDAY 10 APRIL 2010

7.00am Light Breakfast in Industry Exhibition

9.00am ORAL PAPER SESSION 4A | CERVICAL SPINE | Chair Clayton Adam

- 9.00am **4.1** The geography of fatty infiltrates in the cervical multifidus in chronic whiplash
*Dr James Elliott**, *Mr Ashley Pedler*, *Miss Joan Hendrikz*, *Dr Julie Hides*, *A/Prof Michele Sterling*
The University of Queensland - CCRE-Spine, Brisbane, Qld, Australia
- 9.08am **4.2** Diffusion weighted magnetic resonance imaging for healthy neck extensor muscles
*Dr James Elliott**, *Dr Katie McMahon* *The University of Queensland, Brisbane, Qld, Australia*
- 9.16am **4.3** Comparison of a new technique of atlantoaxial fixation using multi-axial C1 posterior arch screws with Magerl-Gallie and Harms techniques: A cadaveric biomechanical study
*Dr Michael Donnellan**, *Dr Richard Appleyard*, *Dr Yannis Sergides*, *Dr William Sears*
Murray Maxwell Biomechanics Lab, Kolling Institute (Univ. of Sydney), Royal North Shore Hospital, Sydney, NSW, Australia
- 9.24am **4.4** Atlanto-axial stabilization using multi-axial C1 posterior arch screws
*Mr Yanni Sergides**, *Dr Michael Donnellan*, *Dr Richard Appleyard*, *Dr William Sears*
Royal North Shore Hospital, Sydney, NSW, Australia
- 9.32am DISCUSSION
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9.52am ORAL PAPER SESSION 4B | BASIC SCIENCE | Chair Rob Moore

- 9.52am **4.5** Lumbar spinous process morphology and the influence of age
*Dr Peter Robertson**, *Dr Caspar Aylott* *Auckland Hospital, New Zealand*
- 10.00am **4.6** Aquaporin-4 expression in an animal model of post-traumatic syringomyelia
*Ms Sarah Hemley**, *Prof Marcus Stoodley*
Australian School of Advanced Medicine, Macquarie University, Sydney, NSW, Australia
- 10.08am **4.7** The role of hyperbaric oxygen treatment in post spinal cord injury inflammation
Mr Yun Wai Young, *Dr Cameron Lutton*, *Dr Satyen Mehta*, *Mr Don Fry*, *A/Prof Richard Williams*,
*Dr Ben Goss** *Brisbane Spine Reference Centre, Qld, Australia*
- 10.16am **4.8** Morphology of osteocyte lacunae in the trabecular bone of lumbar spine in an osteoporotic sheep model
*Dr Reza Zarrinkalam**, *Mr Adnan Mulaibrahimovic*, *A/Prof Robert Moore*
IMVS, SA Pathology, Adelaide, SA, Australia
- 10.24am DISCUSSION
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10.45am Morning tea



Conference Program | **SATURDAY 10 APRIL 2010** *continued*

11.15am **PRESIDENT'S SESSION**

- 11.15am **1.** Basic science of disc arthroplasty *Prof Paul Anderson*
- 11.35am **DISCUSSION**
- 11.45am **2.** Clinical results and comparative effectiveness of cervical disc arthroplasty *Prof Paul Anderson*
- 12.05pm **DISCUSSION**
- 12.15pm **3.** Cervical disc arthroplasty in Australia: Incremental cost effectiveness - results of a formal economic model
Mr Paul Mernagh
- 12.35pm **DISCUSSION**

12.45pm Lunch

1.45pm **ORAL PAPER SESSION 5 | BACK PAIN | Chair Nikolai Bogduk**

- 1.45pm **5.1** Predictors of chronic low back pain: What health practitioners should pay attention to
Dr Markus Melloh, Ms Cornelia Rolli Salathé, Prof Achim Elfering, Dr Özgür Tamcan, Dr Anne Mannion, Prof Norbert Boos, Dr Urs Müller*
Department of Orthopaedic Surgery University of Otago, Dunedin, New Zealand
- 1.53pm **5.2** Staying at home with low back pain: Multidimensional predictors of work absenteeism
Dr Markus Melloh, Ms Cornelia Rolli Salathé, Prof Achim Elfering, Dr Özgür Tamcan, Dr Anne Mannion, Prof Norbert Boos, Dr Urs Müller*
Department of Orthopaedic Surgery University of Otago, Dunedin, New Zealand
- 2.01pm **DISCUSSION**
- 2.11pm **5.3** A cost-effectiveness analysis of intradiscal electrothermal therapy (IDET) versus circumferential lumbar fusion for the treatment of discogenic low back pain
Miss Eugena Stamuli, Mr Michael Gre vitt, Prof Brian Freeman, Professor John Posnett, Miss Najma Farooq, Miss Carina Righetti, Prof Karl Klaxto* *Royal Adelaide Hospital, SA, Australia*
- 2.19pm **5.4** Preoperative health-related quality of life scores as predictor of clinical outcomes after degenerative lumbar surgery
Dr Sabarul Mokhtar, Dr William Sears*
The Australian School of Advanced Medicine, Macquarie University, Sydney, NSW, Australia
- 2.27pm **5.5** A rationalisation of outcome scores for low back pain: The Oswestry disability index and the low back outcome score
Dr Vivek Eranki, Mr Andrew Fagan* *Queen Elizabeth Hospital, Adelaide, SA, Australia*
- 2.35pm **DISCUSSION**

2.50pm Afternoon tea



Conference Program | **SATURDAY 10 APRIL 2010** *continued*

3.20pm MODERATED POSTER SESSION | Chair | *Ralph Stanford*

- 3.20pm **1.** Design and evaluation of an MRI compatible axial compression device for 3D assessment of spinal deformity and flexibility in adolescent idiopathic scoliosis
A/Prof Clayton Adam, Mrs Maree Izatt, Dr Geoff Askin*
Paediatric Spine Research Group, Queensland University of Technology, Brisbane, Qld, Australia
- 3.25pm **2.** 3D lung and rib cage reconstruction using low dose CT scans of adolescent idiopathic scoliosis pre and post anterior endoscopic correction
Dr Felicia Shay, A/Prof Clayton Adam, Dr Geoff Askin, Dr Robert Labrom*
Paediatric Spinal Research Group and Mater Hospital, Brisbane, Australia
- 3.30pm **3.** Nerve root sedimentation sign: Consequences of conflicting results & intra- and inter-observer reliability
Dr Markus Melloh, Dr Thomas Barz, Dr Lukas Staub, Dr Sarah Lord, Gregor Hamann, Prof Jean-Claude Theis*
Department of Orthopaedic Surgery, University of Otago, Dunedin, New Zealand
- 3.35pm **4.** Outcomes in foraminal and lateral nerve root compression: Effects of location of compression and timing of decompressive surgery
Dr Robert Lovell, Mrs Sanela Stanojevic, Dr Ben Goss, A/Prof Richard Williams*
Brisbane Spine Reference Centre, Qld, Australia
- 3.40pm **5.** Annular repair after lumbar discectomy: Preliminary observations from an ongoing, prospective, randomized, controlled clinical trial
Dr Scott Blumenthal, Dr Richard Guyer *Texas Back Institute, Plano, Texas*
- 6. Poster 6 - for display only**
- 3.45pm **7.** Comparison of unicortical vs bicortical Harms techniques with non-destructive biomechanical testing: A cadaveric biomechanical study
Dr Michael Donnellan, Dr Richard Appleyard, Dr Yannis Sergides, Dr William Sears*
Royal North Shore Hospital, Sydney, NSW, Australia
- 3.50pm **8.** Trap for the unwary: Post-traumatic clival epidural haematoma with disruption of the tectorial membrane, case report and literature review
Dr Antony Mahindu *Townsville Hospital, Townsville, Qld, Australia*
- 3.55pm **9.** The use of CT guided stereotactic navigation in percutaneous thoracolumbar pedicle screw insertion
Dr Ellen Frydenberg, Dr Richard Laherty, Dr Timothy Steel* *St Vincent's Hospital, Sydney, NSW, Australia*
- 4.00pm Session concludes

4.20 - 6.00pm BUSINESS MEETING I

Conference Dinner at the Airforce Museum. Sponsored by  **SYNTHES**[®]

6.45 - 7.00pm Buses depart for Museum (If attending, please bring Dinner ticket)



Conference Program | SUNDAY 11 APRIL 2010

7.00am Light Breakfast in Industry Exhibition

8.00 - 9.00am BUSINESS MEETING 2

9.00am ORAL PAPER SESSION 6 | TUMOUR AND TRAUMA | Chair *Greg Malham*

9.00am **6.1** Surgery improves pain, function and quality of life in patients with spinal metastases:
A prospective clinical study
*Mr Gerald Quan**; *Prof Vincent Pointillart* *Austin Hospital, Melbourne, Vic, Australia*

9.08am DISCUSSION

9.13am **6.2** An inflatable cervical collar for surf rescue
*Dr Robert Lovell**; *Ms Anna Jacosen*, *Ms Caroline Grant*, *Mr Marshal Shaw*, *Mr Tony Horstman*,
A/Prof Richard Williams, *Dr Ben Goss* *Brisbane Spine Reference Centre, Qld, Australia*

9.21am **6.3** Risk of spinal injuries in patients in a motor vehicle rollover crash
Mr Jose Miguel Lumawig, *Mr Jeff Arbatin**, *Mr YH Yau* *Royal Adelaide Hospital, SA, Australia*

9.29am **6.4** Cervical spine MRI in alert, neurologically intact trauma patients with midline cervical
tenderness and negative CT
*Ms Helen Ackland**; *Mr Greg Malham*, *Ms Susan Liew*, *Mr Owen Williamson*, *Dr Dinesh Varma*,
Dr Gregory Fitt, *Prof Jeffrey Rosenfeld*, *Prof Peter Cameron*, *Dr Rory Wolfe*, *Prof Jamie Cooper*
National Trauma Research Institute, The Alfred Hospital and Monash University, Melbourne, Vic, Australia

9.37am DISCUSSION

9.52am **6.5** Determining optimal halo pin management practises to decrease pin complications
*Ms Karly Wheeler**; *Mr Gavin Burchall*, *Mr Martin Byrne*, *Mr Greg Malham*
The Alfred, Melbourne, Vic, Australia

10.00am **6.6** Long-term psychosocial adjustment and quality of life following spinal cord injury: A comparison of
injured persons and their caregivers.
Ms Megan Grigg, *Prof Brian Freeman**, *Dr Linley Denson*, *Ms Meena Shunmugam*, *Ms Angela Poli*,
Ms Diana Dorstyn *School of Psychology and School of Medicine, University of Adelaide, SA, Australia*

10.08am **6.7** Epidemiology and treatment of sacral fractures presenting to a Level I trauma centre in Australia
*Dr Matthias Russ**, *Dr Vishal Pai*, *Miss Susan Liew*, *Dr Adam Dowrick* *The Alfred, Melbourne, Vic, Australia*

10.16am DISCUSSION

10.30am Morning tea



Conference Program | **SUNDAY 11 APRIL 2010** *continued*

11.00am ORAL PAPER SESSION 7 | MINIMALLY INVASIVE SURGERY AND RISK | Chair *Ian Farey*

11.00am **7.1** The Influence of midline preservation (MLP) vs midline sacrifice (MLS) upon facet joint morphology in lumbar decompressive surgery: A cross sectional anatomical study

Dr Peter Robertson Auckland Hospital, New Zealand

11.08am **7.2** A comparison of CT-based navigation techniques for minimally-invasive lumbar pedicle screw placement

Dr Martin Wood, Dr Richard Mannion Mater Private Hospital, Brisbane, Qld, Australia*

11.16am **7.3** Low invasiveness on the paraspinal muscles of the spinous process splitting laminectomy for lumbar canal stenosis assessed by CPK value.

Dr Yoshio Shimamura Juntendo University Shizuoka Hospital, Shizuoka, Japan

11.24am **DISCUSSION**

11.39am **7.4** Ionising radiation levels in spinal imaging - time to re-emphasise clinical assessment?

Ms Helen Ackland, Mr Greg Malham, Ms Susan Liew, Dr Dinesh Varma, Ms Zoe Brady*

National Trauma Research Institute, The Alfred Hospital and Monash University, Melbourne, Vic, Australia

11.47am **7.5** Occupational risks of a spine surgeon

Mr Greg Malham The Alfred, Melbourne, Vic, Australia

11.55am **DISCUSSION**

12.05pm Award Presentations

12.35pm Conference closes

1.00pm Bus transfer to airport for all departing delegates