

SINGHEALTH

SURGICAL CONGRESS

SURGICAL EXCELLENCE
THROUGH COLLABORATION

21-27 October 2015
Academia, SGH Campus
singhealthsc.com.sg

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SurgeOn

Surgery ACP Newsletter

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SINGHEALTH

SURGICAL & CONGRESS

SURGICAL EXCELLENCE
THROUGH COLLABORATION

21-27 October 2015
Academia, SGH Campus

**LIMITED SLOTS AVAILABLE FOR WORKSHOP:
REGISTER BY 31ST AUGUST TO ENJOY
COMPLIMENTARY PASS TO THE MAIN CONGRESS**

The workshops will tap on various training models such as cadavers, live surgery and simulation to hone your skills.

PRE-CONGRESS

Date	Workshop
Wed - Fri (21 - 23 Oct)	Thyroid & Neck Dissection Workshop
Thurs, 22 Oct (AM)	Ultrasound-guided Breast Biopsy
Thurs, 22 Oct (PM)	Triple Assessment Diagnostic Breast Workshop
Thurs, 22 Oct	Advanced Laparoscopy Workshop (HPB)
Thurs - Fri (22 - 23 Oct)	Advanced Trauma Life Support (ATLS)
Thurs - Fri (22 - 23 Oct)	Definitive Surgical Trauma Care Course (DSTC)
Thurs - Fri (22 - 23 Oct)	Definitive Perioperative Nurses Trauma Care Course (DPNTC)
Fri, 23 Oct	Hernia Cadaveric Workshop
Fri, 23 Oct	Oncoplastic, Reconstructive live Surgery
Fri, 23 Oct (AM)	Wound Care Management Workshop
Fri & Mon (23 & 26 Oct)	Operating Theatre Management & Theatre Sterile Supplies Unit Course

POST-CONGRESS

Date	Workshop
Mon, 26 Oct	Groin Dissection and Isolated Limb Perfusion
Mon, 26 Oct	Reconstructive Urology & Male Incontinence
Mon - Tues, 26-27 Oct (AM)	2nd SGH Endovascular Surgery Course
Tues, 27 Oct	Therapeutic casting methods: • for Trauma • for Clubfoot

Organised by:

SURGERY
Academic Clinical Program



Singapore General Hospital
Division of Surgery
A consistent cut above



Supported by:



Held in conjunction with:



SingHealth DUKE-NUS
ACADEMIC MEDICAL CENTRE

PATIENTS. AT THE HEART OF ALL WE DO.®



WORKSHOP HIGHLIGHTS

BASIC & ADVANCED BREAST WORKSHOPS

Receive \$100 off when you sign up for any 2 workshops and \$200 off when you sign up for all 3 workshops

1 ULTRASOUND-GUIDED BREAST BIOPSY WORKSHOP

Thursday, 22 October 2015 (AM)
Course Fee: \$400

Image guided needle biopsies for the management of breast lesions have become a standard of care to make an accurate and definitive diagnosis of a breast lesion pre-operatively with a minimally invasive method. This course will teach participants basic breast ultrasound, to observe, learn and have a hands-on experience using the ultrasound to perform fine needle aspiration for cytology, core needle biopsy and vacuum assisted needle biopsy in various models.

2 TRIPLE ASSESSMENT DIAGNOSTIC – BREAST WORKSHOP

Thursday, 22 October 2015 (PM)
Course Fee: \$400 (Locals),
\$550 (Foreigners)

Breast diagnosis and treatment should be multidisciplinary and the best outcomes for patients are achieved when surgeons, radiologists and pathologists discuss in real time. This is a Multi-disciplinary workshop facilitated by senior clinicians. Participants will examine manikins with marked up pathology, view imaging and pathology reports on 10 clinical scenarios and make a finalised diagnosis in a mock TB.

3 ONCOPLASTIC, RECONSTRUCTIVE LIVE SURGERY

Friday, 23 October 2015 (PM)
Course Fee: \$700

This inaugural Oncoplastic and Reconstruction Live Surgery Workshop focuses on advanced surgical techniques of oncology resection and reconstruction for breast and head & neck surgery. There will be a lively, open and interactive sharing of surgical techniques by a team of local and renowned foreign faculty in this workshop. Special emphasis is made of raising an ideal pedicled flap, and tips and pitfalls of inseting. Pre-operative marking and surgery of various oncoplastic breast procedures will also be demonstrated.

4 OPERATING THEATRE MANAGEMENT & THEATRE STERILE SUPPLIES UNIT COURSE

Friday & Monday,
23 & 26 October 2015
Course Fee: \$400

Today's leaders need effective strategies to manage departmental operations. This course addresses approaches to process improvement in perioperative and theatre sterile supplies management.

HIGHLIGHTS OF THE COURSE INCLUDE:

1. Lectures by experienced nursing professionals and administrators that focus on topics specific to processes and managerial issues. Specially invited guest from Australia, Ms. Phyllis Davis will share her expertise on the impact human factors have on teamwork and how its elements can be applied by individuals to achieve synergy within the operating theatre setting.
2. Facility tour of the hospital's hybrid operating theatres and sterile supplies unit.
3. A hands-on programme that provides experiential learning on how information system is leveraged to improve processes and operations efficiency.

5 GROIN DISSECTION AND LIMB PERFUSION

Monday, 26 October 2015 (AM)
Course Fee: \$900

This workshop aims to cover the theoretical knowledge as well as provide a hands-on experience to perform the dissection with the assistance of faculty. Isolated limb perfusion, a technique used to deliver hyperthermic high dose chemotherapy to the affected limb, will also be included. It is recommended for general surgical residents, advanced surgical trainees, surgical oncology fellows as well as general surgeons or physicians with an interest in surgical oncology.

6 RECONSTRUCTIVE UROLOGY & MALE INCONTINENCE

Monday, 26 October 2015 (AM)
Course Fee: \$800

Urethral reconstructive urology and the management of male incontinence are highly sub-specialized fields. The aim of this workshop is to impart basic principles of reconstructive urology, with application of these principles in hands on cadaver stations. Emphasis is placed in the management of urethral strictures and treatment of male incontinence.

REGISTER
NOW AT
www.singhealthsc.com.sg



BIOMECHANICS LABORATORY

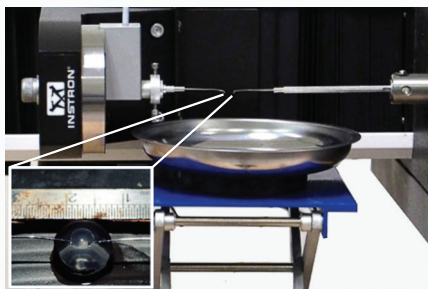
The Biomechanics Laboratory is a research facility situated at Academia, Level 1. It moved into its current premises in March 2014 with multiple grant funding sources including Surgery ACP, Centre Grant, NMRC and SingHealth research grants. It is staffed by 1 research scientist and 4 research engineers.

The original intent of the Biomechanics Laboratory was to emulate the Mayo Clinic Biomechanics Laboratory. The Mayo Clinic Biomechanics Laboratory is situated next to the hospital building and the Medical School. The accessible location of the Mayo Clinic laboratory facilitates research among and between clinicians and medical students.

The Biomechanics Laboratory at Academia enjoys similar location advantages and more. Not only is it situated next to SGH and Duke-NUS Graduate Medical School, the tissue and animal laboratory is also located within Academia. This greatly facilitates tissue work in the laboratory.

The Biomechanics Laboratory at Academia is still in development, with equipment acquisition to be completed by March 2017. The laboratory also has an organic workshop, again modelled after the Mayo Clinic laboratory, which allows custom research jigs and testing equipment to be made in-house. This eliminates the need to rely on external contractors.

Currently, the laboratory is operational and has completed a significant amount of biomechanics research ranging from tendon repairs, suture performance, implant performance, medical image processing, to laser lens capsulotomies for SNEC and SERI. The laboratory also has research discussions with neurosurgeons, and cardiac surgeons who are interested in studying the biomechanics of nerve and cardiac tissue. This goes to show that biomechanics research is applicable to nearly all surgical disciplines.



◀ Biomechanical test on laser lens capsulotomies using custom-made jig

The Biomechanics Laboratory functions as a research facility and a “bridge” which facilitates the flow of people, ideas and resources. This quote from a 1989 Hollywood movie, “If you build it, he will come” appears to be true for the laboratory. The laboratory has attracted many collaborators and is seen as a conduit or interface through which many can tap onto the massive clinical resources available in the largest hospital in Singapore.

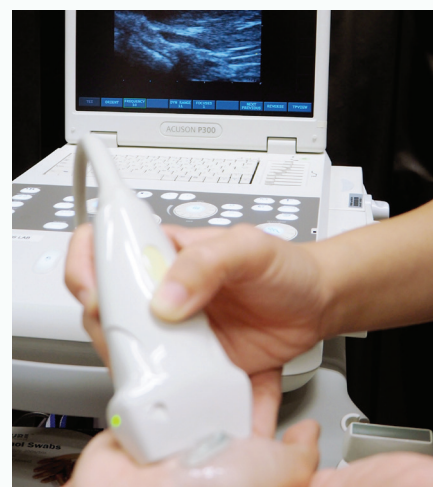
Thus far, the laboratory has more than half a million dollars of competitive grant funding and has attracted a further \$898,430 of in-kind support from both academic and industry collaborations.



The Biomechanics Laboratory welcomes clinicians and researchers from within and outside SingHealth to work or collaborate on Biomechanics research. The laboratory staff are competent and friendly and will be most happy to assist everyone in their queries as well as all aspects of research including grant applications.



◀ Instron ElectroPuls E1000 (the only cyclic mechanical tester in Singapore)



▲ (From top) Equipment include Leica Surgical Microscope, Siemens Acuson P300 ultrasound system and a milling machine

FEATURES / INTERVIEWS



◀ Assoc Prof Balakrishnan (middle) at his graduation ceremony

FEATURING ASSOC PROF ABHILASH BALAKRISHNAN

Director,
Surgical Residency, Surgery ACP
Senior Consultant,
Department of Otolaryngology, SGH
Adjunct Associate Professor,
Duke-NUS Graduate Medical School
Clinical Associate Professor,
National University of Singapore

Prof Balakrishnan ventured into medical education in 2011 when he started doing Harvard Macy courses in Boston. In Sept 2013, with the help of SGH, Prof Fong Kok Yong, and Prof London Ooi, he was awarded a scholarship and recently graduated with a Masters in Health Professions Education (MS-HPed) from MGH Institute of Health Professions. He obtained a perfect GPA score of 4 throughout the programme and completed it in 21 months. He was the oldest of 11 graduates, at age 63 and the only one from Singapore. Let's hear about his education journey!

What made you decide to take up this programme?

I have been an ENT surgeon for more than 30 years. While teaching my junior colleagues, I noticed a difference in the needs of the younger generation from those during my time. I felt there was a real need to equip myself with modern education principles,



to address the learning needs of the present generation of medical students and residents.

How did you maintain your academic excellence?

I had to juggle my time, as I am a full time clinician. With the help of SGH, I was able to adjust my schedule to 70% clinical work and 30% education. But it was still a full time schedule, so a lot of weekends were burnt to complete the assignments. It took about an average of 20 hours a week throughout the course, sometimes more when I spent entire weekends, from morning to night. When travelling for conferences or holidays, I had to complete some of my assignments on planes and in hotels!

What are your takeaways from the programme?

The programme is very innovative, and opened up a whole new world to me. Doctors always think they know how to teach, but that is a fallacy. Many, including myself, were guilty of using outmoded approaches to teaching. We need to attend some faculty development courses to learn about the new pedagogy, otherwise we may become irrelevant to the millennial generation. Another thing I learnt is that as an educator, you must not be afraid to admit that there are some things you do not know. The amount of knowledge now has increased exponentially, and sometimes our juniors can teach us things.

The Masters course focused on inter-professionalism — about working together as a team. In the ward, you

need nurses, pharmacists, allied health personnel and therapists. They each have an important function and a joint effort is necessary for best patient outcomes. SGH and SingHealth are going the right way, expanding in the field of health professional education.

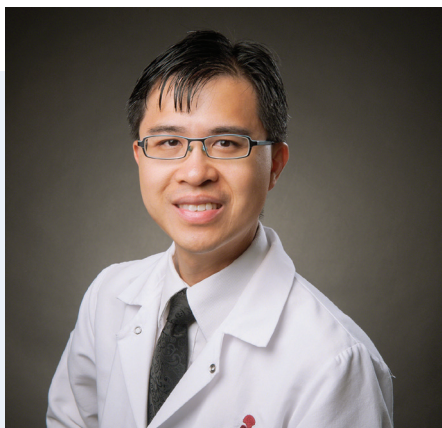
What plans do you have next?

My work had already started when I was in the programme. I have a portfolio within Surgery ACP and was also one of the pioneer fellows at AM•EI. Now I am teaching actively at AM•EI with my own workshop together with another educator. I am also a teaching faculty at the new Master of Health Professions Education jointly organised by the Academy of Medicine, Singapore and Maastricht University from the Netherlands, which has just started in July. On top of exploring new teaching methods, I intend to conduct education research for publication and presentation.

I am terribly excited at the moment. It has been 40 years since my graduation from medical school but I still have plenty of things to do! I am just starting my journey. I am excited to perpetuate this culture, first within the ACP, the hospital and of course in Singapore, as we interact with people from different clusters. In the words of my colleague, "We educators have to help each other!"

Any thoughts and advice for clinicians interested in Education?

Some of my younger learners, residents and some medical students found out what I was doing and expressed a keen interest. They are motivated by the fact that someone my age is continuing in a learning journey. My advice to them is to go for it! This is a new field developing in Singapore, there is a lot of potential and the number of medical students is only going to increase. I am happy to act as a mentor and help anyone who is interested in medical education.



FEATURING DR AMOS LOH

Consultant,
Paediatric Surgery, KKH

What are your research interests and what projects are you currently working on?

My academic interests are in the area of clinical and translational research in paediatric solid tumours, specifically:

- (i) Use of 'omics and next-generation sequencing platforms for the discovery of biomarkers for risk prognostication and therapeutic stratification.

My current focus is to compare established and novel molecular

markers in current risk stratification matrices for neuroblastoma and paediatric Wilms and renal tumours, particularly, in inter-ethnic variations specific to our local Asian population.

- (ii) The development of orthotopic xenograft and explant models of paediatric solid tumours for comprehensive preclinical testing of novel multimodal therapeutic strategies.

I aim to study the use of novel targeted agents, as adjuncts or window agents to standard of-care therapies.

How has Surgery ACP seed grant supported your research efforts?

It has allowed me to launch my first tumour biology protocol, called Modelling, Analysis and Translational Therapeutics for Tumours of Childhood (MAT3CH). The study is a collaborative project between KKH and NCCS, with my lab mentor Prof Huynh; my co-investigators are Dr Soh Shui Yen from Paediatrics ACP, and Dr Kenneth Chang from Pathology ACP. With support from the grant we have opened the protocol in January this year, and started accruing our first patients.



Any future research plans?

I am applying for the NMRC TA award. My aim is to develop the work further and expand into an independent laboratory dedicated to paediatric solid tumour research. My long-term goal is to establish and develop a national-level program in paediatric solid tumours. To kick that off, we have recently secured a partnership with the VIVA Foundation for Children with Cancer, to initiate this program in collaboration with KKH and St Jude Children's Research Hospital.

Any advice for clinicians who wish to pursue research?

The local scene is much improved compared to 5 or 8 years ago, so there is definitely no lack of programs and support structures available. Nonetheless, be prepared to face many hurdles as systems and structures may not mesh with individual agendas. Learning to develop very thick skin, I think, is a necessary prerequisite for anyone choosing to pursue this path. Lastly, I think the purpose of the research always has to be kept in perspective.

PAST RESEARCH EVENTS

MEET-YOUR-MENTOR SESSION



Surgery ACP has been actively linking up YLL-SOM and Duke-NUS medical students with faculty to do research projects under the Research Mentorship programme. An informal meeting was held on 6 May 2015 where nearly 20 first to

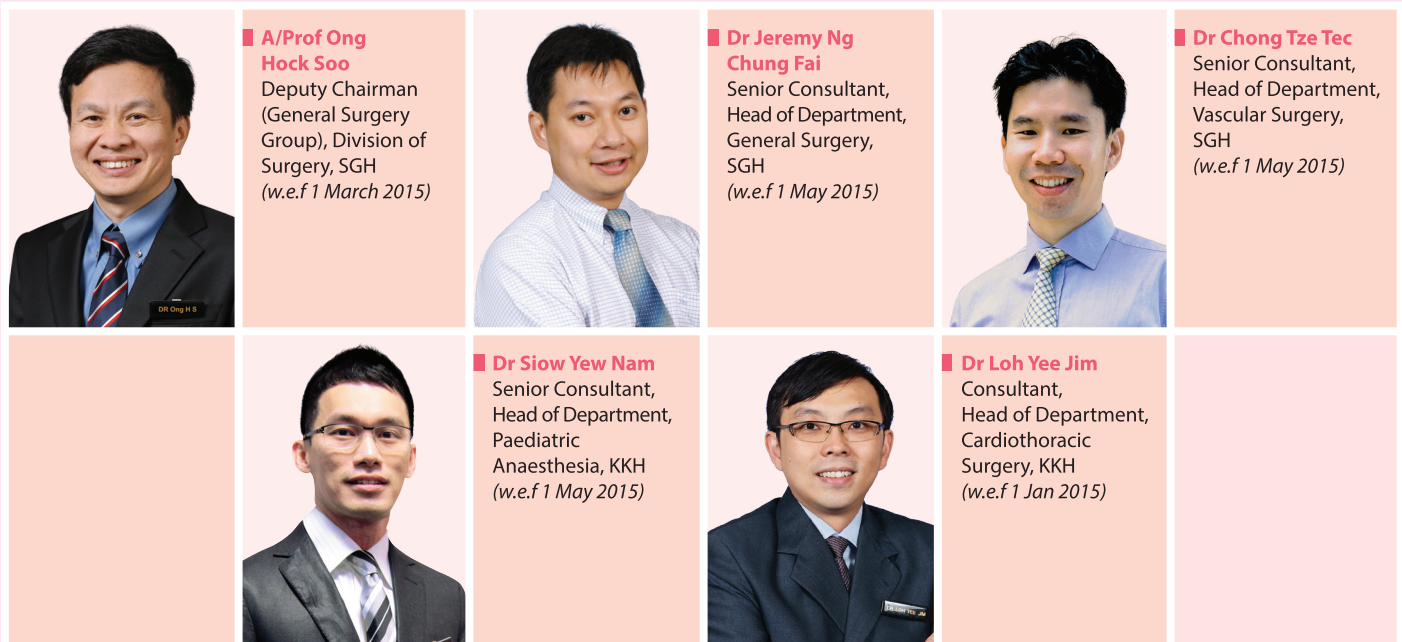


fourth year medical students got to know potential mentors from surgical departments in KKH and SGH. It was a fruitful session as the mentors shared their research projects and the students enthusiastically discussed their ideas.



A second session will be held on Sunday, 25 October 2015 in conjunction with Surgery ACP Research Day and SingHealth Surgical Congress. We look forward to your continued support in Surgery ACP research events.

CONGRATULATIONS ON YOUR PROMOTION



UPCOMING GRANT CALLS AND EVENTS

Strategic Joint Research Fund (SJRF) Application

Surgery ACP Seed Grant Application

Surgery ACP Course Sponsorship Application

SingHealth Surgical Congress (21-27 OCT 2015)

Surgery ACP Research Day and Meet-Your-Mentor Session (25 OCT 2015)

NETWORKING SESSION SPARKS IDEAS FOR NEW COLLABORATION

Surgery ACP is launching a new Strategic Joint Research Fund (SJRF) with Singapore University of Technology and Design (SUTD) and Nanyang Institute of Technology in Health and Medicine (NITHM) in August 2015. SJRF seeks to foster clinician-engineer collaborations to develop novel technologies and solutions to clinical problems. A networking session was organized on 13 May 2015 to link interested faculty and SUTD faculty. We hope that these ideas will lead to genuine collaborations, research proposals, and potential paths to commercialization.

If you wish to apply for SJRF or are looking for collaborator, please contact the Surgery ACP office.



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• SEED GRANT, COURSE SPONSORSHIP
- **RESEARCH MENTORSHIP**
- **COLLABORATIONS WITH INSTITUTES OF
HIGHER LEARNING (IHL)**
- **SURGEON-SCIENTIST START-UP GRANT (S4G)**
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KKH

Breast Department • Cardiothoracic Surgery Service • Colorectal Service • Department of Orthopaedic Surgery • Department of Otolaryngology • Department of Paediatric Anaesthesia • Department of Paediatric Surgery • Department of Plastic, Reconstructive & Aesthetic Surgery • Dental Service