



curriculum vitae
dr benjamin cass
shoulder & elbow surgeon

Dr Benjamin Cass

MBBS MS FRACS (Orth) FAOrthA MASES

Orthopaedic shoulder and elbow surgeon specialising in arthroplasty and complex reconstruction, including management of instability, tendon pathology and arthritis.

Director of Sydney Shoulder Research Institute (SSRI), with an active clinical research program and a leading role in surgical education, including supervision of AOA-accredited fellowship programs and international faculty appointments.

Fellowship-trained in shoulder and elbow surgery with advanced training at the Mayo Clinic (USA) and Royal North Shore Hospital.



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Suite 201
156 Pacific Highway
St Leonards NSW 2065
AUSTRALIA



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qualifications

- 2017** MASES
Member, American Shoulder and Elbow Society
- 2006
to
2011** Masters of Surgery
Faculty of Medicine
The University of Sydney
- 2008** FA (Orth) A
Fellow, Australian Orthopaedic Association
- 2005
to
2006** American Medical Board Certifications
USMLE Complete
- 2000
to
2004** Royal Australasian College of Surgeons
Advanced Surgical Training
FRACS (Ortho)
- 1990
to
1996** MBBS
Bachelor of Medicine, Bachelor of Surgery
The University of Sydney

current appointments

**Since
2021** Design Surgeon
Zimmer Biomet

**Since
2010** Visiting Medical Officer
Royal North Shore Hospital
Mater Private Hospital
North Shore Private Hospital
Ryde Public Hospital
Dubbo Base Hospital
Dubbo Private Hospital

**Since
2012** Director
Sydney Shoulder Research Institute

Supervisor
Sydney Shoulder Research Institute Clinical
Fellowship (AOA accredited program NSW042)

previous appointments

- 2013
to
2016** **Design Surgeon**
Deputy-Synthes Revision Total Shoulder
Replacement Team
Helios Revision Total Shoulder System
- 2006
to
2010** **Senior Lecturer in Orthopaedic Surgery**
University of Sydney,
Northern Clinical School &
Royal North Shore Hospital
- 2005
to
2006** **Research Fellow in Orthopaedic Surgery**
Mayo Clinic, Rochester Minnesota, USA
Supervisor: Prof Bernard Morrey
- 2005** **Upper Limb Surgery, Shoulder and Elbow Fellow**
Royal North Shore Hospital
Supervisors: Prof David Sonnabend &
Dr Jeffery Hughes
- 2001
to
2005** **Accredited Orthopaedic Registrar**
Northside
Australian Orthopaedic Association Training Scheme

prizes and awards

2005

The Philip Segelov Prize

Australian Orthopaedic Association Annual Scientific Conference: Best Paper Presented by a Registrar:

Methods to Reduce Collateral Damage with K Wire

Fixation of the Distal Radius

S Gupta, B Cass, B Schick, W Wong, F Stewart and D Ryan

2003

The Allen Frederick Dwyer Prize

Australian Orthopaedics Registrars Association Annual Conference:

Mini-open vs Percutaneous K-Wiring of Distal Radius Fractures

Decreased complications? An anatomical study

Supervisor: Dr F Stewart, Anatomy Department, University of Sydney, Sydney AUSTRALIA

2000

The Annual Excellence in Clinical Skills Teaching Award

For undergraduate and postgraduate teaching

Royal North Shore Hospital, Northern Clinical School,

University of Sydney, Sydney, AUSTRALIA

1996

The Robert Craig Prize in Surgery

University of Sydney

A study on bone erosion in rheumatoid arthritis using in-situ hybridisation microscopy of the calcitonin receptor

Research completed in the Department of Orthopaedics, Brigham & Women's Hospital, Boston, USA

The Macquarie Pathology Services Prize

University of Sydney

A study on bone erosion in rheumatoid arthritis using in-situ hybridisation microscopy of the calcitonin receptor

Research completed in the Department of Orthopaedics, Brigham & Women's Hospital, Boston, USA

1995

Harvard Medical School

Undergraduate Elective Term

Brigham & Women's Hospital, New England Baptist Hospital, Massachusetts General Hospital Research Labs
Supervisor: Prof T Thornill (Professor of Orthopaedics), Harvard Medical School, Boston, USA

Shoulder Symposium, Royal North Shore Hospital

Course Coordinator, Faculty & Moderator (2008–present)

Primary topics:

- Reverse shoulder arthroplasty, complex primary and revision arthroplasty
- surgical technique evolution
- complications and outcomes

Shoulder & Elbow Society of Australia Biennial Conference

Invited Faculty (Lecturer, Moderator, Panel Member) (2017–present)

Primary topics:

- Arthroplasty strategy
- AC joint and trauma management
- augmentation techniques
- clinical outcomes

Advanced Shoulder Arthroplasty Symposium

Invited Faculty (Lecturer & Panel Member) (2022–present)

- Primary topics:
- Complex primary arthroplasty
- unstable reverse shoulder
- revision surgery
- complication management

Australian Orthopaedic Association

Invited Lecturer & Scientific Session Moderator (2015–present)

Primary topics:

- Elbow surgery
- medico-legal considerations
- shoulder arthroplasty
- infection management

International Shoulder & Elbow Meetings

Invited Faculty (USA, Japan, Singapore, Europe, acific) (2013–present)

Primary topics:

- Reverse shoulder arthroplasty
- biomechanics
- surgical indications and techniques
- fracture management

Additional Invited Meetings & Education Programs

(Various national and international courses, workshops and symposia)

Invited Lecturer, Faculty & Panel Member

Includes:

Victorian Shoulder & Elbow Society

GP Orthopaedic Masterclass (Mater Hospital)

Shoulder Arthroplasty Masters Meeting

International Reverse Shoulder Arthroplasty Symposium

Upper Limb Cadaveric & Bioskills Courses

AOA Continuing Orthopaedic Education

Asian & International Elbow and Trauma Meetings

Specialist education programs for physiotherapists and multidisciplinary clinicians

Primary topics:

- Shoulder arthroplasty (anatomic and reverse)
- rotator cuff pathology and repair
- shoulder trauma and fractures
- elbow surgery and trauma
- surgical decision-making
- complication management
- biomechanics
- surgical technique

International and national scientific presentations including:

- American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting
- Shoulder & Elbow Society of Australia Biennial Conference
- Australian Orthopaedic Association Annual Scientific Meeting
- European Society for Surgery of the Shoulder and Elbow (SECEC / ESSSE)
- Asia-Pacific and International Shoulder Arthroplasty Meetings
- International Trauma and Upper Limb Fracture Conferences
- Singapore General Hospital Shoulder Arthroplasty Courses

Repeated presentations and faculty roles across national and international orthopaedic meetings (2008–present)

Primary topics:

- Shoulder arthroplasty (anatomic and reverse), outcomes and complications
- Rotator cuff pathology and repair techniques
- Instability and Latarjet-related reconstruction
- Proximal humerus fractures and trauma management
- Elbow arthroplasty and fracture management
- Infection in shoulder arthroplasty
- Biomechanics and surgical technique development

Selected presentations:

- The Greater Tuberosity Angle: A Predictor for Rotator Cuff Tear
- Systemic Tranexamic Acid in Shoulder Arthroplasty: Randomised Controlled Trial
- Fitness Band Use in Shoulder Evaluation (FUSE Trial)
- Shoulder/Elbow Triage and Assessment Models of Care
- Accuracy of Arthroscopic Fluid Pump Systems in Shoulder Surgery
- Contamination and Infection in Shoulder Arthroplasty
- Outcomes following distal biceps and elbow reconstruction procedures
- Reverse Shoulder Arthroplasty – Techniques and Indications
- Management of Proximal Humerus Fractures
- Complications in Elbow and Shoulder Surgery

Additional presentations across:

- Asian and European trauma meetings
- Upper limb fracture symposia
- Orthopaedic training and cadaveric dissection courses
- Multidisciplinary clinical education programs

Primary topics:

- Shoulder trauma and fracture fixation
- Surgical decision-making in complex shoulder pathology
- Complication avoidance and management
- Revision surgery and reconstructive techniques

Suture Slippage is Influenced by Suture Type and Bone Density in Knotless Lateral Row Rotator Cuff Repair: A Biomechanical Analysis

K Subbiah, M Donaldson, C Stephen, A Young, B Cass, E Clarke, M Smith and B Wooldridge

Arthroscopy, Sports Medicine, Rehabilitation, 2026 (in press).

Revision rates following total shoulder arthroplasty in rural and urban hospitals: an Australian Orthopaedic Association National Joint Replacement Registry analysis of high-volume surgeons

Z Dragan, RJ Campbell, M Tropman, P Du, DRJ Gill, C Handford, B Cass and A Young

Bone & Joint Open, 2026;7(3):425-432.

Developing a three-dimensional convolutional neural network for automated full-volume multi-tissue segmentation of the shoulder with comparisons to Goutallier classification and partial volume muscle quality analysis

B Kim, Z Gandomkar, MJ McKay, AL Seitz, EO Wesselink B Cass, AAYoung, JM Linklater, J Szajer, K Subbiah, JM Elliott and KA Weber

Journal of Shoulder and Elbow Surgery, 2025 (in press)

ChatGPT: A Patient Education Tool for Common Shoulder Pathology

U Ghilzai, B Fiedler, A Ghali, A Singh, B Cass, A Young and AS Ahmed

Shoulder & Elbow, 2024 Sep 25;17(5):625-630.

doi:10.1177/17585732241283971.

The Tightrope Study: A cadaveric, biomechanical comparison of generations of suspensory fixation with internal brace for Rockwood grade V AC joint injuries.

TK Clifton, AS Ahmed, RP Piggott, E Clarke, M Boudali, MM Smith, B Cass and AA Young

Journal of Shoulder and Elbow Surgery, 2024 Aug 13;S1058-2746(24)00553-6

*for the most up to date listings visit

<https://www.ssri.net.au/publications-dr-benjamin-cass/>

Mid-Term Follow Up of the Nexel Total Elbow Arthroplasty

AS Ahmed, T Clifton, K Subbiah, M Spasojevic, A Young, B Cass, A Marmen, R Yu, C Burton, MM Smith and J Hughes

Journal of Shoulder and Elbow Surgery, 2024 Aug; 33(8):1699-1708

Successful reverse total shoulder replacement in a patient with Apert syndrome

C Burton, DP Koong, K Seagrave, M Spasojevic, SMackenzie and B Cass

Shoulder & Elbow, 2023;0(0). doi:10.1177/17585732231207365

Sequential Release and Muscle Slide of Irreparable Rotator Cuff Tears Results in Linear Gains in Tendon Mobility

M Riediger, M Shareef, AA Young and B Cass

Arthroscopy, Sports Medicine, Rehabilitation, 2023 Oct;5(5):100756

A Shoulder/Elbow Triage and Assessment model of care reduced a public orthopaedic shoulder/elbow clinic waitlist with high patient satisfaction

C Avdalis, D Taylor, B Cass, TE Lambert, G Langron, R Mittal,

M Spasojevic and TR Moopanar

ANZ Journal of Surgery, 2023 Jan 19. doi: 10.1111/ans.18282.

Optimising Screw Trajectory in the Bristow-Latarjet Procedure: A Simple Technique to Improve the Alpha Angle

RLE Tang, SP Mackenzie, D Cuzmar Grimalt, AA Young, R Niu,

OJ Mattern and B Cass

Journal of Orthopedic Surgery and Techniques, 2022;5(2): 487-493.

The effect of single-dose, preoperative intravenous tranexamic acid on early postoperative pain scores after rotator cuff repair: a double-blind, randomized controlled trial

SP Mackenzie, M Spasojevic, M Smith, O Mattern, RP Piggott, SS Patel, N Bedaiwy, B Cass and A Young

Journal of Shoulder and Elbow Surgery, 2022 Jul;31(7):1399-1408

Implication of bone morphology in degenerative rotator cuff lesions: a prospective comparative study between Greater Tuberosity Angle and Critical Shoulder Angle

G Cunningham, C Coor, MM Smith, AA Young, B Cass and BK Moor.
Orthopaedics & Traumatology: Surgery & Research, 2022 Apr;108(2):1030-46

Subacromial osteochondroma and rotator cuff tear in a young adult with multiple osteochondromas

M Spasojevic, SP Mackenzie, AA Young and B Cass
JSES Reviews, Reports, and Techniques, 2022 Feb;2(1):92-95

Wrist mounted accelerometers provide objective evidence of disease and recovery in patients with frozen shoulder

SP Mackenzie, M McLean, M Spasojevic, R Niu, LM Kruse, J Gwynne, AA Young and B Cass
JSES International, 2022 Jan;6(1):111-115

A Single Dose of Tranexamic Acid Reduces Blood Loss After Reverse and Anatomic Shoulder Arthroplasty: A Randomized Control Trial

G Cunningham, J Hughes, B Borner, O Mattern, M Taha, MM Smith, AA Young and B Cass.
Journal of Shoulder and Elbow Surgery, 2021 Jan;30: 1553-1560

Accuracy of arthroscopic fluid pump systems in shoulder surgery: a comparison of 3 different pump systems

ME Taha, K Schneider, MM Smith, G Cunningham, AA Young and B Cass
Journal of Shoulder and Elbow Surgery, 2020 Dec;29(12):2626-2631.

A biomechanical comparison of different suture materials used for arthroscopic shoulder procedures

ME Taha, E Clarke, D O'Briain, MM Smith, G Cunningham, B Cass and AA Young
Arthroscopy, 2020 Mar; 36(3):708-713.

Core set of unfavorable events of shoulder arthroplasty: an international Delphi consensus process

L Audige, H-K Schwyzer, Shoulder Arthroplasty Core Event Set (SA CES) Consensus Panel* and H Durchholz.

Journal of Shoulder and Elbow Surgery, 2019 Nov;28(11):2061-2071.Z

Core Set of Radiographic Parameters for Shoulder Arthroplasty Monitoring: Criteria Defined by an International Delphi Consensus Process

H Durchholz, B Salomonsson, P Moroder, S Lambert, R Page and L Audige on behalf of the Shoulder Arthroplasty (SA) Monitoring Steering Group*

The Journal of Bone and Joint Surgery, 2019 Oct 22;4(4):e0025. doi:

10.2106/JBJS.OA.19.00025

Healing of partial-thickness rotator cuff tears following arthroscopic augmentation with a highly-porous collagen implant: a 5-year clinical and MRI follow-up

DJ Bokor, DH Sonnabend, L Deady, B Cass, AA Young, CL Van Kampen and SP Arnoczky.

Muscles, Ligaments and Tendons Journal, 2019 Jul;9(3):338-347.

Comparative analysis of two glenoid version measurement methods in variable axial slices on 3D-reconstructed CT scans

G Cunningham, J Freebody, MM Smith, ME Taha, AA Young, B Cass and B Giuffre

Journal of Shoulder and Elbow Surgery, 2018 Oct;27(10):1809-1815.

*Dr Cass was an invited member of the Panel/Group

Early Sling Discontinuation Following Rotator Cuff Repair

L Kruse, T Falconer, SJ Dimmick, JC Balestro, G Cunningham, B Cass and AA Young

Techniques in Shoulder & Elbow Surgery, 2018 Sep;19(3):106-110.

The greater tuberosity angle: a new predictor for rotator cuff tears

G Cunningham, M Smith, AA Young and B Cass

Journal of Shoulder and Elbow Surgery, 2018 Aug;27(8):1415-1421.

Contamination of the surgical field with propionibacterium acnes in primary shoulder arthroplasty

TM Falconer, M Baba, O Dorrestijn, LM Kruse, M Smith, MC Figtree, BJ Hudson, M Donaldson, B Cass and AA Young.

Journal of Bone & Joint Surgery, 2016, 19;98(20):1722-1728.

Clinical outcomes and safety of distal biceps repairs using a modified entry point

M Baba, J Leon, M Symes, O Dorrestijn, AA Young and B Cass.

ANZ Journal of Surgery, 2016, August (3). doi: 10.1111/ans.13684.

Evidence of healing of partial-thickness rotator cuff tears following arthroscopic augmentation with a collagen implant: a 2-year MRI follow-up

DJ Bokor, DH Sonnabend, L Deady, B Cass, AA Young, CL Van Kampen and SP Arnoczky.

Muscles, Ligaments and Tendons Journal, 2016;6(1):16-25.

Improving medial footprint coverage in double row cuff repair using Fibretape

AA Young, B Cass, R Appleyard, J Cadman, M Baba and O Dorrestijn

Techniques in Shoulder & Elbow Surgery, 2015 Sep;16(3):74-78.

Preliminary investigation of a biological augmentation of rotator cuff repairs using a collagen implant: A 2-year MRI follow-up

DJ Bokor, DH Sonnabend, L Deady, B Cass, AA Young, CL Van Kampen and SP Arnoczky

Muscles, Ligaments and Tendons Journal, 2015;5(3):144-150.

Low rate of *Propionibacterium acnes* in arthritic shoulders undergoing primary total shoulder replacement surgery using a strict specimen collection technique

CB Maccioni, AB Woodbridge, JC Balestro, M Figtree, BJ Hudson, B Cass and AA Young

Journal of Shoulder and Elbow Surgery, 2015 Aug; 24(8).

Radial head replacement with pyrocarbon prosthesis: early clinical results

IN Abdulla, DC Molony, M Symes and B Cass

ANZ Journal of Surgery, 2014 Nov 12.

Treatment of proximal humeral nonunions with a locked plate and an intramedullary strut autograft

AA Young, B Cass and G Smith

Techniques in Orthopaedics, 2014 Mar;29(1):39-42.

Long-Term Outcome of Resection Arthroplasty for the Failed Total Elbow Arthroplasty

P Zarkadas, B Cass, T Throckmorton, R Adams,

J Sanchez-Sotelo, and B Morrey

Journal of Bone and Joint Surgery – American, Nov 2010; 92: 2576-2582.

How to Treat Elbow Dislocations: Simple and Complex

B Cass, C Nagaraj

Australian Rural Doctor, August 2010.

Methods to Reduce Collateral Damage caused by K Wire fixation of distal radial fractures

S Gupta, B Cass, et al., Department of Anatomy, Sydney University and Royal Prince Alfred Hospital

Proceedings of the 2005 Annual Scientific Meeting of the Australian

Orthopaedic Association. Page 20- 21; TS21;

ISBN 0-9591989-3, 2005.

Analysis of outcomes of rheumatoid forefoot reconstruction using a pedobarographic database

C Cass and B Cass

SICOT World Conference Publication of Proceedings. Sydney, Australia,
April 18-23, 1999.

In March of 2012, Dr Cass founded Sydney Shoulder Research Institute [SSRI] with fellow Orthopaedic Surgeon, Dr Allan Young.

SSRI is dedicated to undertaking research that will translate into real patient outcomes and innovations in the field of orthopaedic surgery. SSRI focuses on only a select number of projects at any given time to maximise the quality of research.

Each year, SSRI appoints two Fellows to undertake independent and collaborative research projects while developing their surgical, clinical and teaching skills under the expert guidance of Dr Cass, Dr Young and their esteemed colleagues Dr Jeffery Hughes, Dr Terence Moopanar and Emeritus Prof David Sonnabend AM.

Visit ssri.net.au for more information.



SydneyShoulder
ResearchInstitute

surgeons trained by Dr Cass

Year	Name	Home country
2010	Dr Diarmuid Molony	Ireland
2011	Dr Geoffrey Smith	Australia (Sydney)
2011	Dr Fredrik Einarsson	Sweden
2011	Dr Denise Mackey	Canada
2011	Dr Christopher Smithers	Australia (Sydney)
2012	Dr Michael Leonard	Ireland
2012	Dr Stephen Gwilym	England
2012	Dr Murali Reddy	New Zealand
2013	Dr Cristobal Maccioni Romero	Chile
2013	Dr Jean-Christian Balestro	France
2014	Dr Mohammed Baba	Australia (Sydney)
2014	Dr Oscar Dorrestijn	The Netherlands
2015	Dr Travis Falconer	Australia (Perth)
2015	Dr Gregory Cunningham	Switzerland
2015	Dr Lisa Kruse	United States of America
2016	Dr David O'Briain	Ireland
2017	Dr Mohy Taha	Switzerland
2017	Dr Owen Mattern	Australia (Melbourne)
2017	Dr Rui Niu	Australia (Sydney)
2018	Dr Diego Cuzmar Grimalt	Chile
2018	Dr Simon Donald	Australia (Sydney)
2018	Dr Haren Nandapalan	Australia (Sydney)
2018	Dr Terence Moopnar	Australia (Sydney)
2019	Dr Andreeanne Marmen	Canada
2019	Dr Michael Riediger	Canada
2020	Dr Najla Bedawi	Saudi Arabia
2021	Dr Milos Spasojevic	Switzerland

surgeons trained by Dr Cass

Year	Name	Home country
2021	Dr Samuel Mackenzie	Scotland
2021	Dr Robert Piggott	Ireland
2022	Dr Rebecca Tang	Australia (Melbourne)
2022	Dr Thomas Clifton	Australia (Perth)
2022	Dr Adil Ahmed	United States of America
2023	Dr Cameron Handford	Australia (Sydney)
2023	Dr K Kushalappa Subbiah	India
2023	Dr Matthew Donaldson	Australia (Sydney)
2024	Dr Anand Ashok Kumar	India
2024	Dr Rory Cuthbert	England
2025	Dr Benoit Borner	Switzerland
2026	Dr Daniel Park	Australia (Sydney)
2026	Dr Geraldine Goh	Australia (Perth)
2026	Dr Kyrill Rykov	The Netherlands
2026	Dr Kunal Mohan	Ireland

Since 1996

Golf

Member

Monash Country Club

1987 to 1996

Debating

Sydney Grammar First Debating Team

Combined GPS First Debating Team

University of Sydney First Debating Team

1989 to 1994

Student Activities

Elected Representative

Medical Society

University of Sydney



sydneyshoulder.com.au