

# CURRICULUM VITAE



CHRIS CHAN YIN WEI

M.D. (UNIMAS)  
M.S. ORTH (UM)

## **CONTENTS**

PERSONAL PARTICULARS	3
EDUCATION	4
APPOINTMENTS	5
DEPARTMENT APPOINTMENTS	5
AWARDS	6
PUBLICATIONS	6
BOOK PUBLICATION	8
INVITED SPEAKER	9
RESEARCH GRANTS	9
PRESENTATIONS	
FREE PAPER PRESENTATION	10
POSTER PRESENTATION	12
STUDENT SUPERVISION	15
SOCIETY	16
COURSE ORGANISED	17
CONFERENCES AND COURSES ATTENDED.	18
EXTRA- CURRICULAR ACTIVITIES	20
REFEREES	21

## **PERSONAL PARTICULARS**

**Date of Birth** : 25<sup>th</sup> December 1975

**Nationality** : Malaysian

**Race** : Chinese

**Sex** : Male

**MMC No** : 37310

**NSR Registration number** : 126043

**Marital status** : Married

**Address** : A-12-03 Ameera Residences  
Jalan SS2/72 47300  
Petaling Jaya  
Selangor

**Telephone** : +6012-8830301 (Hand phone)  
: +603-79320161 (House)

**Office** : +603-7949 2061

**Email** : [chrnat01@yahoo.com](mailto:chrnat01@yahoo.com)

**Current position** : Senior Lecturer  
Spine Research Unit  
Department of Orthopaedic Surgery  
Faculty of Medicine  
University of Malaya  
50603 Kuala Lumpur

## **EDUCATION**

### *PRIMARY EDUCATION*

Sekolah Rendah Bantuan St. Thomas (Standard 1 To 6)  
(1982 - 1987)

### *SECONDARY EDUCATION*

Sekolah Menengah Bantuan St. Thomas (Form 1 To Form 6)  
(1988 - 1994)

### *UNDERGRADUATE QUALIFICATION*

M.D.  
UNIMAS (1995-2000)

### *POSTGRADUATE QUALIFICATION*

M.S. ORTH  
University of Malaya, Kuala Lumpur, Malaysia (2004-2008)

### *SPINE FELLOWSHIP TRAINING*

Supervisor: Professor Kim Ki Tack  
Kyung Hee Meomedical Center  
Seoul, Korea  
1 Jan 2012 – 30 June 2012

## **APPOINTMENTS**

### **Previous Appointments**

1998	Malaysian Medical Association (Local Member)
2005	AOSpine (International Member)
2005	Malaysian Orthopaedic Association (Local Life Member)
2008	Academy of Medicine Malaysia (Local Member)
2009	National Specialist Registry (Member)
2011	Asia Pacific Orthopaedic Association (Member)
2013	Malaysian Spine Society (Committee Member)
2014	Scoliosis Research Society (Active Member)
2014-2015	Scoliosis Research Society (Research Grant Committee)
2015	Malaysian Spine Society (Committee Member)

### **Current Appointments**

2015-current	AOSpine (Representative of Malaysia)
2015-current	Malaysian Orthopaedic Association (Auditor)
2015-current	Malaysian Spine Society (Scientific Chairman)
2015-current	Scoliosis Research Society (E-text Committee)
2015-current	Asia Pacific Spine Society (Chairman)

### **Pre Registration Appointments (House Jobs)**

Sept 2000 – Dec 2000	Paediatric Posting, Sarawak General Hospital
Jan 2001 – April 2001	Obstetrics and Gynaecology Posting, Sarawak General Hospital
May 2001 – Aug 2001	Surgical Posting, Sarawak General Hospital

### **Post Registration Appointments**

Sept 2001 – May 2004	Medical Officer Orthopaedics Department Sarawak General Hospital
June 2004 – May 2008	Masters in Orthopaedic Surgery (Ms Orth) University Malaya

## **ADMINISTRATIVE APPOINTMENTS**

1. Examiner MBBS University Malaya (2015)
2. Ahli Jawatankuasa Pemeriksa Peperiksaan Bahagian 1 Ijazah Sarjana Surgeri, Surgeri Ortopedik Dan Otorinolaringologi- Surgeri Kepala Dan Leher
3. Ahli Jawatankuasa Pembuka Sebutharga Peralatan Tender (2009/2010)
4. Clinical Coordinator Undergraduate Clinical Exam (2010)
5. Secretary Operation Theatre Subcommittee (2011)
6. Coordinator (2014)
7. Subspecialty Fellowship Coordinator (2014/2015)
8. Thesis Review Committee (2014/2015)
9. Department Fellowship Coordinator (2015)
10. Examiner- CBO Part 1/ BSE Exam (2015)
11. OSCE Examiner (2016)
12. Clinical Examiner (2016)
13. CBO Part 1 & Basic Science Examination Committee (2016)
14. Research coordinator (2015-Current)
15. Coordinator Radiology Conference
16. Coordinator for short case teaching Masters Orthopaedic Surgery

## AWARDS

1. ***N. Subramaniam Award Winner 2008 (University)***  
*Masters of Orthopaedic Surgery (Top student for exit exam)*
2. ***Mahmood Merican Award 2008 (University)***  
An Analysis of the Radiographic Morphometry of the Thoracic Pedicle and Correlation with Pedicle Screw Insertion in Cadavers Using the Funnel Technique
3. ***Sijil Perkhidmatan Cemerlang 2010 (UNIVERSITY MALAYA) (University)***
4. ***Asia Pacific Orthopaedic Association (APOA) Spine Junior Travelling Fellowship 2011 (International)***
5. ***Whitecloud Award Nominee- 19<sup>th</sup> International Meeting On Advanced Spine Techniques (IMAST) 2012***  
Feasibility of Percutaneous Posterolateral Spinal Fusion with Recombinant Bone Morphogenetic Protein-2 (Rh-BMP2): A Comparison with Standard Methods Using an Animal Model Study
6. ***International Minimally Invasive Spine Congress Kuala Lumpur 2014- Best Oral Paper Presentation Award (International)***
7. ***P. Balasubramaniam Best Published Translational Medicine (Non Clinical) Paper Award, Malaysian Orthopaedic Association, 2016 (International)***  
Comparison between Percutaneous Fluoroscopic-Guided and Conventional Open Pedicle Screw Placement Techniques for the Thoracic Spine: A Safety Evaluation in Human Cadavers
8. ***Subir Sengupta Award, Malaysian Orthopaedic Association, 2016, (National)***  
Peri-operative Outcome in Posterior Spinal Fusion for Adolescent Idiopathic Scoliosis: A Prospective Study Comparing Single Versus Two Attending Surgeons Strategy
9. ***Best Lecturer Award- Department of Orthopaedic Surgery, Faculty of Medicine, 2016, (Department)***
10. ***Best Research Award- 4<sup>th</sup> International Malaysian Spine Society (MSS) Scientific Congress 2016***  
Assessment of Intra-Operative Blood Loss at Different Surgical Stages of Posterior Spinal Fusion Surgery in Adolescent Idiopathic Scoliosis (Lenke Type 1 and 2): A Prospective Propensity Score-Matched Cohort Study Comparing Between Single and Two Attending Surgeons

## PUBLICATIONS

1. ***“The Assessment of Immediate Post-operative Scoliosis correction Using Pedicle crew System by Utilising the Fulcrum Bending Technique”*** Chan CYW, MK Kwan, S Saravanan, Saw LB, Deepak AS. *Medical Journal of Malaysia*. Mar 2007; 62 (1):33-35. (SCOPUS)
2. ***“Post-operative health Related Quality of Life Assessment in Scoliosis Patients using the Scoliosis Research Society – 22 Patient Questionnaire.”*** Chan CYW, MK Kwan, Saw LB, Deepak AS, Chong CS, Liew TM, Lee CS. *Medical Journal of Malaysia*. June 2008; 63 (2):137-39. (SCOPUS)
3. ***“Outpatient Pre-operative Assessment in Joint Replacement Surgery.”*** Chan CYW, Nam HY, Raveenthiran R, Choon SK, Tai CC. *Medical Journal of Malaysia*. June 2008; 63 (2):100-03. (SCOPUS)
4. ***“Distal Radius Morphometry in the Malaysian Population.”*** Chan CYW, Vivek AS, Leong WH, Rukmanikanthan S. *Malaysian Orthopaedic Journal* 2008;2(2):27-30 (SCOPUS)
5. ***“The Outcome of Pleomorphic Sarcoma at University Malaya Medical Centre - A Fifteen Year Review”.*** *Medical Journal of Malaysia* Oct 2008;63(4):311-314. (SCOPUS)
6. ***“Is Femoral Neck Geometry Adequate For Placement Of The Proximal Femoral Nail In The Malaysian Population? A review of 100 cases”.*** *Medical Journal of Malaysia* 2009;64(1):22-6. (SCOPUS)
7. ***“U-Shaped Sacral Fracture: An Easily Missed Fracture with High Morbidity. A Report of Two Cases”.*** Hussin P, Chan CYW, Saw LB, Kwan MK. *Emerg Med J*. 2009 Sep;26(9):677-8. (ISI)
8. ***“Pneumocranium secondary to Halovest pin penetration through an enlarged frontal sinus. A case report”.*** Cheong ML, Chan CYW, Saw LB, Kwan MK. *Eur Spine J*. 2009 Jul;18 Suppl 2:269-71. (ISI)
9. ***“Comparison of SRS-24 and SRS-22 scores in thirty eight Adolescent Idiopathic Scoliosis patients who had undergone surgical correction”.*** Chan CYW, Saw LB, Kwan MK. ASEAN edition *Malaysian Orthopaedic Journal* 2009;3(1):56-59. (SCOPUS)
10. ***“Chance Fracture Secondary to a Healed Kyphotic Compression osteoporotic Fracture”.*** Teh KK, Chan CYW, Saw LB, Kwan MK. *Malaysian Orthopaedic Journal* 2009;3(2):44-46. (SCOPUS)



11. ***“Scarf related Hangman’s fracture – A case report”***. Chiu CK, **Chan CYW**, Saw LB, Kwan MK. European Journal of Trauma and Emergency Medicine 2010;36:180-2. (ISI)
12. ***“Safety of Thoracic Pedicle Screw Application Using the Funnel Technique in Asians: A Cadaveric Evaluation”***. **Chan CYW**, Kwan MK, Saw LB. Eur Spine J. 2010 Jan;19(1):78-84. (ISI)
13. ***“Safety Issues and Neurological Improvement following C1-C2 Fusion using C1 Lateral Mass and C2 Pedicle Screw in Atlantoaxial Instability”***. MK Kwan, **Chan CYW**, TCC Kwan, YN Gashi, LB Saw. Malaysian Orthopaedic Journal 2010; 4(2):17-22. (SCOPUS)
14. ***“Thoracic pedicle screw insertion in Asian cadaveric specimen: does radiological pedicle profile affect outcome?”*** Chan CYW, Saw LB, Kwan MK. Surg Radiol Anat. 2011;33:19-25. (ISI)
15. ***“Acute Brown-Sequard Syndrome Following Brachial Plexus Avulsion Injury. A Report of Two Cases”***. Zubair M, Ravindran T, **Chan CYW**, Saw LB, Kwan MK. HK Emergency Med 2011;18:347-51. (ISI)
16. ***“Double level extension-distraction thoracic injuries with concomitant double level sternal fracture: a case report”***. Lee CK, **Chan CYW**, Saw LB, et al. M Orth J 2011;5:53-5.
17. ***“Radiological assessment of cervical lateral mass screw angulations in asian patients”***. Mariapan S, Saw LB, **Chan CYW**, Deepak AS. Kwan MK. Indian J Orthop 2011;45:504-7. (ISI)
18. ***“A radiological evaluation of the morphometry and safety of S1, S2 and S2-ilium screws in the Asian population using three dimensional computed tomography scan: an analysis of 180 pelvis”***. Kwan MK, Jeffry A, **Chan CYW**, Saw LB. Surg Radiol Anat 2012;34(3):217-27. doi: 10.1007/s00276-011-0919-2. Epub 2011 Dec 23. (ISI)
19. ***“The Role of Percutaneous Pedicle Screw Stabilisation for Unstable Spine Fractures in Polytraumatised Patients: A Report of Two Cases.”*** Tan BB, Chan CYW, Saw LB, **Kwan MK**. Indian J Orthop 2012 Nov; 46(6):710-713. DOI: 10.4103/0019-5413.104235.

20. ***“Symptomatic calcifying pseudotumor of the thoracic spine that resolved with the indomethacin treatment: a case report”***. Kwan MK, Abdelhai AM, Saw LB, Chan CYW. Spine (Phila Pa 1976). 2012;37(26):E1676-9. (ISI)  
doi: 10.1097/BRS.0b013e318276b48c.
  
21. ***“Correction of severe thoracolumbar spondylolisthesis (Grade 4) secondary to neurofibromatosis with posterior spinal instrumentated fusion alone. A case report”***. Tahir MM, Kwan MK, Saw LB, Chan CYW, Goh DW. Med J Malaysia 2012;67:633-5. (SCOPUS)
  
22. ***“The Safety and Strength of a Novel Medial, Partial Non-Threaded Pedicle Screw: A Cadaveric and Biomechanical Investigation”***. Kwan MK, Chan CYW, Saw LB, Shanmugam R, Lenke LG. J Spinal Disord Tech 2013. Published ahead of print. (ISI)
  
23. ***“Feasibility of Percutaneous Posterolateral Spinal Fusion with Recombinant Bone Morphogenetic Protein-2 (rh-BMP2): A comparison with standard methods using an animal model study”***. Accepted for publication 2013. Journal of Spinal Disorders and Techniques (ISI)
  
24. ***“Improved Accuracy and Safety of Intracorporeal Transpedicular Bone Grafting using Contrast Impregnated Bone: A Case Report”*** Chiu CK, Chan CYW, Kwan MK. Malaysian Orthopaedic Journal. 2014; 8(3):27-9.
  
25. ***“Is Neck Tilt and Shoulder Imbalance The Same Phenomenon? A Prospective Analysis of 89 Adolescent Idiopathic Scoliosis Patients (Lenke Type 1 and 2)”*** Kwan MK, Wong KA, Lee CK, Chan CYW. Eur Spine Journal. 2015; R10.1007/s00586-015-4016-9. (ISI)
  
26. ***“A Comparison of Feasibility and Safety of Percutaneous Fluoroscopic Guided Thoracic Pedicle Screws Between Europeans and Asians: Is There Any Difference?”*** Kwan MK, Chiu CK, Chan CYW, Zamani R, Hansen-Algenstaedt N. European Spine Journal. 2015; 10.1007/s00586-015-4150-4. (ISI)
  
27. ***“Prediction of Curve Correction using Alternate Level Pedicle Screw Placement in Adolescent Idiopathic Scoliosis (AIS) Lenke 1 and 2 Patients using Supine Side Bending (SB) and Fulcrum Bending (FB) Radiograph: The Influence of Curve Magnitude and Lenke AR Curves”*** Kwan MK, Zeyada HE, Chan CYW. Spine (Phila Pa 1976). 2015 August 27. (ISI)

28. ***“Accuracy and Safety of Fluoroscopic Guided Percutaneous Pedicle Screws in Thoracic and Lumbosacral Spine: A Review of 2000 Screws”*** Hansen-Algenstaedt N, Chiu CK, **Chan CYW**, Lee CK, Christian S, Kwan MK. Spine. 2015; 40(17):E954-63. (ISI)
29. ***“The Accuracy and Safety of Fluoroscopically Guided Percutaneous Pedicle Screws in the Lumbosacral Junction and the Lumbar Spine: A Review of 880 Screws”*** Chiu CK, Kwan MK, **Chan CYW**, Schaefer C, Hansen-Algenstaedt N. Bone and Joint. 2015; 97-B (8):1111-7. (ISI)
30. ***“Can Intra-operative Text Messages [Short Message Service (SMS)] Reduce Parental Anxiety of Children Undergoing Posterior Spinal Fusion Surgery For Adolescent Idiopathic Scoliosis (AIS)”*** Kwan MK, Gan CC, Chiu CK, **Chan CYW**. Spine. 2015. (ISI)
31. ***“Comparison between Percutaneous Fluoroscopic-Guided and Conventional Open Pedicle Screw Placement Techniques for the Thoracic Spine: A Safety Evaluation in Human Cadavers”*** Kwan MK, Chiu CK, Lee CK, **Chan CYW**. Bone & Joint. 2015. (ISI)
32. ***“Minimally Invasive Spinal Stabilization (MIS<sub>t</sub>) using Fluoroscopic-Guided Percutaneous Screws Technique as a Form of Palliative Surgery in Patients with Spinal Metastasis”*** Kwan MK, Lee CK, **Chan CYW**. Asian Spine Journal. 2015.
33. ***“Ultra Long Construct MIS<sub>t</sub> using Percutaneous Pedicle Screws in the Treatment of Symptomatic Multicentric Metastasis: A Case Report”*** Lee CK, **Chan CYW**, Kwan MK. Asian Spine Journal. 2015.
34. ***“Improved Accuracy and Safety of Intracorporeal Transpedicular Bone Grafting- using Contrast Impregnated Bone: A Case Report”*** Chiu CK, **Chan CYW**, Kwan MK. Malaysian Orthopaedic Journal. 2015.
35. ***“Peri-operative Outcome in Posterior Spinal Fusion for Adolescent Idiopathic Scoliosis: A Prospective Study Comparing Single versus Two Attending Surgeons Strategy”*** Kwan MK, **Chan CYW**. Spine. 2015. (ISI)
36. ***“Assessment of Intra-operative Blood Loss at Different Surgical Stages during Posterior Spinal Fusion Surgery in the Treatment of Adolescent Idiopathic Scoliosis”*** Chiu CK, **Chan CYW**, Aziz I, Hassan MS, Kwan MK. Spine. 2015. (ISI)
37. ***“Minimally Invasive Spinal Stabilization using Fluoroscopic-Guided Percutaneous Screws as a Form of Palliative Surgery in Patients with Spinal Metastasis”*** Kwan MK, Lee CK, **Chan CYW**. Asian Spine Journal. 2016.

38. ***“The Use of Pre-operative Halo Traction to Minimize Risk for Correction of Severe Scoliosis in a Patient with Fontan Circulation: A Case Report and Review of Literature”*** Chan CYW, Lim CY, M. Shahnaz Hasan, Kwan MK. European Spine Journal. 2016. (ISI)
39. ***“Assessing the Flexibility of the Proximal Thoracic Segments above the ‘Potential Upper Instrumented Vertebra’ using the Cervical Supine Side Bending Radiographs in Lenke 1 and 2 Curves for Adolescent Idiopathic Scoliosis Patients”*** Chan CYW, Chiu CK, Kwan MK. Spine (Phila Pa 1976). 2016. (ISI)
40. ***“Remarkable Bone Formation Following Gefitinib Treatment in Lung Adenocarcinoma Patients with Extensive Lytic Bone Metastases Positive for Epidermal Growth Factor Receptor (EGFR) Mutation: A Report of Two Cases”*** Elrofai SB, Kwan AKN, Chan CYW, Kwan MK. Journal of Orthopaedic Surgery. [Accepted in 2015].
41. ***“Posterior Spinal Instrumented Fusion in Scoliosis Associated with MELAS Syndrome: A Report of 2 Cases and Review of Literature”*** Loh KW, Chan CYW, Chiu CK, M. Shahnaz Hasan, Kwan MK. Journal of Orthopaedic Surgery.
42. ***“Is There an Optimal Upper Instrumented Vertebra (UIV) Tilt Angle to Prevent Post-operative Shoulder Imbalance and Neck Tilt in Lenke 1 and 2 Adolescent Idiopathic Scoliosis (AIS) Patients?”*** Kwan MK, Chan CYW. European Spine Journal. [Accepted in 2016].
43. ***“Neurological Recovery in Two Patients with Cauda Equina Syndrome Secondary to L5 Lumbar Spine Giant Cell Tumour after Treatment with Denosumab without Surgery”*** Randhawa SS, Kwan AKN, Chiu CK, Chan CYW, Kwan MK. Asian Spine Journal. [Accepted in 2016].
44. ***“Prediction of Height Increment using Pre-operative Radiological parameters Following Selective Thoracic Fusion with Alternate Level Pedicle Screw Construct in Lenke 1 and 2 Adolescent Idiopathic Scoliosis Patients”*** Kwan MK, Aziz I, Chan CYW. Journal of Orthopaedic Surgery. [Accepted in 2016].
45. ***“A Silver Medal Winner at the 13<sup>th</sup> World Wu Shu Championship 2015, 17 Months after Selective Thoracic Fusion for AIS: A Case Report”*** Chan CYW, Aziz I, Chai FW, Kwan MK. Spine (Phila Pa 1976). [Accepted in 2016].
46. ***“Accuracy and Safety of Pedicle Screw Placement in Adolescent Idiopathic Scoliosis (AIS) Patients: A Review of 2020 screws using Computer Tomography Assessment”*** Mun Keong Kwan, Chee Kidd Chiu, Siti Mariam Abd Gani, Chris Yin Wei Chan. Spine (Phila Pa 1976). [Accepted in 2016].

47. ***“Is C1 Lateral Mass Screw Placement Safe for the Chinese, Indians and Malays? An Analysis of 180 Computed Tomography Scans”*** Lee Chee Kean, Tan Tiam Siong, **Chan Chris Yin Wei**, Kwan Mun Keong. Journal of Orthopaedic Surgery. [Accepted in 2016].
48. ***“Anesthetic Considerations In Scoliosis Patient With Dopa-Responsive Dystonia Or Segawa’s Syndrome: 2 Case Reports And A Review Of The Literature”*** M. Shahnaz Hasan, Kok Weng Leong, **Chris Yin Wei Chan**, Mun Keong Kwan. Journal of Orthopaedic Surgery. [Accepted in 2016].
49. ***“Biomechanical Comparison between Cortical Screw-rod Construct versus Pedicle Screw-rod Construct in a Transforaminal Lumbar Interbody Fusion (TLIF): A Porcine Animal Study Model”***. **Chris Chan Yin Wei**, Sem Sei Haw, Elrofai Suliman Bashir, Saw Lim Beng, Shamugan Rukmani Kanthan, Kwan Mun Keong. Journal of Orthopaedic Surgery. [Accepted in 2016].
50. ***“Comparison between Minimally Invasive Surgery and Conventional Open Surgery for Patients with Spinal Metastasis: A Prospective Propensity Score-Matched Study”***. Nils Hansen-Algenstaedt, Mun Keong Kwan, Petra Algenstaedt, Chee Kidd Chiu, Lennart Viezens, Teik Seng Chan, Chee Kean Lee, Jasmin Wellbrock, **Chris Yin Wei Chan**, Christian Schaefer. Spine (Phila Pa 1976). [Accepted in 2016].
51. ***“Trajectory of Post-operative Wound Pain within the first two weeks following Posterior Spinal Fusion Surgery in Adolescent Idiopathic Scoliosis Patients”***. Mun Keong Kwan, Chee Kidd Chiu, Teik Seng Chan, Kok Ian Chong, Siti Mariam Mohamad, Mohd Shahnaz Hasan, **Chris Yin Wei Chan**. Spine (Phila Pa 1976). [Accepted in 2016].
52. ***“Does a Dual Attending Surgeon Strategy confer additional benefit for Posterior Selective Thoracic Fusion in Lenke 1 and 2 Adolescent Idiopathic Scoliosis (AIS)? A Prospective Propensity Matching Score Analysis”***. Kwan MK, **Chan CYW**. The Spine Journal. [Accepted in 2016].

## BOOK PUBLICATION

1. *Patient Handbook on Idiopathic Scoliosis*. Kwan Mun Keong, **Chris Chan Yin Wei**, Loh Kwong Weng, Lim Chee Chean, Niki Ho Wai Wye. 2013. Izmo Graphics Associates. ISBN No.: 978-983-42600-9-5.
2. *Management of Spinal Deformities. Concise Handbook For Orthopaedic Trainees in UMMC*. Kwan Mun Keong, **Chris Chan Yin Wei**, Niki Ho Wai Wye, Loh

Kwong Weng. July 2013. Izmo Graphics Associates. ISBN No.: 978-967-12016-1-9

## **INVITED SPEAKER**

1. How to answer MCQs. Basic Surgical Sciences Exam preparatory course 2009. Organised by the College of Surgeons, Academy of Medicine Malaysia. (*National*)
2. How to Answer MCQs. Basic Surgical Sciences Exam preparatory course 2010. Organised by the College of Surgeons, Academy of Medicine Malaysia. (*National*)
3. How to answer MCQs. Basic Surgical Sciences Exam preparatory course 2011. Organised by the College of Surgeons, Academy of Medicine Malaysia. (*National*)
4. Pathophysiology of Low Back Pain. AOEMM Technical Update 2011. 30 October 2011. Grand Seasons Hotel. Kuala Lumpur. (*National*)
5. Advances in surgical management of neck pain. GPs Leading in Advanced Medicine. Episode 2: Back pain. October 21 2012 (*National*)
6. Surgical anatomy and pedicle screw insertion technique. UM Spine Course 2013. Minimally Invasive Spine Surgery. 31 May 2013, University Malaya. (*International*)
7. Current concepts in the management of spinal infections: a review of literature and outcome of surgical management using single stage minimally invasive stabilization (MIS<sub>t</sub>) and minimal incision posterolateral debridement. 9<sup>th</sup> Asia Pacific Spine Society Congress. Kuching, Sarawak, Malaysia. 29-31 August 2013. (*International*)
8. Intradiscal procedures for treatment for low back pain. How effective are these procedures. AO Spine Advances Symposium in Lumbar degenerative Spine Diseases. University Malaya, Kuala Lumpur. 5-6 October 2013. (*International*)
9. Lumbar Disc Herniation: When conservative management is a good option? AO Spine Advances Symposium in Lumbar degenerative Spine Diseases. University Malaya, Kuala Lumpur. 5-6 October 2013. (*International*)
10. Safety of pedicle screws – Asian Perspective. AO Spine Advances Symposium in Lumbar degenerative Spine Diseases. University Malaya, Kuala Lumpur. 5-6 October 2013. (*International*)

11. Spinal Infection and Its Management. Spine Instructional Course 2014. University Malaya, Kuala Lumpur. 20-21 Feb 2014. (*National*)
12. When is Surgery Beneficial in Patients with Metastatic Spinal Tumors who are terminally ill?. The Combined Academic Conference of the 18th Biennial Congress of Asia Pacific Orthopaedic Association (APOA) and the 36th Annual Meeting of the Royal College of Orthopaedic Surgeons of Thailand (RCOST), 25 Oct 2014 to 25 Oct 2014, Asia Pacific Orthopaedic Association, (*International*)
13. Prolapsed Intervetebral Disc, Spine Instructional Course 2014. University Malaya, Kuala Lumpur. 20-21 Feb 2014. (*National*)
14. Spinal Infections and its management - current concept, Spine Instructional Course 2015, 04 Apr 2015 to 05 Apr 2015, Spine Research Unit, Department of Orthopaedic Surgery, University Malaya Medical Centre, (*National*)
15. Update on management of Disc Herniation / Prolapsed Disc, Spine Instructional Course, 04 Apr 2015 to 05 Apr 2015, Spine Research Unit, (*National*)
16. Cervical degeneration with cord compression and myelopathy - Cervical myelopathy, AOSpine Principles Course, 21 Nov 2015 to 22 Nov 2015, AOSpine, (*International*)
17. Anterior column compression fracture without neurological loss A type injury: Anterior column compression fracture with significant deformity but no neurological compromise, AOSpine Principles Course, 21 Nov 2015 to 22 Nov 2015, AOSpine, (*International*)
18. Assessment and management of pyogenic spinal infection, AOSpine Principles Course, 21 Nov 2015 to 22 Nov 2015, AOSpine, (*International*)
19. ACDF and Laminoplasty, Basic Operative Principles Spine Course 2016, 20 Jan 2016 to 20 Jan 2016, Spine Research Unit, NOCERAL, Department of Orthopaedic Surgery, University of Malaya, (*University*)
20. Lumbar and Sacral Screws Fixation and TLIF, Basic Operative Principles Spine Course 2016, 20 Jan 2016 to 20 Jan 2016, Spine Research Unit, NOCERAL, Department of Orthopaedic Surgery, University of Malaya, (*University*)
21. Thoracic Pedicle Screws Fixation and Principles of Fracture Reduction/ Fixation, Basic Operative Principles Spine Course 2016, 20 Jan 2016 to 20 Jan 2016, Spine Research Unit, NOCERAL, Department of Orthopaedic Surgery, (*University*)
22. Lumbar Decompression i.e. Discectomy, Medial Facetectomy, Laminectomy and Internal Laminoplasty, Basic Operative Principles Spine Course 2016, 20 Jan

- 2016 to 20 Jan 2016, Spine Research Unit, NOCERAL, Department of Orthopaedic Surgery, University of Malaya, (*University*)
23. Selection of Fusion level in Lenke 5 curves, Singapore Spine Week 2016, 16 May 2016 to 20 May 2016, AOSPINE, (*International*)
  24. AIS: Scoliosis reduction techniques, Singapore Spine Week 2016, 16 May 2016 to 20 May 2016, AOSPINE, (*International*)
  25. Osteoporotic Vertebral Compression Fracture (OVCF): Diagnosis and treatment, 19th APOA Congress, Melbourne Australia, 29 Mar 2016 to 01 Apr 2016, APOA, (*International*)
  26. Lateral Mass Fixation and C1 / 2 Fixation, Basic Operative Principles Spine Course 2016, 20 Jan 2016 to 20 Jan 2016, Spine Research Unit, NOCERAL, Department of Orthopaedic Surgery, University of Malaya, (*University*)
  27. Discectomy for Prolapsed Intervertebral Disc: Indications for surgery, Technique and Tips & Tricks, Basic Operative Principles Spine Course 2016, 20 Jan 2016 to 20 Jan 2016, Spine Research Unit, NOCERAL, Department of Orthopaedic Surgery, (*University*)
  28. Thoracic Pedicle Screws: Surgical Technique and Complications Avoidance, Basic Operative Principles Spine Course 2016, 20 Jan 2016 to 20 Jan 2016, Spine Research Unit, NOCERAL, Department of Orthopaedic Surgery, (*University*)
  29. Cervical Prolapsed Disc: Indications for Surgery & Techniques (Anterior vs Posterior), Basic Operative Principles Spine Course 2016, 20 Jan 2016 to 20 Jan 2016, Spine Research Unit, NOCERAL, Department of Orthopaedic Surgery, University of Malaya, (*University*)

## **RESEARCH GRANTS**

1. **UMRG Fund:** Feasibility of Percutaneous Spinal Fusion with Bone Morphogenetic Protein: A comparison with standard methods (An animal model) Main investigator. (Completed)
3. **UMRG Fund:** The usage of medial non-threaded pedicle screw in increasing the safety of thoracic pedicle screw insertion in Asians: A cadaveric study. Associate investigator with Prof Kwan Mun Keong. (Completed)



3. **UMRG Fund:** Combination transarticular and C1 lateral mass screw for C1C2 stabilisation: Is there any biomechanical advantage? Associate investigator with Dr. Saw Lim Beng. (Ongoing)

## PRESENTATIONS

### *FREE PAPER PRESENTATION*

1. ***“Post-operative health Related Quality of Life Assessment in Scoliosis Patients using the Scoliosis Research Society – 22 Patient Questionnaire.”*** Chan CYW, MK Kwan, Saw LB, Deepak AS, Chong CS, Liew TM, Lee CS. Presented at Malaysian Orthopaedic Association 37<sup>th</sup> Annual General Meeting, 17 – 20<sup>th</sup> May 2007 (*National*)
2. ***“Comparison between the correction rate of using Polyaxial Pedicle Screw and Hybrid System in Scoliosis Surgery.”*** Saravanan S, Kwan MK, Chooi WK, Chan CYW, Saw LB, Deepak AS. Presented at Malaysian Orthopaedic Association 37<sup>th</sup> Annual General Meeting, 17 – 20<sup>th</sup> May 2007 (*National*)
3. ***“The Outcome of Pleomorphic Sarcoma at University Malaya Medical Center. A fifteen years review”.*** Chan CYW, Janarthan N, Vivek AS, Jayalaskhmi P. Presented at XXI Annual Meeting of European Musculoskeletal Oncology Society. Warsaw, Poland. 14<sup>th</sup> – 16<sup>th</sup> May 2008. (*International*)
4. ***“Comparison of Radiological Coronal Correction and Patient Satisfaction between the Hybrid Fixation Group and the Pedicle Screw Fixation Group in Adolescent Idiopathic Scoliosis in University Malaya Medical Centre”*** Saravanan S, Deepak A S, MK Kwan, LB Saw, CYW Chan presented on Combined Meeting of 28<sup>th</sup> ASEAN Orthopaedic Association Congress & 38<sup>th</sup> Malaysian Orthopaedic Association AGM/ ASM (incorporating the 4<sup>th</sup> Instructional Course of the American Academy of Orthopaedic Surgeons) at Shangri-La Hotel, Kuala Lumpur on 26–29 Jun 2008.
5. ***“Safety of Thoracic Pedicle Screws Placement in Asian Population and Early Experience of Percutaneous Instrumented Stabilization in Thoracolumbar Spine.”*** Kwan MK, Saw LB, Chan CYW. Accepted for oral Presentation at Asia Pacific Spine Symposium 7<sup>th</sup> -8<sup>th</sup> August 2008 (*International*)
6. ***“A Review of the Sagittal Radiological Profile of Patients with Acute Osteoporotic Fractures Treated Conservatively.”*** Chan CYW, Faruk NA, Saw LB, Kwan MK, presented on WENMISS Congress 2009: The World Society for Endoscopic Navigated and Minimal Invasive Spine Surgery at Kota Kinabalu, Sabah, Malaysia on 21-23 May 2009.

7. **"Conservative management of vertebral fragility fracture. A look into final sagittal balance at end of treatment duration".** Chan CYW, Faruk NA, Saw LB, Kwan MK. Annual Congress of World Society for Endoscopic, Navigated & Minimal Invasive Spine Surgery (WENMISS) 2009- International meeting- Accepted for best paper award. (*International*)
8. **"Posterior Cervical Stabilization with Lateral Mass Screw Fixation – A Comparison between Magerl and A Novel Technique."** M Sureisen, LB Saw, CYW Chan, MK Kwan, AS Deepak, presented at 40<sup>th</sup> MOA Annual General Meeting / Annual Scientific Meeting 2010, in Johor Bahru, Malaysia on 21-23 May 2010.
9. **"Use of pre-operative supine side bending films in predicting the optimal proximal fusion vertebra' (PFV) tilt angle in preventing neck tilt among adolescent idiopathic scoliosis patients."** Kwan MK, Saw LB, Chan CYW. APOA Spine and Paediatric Sections 2011 1<sup>st</sup> -4<sup>th</sup> June 2011. (*International*)
10. **"The Use of Percutaneous Pedicle Screw Fixation in Thoracolumbar Spine in Asians: Is It Safe?"** MK Kwan, CYW Chan, LB Saw, presented at APOA Spine & Paediatric Sections Meeting 2011, in Gifu, Japan on 1-4 Jun 2011
11. **"Biomechanical comparison of instrumented lumbar interbody fusion using one PLIF versus TLIF polyetheretherketone (PEEK) cage."** Chan CYW, Cheong ML, Saw LB, Kwan MK. APOA Spine and Paediatric Sections 2011 1<sup>st</sup> -4<sup>th</sup> June 2011. (*International*)
12. **"Comparison between percutaneous and standard open techniques for thoracic pedicle screw placement (T4 to T12): A safety evaluation using a cadaveric model."** Chan CYW, Saw LB, Kwan MK. APOA Spine and Paediatric Sections 2011 1<sup>st</sup> -4<sup>th</sup> June 2011. (*International*)
13. **"Percutaneous Pedicle Screw fixation of the Thoracic Spine. Is this technique safe in Asian patients?"** Kwan MK, Saw LB, Chan CYW. 8<sup>th</sup> SSIS Busan, Korea. 23<sup>rd</sup>-24<sup>th</sup> June 2011. (*International*)
14. **"Percutaneous Pedicle Screw stabilisation for advanced spinal metastasis: Early experience in a single institution."** Kwan MK, Saw LB, Chan CYW. 8<sup>th</sup> SSIS Busan, Korea. 23<sup>rd</sup>-24<sup>th</sup> June 2011. (*International*)
15. **"Correlation between preoperative side bending lowest instrumented vertebra tilt and postoperative lowest instrumented vertebra tilt in relation to coronal balance in adolescent idiopathic scoliosis with structural lumbar curve."** Lee CK, Chan CYW, Saw LB, Kwan MK. MSS-SRS international spine congress 2011. Kuala Lumpur, Malaysia. 8th - 10th December 2011 (*International*)
16. **"Outcome of percutaneous pedicle screw stabilisation in advance spinal metastasis."** Saw LB, Chan CYW, Kwan MK. MSS-SRS international spine

congress 2011. Kuala Lumpur, Malaysia. 8th - 10th December 2011  
(*International*)

17. ***“Feasibility of percutaneous posterolateral spinal fusion with recombinant bone morphogenetic protein-2(rh-BMP2): A comparison with standard methods using an animal model study.”*** Chan CYW, Saw LB, Paisal H, Kwan MK. 19th International Meeting on Advanced Spine Techniques, Istanbul. July 18-21, 2012. Thomas Whitecloud Award Presentation. (*International*)
18. ***“Surgical correction in patients with lumbar degenerative kyphosis with low bone mineral density: An analysis of 40 patients with a minimum follow-up of two years.”*** Chan CYW, Kim KT, Huh DS, Lee SH, Son ES. Asia Pacific Orthopaedic association meeting, New Delhi. October 3-6, 2012. (*International*)
19. ***“Palliative Surgery in Spinal Metastasis Patients with Instability Pain: The Role of Minimally Invasive Spinal Stabilization (MIS) using Fluoroscopic Guided Percutaneous Screws Technique”*** Kwan MK, Lee CK, Chan CYW, presented at Scoliosis Research Society (SRS) 22<sup>nd</sup> International Meeting on Advanced Spine Techniques (IMAST) 2015, in Kuala Lumpur Convention Center, on 8-11 July 2015.
20. ***“The Safety of Percutaneous Pedicle Screws using Fluoroscopy in the Lumbosacral Junction and Lumbar Spine”*** Chiu CK, Kwan MK, Chan CYW, Schaefer C, Hansen-Algenstaedt N, presented at Scoliosis Research Society (SRS) 22<sup>nd</sup> International Meeting on Advanced Spine Techniques (IMAST) 2015, in Kuala Lumpur Convention Center, on 8-11 July 2015.
21. ***“Are Bicortical Purchase of C1 Lateral Mass and C2 Pedicle Screws Safe for Internal Carotid Artery Asians?”*** Lee CK, Tan TS, Chan CYW, Kwan MK, presented at Scoliosis Research Society (SRS) 22<sup>nd</sup> International Meeting on Advanced Spine Techniques (IMAST) 2015, in Kuala Lumpur Convention Center, on 8-11 July 2015.
22. ***“The use of Fluoroscopic Guided Percutaneous Pedicle Screws in the Upper Thoracic Spine (T1 to T6): Is it Safe?”*** Kwan MK, Chiu CK, Chan CYW, Zamani Z, Hansen-Algenstaedt N, presented at 19<sup>th</sup> APOA Congress, held in Melbourne Australia on 29<sup>th</sup> March – 1<sup>st</sup> April 2016.
23. ***“Assessment of Intraoperative Blood Loss at Different Surgical Stages during Posterior Spinal Fusion Surgery in the Treatment of Adolescent Idiopathic Scoliosis”*** Chiu CK, Chan CYW, Aziz I, Hasan MS, Kwan MK, presented at 19<sup>th</sup> APOA Congress, held in Melbourne Australia on 29<sup>th</sup> March – 1<sup>st</sup> April 2016.

24. ***“Is there an optimal Upper Instrumented Vertebra (UIV) tilt angle to prevent post-operative shoulder imbalance and neck tilt in Lenke 1 and 2 Adolescent Idiopathic Scoliosis (AIS) patients?”*** Kwan MK, Chan CYW, presented at 19<sup>th</sup> APOA Congress, held in Melbourne Australia on 29<sup>th</sup> March – 1<sup>st</sup> April 2016.
25. ***“Does a dual attending surgeon strategy improve peri-operative patient outcome in Adolescent Idiopathic Scoliosis?”*** Chan CYW, Kwan MK, presented at The 45<sup>th</sup> Annual Meeting of the Japanese Society for Spine Surgery and Related Research 2016, in Chiba Tokyo on 14-16 April 2016.
26. ***“Importance of the Upper Instrumented Vertebra (UIV) tilt angle in preventing post-operative shoulder imbalance and neck tilt in Lenke 1 and 2 Adolescent Idiopathic Scoliosis (AIS) patients?”*** Chan CYW, Kwan MK, presented at The 45<sup>th</sup> Annual Meeting of the Japanese Society for Spine Surgery and Related Research 2016, in Chiba Tokyo on 14-16 April 2016.
27. ***“A Computed Tomography (CT) analysis of the accuracy and safety profile of 2020 pedicle screws among Asian Adolescent Idiopathic Scoliosis (AIS) patients”*** Chan CYW, Chiu CK, Kwan MK, presented at The 45<sup>th</sup> Annual Meeting of the Japanese Society for Spine Surgery and Related Research 2016, in Chiba Tokyo on 14-16 April 2016.
28. ***“The Safety and Accuracy of Fluoroscopic Guided Percutaneous Pedicle Screws amongst Asians”*** Chan CYW, Chiu CK, Kwan MK, presented at The 45<sup>th</sup> Annual Meeting of the Japanese Society for Spine Surgery and Related Research 2016, in Chiba Tokyo on 14-16 April 2016.
29. ***“Fluoroscopic guided percutaneous thoracic and lumbosacral pedicle screws, is it safe for Asians?”*** Chan CYW, Chiu CK, Kwan MK, presented at Asia Pacific Spine Society (APSS) Spine Week Meeting 2016, in Marina Bay Sands Convention Center, Singapore on 16-20 May 2016.

#### **POSTER PRESENTATION**

1. ***Comparison of SRS-24 and SRS-22 scores in thirty eight Adolescent Idiopathic Scoliosis patients who had undergone surgical correction.*** Poster presentation at Malaysian Orthopaedic Association 37<sup>th</sup> Annual General Meeting, 17 – 20<sup>th</sup> May 2007. (*National*)
2. ***The use of Fulcrum Bending Film in Scoliosis Correction by Pedicle Screw Systems.*** Poster presentation at Malaysian Orthopaedic Association 37<sup>th</sup> Annual General Meeting, 17 – 20<sup>th</sup> May 2007. (*National*)

3. ***Complex Dorsal Dislocation of the Metacarpophalangeal Joint: A description of pathoanatomy and surgical approach.*** Poster presentation at Malaysian Orthopaedic Association 37<sup>th</sup> Annual General Meeting, 17 – 20<sup>th</sup> May 2007. (*National*)
4. ***Distal Radius Morphometry in the Malaysian Population.*** Poster presentation at Malaysian Orthopaedic Association 37<sup>th</sup> Annual General Meeting, 17 – 20<sup>th</sup> May 2007 (*National*)
5. ***Functional Outcome of Jones Fracture.*** Poster presentation at Malaysian Orthopaedic Association 38<sup>th</sup> Annual General Meeting, 26<sup>th</sup> -29<sup>th</sup> June 2008. (*National*)
6. ***Is The Femoral Neck Geometry Adequate For Placement Of The Proximal Femoral Nail in the Malaysian Population?*** Poster presentation at Malaysian Orthopaedic Association 38<sup>th</sup> Annual General Meeting, 26<sup>th</sup> -29<sup>th</sup> June 2008. (*National*)
7. ***The Outcome of Pleomorphic Sarcoma At University Malaya Medical Center. A Fifteen Years Review.*** Poster presentation at Malaysian Orthopaedic Association 38<sup>th</sup> Annual General Meeting, 26<sup>th</sup> -29<sup>th</sup> June 2008. (*National*)
8. ***Safety of Pedicle Screw Placement in Thoracolumbar Spine: A Comparison Between Open VS Percutaneous Methods Using Asian Cadaveric Models.*** Poster presentation at Annual Congress of World Society for Endoscopic, Navigated & Minimal Invasive Spine Surgery (WENMISS) 2009 - International meeting. (*International*)
9. ***Efficacy of Cell Saver and Normovolaemic Haemodilution in Reducing Allogenic Blood Requirement in Patients Undergoing Spine Surgery.*** Poster presentation at Annual Congress of World Society for Endoscopic, Navigated & Minimal Invasive Spine Surgery (WENMISS) 2009 - International meeting. (*International*)
10. ***Radiology Assessment of Cervical Lateral Mass Screw Angulation, How Safe are the Vertebral Artery?*** Poster presentation at Annual Congress of World Society for Endoscopic, Navigated & Minimal Invasive Spine Surgery (WENMISS) 2009 - International meeting. (*International*)
11. ***Compliance, Complications and Pattern of Boston Brace Usage Among Adolescent Idiopathic Scoliosis Patients in University Malaya Medical Center: A Review of Thirty Patients.*** Poster presentation at Malaysian Orthopaedic Association Annual meeting 2010. (*National*)

12. ***The Role of Percutaneous Pedicle Screw Stabilization for Unstable Spine Fractures in Polytraumatised Patients: A Report of Three Cases.*** Poster presentation at Malaysian Orthopaedic Association Annual Meeting 2010. ***(National)***
13. ***A Health Related Quality of Life Assessment in Adolescent Idiopathic Scoliosis Patients treated with Boston Brace using the Scoliosis Research Society-22 Patient Questionnaire.*** Poster presentation at Malaysian Orthopaedic Association Annual Meeting 2010. ***(National)***
14. ***Comparison between the Percutaneous Techniques and the Standard Open for Thoracic Pedicle Screw Placement (T4 to T12): A Safety Evaluation using a Cadaveric Model.*** Poster presentation at Malaysian Orthopaedic Association Annual Meeting 2010. ***(National)***
15. ***Thoracic Pedicle Morphometry in Upper Thoracic Spine (T1 to T6) in Asian Pediatric Population: A Computed Tomography Analysis of Normal and Scoliosis Populations.*** Poster presentation at Malaysian Orthopaedic Association Annual Meeting 2010. ***(National)***
16. ***Radiological evaluation of the morphometry of pedicle rib unit to pedicle in the thoracic spine: a comparison between malay, chinese and indian.*** Poster presentation at MSS-SRS international spine congress 2011. Kuala Lumpur, Malaysia. 8th - 10th December 2011. ***(International)***
17. ***Comparison between different methods of determining the lowest instrumented vertebrae in selective thoracic fusion for lenke 1A and 1B (Kings III and IV) adolescent idiopathic scoliosis.*** Poster presentation at MSS-SRS international spine congress 2011. Kuala Lumpur, Malaysia. 8th - 10th December 2011. ***(International)***
18. ***Outcome of percutaneous pedicle screw fixation and instrumentation in spine infections.*** Poster presentation at MSS-SRS international spine congress 2011. Kuala Lumpur, Malaysia. 8th - 10th December 2011. ***(International)***
19. ***Biomechanical review of rod-screw interface in withstanding torque- a comparison between different pedicle screw systems.*** Poster presentation at MSS-SRS international spine congress 2011. Kuala Lumpur, Malaysia. 8th - 10th December 2011. ***(International)***
20. ***Symptomatic calcifying pseudo tumor of the thoracic spine which resolved with indomethacin treatment. A case report.*** Poster presentation at MSS-SRS international spine congress 2011. Kuala Lumpur, Malaysia. 8th - 10th December 2011. ***(International)***

21. ***Biomechanical review of the rod-screw interphase in withstanding rotational torque- a comparison between different spinal systems.*** Chan CYW, Premganes G, Saw LB, Kwan MK, Wong CC. 19th International Meeting on Advanced Spine Techniques, Istanbul. July 18-21, 2012. (*International*)
22. ***Use of percutaneous pedicle screw fixation in spine infections: Clinical outcome assessments.*** Abdelhai AM, Chiu CK, Chan CYW, Saw LB, Kwan MK, Hussein AMM. 19th International Meeting on Advanced Spine Techniques, Istanbul. July 18-21, 2012. (*International*)
23. ***Percutaneous fluoroscopic pedicle screw placement technique in thoracic and lumbar spine. A clinical safety assessment using CT Scan.*** Kwan MK, Saw LB, Chan CYW. 19th International Meeting on Advanced Spine Techniques, Istanbul. July 18-21, 2012. (*International*)
24. ***Outcome of posterior minimal invasive surgery in advanced spinal metastasis.*** Saw LB, Chan CYW, Kwan MK. 19th International Meeting on Advanced Spine Techniques, Istanbul. July 18-21, 2012. (*International*)
25. ***Is neck tilt and shoulder imbalance a same phenomenon? A radiological study of 89 adolescent idiopathic scoliosis (Lenke 1 and 2) patients.*** 48<sup>th</sup> Scoliosis Research Society Meeting & Course, Lyon. September 18-21, 2013. (*International*)
26. ***“A Biomechanical Comparison between Cortical Screw-Rod Construct Versus Pedicle Screw-Rod Construct in a Transforaminal Lumbar Interbody Fusion (TLIF) Model: A Porcine Animal Study Model”*** Chan CYW, Haw SS, Saw LB, Rukmanikanthan S, Kwan MK, presented at SRS Annual Meeting 2014, held in Palacio De Congresos De Valencia on 16-19 July 2014.
27. ***“Influence of Autologous Blood Transfusion Technique on Post-Operative Hemoglobin Level in Adolescent Idiopathic Scoliosis (AIS) Surgery”*** M Shahnaz Hasan, Ng CC, Chan CYW, Kwan MK, presented at SRS 50<sup>th</sup> Annual Meeting & Course 2015, held in Minneapolis, Minnesota USA on 30 September – 3 October 2015.
28. ***“Peri-operative Outcome in Posterior Spinal Fusion for Adolescent Idiopathic Scoliosis: A Prospective Study Comparing Single Versus Two Attending Surgeons Strategy”*** Chan CYW, Kwan MK, presented at 19<sup>th</sup> APOA Congress, held in Melbourne Australia on 29<sup>th</sup> March – 1<sup>st</sup> April 2016.
29. ***“Assessing the Flexibility of the Proximal Thoracic Segments above the ‘Potential Upper Instrumented Vertebra’ using the Cervical Supine Side Bending Radiographs in Lenke 1 and 2 Curves for Adolescent Idiopathic Scoliosis Patients”*** Chan CYW, Chiu CK, Kwan MK, presented at The 45<sup>th</sup>

Annual Meeting of the Japanese Society for Spine Surgery and Related Research 2016, in Chiba Tokyo on 14-16 April 2016.

30. ***“Assessment of Intra-operative Blood Loss at Different Surgical Stages During Posterior Spinal Fusion Surgery in the Treatment of Adolescent Idiopathic Scoliosis”*** Chiu CK, Chan CYW, Aziz I, Hasan MS, **Kwan MK**, presented at Asia Pacific Spine Society (APSS) Spine Week Meeting 2016, in Marina Bay Sand Convention Center, Singapore on 16-20 May 2016.

## **STUDENT SUPERVISION**

### ***POST GRADUATE***

1. Sureisen Manickam: Comparison between a Novel Technique and Magerl Technique for Cervical Lateral Mass Screw. Biomechanic and Safety. Co-Supervision with Dr. Saw Lim Beng. Completed 2009.
2. Jeffry Amit: Morphometry of the safety of S1 and S2 screws in Asian Population using a computed tomography scan. Co-supervision with Assoc. Prof Kwan Mun Keong. Completed 2008.
3. Cheong Min Lee: Biomechanical Comparison of Instrumented Lumbar Interbody Fusion Using One Plif or Tlif Polyetheretherketone (Peek) Cage. Co-Supervision with Prof. Kwan Mun Keong. Completed 2009.
4. Taher Omar Ahmed: Assessment of Accuracy And Safety Of Pedicle Screw Fixation In Spinal Fractures In University Malaya Medical Center. Co-supervision with Prof Kwan Mun Keong. Completed 2009.
5. Wong Kai Ann: Perception of parents and patients on neck tilt and shoulder balance in relation to radiological parameter. Co-supervision with Prof Kwan Mun Keong. Completed 2012.
6. Wong Yie Dee: Individual Lumbar Segments Spontaneous Correction in selective thoracic fusion for adolscent idiopathic scoliosis and its relationship with the thoracic fusion block configuration. Co-supervision with Assoc. Prof Saw Lim Beng.
7. Premganesh Ganaisan: Biomechanical review of rod-screw-nut interface in withstanding rotational torque. A comparison between different spine systems. Completed 2012.



8. Sem Sei Haw: Biomechanical Comparison of lumbar pedicle screw-rod and cortical screw-rod fixation with interbody support in spondylolisthesis. 2013/2014.
9. Foo Choon Hoon: Outcome of cervical lateral mass fixation in cervical spondylotic myelopathy. Co-supervision with Prof Kwan Mun Keong. 2013/2014.
10. Mah Kok Keong. Efficacy of akurit 4 in treatment of spinal tuberculosis: A retrospective review. 2014/2015.
11. Tan Thiam Siong: Surgical Morphometry of C1 Lateral Mass and C2 Pedicle in relation to screw fixation: A CT assessment. 2014/2015.
12. Lee Keong Joo. Three Dimensional Pedicle Morphometric Assessment in Malaysian Adolescent Idiopathic Scoliosis (AIS) patients. 2014/2015.
13. Thirumurugan A/L Kurusamy. Pedicle Morphometry In Adolescent Idiopathic Scoliosis: Does It Correlate With Perforation Rate. 2015/2016.
14. Lim Min Yuen.

### ***SOCIETY***

1. **Malaysian Medical Association (MMA)** – Ordinary Life Member
2. **Malaysian Medical Council (MMC): Registration no.: 37310** – 2001 onwards
3. **Malaysia Orthopaedic Association-** Member
4. **Academy of Medicine Malaysia-** Member
5. **National Specialist Registry-** Orthopaedic Surgeon
6. **Malaysian Spine Society:** Committee Member
7. **Asia Pacific Orthopaedic Association:** Member
8. **AO Spine:** Member

### ***COURSES ORGANISED***

1. **UM Spine Course 2013. Minimally Invasive Spine Surgery.** 31<sup>st</sup> May 2013. Secretary.
2. **Basic Surgical Sciences Exam preparatory course 2013. Organised by the**

- College of Surgeons, Academy of Medicine Malaysia.** Tutor and Organiser.
3. **Basic Surgical Sciences Exam preparatory course 2012. Organised by the College of Surgeons, Academy of Medicine Malaysia.** Tutor and Organiser.
  4. **GPs Leading in Advanced Medicine (GLAM) Episode 2: Back Pain.** 21 October 2012. Boulevard Hotel, Kula Lumpur, Malaysia. Committee.
  5. **UM Spine course 2011. MISS- percutaneous Pedicle Screw Techniques. Cadaveric Workshop. 24<sup>th</sup> February 2011.** Treasurer.
  6. **Basic Surgical Sciences Exam preparatory Course 2011. Organised by the College of Surgeons, Academy of Medicine Malaysia.** Tutor and Organiser.
  15. **UM Spine Course 2010. Percutaneous Pedicle Screw Stabilization System Cadaveric Workshop, Faculty of Medicine,** 7th January 2010. Treasurer.
  16. **Basic Surgical Sciences Exam preparatory course 2010. Organised by the Surgeons, Academy of Medicine Malaysia.** Tutor and Organiser.
  17. **Basic Surgical Science Exam Online Resources 2009** (8th - 9th October 2009). Contributor
  18. **AO Basic Principles of Orthopaedic Surgery 2009,** University Malaya; Instructor.
  19. **Basic Surgical Sciences Exam preparatory course 2009. Organised by the College of Surgeons, Academy of Medicine Malaysia.** Tutor and Organiser.
  20. **Basic Surgical Science Exam preparatory course 2008, Organised by the College of Surgeons, Academy of Medicine Malaysia:** Tutor.
  21. **Basic Trauma Course 2008,** University Malaya Medical Center: Table Instructor
  22. **Orthopaedic Trauma Course 2008,** University Malaya Medical Center: Table Instructor
  23. **5<sup>th</sup> Asia Pacific Spine Symposium 2008,** Kuala Lumpur; Committee Member
  24. **3<sup>rd</sup> Advanced Ilizarov and 2<sup>nd</sup> Taylor Spatial Frame Course and Workshop 2007,** University Malaya Medical Center; Committee Member
  25. **Basic Microsurgery Workshop 2007,** University of Malaya; Committee Member.
- CONFERENCES AND COURSES ATTENDED***
1. **Orthopaedic Trauma Seminar** 13 – 14<sup>th</sup> October 2001, Sarawak General Hospital

2. **Office Orthopaedic Seminar** 13 – 14<sup>th</sup> April 2002, Sarawak General Hospital
3. **Operating Room Personals (ORP) Course** 5 – 7<sup>th</sup> July 2002, Sarawak General Hospital
4. **Orthopaedic Update 1 Course** 11 – 12<sup>th</sup> October 2003, Sarawak General Hospital
5. **AO Course Principles of Operative Fracture Treatment** 2 – 4<sup>th</sup> March 2004 Sarawak, Malaysia.
6. **Basic Principles of Fracture Management Course** 12 - 13<sup>th</sup> June 2004, University Malaya Medical Center
7. **Paediatric Orthopaedic Update Course 2004** 11 – 12<sup>th</sup> December 2004 UNIMAS
8. **AO Course Advances in Fracture Management** 12 – 15<sup>th</sup> April 2005 Kelantan, Malaysia.
9. **Research Methods Introductory Course** 26 – 28<sup>th</sup> July 2005, University Malaya.
10. **Ilizarov Course and Workshop 2005** 30<sup>th</sup> September – 1<sup>st</sup> October 2005 Sarawak General Hospital.
11. **Basic Microsurgery Workshop** 11 – 12<sup>th</sup> January 2006, University Malaya
12. **Primary Total Knee Arthroplasty Course 2006** 24 – 25<sup>th</sup> April 2006 Sarawak General Hospital.
13. **AO Spine Basic Course** 7 – 9<sup>th</sup> July 2006, Kuala Lumpur, Malaysia.
14. **Biomechanics Course 2007** 3 – 4<sup>th</sup> March 2007, University Malaya.
15. **MSSH 4<sup>th</sup> Scientific Meeting** 19<sup>th</sup> January 2008, University Kebangsaan Malaysia
16. **Biomechanics Course 2008** 23 – 24<sup>th</sup> February 2008, University Malaya.
17. **14<sup>th</sup> Postgraduate Intensive Course in Orthopaedics** 7 – 11<sup>th</sup> April 2008, UKM Medical Center
18. **AO Spine Advance Course 2009**, 26 – 30<sup>th</sup> October 2009, Kuala Lumpur Convention Center, Kuala Lumpur.

19. **Minimally Invasive Spine Surgery Course 2010**, Wooridul Spine Hospital, Seoul, Korea.
20. **APOA Instructional Spine Surgery Course 2010**, 25-27 November 2010, National Hospital, Colombo, Sri Lanka.
21. **APOA Spine and Paediatric Sections 2011** 1<sup>st</sup> -4<sup>th</sup> June 2011, Gifu City, Japan
22. **MSS-SRS international spine congress 2011**. 8th - 10th December 2011. Kuala Lumpur, Malaysia.
23. **19<sup>th</sup> IMAST 2012**. 18-21 July 2012. Istanbul, Turkey
24. **Golden Jubilee Congress of APOA**. 3-6 October 2012. New Delhi, India.
25. **OLC SABL Spine Course**. 13-14 October 2012. CHUK, Hong Kong.
26. **GPs Leading in Advanced Medicine (GLAM) Episode 2: Back Pain**. 21 October 2012. Kuala Lumpur.
27. **SRS 48<sup>th</sup> Annual Meeting and Course**. 18-21 September 2013. Lyon, France.
28. **AO Spine Advances Update on Lumbar Degenerative Diseases**. 5-6 October 2013. University Malaya, Kuala Lumpur.

### ***INVITED LECTURES***

- 1.

### ***EXTRA-CURRICULAR ACTIVITIES***

#### **Sport**

1. Represented University (UNIMAS) at Intervarsity Games 1998 in Tennis
2. Represented Faculty in Inter Faculty Bowling competition 1997, 1998 – champion, runners up.
3. Represented Faculty in Inter Faculty Badminton competition 1998
4. Represented University in University Malaya- National University of Singapore annual golf tournament 2010.

## **REFEREES**

### **1. Prof Dr Tunku Sara Ahmad**

Head of Department of Orthopaedic Surgery,  
University of Malaya Medical Centre and  
Faculty of Medicine,  
Kuala Lumpur,  
Malaysia.

Tel no : 6-03-79492061  
E mail : tsara@ummc.edu.my

### **2. Prof Dr. Kwan Mun Keong**

Department of Orthopaedic Surgery,  
University Malaya Medical Centre.  
Tel no : 03-79492061 (Office)  
H/P : 6-019-3624433  
E mail : munkeong42@hotmail.com