FRI 26	*ALL TIMES SHOWN ARE IN AEDT*	
NOVEMBER Time (AEDT)	SESSION INFORMATION	
07.20-08.20	LifeHealthcare Breakfast Session The Progression and Future of Endoscopic Spine Surgery in ANZ Speakers: A/Professor Christoph Hofstetter, Dr Shanu Gambhir and Dr Yingda Li Chair: Dr Yingda Li and Mr William Leung	
08.30-08.40	Acknowledgement of Country and Conference Opening A/ Professor John Costi	
08.40-10.00	01. BASIC SCIENCE AND BIOMECHANICS Free Paper Session Chairs: A/Professor John Costi and Dr Ryan Quarrington 1.1 Associations Between Potentially Modifiable Clinical Factors and Sagittal Balance of the Spine Dr Larry Cohen 1.2 Measuring Longitudinal Growth of the Thoracic Spine in Healthy Adolescent Females in Brisbane: A 6 Year Sequential MR Study Dr Catherine Choi 1.3 Enhancing Dental Pulp Stem Cell Viability for the Treatment of Spinal Cord Injury via Immune Cell Preconditioning Sandra Jenkner 1.4 Positron Emission Tomography (PET) Imaging of 18-Kda Translocator Protein Radioligand [18F]GE-180 for Biological Assessment of Acute Spinal Cord Injury Dr Ryan O'Hare Doig 1.5 Lumbar Disc Herniation Failure After Simulated Multiaxial Repetitive Lifting Mr Michael Russo 1.6 Application of 3D Modelling Techniques for Prediction of Deep Tissue Pressure Injuries: Sensitivity to Substrate Stiffness Mr Lionel Rayward 1.7 Novel Objective Measure of dynamic instability, the Walking Orientation Randomness Metric (WORM) score Mr Pragadesh Natarajan 1.8 Proposed objective scoring algorithm for walking quality, based on relevant gait metrics: The Simplified Mobility Score: SMoS™ - [Observational Study] Mr R. Dineth Fonseka	



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NOVEMBER Time (AEDT)	SESSION INFORMATION		
10.00-10.45	MORNING TEA VIRTUAL EXHIBITION		
10.15-10.35	LifeHealthcare: Meet the Expert Session RoboticScope: Effortless Microsurgery for Spine Speaker: Professor Christian Freyschlag and Gerhard Korn	LifeHealthcare > Spine What matters to you, drives us	
	Chair: Mr Richard Brookhouse		
10.45-11.45	02. CERVICAL SPINE Free Paper Session Chairs: A/Professor Kevin Seex and Dr Isaac Rhee		
	2.1 CP ESP viscoelastic cervical disk replacement: minimum 2 years follow-up clinical results. Evolution of segmental mobility and location of mean centers of rotation. Professor Jean Yves Lazennec		
	2.2 Comparison of in vivo kinematic parameters of three cervical disc prosthes Mr Nicholas Chang	ses	
	2.3 Successful cervical interbody fusions (ACDF) in canines using custom 3D pr week and 36-month retrieval analyses. Dr William Parr	inted titanium systems – 5	
	2.4 Comparison of kinematic measures following cervical arthroplasty, arthroc Mr Simon Luong	lesis, and hybrid procedures	
	2.5 Cervical interbody spaces vary by level and are always asymmetrical; most symmetrical cervical interbody devices will not fit well in the anatomical space Mr Wilson Liu		
	2.6 Evaluation of the cervical range of movement (CROM) in postoperative anterior cervical discectomy and fusion (ACDF) and cervical total disc replacement (CTDR) patients Dr Prashanth Rao		
11.45-13.00	SOCIETY SESSION Chair: Dr Davor Saravanja		
	11.45-12.00 Changing Dogma: building the biomarker and predicting growth in A/Professor Michelle Welborn	paediatric orthopaedics	
	12.00-12.20 Vertebral Body Tethering: where are we now? Dr Steven Hwang		
	12.20-12.40 Spinal Deformity Surgery in Elderly Patients A/Professor Hamid Hassanzadeh		
	12.40-13.00 Bone-On-Cage for Operative Correction of Scheurmann's Kyphosis Professor Robert Gaines		



FRI 26	*ALL TIMES SHOWN ARE IN AEDT*	
NOVEMBER Time (AEDT)	SESSION INFORMATION	
13.00-14.30	LUNCH VIRTUAL EXHIBITION	
13.20-13.40	Medtronic: Meet the Expert Session Enabling Technologies and Robotic-Assisted Surgery - Changing the Future of Healthcare Speaker: Dr Mohammed Awad Chair: Mr Abel Anzaldo Medtronic Engineering the extraordinary	
13.50-14.10	·	he Expert Session X Mobile Imaging Robot in Action
	Speaker: Dr Paul Licina Chare: Mr Fouad Kesserwani Speaker: Mr Dom Chair: Mr Uli Mez	
	ilmt # B	RAINLAB
14.30-15.30	SYMPOSIUM I Chair: Dr Ralph Stanford 14.30-14.50 ALIF with BMP Dr Scott Blumenthal 14.50-15.10 Have CTDRs evolved to the point of perfection? Dr Richard Guyer 15.10-15.30 Using Predictive Analytics to choose the Best Patients for Lumbar Disc Replacement Lessons from the FDA IDE Studies Dr Jack Zigler	
15.30-16.15	AFTERNOON TEA VIRTUAL EXHIBITION	
15.45-16.05	DePuy Synthes: Meet the Expert Session Complex Cervical using Symphony Speaker: Prof Heiko Koller	DePuy Synthes THE ORTHOPAEDICS COMPANY OF Johnson
16.15-17.30	03. OTHER, OUTCOMES, TUMOUR AND TRAUMA Free Paper Session Chairs: Dr David Nielsen and Mr Tajrian Amin 3.1 Proposed objective scoring algorithm for assessment and interventio lumbar spinal stenosis: The Gait Posture index (GPi) A/Professor Ralph Mobbs	n recovery following surgery for



FRI 26	*ALL TIMES SHOWN ARE IN AEDT*		
NOVEMBER Time (AEDT)	SESSION INFORMATION		
	3.2 Accelerometers for objective evaluation of physical activity and gait in patients presenting with spine problems: A prospective evaluation of 692 patients over a 4-year period. A/Professor Ralph Mobbs		
	3.3 Review of the Australian Spine Registry (ASR) Pilot: 3 years of engaging surgeons and patients. Dr Esther Apos		
	3.4 The Use of Carbon Fibre/Polyetheretherketone (CF/PEEK) in Pedicle Screw Fixation for Spinal Neoplasms – Potential Advantages in Postoperative Outcomes and Radiotherapy Planning Mr Daniel Ho		
	3.5 Developing and characterising a porcine survival model of thoracic contusion spinal cord injury Miss Christine Gayen		
	3.6 Outcomes for vertebrectomy for malignancy and correlation to the spine instability neoplastic score (sins): a 10-year single-centre perspective Dr Christopher Donnellan		
	3.7 The effect of multiple nerve transfer surgery for the restoration of upper limb function in tetraplegia: Expanding on traditional tendon-based surgical techniques Dr Jacqueline Woerner		
17.30-18.00	Spine & Wine Time		
	Join Rob Geddes, Master of Wine, and Jim Schwilk, Sydney Wine Centre for a chat about wine.		
17.30-18.30	Networking Session		
	Join your colleagues for some dedicated networking time in our "speed meeting" room. You'll be able to video chat with other attendees in real time in an informal setting, allowing you unwind after a busy first day at the conference.		
	End of Day One		



SAT 27	*ALL TIMES SHOWN ARE IN AEDT*	
NOVEMBER Time (AEDT)	SESSION INFORMATION	
07.15-08.15	Medtronic Breakfast Session Al-driven Surgical Planning, Patient-Specific Implants, and Navigated Robotic Guidance Speakers: Dr Joseph Osorio and Dr Christopher Kleck Chair: Mr David Hamilton Medtronic Engineering the extraordinary	
08.25-08.30	Welcome to Day Two A/ Professor John Costi	
08.30-10.00	04. CERVICAL, SPINAL DEFORMITY AND SURGERY Free Paper Session Chair: Dr Prashanth Rao	
	4.1 Use of Demineralized Cortical Fibers is associated with reduced risk of Pseudarthrosis after Pedicle Subtraction Osteotomy for Adult Spinal Deformity Prof Benny Dahl	
	4.2 Chromium metal ion release during instrumented spinal surgery in children; the effects of electrosurgery A/ Professor Peter Cundy	
	4.3 Late Failure of Cervical Disc Arthroplasty Due to Osteolysis Dr Scott Blumenthal	
	4.4 3D Morphology of cervical vertebral endplate anatomy: a literature review Mr Wilson Liu	
	4.5 Mid-Term 4-year Neck Disability Index Scores for Single-Level Total Disc Replacement with a Novel Viscoelastic Artificial Cervical Disc Compared to ACDF Dr William F. Lavelle	
	4.6 Mid-Term 4-year Neck and Shoulder/Arm Pain Scores for Single-Level Total Disc Replacement with a Novel Viscoelastic Artificial Cervical Disc Compared to ACDF Dr William F. Lavelle	
	4.7 Early results of a novel growth rod for early onset scoliosis Dr Kristopher Lundine	
	4.8 Single Position Anterior-To-Psoas Lumbar Interbody Fusion and Bilateral Screw Fixation: Perioperative Results and Complications Dr Isaac Rhee	
	4.9 Not so sweet: determining hemoglobin A1C cutoffs in diabetic patients prior to posterior spinal fusion A/Professor Aaron Buckland	

SAT 27	CECCION INFORMATION	
NOVEMBER Time (AEDT)		
10.00-10.45	MORNING TEA VIRTUAL EXHIBITION	
10.15-10.35	LifeHealthcare: Meet the Expert Session The Importance of Synergy Between Interbody Cages and Biologics: 4WEB & Australian Biotechnologies Fibreputty Speaker: Mr John Cunningham Chair: Mr Balaji Mani LifeHealthcare Spine What matters to you, drives us	
10.45-11.30	PRESIDENT'S SESSION Ms Carmel Monaghan, Ramsay Health Care Chair: Professor Matthew Scott-Young	
11.30-12.40		



SAT 27	*ALL TIMES SHOWN ARE IN AEDT*	
NOVEMBER Time (AEDT)	SESSION INFORMATION	
12.40-14.00	LUNCH VIRTUAL EXHIBITION	
13.00-13.20	Device Technologies: Meet the Expert Session Bedrock: Fixation & Foundation of Long Constructs Speaker: Dr Michael Selby Chair: Mr Kieran Ryan	
13.30-13.50	Australian Biotechnologies: Meet the Expert Session Osteoinductive Bone in Spinal Fusions Speaker: Professor William Walsh Chair: Ms Lynette Newby Australian Biotechnologies Globus Medical: Meet the Expert Session My Clinical Experience with ExcelsiusGPS® Speaker: Dr John Choi Chair: Mr Joshua Gross	
14.00-15.00	SYMPOSIUM II: Robotics in Spine surgery Chair: Prof Greg Malham 14.00-14.05 Introduction 14.05 -14.17 Robotic spine surgery in my practice: pros and cons Dr Mohammed Awad 14.17-14.29 Robotic Spine Surgery – early adoption experience and results 2017-2021 Dr John Choi 14.29-14.41 Robotics in minimally invasive Spine Surgery Dr Michael Selby 14.41-14.53 Spinal robotics: current applications and future perspectives Dr Jonathon Ball 14.53-15.00 Discussion All speakers	
15.00-15.45	AFTERNOON TEA VIRTUAL EXHIBITION	
15.15-15.35	NuVasive Meet the Expert Session Pulse – An Integrated Spinal Technology Platform that has Changed My Practice Speaker: Dr Zachary Tempel Chair: Ms Kate Blackwell	



SAT 27	*ALL TIMES SHOWN ARE IN AEDT*		
NOVEMBER Time (AEDT) SESSION INFORMATION			
15.45-16.45	THE GETTING OF WISDOM Chair: Dr Rob Kuru The Getting of Wisdom A/Professor Bryan Ashman An Engineer Meets the Spine: Her Continued Quest for Wisdom A/Professor Paige Little The Getting of Wisdom Professor Marcus Stoodley		
17.00-18.00 (via Zoom)	ANNUAL GENERAL MEETING Please note this meeting will be conducted via Zoom. Link and login details will be made available to preregistered SSA members. For further details or to register for the AGM contact the SSA secretariat@spinesociety.org.au		
	End of Day Two		



DAY THREE | SUNDAY 28 NOVEMBER

ALL TIMES SHOWN ARE IN AEDT		
NOVEMBER Time (AEDT)	SESSION INFORMATION	
07.45-07.50	Welcome to Day Three A/Professor John Costi	
07.45-07.50	O6. NEW TECHNOLOGY Free Paper Session Chairs: Dr Gerald Quan and Dr Ghassen Gader 6.1 Bone morphogenetic protein in spine surgery: past, present and future. Has a good product been adequately handled? A Narrative Review. Professor Gregory Malham 6.2 Comparison of novel machine vision image guidance system with a 3D-fluoroscopy-based platform for pedicle screw placement: a randomised prospective study of radiation, accuracy and cost. Professor Gregory Malham 6.3 Expandable lateral lumbar cages with integrated fixation: a viable option for rostral adjacent segment disease Professor Gregory Malham 6.4 Where we're at with 3D printed spinal devices: hype, disillusionment and productive application in spinal surgery Dr William Parr 6.5 Early experience using novel machine vision spine navigation system to map intraoperative spinal changes in posterior spinal fusion Mr John Cunningham 6.6 Wearable devices for patient monitoring in the early postoperative period: a literature review.	
	Mr Tajrian Amin 6.7 Patient specific 3d-printed vertebrectomy cages in the cervical, thoracic and lumbar spine: a case series. Mr Tajrian Amin 6.8 The superior efficacy and immediate preparation time of a novel combination hemostatic agent powder containing thrombin Professor William Spotnitz 6.9 The future of endoscopic spine surgery A/Professor Christoph Hofstetter	



DAY THREE | SUNDAY 28 NOVEMBER

SUNDAY 28		
NOVEMBER Time (AEDT)	SESSION INFORMATION	
09.20-10.00	MORNING TEA VIRTUAL EXHIBITION	
09.30-09.50	Mainstay: Meet the Expert Session Targeting the Multifidus: A Paradigm Shift in Treatment Options for CLBP Speaker: Dr Michael Selby Chair: Mr YH Yau Mainstay Medical Restoring Function. Restoring Life.	Neutron: Meet the Expert Session Ziehm 3D – Advantages in 3D imaging Speaker: Mr Colin Loo Chair: Mr Owen Smith
10.00-11.20	07. LUMBAR SPINE Free Paper Session Chair: Dr Susan Liew 7.1 Index level and adjacent level revision spine surgery following single level lumbar total disc replacement Dr David Nielsen 7.2 Hyperlordotic anterior interbody use without superior articulating process resection has an increased risk of latrogenic neurological injury in single level circumferential fusion A/Professor Aaron Buckland 7.3 Optimizing safety in robotic lumbar instrumented fusions: a risk factor analysis of robotic failures A/Professor Aaron Buckland 7.4 Comparison of freehand, fluoro-guided, CT navigation, and robot-guided TLIF and ALIF A/Professor Aaron Buckland 7.5 Lordosis Distribution Index in short-segment lumbar spine fusion — can ideal lordosis reduce revision surgery and latrogenic deformity? Prof Benny Dahl 7.6 Vascular considerations in virtual surgical planning for anterior lumbar interbody fusion (ALIF): A technical note Mr Tajrian Amin 7.7 Computed tomography study of the relationship between pelvic incidence and osseous contribution to lumbar lordosis in children Mr Joseph Baker	
11.20-11.40	Comfort break	

DAY THREE | SUNDAY 28 NOVEMBER

SUNDAY 28	*ALL TIMES SHOWN ARE IN AEDT* SESSION INFORMATION		
NOVEMBER Time (AEDT)			
11.40-12.30	TOP TEN POSTERS Chair: A/Professor John Costi		
	TT01 Virtual Surgery Planning and Patient Specific Implants, how does what is achieved in surgery compare to what is planned. Dr William Parr		
	TT02 The efficacy of L5-S1 total disc replacement - a systematic review and meta-analysis Mr Nicholas Chang		
	TT03 Radiculitis: assessing the risk of biologic use in minimally invasive transforaminal lumbar interbody fusions A/Professor Aaron Buckland		
	TT04 Pott's Disease of the cervical spine: a case report of a rare tubercular localization Dr Ghassen Gader		
	TT05 Screw augmentation using demineralized bone fiber anchors Professor William Walsh		
	TT06 Quantifying the biomechanical effects of a L4-L5 XLIF on adjacent spinal structures Mr Vivek Ramakrishna		
	TT07 Dysphagia and Recurrent Laryngeal Nerve Injury Following Anterior Cervical Discectomy and Fusion in an Australian retrospective study Dr Lawrence Oh		
	TT08 Risk factors for vocal cord palsy in low anterior cervical spine surgery Dr Milly Huang		
	TT09 Personalization of anterior lumbar interbody fusion using 3d-printed patient-specific interbody cages and virtual surgery planning: a case series Mr Tajrian Amin		
	TT10 The Benefit Zone of Endoscopic Spine Surgery A/Professor Christoph Hofstetter		
12.30-12.45	AWARDS AND CONFERENCE CLOSE A/Professor John Costi		
22.00	Don't miss the conference closing. We'll announce the winner of our gamification prize draw in addition to the winners of the Alistair Robson, Clayton Adam, Rob Johnston Awards and the Best Poster, Paper and Spinal Research Paper Awards.		
	End of Day Three – See you in 2022!		

