JACOB YOONG LEONG OH

PROFILE SUMMARY:

An Orthopaedic Surgeon who specialises in Spine Surgery. Originally from Singapore, I completed my medical training in New Zealand, Residency in Singapore, and complex spine fellowship in Canada. I enjoy working as part of a team and place great emphasis on patient-centred medicine. I am also strongly committed to academic work. My area of interest is in Minimally invasive Spine surgery, Adult Deformity and Spinal Navigation/Robotics.



QUALIFICATIONS:

MBCHB	2003	University of Otago, New Zealand.
MRCSEd	2007	Member, Royal College of Surgeons Edinburgh.
MMED	2011	Master of Medicine, Ortho Surgery, National University of Singapore.
FRCSEd	2012	Fellow, Royal College of Surgeons Edinburgh (Orthopaedic Surgery).
Fellowship	2013	Adult Spine Fellowship, Foothills Hospital, Calgary, Canada.
Fellowship	2018	Asia Pacific Spine Society Travelling Fellow (Thailand, Korea, Japan)
Fellowship	2020	Endoscopic Spine Fellowship (Centre for Endoscopic SS, India)

CURRENT APPOINTMENTS + MEMBERSHIPS:

1) Senior Consultant Department of Orthopaedics, Tan Tock Seng Hospital.

2) **Director of Spine Services:** Department of Orthopaedics, Tan Tock Seng Hospital.

3) **Deputy Head** Department of Orthopaedics, Tan Tock Seng Hospital

4) **Chair and Country Lead** AOSpine Asia Pacific (Singapore)

5) Adjunct Asst. Professor: YLL School of Medicine, National University of Singapore

6) Faculty and Clinical Lecturer: LKC School of Medicine, Nanyang Tech University.

7) Assistant Program Director: NHG-AHPL Residency Program, Orthopaedic Surgery

8) Vice-President: Back Society of Singapore (BSS)

9) **Journal Reviewer:** World Neurosurgery – Spine section

10) Clinical Lecturer: Nanyang Polytechnic Health Sciences

11) **Fellow:** Academy of Medicine Singapore (FAMS)

12) **Executive Committee** Singapore Spine Society 2018-2023 (SSS)

13) **Board Member**Society for Minimally Invasive Spine Surgery (SMISS AP)
14) **Board Member**Pacific and Asian Society for MIS Surgery (PASMISS)
15) **Board Member**ASEAN MISST (Minimally Invasive Spine Surgery)

16) **Member**North American Spine Society (NASS)
17) **Member**Asia Pacific Spine Society (APSS)

Meddragin Strategy (APSS)

18) **Consultant** Medtronic, Stryker, Joimax

PUBLICATIONS:

1. Equipoise for Lateral Access Surgery

World Neurosurgery 2022 H Wu, PWH Cheung, RCC Soh, Oh JYL, JPY Cheung

2. Comparison of Unremoved Intervertebral disc location between two lateral lumbar interbody fusion (LLIF) techniques

World Neurosurgery 2022

Weerasak Singhatanadgige, Oh JYL, Wicharn Yingsakmongkol, Worawat Limthongkul

3. Selective Nerve Root Block for the treatment of Lumbar Radiculopathy

Surgeries 2022

Jacqueline Chu Ruo Yang, Shi Ting Chiu, Oh JYL, Arun Kumar

4. Return to driving is safe 6 weeks after anterior cervical surgery

Clinical Spine Surgery 2022

Benjamin Ding, Yu CS, Oh JYL

5. Risk factors for Adjacent Segment Problems after Post Instrumentation of the C-Spine.

Surgeries 2022

Wayne Yap, Colum Nolan, Arun Kumar, Oh JYL

6. Impact of Covid-19 on Orthopaedic specialist training: A nationwide survey of Orthopaedic Residents in Singapore

Singapore Medical Journal 2022

Dennis Hey, Reuben Soh, Oh JYL

7. Correction of degenerative lumbar coronal deformity using asymmetrical interbody cages: Surgical technique and case report

Journal of Craniovertebral Junction and Spine 2021

Gloria Cheng, Wayne Yap, Arun Kumar, Oh JYL

8. Migration + Spontaneous Extrusion of a lumbar spinal fusion rod from the gluteal region *Cureus 2022*

Tamara Soh, Cheryl Tan, Kelvin Lor, Oh JYL

9. Early postoperative loss of disc height following transforaminal and lateral lumbar interbody fusion: A radiographic analysis

Asian Spine Journal 2022

Arun Kumar, Tamara Soh, Mark Tan, Oh JYL

10. Postoperative Urinary Retention following thoracolumbar spinal fusion: Prevalance, risk factors and outcomes

Cureus 2021

Cheryl Tan, Glen Ho, Arun Kumar, Oh JYL

11. An Atypical Presentation of Metastatic Ewing Sarcoma to the Spine.

Indian Spine Journal 2021

Wei Jie Tan, Hwei Yee Lee, Wayne Yap, Colum Nolan, JYL Oh,

12. intracerebral Haemorrhage Following Spine Surgery: A Word Of Caution On The Use Of Suction Drains

British Journal of Neurosurgery 2021

Zhang Wei, Reuben Soh, Dinesh Kumar, Colum Nolan, JYL Oh

13. Osteoporosis of the Spine: Asian Perspectives (Book Chapter)

Parathyroid Hormone Therapy in management of Osteoporosis: World Scientific 2021 Arun Kumar, <u>Jacob Oh Yoong Leong</u>

14. The feasibility of anterior spinal access – the vascular corridor at the L5-S1 level for anterior lumbar interbody fusion

Spine 2021

Julia Ng, Matthew Scott-Young, Daniel Chan, Oh JYL

15. Prospective evaluation of the time required for insertion of 380 lumbar and sacral pedicle screws using navigation with an intraoperative 3D imaging system

International Journal of Spine Surgery (June 2020)

Benjamin Ding, Arun Kumar, Oh JYL, Yu CS.

16. Reliability of the new modified Moro's classification and oblique corridor grading to assess feasibility of the OLIF.

International Journal of Orthopaedics 2020

Arun Kumar, Julia Ng, Tamara Soh, Wayne Yap, Mark Tan, Yu CS, JYL OH

17. Fighting from the COVID-19 Frontline: A Junior Doctor's Perspective on Fear, Duty and Calling

Malaysian Orthopaedic Journal 2020

K Rassapan, JYL Oh

18. Orthopaedic Surgery after Covid 19 – A blueprint for resuming elective surgery after a pandamic

International Journal of Surgery July 2020

Benjamin Ding, JYL Oh, Kelvin Tan, Lee KT

19. A Surgeons role in fighting a medical Pandemic: Experiences from the unit at the epicenter of COVID-19 in Singapore – A Cohort Perspective.

International Journal of Surgery May 2020

K Rassapan, JYL Oh, BTK Ding, KT Lee

20. Addressing Coronavirus Disease 2019 in Spine Surgery: A Rapid National Consensus using the Delphi Method via Teleconference

Asian Spine Journal May 2020

KA Tan, VN Thadani, D Chan, JYL Oh, GKP Liu

21. Operating in a Pandemic: Lessons and strategies from an Orthopedic Unit at the Epicenter of Covid-19 in Singapore

Journal Bone and Joint Surgery May 2020

BTK Ding, T Soh, BY Tan, JYL Oh, K Rassapan, KT Lee

22. Spine Surgery and COVID-19: Challenges and Strategies from the frontlines

Journal Bone and Joint Surgery April 2020

Tamara Soh, Sean Ho, Wayne Yap, Oh JYL

23. Spine Surgery and COVID-19: Early Experiences from the Singapore

Spine 2020

Tamara Soh, Sean Ho, Wayne Yap, Oh JYL

24. Accuracy of Thoracolumbar Pedicle Screw Insertion based on routine intraoperative imaging and Navigation

Asian Spine Journal Sept 2020

Pirated Sundaram, JYL Oh, C Nolum, M Tan, Yu CS, Ling JM

25. Intraoperative neuromonitoring in the Cervical Spine Surgery – When is a signal drop clinically Significant?

Asian Spine Journal (Accepted awaiting publication)

Joshua De Cruz, Kevin Wong Ho Yin, Arun Kumar, Eugene Yang, Dinesh Kumar, JYL Oh

26. Morphological Parameters of the Thoracic Pedicle in an Asian population – A Magnetic Resonance-Based Study of 3324 Pedicles

Global Spine Journal 2020

Tamara Soh, Ankit Tandon, Arun Kumar, Oh JYL

27. Unusual Atlantoaxial Stenosis adjacent to long segment cervical spinal fusion

Annals Academy of Medicine 2020

Marcus Lee, Arun Kumar, Oh JYL

28. Spinal Navigation for Cervical Pedicle Screws: Surgical Pearls and Pitfalls.

Global Spine Journal (Publication ahead of print)

Gerrard Gan, Arun Kumar, Colum Nolan, Yu CS, Oh JYL

29. Spontaneous total resolution of severe disc herniation.

Chonnam Medical Journal (Publication ahead of print)

Arun Kumar, Oh JYL

30. Factors influencing early disc height loss following lateral lumbar interbody fusion

Asian Spine Journal March 2020

Arun Kumar, Oh JYL

31. Incidence of pedicle screw breach following open and minimally invasive spinal instrumentation: A postoperative CT analysis of 513 pedicle screws applied under fluoroscopic guidance

Biomedicine 2020

Chong XL, Arun Kumar, Oh JYL

32. Technological Advancements that can be adopted for safe vertebral column resection.

Indian Spine Journal July 2020

Arun Kumar, Oh JYL

33. Psoriasis complicating wound healing after minimally invasive lumbar spinal fusion.

Indian Spine Journal July 2020

Yeo QY, Arun Kumar, Oh JYL

34. The Oblique Corridor at L4/5: A radiographic anatomical study into the feasibility for lateral interbody fusion.

Spine 2020

Julia Ng, Arun Kumar, Ankit Tandon, Oh JYL

35. Does Lumbar interbody cage size influence Subsidence? A biomechanical study

Spine 2020

Yuan Wei, Arun Kumar, Oh JYL

36. Post-Surgical thoracic cord herniation following an unrepaired Dural defect: A rare complication.

British Journal of Neurosurgery 2019

Arun Kumar, Mark Tan, Colum Nolan, Oh JYL

37. Transverse myelitis masquerading as cauda equina syndrome, stroke and cervical myelopathy.

Biomedicine 2020

Sally Chan, Arun Kumar, Oh JYL

38. Orthostatic Hypotension following cervical spine surgery: Prevalence + Risk Factors

Global Spine Journal 2019

Edward Ong, Lincoln Yeo, Arun Kumar, Oh JYL

39. Orthopaedic Resident Burnout: A literature review on vulnerability, risk factors, consequences and management strategies

Malaysian Orthopaedic Journal 2019 Wong KP, Arun Kumar, Oh JYL

40. Tremors as an Atypical Presentation of Cervical Myelopathy

Journal of Medical Science 2019 Melinda Goh, Arun Kumar, Oh JYL

41. What is the optimal screw length of lumbar pedicle screws during MIS Fixation? A CT guided analysis of 771 Screws

Asian Spine Journal, July 2019 Chua MJ, S Siddiqui, Yu CS, Colum Nolan, Oh JYL

42. Is Spinal Surgery safe for elderly patients aged 80 years and above? Predictors of mortality and morbidity in an Asian Population.

Neurospine Dec 2019 (Editors Choice) Joshua Tan, Arun Kumar, Oh JYL

43. Direct Fixation of C1 Jefferson Fracture using C1 lateral mass screws

International Journal of Spine Surgery 2019 Aravind Kumar, Lim Hai Fon, Oh JYL

44. Spinal Navigation and the impact on residency training: A double edged sword?

Clinics of Orthopaedic Surgery, May 2019

Arun Kumar, Tamara Soh, Mark Tan, Colum Nolan, Yu CS, Oh JYL

45. Factors affecting Mortality rates in Geriatric patients with acute spine fractures: A 12 year study of 613 patients in Singapore.

Asian Spine Journal, March 2019 EL Soon, JC Ling, A Leong, Oh JYL

46. Hassle free Rod placement using Spinal navigation for long construct MIS cases

Asian Spine Journal, Jan 2019

Arun Kumar, Worawat Limsungkol, Oh JYL

47. Early post-surgical recurrence of metastatic vertebral neuro-endocrine tumour treated effectively with chemo-radiotherapy

Biomedicine, March 2019

Arun Kumar, Tee SW, Mark Tan, Oh JYL

48. Ossification of the yellow ligament in the cervical spine – An unusual location *Biomedicine 2019*

Oh JYL, Victor Wang, Timothy Teo, Arun Kumar, Hee HT

49. Pedicle screw revision pull-out strength - does the screw thread design matter?

Spine Feb 2019

WRD Seng, S Siddiqui, Oh JYL

50. A rare case of extensive cervico-thoracic ossification of the posterior longitudinal ligament causing myelopathy

Biomedicine Dec 2018

Arun Kumar, Mark Tan, Oh JYL

51. Megacolon as an atypical presentation of Cervical Myelopathy

Journal of Spine Surgery, 2017 Oh JYL, Kwek K, Tee SW, Mark Tan

52. Outcomes of Non-operative management of Cervical Spine Injuries

Book chapter, for Cervical Spine Injuries: Epidemiology, Long term outcomes and complications. Nova Publisher 2015.

Oh JYL, Hee HT, JS Butler

53. Infection rates in Singaporeans with and without complicated diabetes after ankle fracture surgery

Journal of Orthopaedic Surgery, April 2015. Tan TL, Oh JYL, Kwek E

54. An Atypical Presentation of Spinal Stenosis

Asian Spine Journal, Feb 2015 Oh JYL, Tan JH, Teo TWW, Hee HT

55. Spinal Cord Ischaemia following hypovolaemic Shock

Asian Spine Journal, Dec 2014 Oh JYL, Tan JH, Teo TWW, Hee HT

56. Paradoxical Motion in L5-S1 Adult Spondylolytic Spondylolisthesis

European Spine Journal, 2012 Oh JYL, Liang S, Louange D, Rahmat R, Hee HT, Kumar VP

57. "Snapping" Knee secondary to a tibial osteochondroma

The Knee Journal, 2008 Oh JYL, Tan K, Wong YS

58. Spontaneous spinal epidural haematoma associated with aspirin intake

Singapore Medical Journal, 2008 Oh JYL, Lingaraj K, Rahmat R

INVITED FACULTY and TALKS:

SpineWeek (SMISS AP, Medtronic Robotic Seminar)	Melbourne	May 2023
AO Asia Pacific (Regional Faculty, Adv MIS Course)	Melbourne	April 2023
AO Asia Pacific (Course Chair, Adv Deformity Course)	Singapore	Mar 2023
Singapore Spine Society Annual Meeting (Robot/Endoscopy)	Singapore	Mar 2023
Medtronic OLIF Seminar (Chinese Webinar)	China	Mar 2023
MISSABCON (Avoiding Complications in OLIF)	Pune, India	Nov 2022
SMISS AP (Single Position Surgery)	Osaka, Japan	Oct 2022
Deformity Down Under (Endoscopy, MIS Lateral)	Sydney, Australia	Aug 2022

AO East Asia Conference (Achieving Lordosis in Deformity)	Singapore	Aug 2022
AO In-League Webinar (Advanced lateral Applications)	Singapore	Aug 2022
AO Advance MIS and Open Solutions for Adult Deformity	Singapore	July 2022
PASMISS 2022 – Early Experience with the Mazor Robot	Singapore	July 2022
3 rd Chulalongkorn MIS TLIF and OLIF Course	Bangkok, Thailand	Mar 2022
Medtronic Deformity Symposium (Future of Spine Surgery)	Singapore	Mar 2022
Singapore Trauma course (Spinal cord injury and steroids)	Singapore	Dec 2021
Cochin International Orthopaedic Summit (OLIF Complications) Cochin, India	Oct 2021
AOSpine Advance MIS Course (Chair)	Singapore	Nov 2021
Asia Pacific Spine Society (Fixation in Osteoporotic Fractures)	KL, Malaysia	Oct 2021
ESPINE Endoscopic Symposium (Endoscopic Fusion)	Vienna, Austria	Sept 2021
World Spine (Consideration with Operating with Covid)	Korea	Oct 2021
Asia Pacific Orthopaedic Association (MIS Corpectomy)	Malaysia	July 2021
Singapore Trauma and Critical Care Conference	Singapore	April 2021
Pain Association of Singapore Annual Meeting	Singapore	Mar 2021
Singapore Spine Society 4th Annual Meeting (Co-Chair)	Singapore	Jan 2021
Singapore Spine Society Endoscopic Workshop (Chair)	Singapore	Jan 2020
AO Advance Symposium – Endoscopic Spine Surgery (Chair)	Singapore	Jan 2020
Singapore Spine Society 3 rd Annual Meeting (Co-Chair)	Singapore	Jan 2020
Singapore Orthopaedic Association/Spine Society	Singapore	Nov 2019
Deformity Down Under (Spine Deformity Symposium)	Sydney, Australia	Aug 2019
OLIF Without the flip (Medtronic)	Singapore	May 2019
Spine Synergy (Robotics, Navigation, Innovations in Spine)	Korea	May 2019
Spine Public Forum (Singapore Spine Society)	Singapore	Mar 2019
Advance MIS Solutions for Spine Surgery (Course Chair)	Singapore	Mar 2019
Singapore Spine Society 2 nd Annual Meeting	Singapore	Jan 2019
Advanced Surgical Solutions for Osteoporotic Spine Factures	Singapore	Jan 2019
Advanced Cervical Spine Course 2019	Singapore	Nov 2018
Singapore Orthopaedic Association Annual Meeting	Singapore	Nov 2018

AO Trauma Basic Course (Faculty)	Singapore	Aug 2018
Fundamentals in Spine Surgery (Medtronic)	Bangkok	Mar 2018
Singapore Spine Society 1st Annual Meeting	Singapore	Jan 2018
Medtronic South East Asia (SEA) Trauma Course	Bangkok	Dec 2017
The Economist – Demystifying Ageing (Osteoporosis)	Fullerton (Singapore)	Nov 2017
Masterclasses in Spinal Complications - Faculty	Academia (SGH)	Oct 2017
AO Trauma Basic Course (Faculty)	NTFGH	Aug 2017
Chinese Evening Newspaper (Lian He Wan Bao)	Media	May 2017
Combined Radiology Musculoskeletal Course (Chair)	TTSH	Feb 2017
FRCS Prep Course	NUH	Feb 2017
Public Forum (Pain Management: Spine)	TTSH	Nov 2016
Public Forum (Back Society: The Ageing Spine)	TTSH	Sept 2016
SOA Annual Scientific Meeting (Faculty: Spine Papers)	Singapore	Oct 2016
Convenor, EOPT for year 3 Medical students (YLL)	TTSH	Oct 2016
Public Forum (World Physiotherapy Day)	TTSH	Aug 2016
AO Spine Basic Course (Faculty)	Academia (SGH)	Aug 2016
AO Trauma Basic Course (Faculty)	Academia (SGH)	Aug 2016
9 th NUH Spinal Deformity Course (Faculty)	NUH	June 2016
Singapore Trauma 2016 : Spine Section	TTSH	April 2016
Spine Update: 2016 (Pesi Cacha Lectureship)	NUH	Jan 2016
Minimally invasive techniques. Alphatec Spine	Academia (SGH)	July 2015
Singapore Trauma 2015: Spine Section	TTSH	April 2015
Spine Update: 2015 Pesi Cacha Lectureship	NUH	Jan 2015
MIS course for Spine Surgery (Co-Chair)	NUH	June 2014
FRCS Basic Science Course (Faculty)	TTSH	Mar 2014
Combined Radiology Musculoskeletal Course (Faculty)	TTSH	Mar 2014

AWARDS:

1) The Public Administration Medal (Bronze)	National Award, Prime Ministers Office	
2) Top 20 Best Teacher Award	Tan Tock Seng 2022	
3) NUS Deans Teaching Award	YLL School of Medicine, NUS 2021	
4) Top Ten Best Teacher Award	Tan Tock Seng 2021	
5) TTSH Quality Award – Exceptional Compliments	Tan Tock Seng 2019	
6) TTSH Clinical Training Merit Award (NUS)	Tan Tock Seng 2019	
7) TTSH Best Teacher Award (Senior Doctors)	Tan Tock Seng 2018	
8) NHG Teaching award (Senior Doctors)	National Healthcare Group 2018	
9) Orthopaedic Teaching Excellence Award	National University Hospital 2018	
10) Top Ten Best Teacher Award	Tan Tock Seng Hospital 2017	
11) NUS Medicine Special Recognition Award	National University of Singapore 2017	
12) Quality Improvement Project (Merit)	Tan Tock Seng Hospital 2017	
13) Postgraduate Teaching Excellence Award	Khoo Teck Puat Hospital 2015	
14) Undergraduate Teaching Excellence Award	Khoo Teck Puat Hospital 2015	
15) Deans Teaching Award	YLL School of Medicine, NUS 2015	
16) Service Champion (Patients Satisfaction)	Khoo Teck Puat Hospital 2012-2015	
17) Scholarship – Fellowship Training Award	Ministry of Health, Singapore 2011	