

## Brief Curriculum Vitae



**Associate Professor Alfred Kow Wei Chieh**  
**MBBS (Singapore), M Med (Surgery), MRCS(Ed), MRCS(Ire)**  
**FRCSEd (Gen Surgery), FAMS, FACS**

**Assistant Dean, Yong Loo Lin School of Medicine, National University of Singapore**

**Associate Chairman Medical Board (Education), National University Hospital  
Singapore**

**Head & Senior Consultant, Division of Hepatobiliary & Pancreatic Surgery, Department  
of Surgery, National University Health System Singapore**

**Senior Consultant, Liver Transplant Program, National University Centre for Organ  
Transplantation (NUCOT), National University Hospital Singapore**

**Senior Consultant, Division of Surgical Oncology, National University Cancer Institute  
Singapore (NCIS), National University Health System Singapore**

**Associate Professor, Department of Surgery, National University of Singapore**

## Curriculum Vitae

### 1. Current Appointments:

- **Head & Senior Consultant**, Division of Hepatobiliary & Pancreatic Surgery, Department of Surgery, National University of Singapore
- **Associate Chairman Medical Board (ACMB of Education)**, Medical Board, National University Hospital Singapore
- **Senior Consultant**, Liver Transplant Program, National University Centre for Organ Transplantation (NUCOT), National University Health System
- **Senior Consultant**, Division of Surgical Oncology, National University Cancer Institute Singapore (NCIS), National University Health System
- **Assistant Dean (Education)**, Yong Loo Lin School of Medicine, National University of Singapore
- **Associate Professor of Surgery**, Clinical Educator Track, National University of Singapore
- **Fellow**, National University of Singapore Teaching Academy (NUSTA)
- **Affiliate Member**, National University Cancer Institute (NCIS), National University Health System Singapore
- **Lead**, Hepatobiliary & Pancreatic Cancer Group, NCIS, NUHS
- **Visiting Consultant**, Department of Surgery, Ng Teng Fong General Hospital
- **Visiting Consultant**, Department of Surgery, Kho Teck Puat Hospital Singapore
- **Visiting Consultant**, Department of Hepatobiliary Surgery & Liver Transplantation, Singapore General Hospital, Singhealth Services
- **Chairperson**, General Surgery Working Committee (GS-WC), Ministry of Health.
- **Chairperson**, Undergraduate Curriculum Committee (UGCC), Yong Loo Lin School of Medicine, NUS
- **Chairperson**, Medical Education Technology and Enterprise Task Force, Yong Loo Lin School of Medicine, NUS
- **Chairperson**, Curriculum Implementation Task Force, Yong Loo Lin School of Medicine, NUS
- **Council Member**, College of Surgeons, Academy of Medicine, Singapore
- **Board Member**, Chapter of General Surgeons, College of Surgeons, Academy of Medicine, Singapore
- **Member**, Joint Committee on Specialist Training (JCST), Specialist Accreditation Board, Ministry of Health
- **Member**, Residency Advisory Committee for Surgery-In-General (SIG), Ministry of Health, Singapore
- **Fellow**, Healthcare Family Fellowship Program, Ministry of Health Singapore

- **Co-chairperson**, Clinical Practice Guidelines Committee, The Guidelines, Advisories and Consensus Committee (GACC), Office of Professional Affairs (OPA), Academy of Medicine, Singapore
- **Member**, Singapore Medical Council, Panel of Medical Expert Witness
- **Co-Lead**, MIS HPB Surgery Study Group, International Society of Liver Surgeons
- **Member**, ILTS Education Committee, International Liver Transplant Society
- **Co-Lead**, ILTS Regional Expansion Advanced Learning Project (Southeast Asia and South Asia and Indian Subcontinent), International Liver Transplant Society
- **Member**, Faculty Teaching Excellence Committee, Yong Loo Lin School of Medicine, National University of Singapore
- **Visiting Consultant**, Singapore Armed Forces Specialist Medical Board, Ministry of Defence Singapore
- **Member**, Education Representative, National Wellness Committee for Junior Doctors, Manpower Standards & Development Division, Ministry of Health Singapore
- **Member**, Sub-committee on Liver Transplantation, Advisory Committee on Transplantation, Ministry of Health Singapore
- **Member**, Task Force for Future Enhancement to the Curriculum, Yong Loo Lin School of Medicine
- **Member**, Task Force for Zero Error in Assessment, Yong Loo Lin School of Medicine
- **Member**, National Liver Transplant Program Workgroup, Outcomes & Reporting Thematic Subgroup, Ministry of Health
- **Member**, National Liver Transplant Program Workgroup, Training & Competency Thematic Subgroup, Ministry of Health
- **Member**, ILTS Sponsorship Committee, International Liver Transplant Society
- **Lead**, Education and Teaching Working Group, Holomedicine Association
- **Co-Lead**, Medical and Scientific Evidence Working Group, Holomedicine Association
- **Member**, Scientific Committee, International LDLT Registry, International Liver Transplant Society (ILTS)

## 2. Memberships in Professional and Honorary Societies:

- Fellow, Royal College of Surgeons of Edinburgh (FRCSEd)
- Member, Royal College of Surgeons of Ireland
- Member, Singapore Medical Association.
- Member, Gastroenterology Society of Singapore (GESS), since 2005.
- Member, International Hepatobiliary and Pancreatic Surgery Association (IHPBA), since 2007.
- Member, International Liver Transplant Society (ILTS), since 2011.

- Member, International Society of Liver Surgeons (ISLS), since 2017.
- Member, Singapore Catholic Medical Guild.
- Member, Academy of Medicine, Singapore (FAMS), since 2012.
- Fellow, American College of Surgeons (FACS) since October 2016.

### **3. Clinical Areas of Interest:**

- Liver diseases, including benign and malignant liver tumours and others
- Pancreatic disease, including benign and malignant pancreatic tumours
- Biliary disease, including benign and malignancy biliary diseases.
- Adult and paediatric liver transplantation
- Living-related liver transplantation
- Laparoscopic liver donor harvesting in paediatric liver transplantation
- Complex hepatobiliary surgery (living-donor, 2-staged hepatectomies, ALPPS)
- Complex pancreatic surgery
- Minimally invasive liver and pancreas surgery
- Ablation techniques for liver tumours

I have pioneered or performed the following complex surgical procedures in Singapore:

- Full laparoscopic ALPPS procedure
- Full laparoscopic left lateral sectionectomy for donor hepatectomy in paediatric LDLT
- Laparoscopic-assisted donor right hepatectomy for adult LDLT
- Full laparoscopic right hepatectomy for donor hepatectomy in adult LDLT
- Laparoscopic-assisted pancreaticoduodenectomy
- Full laparoscopic pancreaticoduodenectomy

### **4. Clinical Programs:**

- I am the pioneer and champion of the ERAS program in HPB surgery in NUHS
- I have also started the Telemedicine Consultation for the Division of HPB Surgery in NUH
- I am also the Clinical Director of the Management and Innovation for the Longevity in the Elderly Surgical (MILES) patients program in NUHS
- I am the Surgical Lead in the Geriatric OncoLogy enD-to-ENd (GOLDEN) program in NUHS, where medical oncologist, radiation oncologist and surgical oncologist work together to provide comprehensive care for elderly cancer patients at the NUHS and NCIS.

## 5. Awards and Honours:

Asean Scholarship (Pre-University)	1995 to 1996
Ten Outstanding Young Malaysian (TOYM) Award 2014 – Medical Innovation Category	2014
Wong Hock Boon Society – Singapore Medical Association, Outstanding Mentor Award 2013	2013
NUHS-Mocktar Riady Pinnacle Award - <b>High Achiever Award 2018, NUHS Tribute Night</b>	2019
<b>Gold Award</b> , Most Innovative Healthcare Technology, 19 <sup>th</sup> Annual <b>Asian Hospital Management Award 2020</b>	2020
<b>NUS Medicine Fortitude Award</b>	2020
<b>Yong Loo Lin School of Medicine Educator of the Year Award</b> for AY2019/2020	2020
<b>Yong Loo Lin School of Medicine Faculty Digital Teaching Excellence Award (Team – for PASS-IT Project) AY 2019/2020</b>	2020
<b>Outstanding Educator Award 2021</b> , University Awards, National University of Singapore	2021
NUHS Education Collaboration Award ( <b>Geriatric Oncology Longitudinal End to eNd (GOLDEN) programme</b> )	2021
<b>National University of Singapore Annual Digital Education Award (Team – for RESCUE Project) AY 2020/2021</b>	2021
NUHS-Mocktar Riady Pinnacle Award 2021 – <b>Outstanding Mentor Award, NUHS Tribute Night</b>	2022
NUHS-Mocktar Riady Pinnacle Award 2021 – <b>Team Award: The NUCOT Liver Transplant Team, NUHS Tribute Night</b>	2022

- **Education-related Awards**

- **Yong Loo Lin School of Medicine**

- Best Tutor Award 2012, Yong Loo Lin School of Medicine, NUS
    - Nominated as Role Model, Yong Loo Lin School of Medicine at the Graduate Exit Questionnaire by Class of 2012, Class of 2013, Class of 2014, Class of 2015, Class of 2016, Class of 2017
    - Dean's Award for Teaching Excellence, Yong Loo Lin School of Medicine AY2011/2012, AY2012/2013, AY2013/2014, AY2014/2015, AY2015/2016, AY2016/2017, AY2017/2018
    - Faculty Teaching Excellence Award (FTEA), Yong Loo Lin School of Medicine, AY 2011/2012 & AY2014/2015

- **National University of Singapore**

- Annual Teaching Excellence Award (ATEA) 2011/2012, National University of Singapore
    - Annual Teaching Excellence Award (ATEA) 2014/2015, National University of Singapore
    - Nominated for Outstanding Education Award 2014/2015 by Yong Loo Lin School of Medicine under ATEA, National University of Singapore

- **Medical Student Society, Yong Loo Lin School of Medicine**

- Teaching Appreciation Award for Teacher's Day 2008, Medical Student Society, Yong Loo Lin School of Medicine, National University of Singapore.
- Top 10 Best Teacher's Award, Teaching Appreciation Award for Teacher's Day 2009, Medical Student Society, Yong Loo Lin School of Medicine, National University of Singapore.
- Best Tutor Award 2010, Medical Student Society, Yong Loo Lin School of Medicine, National University of Singapore.
- NUS Medical Society Outstanding Tutor Award 2012/2013.
- Outstanding Tutor Award 2014/15. NUS Medical Student Society, Awards and Appreciation Night 2015
- Wong Hock Boon Society – Singapore Medical Association, Outstanding Mentor Award 2013.
- Distinguished Educator Award 2015/2016, NUS Medical Student Society, Awards and Appreciation Night 2016
- Medsoc Outstanding Tutor Award AY2017/2018, NUS Medical Student Society, Awards and Appreciation Nite 2018
- **National University Hospital/ National University Health System**
  - NUH Teaching Excellence Award 2014.
  - NUHS Teaching Excellence Award (Medical) 2018.
  - NUHS Teaching Excellence Award (Medical), 2019.
  - NUHS Teaching Excellence Award (Medical), 2020.
  - NUHS Education Collaboration Award (**Geriatric Oncology Longitudinal End to eNd (GOLDEN) programme**) 2021.

## 6. Academic Contribution:

- 150 peer-reviewed publications, 5 book chapters
- Some Key Publications:
  - Risk factors of peritoneal recurrence and outcome of resected peritoneal recurrence after liver resection in hepatocellular carcinoma: review of 1222 cases of hepatectomy in a tertiary institution. **Kow AW**, Kwon CH, Song S, Shin M, Kim JM, Joh JW. *Ann Surg Oncol*. 2012 Jul;19(7):2246-55.
  - The role of caudate lobectomy in Type III hilar cholangiocarcinoma: A 15-year experience in a tertiary institution. **Kow WCA**, Choi DW, Choi SH, Heo JS, Kim MJ. *World J Surgery* (2012) 36:1112 – 1121.
  - Surgical outcomes of 230 resected hilar cholangiocarcinoma in a single centre. Song SC, Choi DW, **Kow AW**, Choi SH, Heo JS, Kim WS, Kim MJ. *ANZ J Surg*. 2013 Apr; 83(4):268-74.
  - Clinicopathological factors and long-term outcome comparing between lung and peritoneal metastasectomy after hepatectomy for hepatocellular carcinoma in a tertiary institution. **Kow AW**, Kwon CH, Song S, Kim JM, Joh JW. *Surgery*. 2015 Apr; 157(4):645-53.
  - Greater hypertrophy can be achieved with Associating Liver Partition with Portal vein ligation for Staged hepatectomy compared to Conventional Staged Hepatectomy, but with a higher price to pay? Chia DKA, Yeo Z., Loh S., Iyer SG., Madhavan KK., Bonney G., **Kow AWC**. *Am J Surg*. 2017 Aug 26.
  - ALPPS for hepatocellular carcinoma is associated with decreased liver remnant growth. Chia DKA, Yeo Z, Loh SEK, Iyer SG, Madhavan K, **Kow AWC**. *Journal of Gastrointestinal Surgery* 2018; 22(6): 973 – 980.

- Does persistent Anti-HBc positivity influence the prognosis of HBsAg-negative Hepatocellular Carcinoma? Comparative Outcomes of Anti-HBc positive versus Anti-HBc Negative Non-B Non-C HCC. Law J.H. Jarrod KH Tan, Michael KY Wong, Ng WQ, Tan PS, Bonney GK, Iyer SG, Madhavan K, **Alfred WC Kow**. HPB (Oxford). 2018 Aug 4.
- How to do Laparoscopic Associating Liver Partition with Portal Vein Ligation for Staged Hepatectomy (How I Do It). Chia D, Pang NQ, **Kow AWC**. ANZJS Sept 2018.
- An international multicentre study of protocols for liver transplantation during a pandemic: A case for quadripartite equipoise. Chew CA, Iyer SG, **Kow AWC**, Madhavan KK, Bonney GK et al. Accepted for publication in Journal of Hepatology May 2020.
- Push and pull factors, and the role of residents in nurturing medical students' interest in surgery as a career option in a multiracial Asian context: Results of a prospective national cohort study. Ng CWQ, Syn NL, Hussein RM, Ng M, **Kow AWC**. American Journal of Surgery May 2020.
- Response and Lessons Learnt Managing the COVID-19 Crisis by School of Medicine, National University of Singapore. Samarasekara DD, Goh DLM, Yeo SP, Ngiam NSP, Aw MM, Lim MM, Pillai S, Lee SS, Mahadevan M, **Kow AWC**, Chong YS, Lau TC. MedEd Publish 9.
- Laparoscopic Major Liver Resections: Current Standards. Review. **Kow AWC**, Chan A, Rotellar F, Kim KH. Accepted for publication in International Journal of Surgery, June 2020.
- Current Status of Liver Transplantation in Asia. Hibi T, **Kow AWC**, Chan A, Bhangui P. Accepted for publication in International Journal of Surgery, June 2020.
- Liver Resection in Cirrhotic Liver: Are there any limits? Chan A, **Kow AWC**, Hibi T, di Benedetto F, Serrablo A. Accepted for publication in International Journal of Surgery, June 2020.
- Optimization of Outpatient Transplantation Services During the COVID-19 Pandemic: A South-East Asian Tertiary Organ Transplant Center Experience. Letter to Editor. Tan JKH, Pang NQ, Bonney GK, **Kow AWC**, Vathsala A, Ganpathy IS. Accepted for publication in British Journal of Surgery July 2020.
- Onco-fetal Reprogramming of Endothelial Cells Drives Immunosuppressive Macrophages in Hepatocellular Carcinoma. Ankur Sharma, Justine Jia Wen Seow, Charles-Antoine Duterte, Rhea Pai.....**Alfred Kow Wei Chieh**....Ramanuj DasGupta. Cell 183, October 15, 2020: 1—18.

## Autobiography

Associate Professor Alfred Kow is a practicing HPB and Liver Transplant surgeon at the National University Hospital Singapore. He is currently the Head of the Hepatobiliary & Pancreatic Surgery at the National University Hospital Singapore. His main area of interest is liver transplantation and minimally invasive HPB surgery. He has pioneered many complex HPB surgeries in Singapore using MIS technique including major laparoscopic hepatectomies, laparoscopic pancreaticoduodenectomy (Whipples'), full laparoscopic ALPPS procedure and laparoscopic liver donor hepatectomy for liver transplantation. He is also the Clinical Director of the MILES program at NUHS (Management and Innovation for Longevity in Elderly Surgical patients), focusing on improving the peri-operative care and outcomes of elderly patients needing surgery in NUHS. In addition, he has been appointed the Associate Chairman of Medical Board (Education) for the National University Hospital Singapore in March 2022.

In addition to his clinical work, Associate Prof Alfred Kow spends a lot of his time planning medical school curriculum for the Yong Loo Lin School of Medicine in National University of Singapore as the Assistant Dean of Education at the Deanery. He has also received many teaching awards for teaching excellence from the hospital, medical school as well as at the university level (Including the Outstanding Educator Award at the NUS University Awards in 2021). He is also actively involved in surgical training for postgraduate surgical program at the hospital as well as at the Ministry of Health of Singapore. He is also actively involved in developing advanced technology in education using VR, MR and AI with machine learning models in medical training.

Dr Kow has keen interest in research activities involving development of surgical techniques in HPB surgery, liver transplantation and outcomes of surgical treatment for HPB malignancies. Furthermore, he is also actively developing research to help improve surgical education and training for both undergraduate and postgraduate setting. Many of his research work on education aim to understand the art and science behind training the junior doctors to be excellent surgeons for the future. He has published more than 150 peer-reviewed papers and conference articles as well as a few book chapters in the areas of Hepatobiliary surgery and gastroenterology.