



Matthew Scott-Young

MBBS FRACS FAOrthA

Orthopaedic Surgeon (Spine)
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 Professor

2021 - 2023
Faculty of Health Sciences & Medicine
Bond University, Gold Coast Queensland Australia

Honorary Adjunct Associate Professor

2015-2020, 2006-2009
Faculty of Health Sciences & Medicine
Bond University, Gold Coast Queensland Australia

— PROFESSIONAL POSITIONS, MEMBERSHIPS & SERVICE

Spine Society of Australia (SSA)

- **2022 - 2023 Immediate Past President**
- 2020-2022 President
- 2018-2019 President elect / Vice President
- 2016-2018 Secretary
- 2018 Program Committee 29th Annual Scientific Meeting, Adelaide
- 2017 Program Committee 28th Annual Scientific Meeting, Hobart
- 2006 – 2022 Member
- <http://spinesociety.org.au/>

International Society for the Advancement of Spine Surgery (ISASS)

- Note: formally the Spine Arthroplasty Society (SAS)
- **2020 - 2023 ISASS Board of Directors**
- 2023 ISASS ASM Regional Program Director- Asia Pacific, San Francisco
- 2022 ISASS ASM Faculty member, Bahamas
- 2020 ISASS ASM Program Co-Chair, Puerto Rico
- 2018 ISASS ASM Clinical Program Co-Chair, Toronto
- 2016 ISASS ASM Clinical Program Co-Chair
- 2011 ISASS ASM Clinical Science Program Co-Chair
- 2017, 2014, 2012, 2010, 2009, 2008, 2006, 2005 ISASS / SAS Annual Scientific Meeting (ASM) Program Committee
- 2005 – 2022 Member
- <https://www.isass.org/>

MY AHPRA/MEDICAL BOARD REGISTRATION

Registered specialty
Orthopaedic Surgeon

Registration number
MED0001181897

AHPRA link
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

PO Box 8295
Gold Coast Mail Centre
Queensland Australia 9726
ABN 64 359 881 417

Telephone +61 7 5528 6477

Emergency +61 7 5596 6111
Facsimile +61 7 5503 1933
Email info@goldcoastspine.com.au
Web www.goldcoastspine.com.au
Social  

AOA/NSA Spinal Surgery Post-Graduate Fellowship Education & Training (PFET) Committee
2023 Committee member

AO Technical Commission
2020-2023 Spine lumbar degenerative expert group - member
<https://aospine.aofoundation.org/>

Australian Orthopaedic Association (AOA)
2004 – 2023 Fellow
<https://www.aoa.org.au/>

Australian Society of Orthopaedic Surgeons (ASOS)
2018-2023 Member
<https://asos.org.au/>

Royal Australasian College of Surgeons (RACS)
1995 – 2023 Fellow
<https://www.surgeons.org/>

WorkCover Queensland (WCQ)
2014 – 2023 Independent Medical Examiner Panel
<https://www.worksafe.qld.gov.au/service-providers/working-with-workcover/provider-panels/current-panels>

Medico-legal Society of Queensland
2015-2023 member
<https://www.medico-legal.com.au/>

North American Spine Society (NASS)
2004 – 2023 corresponding member
<https://www.spine.org/>

Society for Minimally Invasive Spine Surgery (SMISS)
2020 -2023 Member
<https://smiss.org/>

AOA National Joint Replacement Registry (AOANJRR)
2015 – 2022 Committee Member
<https://aoanjrr.sahmri.com/>

TEACHING EXPERIENCE

AOA accredited fellowship in spine surgery

- 2011 – 2023 Chief Supervisor
- Orthopaedic post-graduate training program in complex spine surgery
- Continued accreditation but fellowship not filled as operating under PFET fellowship

Pindara Private Hospital Spine Fellowship

- 2017 – 2021 Chief Supervisor
- RACS PFET Accredited Fellowship
- Post-graduate training program in complex spine surgery – orthopaedic & neurosurgical candidates

— CURRENT JOURNAL AFFILIATIONS

The International Journal of Spine Surgery (IJSS)

2022 Senior Review Editor
2014 – 2021 Section Editor (biologics)
2014-2022 Reviewer
<https://www.ijssurgery.com/>

Spine

2019 – 2022 Reviewer
<https://journals.lww.com/spinejournal/pages/default.aspx>

The Spine Journal

2018 – 2022 Reviewer
<https://www.thespinejournalonline.com/>

European Spine Journal (Eur Spine J)

2016 – 2022 Reviewer
<https://www.springer.com/journal/586>

— CURRENT RESEARCH AND DEVELOPMENT PROJECTS

1997 - 2022 Clinical and patient outcomes of spinal surgery

- 2017 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.

2013 – 2022 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

2013 – 2022 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

2017 – 2022 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

— MY PAST RESEARCH & DEVELOPMENT PROJECTS

2014 – 2020 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

2007 – 2013 Comparison of DISCOVER™ Artificial Cervical Disc and ACDF for Treatment of Cervical DDD (IDE Study)

- Executive Committee Member & Investigator
- FDA clinical trial
- Clinical trials.gov identifier: NCT00432159
- DePuy Spine, USA.

2005 – 2010 INMOTION® lumbar artificial disc replacement

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

— MY PUBLICATIONS

A systematic review of anterior lumbar interbody fusion (ALIF) versus posterior lumbar interbody fusion (PLIF), transforaminal lumbar interbody fusion (TLIF), posterolateral lumbar fusion (PLF)

Rathbone J, Rackham M, Nielsen D, Lee SM, Hing W, Riar S, Scott-Young M *European Spine Journal*, 2022, <https://doi.org/10.1007/s00586-023-07567-x>

Single-Level Total Disc Replacement: Index-Level and Adjacent-Level Revision Surgery Incidence, Characteristics

Scott-Young M, McEntee L, Rathbone E, Nielsen D, Grierson Land Hing W *Int J Spine Surg* 2022, 16(5) 847-858
DOI: <https://doi.org/10.14444/8331>

Single-Level Total Disc Replacement: Mid- to Long-Term Outcomes

Scott-Young M, McEntee L, Rathbone E, Nielsen D, Grierson Land Hing W *Int J Spine Surg* 2022 16(5) 837-846
DOI: <https://doi.org/10.14444/8330>

Strides Toward Advancing Spine Surgery: Synergy Between Australasia and the International Society for the Adv

Scott-Young M, *Int J Spine Surg* 2022, 16(5) 800-801

Comparison of Mid- to Long-term Follow-up of Patient-reported Outcomes Measures After Single-level Lumbar Total Disc Replacement, Multi-level Lumbar Total Disc Arthroplasty, and the Lumbar Hybrid Procedure for the Treatment of Degenerative Disc Disease

Scott-Young M, Lee SM, Nielsen D, Rathbone E, Rackham M, Hing, W *Spine* 2021, 46(5) 377-386
DOI: [10.1097/BRS.00000000000004253](https://doi.org/10.1097/BRS.00000000000004253)

Midterm osteolysis-induced aseptic failure of the M6-C™ cervical total disc replacement secondary to polyethylene wear debris

Scott-Young M, Rathbone E, Grierson L, *European Spine Journal*, 2022, <https://doi.org/10.1007/s00586-021-07094-7> .

The feasibility of Anterior Spinal Access

Ng J P., Scott-Young M., Chan D N., Oh J Y. *Spine* 2021, 46 (15) 983-989

Clinical outcomes of cervical hybrid reconstructions: A prospective study

Scott-Young M., McEntee L., Rathbone E., Hing W., Nielsen D.
Int J Spine Surg 2020, 14 (s2) S57-S66

**Cheng B. (ed) *Handbook of Spine Technology*. (2019) Springer, Cham
M Scott-Young, Section Editor – International Experience**

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 Khayatzaeh, 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

Int J Spine Surg 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

SW Wiesel, Lippincott Williams & Wilkins, Chicago, 2013.

Chapter 16: 'Anterior lumbar interbody fusion, disc replacement, and corpectomy'

PJ Tortolani, PC McAfee, M Scott-Young

The Cervical Spine 5th Edition

EC Benzel, Lippincott Williams & Wilkins, Philadelphia, 2012

Chapter 118: 'Complications of total disk replacement'

M Scott-Young

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

— RECOGNITION OUR PAPERS HAVE RECEIVED

2021 Alastair Robson Award

- **SSA Annual Scientific Meeting (virtual)**
- *Single level total disc replacement – Index level revision and adjacent surgery incidence, characteristics, and outcomes*

2016 Kostuik Innovation Award

- **ISASS16, Las Vegas USA**
- *The incidence of adjacent segment disease and index level revision and outcomes of secondary surgical intervention following single level lumbar total disc replacement.*

2014 Best Paper Award

- **SSA Annual Scientific Meeting, Brisbane**
- *The Incidence of Retrograde Ejaculation Following Anterior Lumbar Interbody Fusion using rhbmp2 in 376 Male Patients*

2007 Medtronic Best Presentation Award

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

PEER REVIEWED PODIUM PRESENTATIONS (A SELECTION)

- ***What is the expected improvement in patient-reported outcome measures in the lumbar hybrid procedure for treating multilevel degenerative disc disease?***

 - M Scott-Young, D Nielsen, B Beer, E Rathbone, 34th SSA & Spine Week, Melbourne, 2023.
- ***Single level total disc replacement – Index level revision and adjacent surgery incidence, characteristics, and outcomes***

 - M Scott-Young, L McEntee, E Rathbone, D Nielsen, L Grierson, W Hing, 32nd SSA, virtual, 2021.
- ***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 Luukkomen, 28th SSA ASM, Hobart, 2017
- ***Clinical outcomes of first generation multilevel cervical total disc replacement***

M Scott-Young, L McEntee, S Lee, I Luukkomen, 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 Luukkomen, 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 Neislen, 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 (A SELECTION)

- **Full Circle—My Journey through Implant Concepts, Designs and Complications**
- 2023 Keynote speaker, Total Disc Arthroplasty Symposium – Centinel Spine, London, July 2023.
- **Single Level Total Disc Replacement – Index Level Revision and Adjacent Level Surgery Incidence, Characteristics, and Outcomes**
- 2022 International Congress of Korean Society of Spine Surgery, Invited Lecture VI (virtual), May 2022.
- **New frontiers in Spine Surgery, Singapore Spine Society**
3rd Annual Meeting, Singapore Spine Society, Singapore, January 2020.
- **Incorporating research and evidence based medicine into clinical spinal practice**
Society Session, 29th SSA ASM, Adelaide, April 2018.
- **Transpsaos versus MIS TLIF: which is the best technique for degenerative spondylolisthesis transpsaos**
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.