

CONFERENCE PROGRAM • FRIDAY 5 APRIL 2024

All Friday & Saturday sessions (except breakfasts) will be conducted in **Parkside 1 • Level 2 • ICC**

7.15 - 8.15am **LIFEHEALTHCARE BREAKFAST SESSION 1** Room: E3.3 • Level 3 • ICC

Expanding the frontiers of enabling technologies in spine:

A KOL led discussion

Dr Andrew Kam



8.00 - 8.30am ARRIVAL TEA & COFFEE | THE GALLERY

8.30 - 8.40am **SSA 2024 CONFERENCE OPENING** **Dr Rob Kuru and A/Professor Paige Little**

8.40 - 10.00am FREE PAPER SESSION 1 | OUTCOMES

Chairs | **Dr Rob Kuru, Dr John Street**

See abstracts pgs 41 - 47

8.40am **1.1** Analysis of ODI scores following primary single level discectomy from the Australian Spine Registry

Dr Rob Kuru

8.50am **1.2** The growing problem of spine surgery wait times in British Columbia, Canada: Longitudinal trends and impacts on perioperative outcomes

Dr John Street

9.00am **1.3** Enrollment, surgical outcomes, complications and cost analysis from the Paediatric Spinal Surgery Registry (PSSR): Update after first 18-months of enrollment

A/Professor Aaron Buckland

9:10am **1.4** Patient reported outcomes of cervical and lumbar fusion surgery for patients with workers compensation claims do not differ to privately insured patients

Dr Jessica Gaff

9:20am **1.5** Review of 55 consecutive malpractice legal actions, with analysis of spine surgery risk factors

Mr Graeme Brazenor

9:30am **1.6** Low back pain classifications and their associations with disability, quality-of-life, and sociodemographic factors: A comprehensive examination using the PainDETECT Questionnaire

Mr Zachary Gan

9:40am **1.7** Evaluating disability and recovery through gait analysis: A prospective study of pre and post-intervention outcomes in 1317 patients with spinal complaints

Professor Ralph J Mobbs

9:50am **1.8** Prospective evaluation of a dynamic distraction lumbar belt for low back pain

Mr Robert Gunzburg

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10.00am MORNING TEA | THE GALLERY

10.30 - 11.30am FREE PAPER SESSION 2 | NEW TECHNOLOGY

See abstracts pgs 48 - 52

Chairs | *Dr Davor Saravanja, Ms Xenia Zubenko*

10.30am **2.1** Using machine learning to predict the likelihood of success after lumbar fusion
A/Professor Paul Licina

10.40am **2.2** Can augmented reality (AR) help choosing the rod: An in-vitro study
Dr Patrick Weidle

10.50am **2.3** New smartphone-based eHealth technology to better link rural and remote scoliosis patients with tertiary care
A/Professor J Paige Little

11.00am COMBINED 2.4 / 2.5 PRESENTATION
HumiGard: Preserving tissue homeostasis against the enemy that is exposure
Mr John Cunningham

2.4 Effect of humidified warmed air on the surgical incision during spinal surgery: An animal model of bacterial load

2.5 The delivery of humidified, warmed air to the surgical site during spinal surgery: Findings from a first in human clinical trial

11.15am **2.6** Uniportal endoscopic approach for spinal stenosis: Objective outcomes, length of stay, complications, learning curve, and key insights
Professor Ralph J Mobbs

11.30am - 1.00pm SOCIETY SESSION

Chair | *A/Professor John Costi*

11.30am The future of medical practice in Australia: Good, bad or ugly?
Professor Steve Robson

12.00pm Perils and pitfalls of AI in research and publication
Mr Robert Gunzburg

12.30pm Threats to and defences for medicine in Australia
Professor Steve Robson

1.00pm - 2.00pm LUNCH | THE GALLERY

CONFERENCE PROGRAM • **FRIDAY 5 APRIL 2024**

All Friday & Saturday sessions (except breakfasts) will be conducted in **Parkside 1 • Level 2 • ICC**

2.00 - 3.30pm	SYMPOSIUM 1 Chairs <i>Mr Michael A Johnson, Dr Ashish Diwan</i>
2.00pm	How unprofessional behaviours among co-workers impact patient safety Professor Johanna Westbrook
2.45pm	Adverse event reporting, surveillance and the impact of SAVES on patient care Dr John Street
3.30 - 4.00pm	AFTERNOON TEA THE GALLERY
4.00 - 5.30pm	FREE PAPER SESSION 3 CERVICAL <i>See abstracts pgs 53 - 60</i> Chairs <i>Dr Matthew Scott-Young, Dr Matthew Rackham</i>
4.00pm	3.1 Strategies for addressing failed cervical total disc replacement: In 42 patients Dr Scott Blumenthal
4.10pm	3.2 Protection of adjacent disc after cervical disc prosthesis: 10 years follow-up with baguera C Professor Vincent Pointillart
4.20pm	3.3 A report of osteolysis severity and implant failure associated with the M6-CTM implant in a large cohort and the patient and surgical outcomes following device retrieval Dr Gregory Cunningham
4.30pm	3.4 Hybrid technique versus long fusion technique in multilevel cervical degenerative disc disease: An analysis of functional, radiological, and neurological outcomes Dr Didik Librianto
4.40pm	3.5 Baseline and 6-month descriptive analysis of degenerative cervical myelopathy DCM patients from observational myelopathy natural history MYNAH registry Dr Nashwa Najib
4.50pm	3.6 Incidental degenerative cervical myelopathy in secondary healthcare: A comprehensive single-center retrospective audit Mr Rohil Chauhan
5.00pm	3.7 Type II odontoid fractures: Non operative treatment a good alternative Dr Andy Gov
5.10pm	3.8 Effects of cervical intervertebral disc injury and adjacent segment response: An in vivo ovine biomechanical model with histological validation Dr Christopher Colloca
5.20pm	3.9 Willingness to randomise patients to lumbar spine fusion surgery or conservative care in a future randomised trial: An Australian cross-sectional survey of clinicians Professor Nadine Foster
5.30 - 7.00pm	WELCOME RECEPTION THE GALLERY

CONFERENCE PROGRAM • **SATURDAY 6 APRIL 2024**

All Friday & Saturday sessions (except breakfasts) will be conducted in **Parkside 1 • Level 2 • ICC**

7.15 - 8.15am	MEDTRONIC BREAKFAST SESSION 2 Room: E3.3 • Level 3 • ICC AI and robotics: The evolution of technology in spine surgery Mr David Edis, Mr Andrew Grossbach	 Engineering the extraordinary
8.00 - 8.30am	ARRIVAL TEA & COFFEE THE GALLERY	
8.30 - 10.00am	FREE PAPER SESSION 4 LUMBAR 1	<i>See abstracts pgs 61 - 69</i>
	Chairs <i>A/Professor Kevin Seex, Dr Ayfer Aslan</i>	
8.30am	4.1 Reassessing the minimum 2-year follow-up standard after lumbar decompression surgery: A 2-months follow-up seems to be an acceptable minimum A/Professor Aaron Buckland	
8.40am	4.2 Relationship of discography to re-operation for disc-related pain more than 10 years after lumbar total disc replacement Dr Jack Zigler	
8.50am	4.3 Safety and efficacy of PTP in Australia: The first 100 cases Mr Yi Yuen Wang	
9.00am	4.4 Predictors of clinical failure after endoscopic lumbar spine surgery during the initial learning curve Dr Daniel Scherman	
9.10am	4.5 Clinical outcomes of unilateral biportal endoscopy decompression for degenerative lumbar canal stenosis in the elderly population: A single-center retrospective study Dr Meenu Shunmugam	
9.20am	4.6 Central nervous system infections in the Northern Territory: An interesting spectrum of tropical organisms Dr Roshitha Bakmeedeniya	
9.30am	COMBINED 4.7 / 4.8 PRESENTATION Mr Stone Sima	
	4.7 In subjects with chronic low back pain, does neuropathia exclusively correlate to neuronal compression? A correlation study of PainDETECT Questionnaire and corresponding MRI and x-ray findings	
	4.8 Association between non-spinal comorbid medical conditions and neuropathic low back pain: A further unravelling of pain complexities in the context of back pain	
9.45am	4.9 Does clinical experience influence the qualitative assessment of lumbar spinal degeneration using the Pfirrmann, Goutallier and Weishaupt grading scales? Professor Ian Whittle	
10.00am	MORNING TEA THE GALLERY	

CONFERENCE PROGRAM • **SATURDAY 6 APRIL 2024**

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10.30 - 11.15am **PRESIDENT'S SESSION**

Chair | *Dr Rob Kuru*

Frailty / sarcopenia and spine

Dr John Street

11.20am - 12.30pm **FREE PAPER SESSION 5 | LUMBAR 2**

Chairs | *Dr Ralph Stanford, A/Professor Paul Licina* *See abstracts pgs 70 - 75*

- 11.20am **5.1** Changes in sagittal alignment following lumbar total disc replacement:
Analysis based on full-body eos imaging
Dr Scott Blumenthal
- 11.30am **5.2** Clinical outcome of lumbar total disc replacement in patients more than
60 years of age
Dr Jack Zigler
- 11.40am **5.3** Restorative neurostimulation provides meaningful and durable outcomes:
5-year longitudinal follow-up of ReActiv8-b clinical trial
Dr Michael Selby
- 11.50am **5.4** Poor device-anatomy fit may contribute to the principle modes of lumbar
fusion device failure as identified by a new analysis of the FDA MAUDE
database
Dr William Parr
- 12.00pm **5.5** Is standalone ALIF a safe and effective treatment for low grade isthmic
spondylolisthesis?
Mr James Toohey
- 12.10pm **5.6** 3D-printed titanium cages for anterior and lateral lumbar interbody fusion
result in excellent fusion rates one year after surgery
A/Professor Aaron Buckland
- 12.20pm **5.7** Impact of interbody lumbar fusion cages on the functional outcome in
degenerative spondylolisthesis
A/Professor Henrik Baecker

12.30pm - 1.30pm LUNCH | THE GALLERY

CONFERENCE PROGRAM • **SATURDAY 6 APRIL 2024**

All Friday & Saturday sessions (except breakfasts) will be conducted in **Parkside 1 • Level 2 • ICC**

1.30 - 3.00pm SYMPOSIUM 2

Chairs | *Dr Michelle Atkinson, Professor Nadine Foster*

1.30pm Breaking down: Lumbar stress injuries in elite cricketers

Mr Rowan Schouten

2.10pm Treatment and avoidance of deep surgical spinal infection

Dr John Street

2.50pm Registry update *Mr Michael Johnson*

3.00 - 3.30pm AFTERNOON TEA | EXHIBITION HALL 2

3.30 - 4.30pm THE GETTING OF WISDOM

Chair | *Dr Graeme Brazenor*

3.30pm *Professor Nigel Jones*

3.50pm *Mr Michael A Johnson*

4.10pm *Dr Gordon Dandie*

4.30 - 6.00pm **SSA BUSINESS MEETING - AGM**

7.00 - 11.00pm **SSA 2024 CONFERENCE GALA DINNER**

Australian National Maritime Museum

Darling Harbour

CONFERENCE PROGRAM • SUNDAY 7 APRIL 2024

All Sunday sessions (except breakfast) will be conducted in **C3.3 • Level 3 • ICC**

7.15 - 8.15am **MATRIX MEDICAL INNOVATIONS BREAKFAST SESSION 3** Room: E3.3 • Level 3

Endoscopic spine surgery versus open surgery:
Discussing the options for spine surgery in 2024



Professor Ralph Mobbs, Dr Greg Cunningham, Dr Yi Yuen Wang

8.00 - 8.30am ARRIVAL TEA & COFFEE | ROOM C3.3 FOYER

8.30 - 10.00am FREE PAPER SESSION 6 | BIOMECHANICS, BASIC SCIENCE & INTERVENTIONS

Chairs | **A/Prof Paige Little, Dr Lionel Rayward** See abstracts pgs 77 - 85

8.30am **6.1** Biomechanical implications of lumbar intervertebral disc fenestration:
Comparison of ex vivo and in vivo conditions in a preclinical rabbit model
Dr James Crowley

8.40am **6.2** Assessing neuropathic pain in patients with chronic low back pain and
who have not had prior spinal surgery: The pain questionnaire used can
influence findings
Dr Danielle Chene

8.50am **6.3** Engineering the perfect mattress: Investigating biomechanical advantages
of tri-phasic foam behaviour on the average male
Dr Lionel Rayward

9.00am **6.4** Ideal screw length to optimize fixation in expandable lateral cages with
integrated plate
Professor Greg Malham

9.10am **6.5** Anterior lumbar interbody fusion with a novel osteoinductive allograft:
2 year clinical and radiographic outcomes
Mr Dean Biddau

9.20am **6.6** Stress shielding may reduce bone density in long-segment spinal fusion:
Cohorts of AS/DISH and Harrington rod fusion patients
Dr Alexander Swart

9.30am **6.7** A normative spatiotemporal gait database for 366 healthy subjects
Mr Panawannage Vinuja Randunu (Vin) Fernando

9.40am **6.8** Perception matters: Severity of cosmetic deformity in adolescent idiopathic
scoliosis cannot be subjectively assessed
Mrs Maree T Izatt

9.50am **6.9** Quantifying full spine paraspinal muscle volume, intramuscular fat and
fat-free muscle (a)symmetry in adolescent idiopathic scoliosis
Miss Phoebe Duncombe

CONFERENCE PROGRAM • SUNDAY 7 APRIL 2024

All Sunday sessions (except breakfast) will be conducted in **C3.3 • Level 3 • ICC**

10.00am MORNING TEA | ROOM C3.3 FOYER

10.30 - 12.00pm FREE PAPER SESSION 7 | SPINE DEFORMITY & TRAUMA

Chairs | *Dr Peter Woodland, Miss Phoebe Duncombe* See abstracts pgs 86 - 92

- 10.30am **7.1** A retrospective, multi-centre comparison of continuous epidural analgesia and patient controlled analgesia following following posterior spinal instrumented fusion for adolescent idiopathic scoliosis
Dr Maisha Jamali
- 10.40am **7.2** Health-related quality of life is unchanged at 5 years follow-up after AIS surgery: A single-center study of 164 patients
Dr Martin Heegaard
- 10.50am **7.3** The incidence and outcomes of traumatic cauda equina syndrome
Ms Xenia Zubenko
- 11.00am **7.4** Global reconstruction in post tubercular kyphotic deformity: An analysis of 67 cases
Professor MD Shah Alam
- 11.10am **7.5** Novel instruments and method of posterior compression in lumbar fusion surgery, create more lordosis than the conventional alternatives
A/Professor Kevin Seex
- 11.20am **7.6** The association between Hounsfield units and mechanical complications in ASD patients
Dr Martin Heegaard
- 11.30am **7.7** Characterizing gait profiles of spine, hip and knee disease using a single-point wearable inertial measurement unit
Professor Ralph J Mobbs
- 11.40am **7.8** Traumatic spinal cord injury in the elderly: Predictors for mortality and functional outcomes
Dr Mina Asaid
- 11.50am **7.9** Role of pre-operative distraction using modified Halo-Pelvic-Ilizarov distraction assembly in correction of severe kyphoscoliotic spine deformities
Professor Amer Aziz

CONFERENCE PROGRAM • SUNDAY 7 APRIL 2024

All Sunday sessions (except breakfast) will be conducted in **C3.3 • Level 3 • ICC**

12.00 - 12.50pm TOP 10 POSTER SESSION *See abstracts pgs 93 - 101*

Chairs | ***Professor Ralph Mobbs, Dr Nashwa Najib***

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| 12.00pm | TP.1 Assessing the efficacy of simultaneous cold therapy and compression bracing on acute post-operative pain following lumbar fusion surgery
<i>Mr Patrick Beaumont</i> |
| 12.05pm | TP.2 Execution of surgical strategy is improved by adapted patient specific rods in treatment of adult spinal deformity
<i>Dr Martin Gehrchen</i> |
| 12.10pm | TP.3 Functional outcome following adolescent scoliosis correction
<i>A/Professor Henrik Baecker</i> |
| 12.15pm | TP.4 Clinical and radiological outcomes following lumbar fusion using a bidirectional expandable interbody device
<i>Mr Yi Yuen Wang</i> |
| 12.20pm | TP.5 The learning curve of ReActiv8 implantation
<i>Dr Adrian Nowitzke</i> |
| 12.25pm | TP.6 A clinical care pathway for restorative neuromodulation with ReActiv8 for chronic low back pain: Description and cross-sectional analysis of patient satisfaction
<i>Mr Allen Huang</i> |
| 12.30pm | TP.7 Australian spine surgeon's perspectives on endoscopic spine surgery: An in-depth analysis
<i>Dr Joseph Reidy</i> |
| 12.35pm | TP.8 Analysis of blood pressure targets in paediatric neuromuscular scoliosis patients following corrective surgery in the intensive care setting: A study protocol
<i>Dr Grace Pulling</i> |
| 12.40pm | TP.9 Lumbar interbody fusion patient specific implants improve clinical outcomes and provide better value compared to stock alternatives
<i>Dr William Parr</i> |
| 12.45pm | TP.10 Radiological outcomes and quality of life in patients who underwent surgical correction of cervicothoracic kyphosis in patients with cervicothoracic tuberculous spondylitis: Multi-center experience
<i>Dr Ifran Saleh</i> |

12:50 - 1:00pm AWARDS and Conference close