



## Matthew Scott-Young

### MBBS FRACS FAOrthA

Orthopaedic Surgeon (Spine)  
Associate Professor, Bond University

#### — EDUCATION & QUALIFICATIONS

##### **MBBS**

Bachelor of Medicine, Bachelor of Surgery  
1986 University of Queensland, Australia

##### **FRACS**

1995 Fellow of the Royal Australasian College of Surgeons

##### **Postgraduate fellowship in orthopaedic surgery (spine)**

1995 Nuffield Orthopaedic Centre, Oxford, United Kingdom

##### **FAOrthA**

2004 Fellow of the Australian Orthopaedic Association

#### — UNIVERSITY AFFILIATION

##### **Honorary Adjunct Associate Professor (Associate Professor)**

Faculty of Health Sciences & Medicine  
Bond University, Gold Coast Queensland Australia

#### — CURRENT PROFESSIONAL POSITIONS & MEMBERSHIPS

##### **Spine Society of Australia (SSA)**

President

##### **The International Journal of Spine Surgery (IJSS)**

Section Editor (biologics)

##### **Pindara Private Hospital Spine Fellowship**

Chief Supervisor  
RACS PFET Accredited Fellowship

##### **AOA National Joint Replacement Registry (AOANJRR)**

Committee Member  
SSA Representative

##### **International Society for the Advancement of Spine Surgery (ISASS)**

formally the Spine Arthroplasty Society (SAS)  
ISASS Member, Board of Directors 2020  
ISASS Annual Scientific Meeting (ASM) Program Committee 2018,  
2017, 2014, 2012, 2010, 2009, 2008, 2006, 2005  
ISASS ASM Clinical Program Co-Chair 2016  
ISASS ASM Clinical Science Co-Clinical Program Chair 2011

##### **WorkCover Queensland (WCQ)**

Independent Medical Examiner

##### **North American Spine Society (NASS)**

corresponding member

##### **Australian Medical Association (AMA)**

Member

#### MY AHPRA/MEDICAL BOARD REGISTRATION

**Registered specialty**  
Orthopaedic Surgeon

**Registration number**  
MED0001181897

**AHPRA link**  
[ahpra.gov.au/Registration/Registers-of-Practitioners.aspx](http://ahpra.gov.au/Registration/Registers-of-Practitioners.aspx)

#### WHERE I WORK

**Gold Coast Spine**  
– Outpatient consultations  
Southport Central, 27 Garden Street,  
Southport Queensland Australia

**Pindara Private Hospital**  
– Surgical lists & visiting  
medical officer  
Allchurch Avenue, Benowa  
Queensland Australia

**Gold Coast Private Hospital**  
– Visiting medical officer  
14 Hill Street, Southport Queensland  
Australia

#### **Location**

Southport Central, Building G  
27 Garden Street  
Southport Queensland  
Australia 4215

#### **Postal**

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Social  

## — MY CURRENT RESEARCH AND DEVELOPMENT PROJECTS

### Clinical and patient outcomes of spinal surgery

- **Bond University Human Research Ethics Committee Study 0000015881**
  - lead investigator
  - 20 year+ prospective clinical study in relation to clinical and patient outcomes of spine surgery, with emphasis on total disc replacement surgery in the lumbar and cervical spine.

### Anterior Cervical Decompression & Fusion (ACDF) system

- **Aquila® Spinal System**
- **Borealis® Spinal System**
- **Northpole® Guidance and Alignment System**
  - Inventor
  - Australian designed and manufactured integrated cage system for use in ACDF surgery.
  - in partnership with Prism Surgical Designs Pty Ltd:
    - Granted Australian Standard Patent AU2017301106
    - Granted Australian Innovation Patent AU2017100001
    - Pending USA Patent Application US20190167442

### Anterior Lumbar Interbody Fusion (ALIF) system

- **Australis® Spinal System**
- **Aurora® Spinal System**
- **SouthPole® ALIF Alignment and Insertion System**
- **Kraken™ ALIF Insertion and Distraction System**
  - Inventor
  - Australian designed and manufactured cage and plate system for use in ALIF surgery.
  - in partnership with Prism Surgical Designs Pty Ltd:
    - Granted Australian Standard Patent AU2016250447
    - Granted USA Patent US10,687,959
    - Pending GB Patent GB2556706

### Vertebral Body Replacement System (VBR)

- **Nova-C® Spinal System** (currently under development)
  - Inventor
  - Australian designed and developed vertebral body replacement cage for use in anterior reconstructive spinal surgery.
  - in partnership with Prism Surgical Designs Pty Ltd:
    - Granted Australian Standard Patent AU2018267562
    - Pending US Patent Application US20190159909

### Expedium® Evolution System Project

- product development team
- DePuy Synthes, Raynham USA.
- project to design a comprehensive platform of implants and instrumentation for the treatment of spinal conditions including degenerative conditions and deformity

## RECOGNITION OUR PAPERS HAVE RECEIVED

### Kostuik Innovation Award

- International Society for the Advancement of Spine Surgery (ISASS)
- ISASS16, Las Vegas USA, April 2016
- *The incidence of adjacent segment disease and index level revision and outcomes of secondary surgical intervention following single level lumbar total disc replacement.*

### The Best Paper Award

- Spine Society of Australia (SSA)
- Annual Scientific Meeting, Brisbane, April 2014.
- *The Incidence of Retrograde Ejaculation Following Anterior Lumbar Interbody Fusion using rhbmp2 in 376 Male Patients*

### The Medtronic Best Presentation Award

- SSA Annual Scientific Meeting, Hobart, April 2007
- *Clinical Results of Two-Level Lumbar Arthroplasty Versus Combined Arthroplasty and Fusion (Hybrid Procedure)*

## — MY PAST RESEARCH & DEVELOPMENT PROJECTS

### **Comparison of DISCOVER™ Artificial Cervical Disc and ACDF for Treatment of Cervical DDD (IDE Study)**

2007-2013

- Investigator & executive committee member\*
- FDA clinical trial
- Clinical trials.gov identifier: NCT00432159
- DePuy Spine, USA.

### **INMOTION® lumbar artificial disc replacement**

2005-2010

- design team member
- design & development of the INMOTION® lumbar artificial disc replacement
- DePuy Spine, Raynham USA.

## — MY PUBLICATIONS

### ***Allograft Use in Modern Spinal Surgery***

Scott-Young M.N., Zotti M.G.T.

In: Cheng B. (eds) *Handbook of Spine Technology*. (2019) Springer, Cham.

### ***Surgical Site Infections in Spine Surgery: Prevention, Diagnosis, and Treatment Using a Multidisciplinary Approach***

Scott-Young M., Zotti M., Fassett R.G.

In: Cheng B. (eds) *Handbook of Spine Technology*. (2019) Springer, Cham.

### ***Lateral Approach to the Thoracolumbar Junction: Open and MIS Techniques***

Zotti M.G.T., McEntee L.P., Ferguson J., Scott-Young M.N.

In: Cheng B. (eds) *Handbook of Spine Technology*. (2019) Springer, Cham.

### ***Patient-reported outcome measures after multilevel lumbar total disc arthroplasty for the treatment of multilevel degenerative disc disease***

Scott-Young M., McEntee L., Zotti M. et al.

*Spine*, 2019; 45(1):18-25

### ***Anatomic considerations in headaches associated with cervical sagittal imbalance: A cadaveric biomechanical study***

OA Kalmanson, S Khayatzadeh, A Germanwala, M Scott-Young et al.

*Journal of Clinical Neuroscience* 65 (2019) 140-144.

### ***Total Disc Replacement Surgery in a Professional Australian Rugby League Player – A Case Report***

T Gan, A Rickenbach, M Scott-Young

*Clinical Journal of Sport Medicine*, 2018;00:1-3.

### ***Combined Aorto-Iliac and Anterior Lumbar Spine Reconstruction: A Case Series***

M Scott-Young, L McEntee, J Furness, B Schram, W Hing, D Grosser, M Zotti

*International Journal of Spine Surgery (IJSS)*, June 2018, 12 (3) 328-336.

### ***Clinical and Radiological Mid-Term Outcomes of Lumbar Single-Level Total Disc Replacement***

M Scott-Young; M Lee; D Nielsen, C Magno, K Kimlin, E Mitchell

*Spine* 2018; 43:2:p 105–113

### ***The Concurrent Use of Lumbar Total Disc Arthroplasty and Anterior Lumbar Interbody Fusion: The Lumbar Hybrid Procedure for the Treatment of Multi-Level Symptomatic Degenerative Disc Disease- A Prospective Study***

M Scott-Young, L McEntee, B Schram, E Rathbone, W Hing, Wayne D Nielsen

*Spine* 2017; 43(2),pp E75-E81

***Fluoroscopic assessment of lumbar total disc replacement kinematics during walking***

RS Barrett, GA Lichtwark, C Armstrong, L Barber, M Scott-Young  
*Spine* 2015; 40(7): 436-442.

***Operative Techniques in Spine Surgery***

PJ Tortolani, PC McAfee, M Scott-Young  
SW Wiesel, *Lippincott Williams & Wilkins*, Chicago, 2013.  
Chapter 16: 'Anterior lumbar interbody fusion, disc replacement, and corpectomy'

***The Cervical Spine 5th Edition***

M Scott-Young  
EC Benzel, *Lippincott Williams & Wilkins*, Philadelphia, 2012  
Chapter 118: 'Complications of total disk replacement'

***Motion Preservation Surgery of the Spine: Advanced Techniques and Controversies***

J Yue, R Bertagnoli, P McAfee, H An Saunders, Philadelphia, 2008  
Chapter 48: 'Overall revision strategies: lumbar'  
M Scott-Young, F Daday  
Chapter 96: 'Cervical arthroplasty adjacent to fusion, multiple-level cases, and hybrid applications'  
P McAfee, M Scott-Young

***Roundtables in Spine Surgery: Recent advances in cervical arthroplasty***

M Scott-Young, P McAfee, L Pimento, Roundtables in Spine Surg 2(1), 2007  
M Scott-Young  
*Use of cervical arthroplasty adjacent to a fusion: prospective study of 41 cases*

***Posterior dynamic stabilization devices in the coming of age of lumbar disc replacement***

M Scott-Young  
*Neurosurg Focus* 22(1):E14, 2007, pp 1-5.

***Roundtables in Spine Surgery: Long-Term Results of Lumbar Arthroplasty***

P McAfee M Scott-Young Roundtables in Spine Surg 1(4), 2006.  
*Survivorship analysis of the CHARITÉ artificial disc: review of 1938 patients from eight leading international spine centers*  
B Cunningham, G De Muth, P McAfee, M Scott-Young et al  
*Long-term survivorship of lumbar arthroplasty: an Australian case series*  
M Scott-Young

***Roundtables in Spine Surgery: Complications & Revision Strategies in Lumbar Spine Arthroplasty***

P McAfee, M Scott-Young Roundtables in Spine Surg 1(2) 2005  
*Strategy for revision disc replacement surgery*  
M Scott-Young

***Classification of Musculoskeletal Trauma***

PB Pynsent, JCT Fairbank, & A Carr, Butterworth-Heinemann, Oxford, 1999  
Chapter 8: 'The Spine'  
M Scott-Young, H Hegde, MF Brown  
Chapter 9: 'Spinal cord injuries'  
H Hedge, MF Brown, M Scott-Young, P Sett

## — PEER REVIEWED PODIUM PRESENTATIONS (A SELECTION)

- *Current role of total disc replacement in clinical practice, outcomes, and the future*, M Scott-Young, L McEntee, M Zotti, W Hing, E Rathbone, Deformity Down Under, Sydney, August 2019.
- *Outcomes of revision surgery via anterior approach for refractory back syndrome following posteriorly inserted interbody cages*, M Scott-Young, L McEntee, M Zotti, W Fairburn, 30th SSA Gold Coast, 2019.
- *Total disc arthroplasty outcomes in a workers' compensation population in Australia*, M Scott-Young, L McEntee, M Zotti, L Boyce, 30th SSA Gold Coast, 2019.
- *Comparison of patient-reported outcomes after single level and multi level lumbar total disc arthroplasty constructs*, M Scott-Young, L McEntee, M Zotti, W Hing, E Rathbone, 30th SSA Gold Coast, 2019.
- *Patient reported outcome measures following multi-level lumbar total disc arthroplasty for the treatment of multi-level degenerative disc disease*, M Scott-Young, L McEntee, M Zotti, W Hing, E Rathbone, 30th SSA Gold Coast, 2019.

- *Anterior Lumbar Interbody Fusion; A prospective, unmasked, non-randomized study of 240 patients utilizing a PEEK® Optima ALIF cage*, M Scott-Young, L McEntee, M Zotti, E Young, 4th International PEEK Meeting, Washington DC, USA, April 2019.
- *Outcomes of Single Level Total Disc Arthroplasty for Lumbar Degenerative Disc Disease*, M Scott-Young, L McEntee, B Schram, J Furness, E Rathbone, M Zotti, W Hing, ISASS18, Toronto Canada, April 2018.
- *Clinical outcomes of first generation multilevel cervical total disc replacement*, M Scott-Young, L McEntee, S Lee, I Luukkainen, 28th SSA ASM, Hobart, 2017
- *Clinical outcomes of first generation multilevel cervical total disc replacement*, M Scott-Young, L McEntee, S Lee, I Luukkainen, 28th SSA ASM, Hobart, 2017
- *Complications of anterior spine surgery – A two year retrospective study of a two surgeon practice*, L McEntee, M Scott-Young, T Suen, H Cho, 27th SSA ASM, Melbourne, 2016.
- *Combined aortoiliac and anterior lumbar spine reconstruction*, L McEntee, M Scott-Young, D Grosser, T Suen, 27th SSA ASM, Melbourne, 2016.
- *The incidence of adjacent segment disease and index level revision and outcomes of secondary surgical intervention following single level lumbar total disc replacement*, M Scott-Young, L McEntee, J Cho, I Luukkainen, ISASS16, Las Vegas USA, 2016.
- *The Incidence of Retrograde Ejaculation Following Anterior Lumbar Interbody Fusion using rhbmp2 in 376 Male Patients*, M Scott-Young, A Kasis, D Neilsen, E Mitchell, SSA ASM, Brisbane, 2014.
- *Evaluation of surgical volume performance of a patients undergoing combined total disc replacement and anterior lumbar interbody fusion - The Hybrid Procedure*, M Scott-Young, A Kasis, C Magno, D Nielsen, N Blanch, E Mitchell, SSA ASM, Sydney, 2012.
- *Combined arthroplasty and anterior lumbar interbody fusion (hybrid procedure) in 385 patients with a minimum of 2 years follow-up*, M Scott-Young, A Kasis, C Magno, D Nielsen, N Blanch, E Mitchell, ISASS12, Barcelona Spain, 2012.
- *Clinical results of two-level lumbar disc replacement vs. combined arthroplasty & fusion (hybrid procedure) in 200 patients with a minimum of 4 years follow-up*, M Scott-Young, A Kasis, C Magno, D Nielsen, N Blanch, E Mitchell, ISASS12, Barcelona Spain, 2012.
- *Combined arthroplasty and anterior lumbar interbody fusion (hybrid procedure) in 385 patients with a minimum of 2 years follow-up*, M Scott-Young, A Kasis, C Magno, D Nielsen, N Blanch, E Mitchell, ISASS12, Barcelona Spain, 2012.
- *Minimally invasive spine surgery in adult deformity correction: a prospective case series of 37 patients*, M Scott-Young, C Magno, D Nielsen, E Mitchell N Blanch, SSA ASM, Melbourne, 2011.
- *Anterior cervical decompression and fusion with rhbmp-2: a prospective case series of 53 patients*, M Scott-Young, C Magno, D Nielsen, E Mitchell N Blanch, SSA ASM, Melbourne, 2011.
- *Clinical outcomes following cervical disc replacement with PCM after a minimum 1 year follow up*, M Scott-Young, C Magno, D Nielsen, E Mitchell N Blanch, SSA ASM, Melbourne, 2011.

## — GUEST SPEAKER ENGAGEMENTS

- *New frontiers in Spine Surgery*, Singapore Spine Society, 3<sup>rd</sup> Annual Meeting, Singapore, January 2020.
- *Incorporating research and evidence based medicine into clinical spinal practice*, Society Session, 29th SSA ASM, Adelaide, April 2018.
- *Transposas versus MIS TLIF: which is the best technique for degenerative spondylolisthesis transposas*, debate, Matthew Scott-Young & John A. I. Ferguson, IMAST, Kuala Lumpur Malaysia, 2015.
- *Multilevel cervical disc herniation arthroplasty*, debate, Matthew Scott Young & Chung Chek Wong & Morio Matsumoto, IMAST, Kuala Lumpur Malaysia, July 2015.
- *Is there still a role for arthroplasty in lumbar DDD?*, instructional course lecture, IMAST, Kuala Lumpur Malaysia, 2015.
- *Between sunrise and sunset – is there enough time?* invited speaker - The Getting of Wisdom Session, SSA 26th ASM, Canberra, 2015.
- *Around the world experience with cervical and lumbar TDR: the Australian experience*, invited speaker, SAS10, New Orleans USA, 2010.
- *Critical evaluation of bone grafting technologies*, instructional course lecture, IMAST, Bahamas, 2007.
- *Complications of lumbar TDR and revision strategies*, Instructional course lecture, instructional course lecture, SAS7, Berlin Germany, 2007.
- *Multi-level disc replacement and hybrid technology, complications and revision strategies in lumbar spine arthroplasties, short and long term results of cervical disc replacement*, invited speaker, Mayo Clinic International Spine Surgery & Tumor Symposium, Hawaii USA, 2006.
- *SB Charité: Australian experience, rationale & indications for lumbar disc arthroplasty*, invited speaker, Asia Pacific Orthopaedic Association (APOA) Combined Meeting, Taipei Taiwan, 2005.
- *Indications and preoperative evaluation for disc replacement*, invited speaker, American Academy of Orthopedic Surgeons (AAOS) Annual Meeting, International Symposium – The Aging Spine: Disc Replacement, Repair, and Regeneration, Washington DC USA, 2005.