SUISE Surgery ACP Newsletter





ISSUE **06**JAN - APR 2016

AM-ETHOS PROJECTS

Page 02

RESEARCH FUNDING EXCELLENCE

Page 06



n January 2016, four noteworthy projects were awarded a 3-year grant under the Academic Medicine – Enhancing Training, Healthcare, Outcomes & Standards (AM-ETHOS) Medical Simulation & Inter-Professional Learning Project Grant initiative.

Do keep a lookout for all the exciting education activities happening within our academic centre. If you have education project ideas that require funding and support, the Surgery ACP Education Office would like to hear from you!

PRINCIPAL INVESTIGATOR	PROJECT TITLE	HIGHLIGHTS
Assoc Prof Ong Choo Phaik Caroline Senior Consultant, Paediatric Surgery, KKH Vice Chair (Education), Surgery ACP	Faculty Development for Simulation Educators and Supporting Standards in Simulation Education	This grant aims to enhance the skills of clinical teachers who use simulation to teach procedural or operative skills. An international expert is invited to design and deliver this novel faculty development programme that is based on best evidence for curriculum design and teaching methods in simulation-enhanced procedural skills education. The initial workshop is provided to SSSC platform directors and leads who can then facilitate future workshops for new simulation faculty.
Dr Chong Tze Tec Senior Consultant (Head), Vascular Surgery, SGH Vice Chair (Education), Surgery ACP Assoc Prof Cheow Peng Chung Senior Consultant, HPB/Transplant Surgery, SGH Programme Director, General Surgery Residency, SingHealth	Surgical Skills Training Roadmap for Medical Students	This grant aims to provide a surgery immersion programme for medical students to strengthen their foundation as preparation into SingHealth Residency.
Assoc Prof Koh Suang Bee Joyce Senior Consultant, Orthopaedic Surgery, SGH	Musculoskeletal Surgical Simulation Curriculum for Medical Students	This grant aims to introduce and expose Duke-NUS medical students to learner-centric MSK-related surgical simulation workshops and gain practical skills. This will allow medical students to gain an understanding of surgical specialties prior to entry into SingHealth Residency.
Dr Hairil Rizal Abdullah Consultant, Anaesthesiology, SGH	Perioperative In-Situ Crisis Resource Management Simulation Training Programme	This grant aims to build a core, multi-disciplinary group of simulation trainers comprising anaesthesiologists, surgeon, perioperative nurse and simulation technologist. This Inter-professional team of trainers and faculty will conduct regular perioperative simulation workshops and multi-disciplinary training for Duke-NUS medical students and faculty.

WHAT'S NEW

IN SURGERY ACP RESEARCH OFFICE?

In June 2016, Surgery ACP welcomed two new research initiatives – the Health Services Research and Nursing/Allied Health Interdisciplinary Research. Together with the four current research programmes, namely Device Development, Clinical & Research Database Registry, Resident and Student Research Mentorship and Clinician Scientist Development, we strive to build a strong and vibrant research environment for our surgeons, nurses and allied health professionals. Let us hear from some of the newly appointed programme directors!

HEALTH SERVICES RESEARCH

ealth Services Research (HSR) is research that is focused on improving the quality, accessibility and organisation of health services and systems. This programme will be co-led by Dr Emile Tan and Dr Wong Ting Hway.

"HSR and clinical research have considerable overlap and complement each other in many positive ways.
HSR is particularly useful in identifying gaps in evidence or oversight in service provision."

Dr Emile Tan Co-Director, HSR

Dr Tan further added that the healthcare providers must be knowledgeable of what they do and provide excellent service as patient satisfaction and happiness of their family will eventually be one of the major success indicators for those who are in the healthcare profession.

SURGICAL NURSING RESEARCH

s Ang Shin Yuh belongs to a small group of nurses who conducts studies on four focus areas, namely Nursing Care Quality and Outcomes, Nursing Workforce, Care Environment and Caregiver Well-being. They also facilitate health technology assessment, reviews as well as research endeavours of other nurses and collaborate with institutions of higher learning, such as NYP and NUS on innovations that could potentially improve the delivery of nursing care.

To encourage the involvement of surgical nurses in research, a new surgical nursing research programme will be set up. Co-led by Assoc Prof Brian Goh and Ms Ang Shin Yuh, this initiative aims to develop research capability and build-up capacity among surgical nurses.

"Nursing research is important because the successful and intentional integration of research and clinical practice can contribute to the science behind effective surgical nursing practice and facilitate the implementation of evidence-based practice."

Ms Ang Shin Yun Co-Director, Surgical Nursing Research



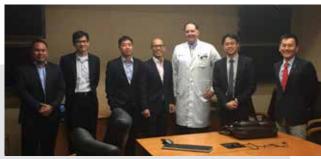
DUKE TRIP

urgery ACP went on a study trip to Duke University School of Medicine in Durham, North Carolina, USA, from 26 to 31 March 2016. The objective of the study trip was to learn from DukeMed on biomedical engineering, health services research, database management, the framework and strategies for medical technology development and commercialisation within an academic medical centre and surgical-related residency training. The visit also aimed to identify possible exchanges between SingHealth and Duke surgical residency programmes and opportunities for collaboration in research, residency training and other relevant areas.

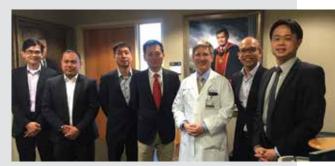
MEMBERS OF THE STUDY TRIP:

- 1. Dr Tan Hiang Khoon, Academic Chair
- 2. Assoc Prof Henry Ho, Director, Device Development
- 3. Dr Tan Ngian Chye, Deputy Director, Device Development
- Dr Lee Lui Shiong, Deputy Director, Clinical & Research Database Registry
- 5. Eugene Quek, Manager, Research
- 6. Khairul Anwar, Executive, Clinical and Research Database Registry

The study trip was indeed very fruitful as the team was recharged with fresher ideas and a clearer understanding of many approaches to bring Surgery ACP forward.



Surgery ACP team with Dr Jeffrey Ferranti, Vice President & Chief Information Officer (3rd from right)



Surgery ACP team with Prof Allan Kirk, Professor and Chairman, Department of Surgery Duke University, School of Medicine (3rd from right)



Lab tour

MOU SIGNING BETWEEN BIOMECHANICS LABORATORY AND INSTRON SINGAPORE

GH Biomechanics Lab and Instron Singapore Pte Ltd have formalised their working relationship through a Memorandum of Understanding which was signed on 29 January 2016. Originating from the famed Massachusetts Institute of Technology 70 years ago, Instron is globally-renowned for its cutting-edge testing technology and systems.

Director of Biomechanics Research, Assoc Prof Tay Shian Chao said that the laboratory was envisioned to give clinicians "convenient access to research resources within the hospital", and to act as a bridge to collaborate with external parties. Through its partnership with Instron, he added that the laboratory will have access to "the most state-of-the-art biomechanics equipment available for research".

On describing the laboratory, Mr Goh Kim Chue, Regional Vice-President at Instron, called it "a prestigious Biomechanics Lab in the region", and was "highly impressed" with their work. He also shared that discussions for the licensing and commercialising of an invention by the Biomechanics Lab are already underway. He added that he is "confident that with the wealth of research going on in SGH, there will be more of such commercialisation opportunities."

SGH CEO Prof Ang Chong Lye believed that the expertise available at Instron complements the capabilities of the Biomechanics Lab, which promote advancement of biomedical research that can ultimately benefit the hospital patients.



Mr Goh Kim Chue, Regional Vice President and General Manager, Instron Singapore (Left) and Prof Ang Chong Lye, CEO, SGH

RESEARCH MENTORSHIP: START YOUNG, START RIGHT

Excerpt from article by Tomorrow's Medicine, a SingHealth Duke-NUS AMC publication. www.tomorrowsmed.com



W

ith proper guidance from a nurturing mentor, two young medical trainees have achieved a number of research accomplishments.

Young researchers Gerald Lim and Dr Roderica Ng won first and third prize respectively for their poster presentations at the WSM London, a scientific meeting organised by the Anaesthesia Association of Great Britain and Ireland in January 2016.

The result was considered astonishing since they were competing against more senior doctors. Gerald was only in his first year at NUS Yong Loo Lin Medical School (YLLSoM), whilst Roderica was a SingHealth Transitional Year Resident fresh out of university.

Under Dr Chew's mentorship, Gerald and Roderica received helpful guidance in preparing manuscripts, presenting posters, and in grant and publication writing – experiences that most medical students are not exposed to.

"I am immensely proud of their achievements. I started guiding Gerald and Roderica when they were still in their first year of medical school, and it feels great to be a part of their journey,"

> said Dr Sophia Chew, Senior Consultant, Anaesthesiology, SGH.

Dr Chew's interest is in postoperative acute kidney injury (AKI), a serious complication that may occur after cardiac surgery. As clinical factors alone have failed to accurately predict the incidence of AKI, she has turned to research to gain more insights.

Her work in a collaborative project between SGH and NUH has resulted in the largest cardiac surgical anaesthesia database in Singapore, with a record of over 3,000 patients. To date, Dr Chew has 20 mentees under her wing.

STUDENT ENGAGEMENT SESSION AT NUS

S

urgery ACP has been actively linking up YLLSoM and Duke-NUS medical students with faculty to do research projects under the Research Mentorship programme.

As part of its active programme, an engagement session was organised on 22 March 2016 at NUS wherein thirty first to fourth year medical students heard insights from potential mentors from Surgery ACP.

Dr Eliza Sin shared her residency experience whilst Tan Yi Liang, a 5-year YLLSoM student who was in the first intake of this programme, also shared his positive research mentorship experience.

Surgery ACP will continue to build on this significant programme and look forward to your continued support in our research events.



Mentors attended: Dr Ong Kong Wee, Dr Chew Min Hoe, Dr Mark Wong, Dr Tan Chieh Suai and Dr Eliza Sin

Surgery ACP recognises that early exposure of medical students to research is important in developing them into surgeon scientists. As interest in research takes time to develop and is usually realised during various research attachments, it is imperative to provide them with a mentorship programme.

RESEARCH FUNDING EXCELLENCE

Grant Recipients in 2015

Provide seed funding for clinicians to kick-start their research in preparation for future external grant.

The following individuals have been awarded the Surgery ACP Seed Grant Award:

TITLE	PRINCIPAL INVESTIGATOR	DEPT/ INSTITUTION
Biomechanical Comparison of Monocortical Versus Bicortical Rib Fixation in a Cadaveric Model Using the Synthes MatrixRIB System	Abby Choke	Plastic, Reconstructive & Aesthetic Surgery, SGH
Effective Utilisation of Antibiotics in Combination Guided by Multiple Combination Bactericidal Testing (MCBT) with Polymyxin B Pharmacokinetics Elucidation to Treat Extreme Drug-Resistant Gram- Negative Bacteria in Major Burns Patients	Stephanie Chan	Plastic, Reconstructive & Aesthetic Surgery, SGH
Novel Method of Intraoperative Liver Tumor Localisation with Indocyanine Green (ICG) and Near-infrared (NIR) imaging	Lee Ser Yee	Hepatopancreatobiliary and Transplant Surgery, SGH
Validation of Genomic Aberrations and Field Change Effect in Synchronous and Metachronous Tumours	Johnny Ong	General Surgery, SGH
Comparison of Fibre Optic Tracheal Intubation via I-gel® and Air-Q® Supraglottic Airway Devices in Patients Scheduled for Elective Surgery under General Anaesthesia.	Patrick Wong	Anaesthesiology, SGH
Anatomy and Biomechanics of the Medial Patellofemoral Ligament – A Cadaveric Study	Paul Chang	Orthopaedic Surgery, SGH
Feasibility Study of Generating Voice Using Non-invasive Measurements of Respiration for Post-laryngectomy Patients	Siti Radhziah Binte Sudirman	Otolaryngology, SGH
Oral and Pharyngocutaneous Fistula Occlusion Device: Development and Prototype	Tan Ngian Chye	Division of Surgical Oncology, NCCS
The Use of Negative Pressure Wound Therapy (NPWT) in Flaps – Proof of Concept of Changes in Perfusion and Mechanical Deformation in a Porcine Flap Model	Terence Goh	Plastic, Reconstructive & Aesthetic Surgery, SGH SingHealth Residency.

Projects Awarded Funding under NTU-Surgery ACP Strategic Joint Research Fund:

TITLE	CLINICAL CO-PI	DEPT/INSTITUTION	TECHNICAL CO-PI	INSTITUTION	
Fast, Two Minute Surgical Procedure for Splicing of Blood Vessels	Andrew Chin	Hand Surgery, SGH	Terry Steele	School of Materials Science & Engineering	
Conceptual Design and Development of an Expanded Polytetrafluoroethylene Valved Conduit with Sinus of Valsalva Using 3-D Printing Technology	Nakao Masakazu	Cardiothoracic Surgery Service, KKH	Yeo Joon Hock Tony	School of Mechanical & Aerospace Engineering	
High-intensity Focused Ultrasound Ablation of Benign Thyroid Nodules Using Erosion Mechanism	Tan Ngian Chye	Division of Surgical Oncology, NCCS	Zhou Yufeng	School of Mechanical & Aerospace Engineering	
Development of Smart Forceps with Real- time Haptic Force Feedback for Surgery	Tay Shian Chao	Hand Surgery, SGH	Du Hejun	School of Mechanical & Aerospace Engineering	

Projects Awarded Funding under SUTD-Surgery ACP Strategic Joint Research Fund:

TITLE	CLINICAL CO-PI	DEPT/INSTITUTION	TECHNICAL CO-PI	INSTITUTION
Design and Prototyping of a Robotic Gantry to Aid in Non-Contact Ultrasound Image Acquisition of Hand and Image Analysis System for 3D Morphometric Measurement for Tendons and Muscles.	Duncan Angus McGrouther	Hand Surgery, SGH	Subburaj Karuppasamy	Engineering Product Development
Development of an Intuitive Interactive Platform for Preoperative Communication between Hospital and Patients/ Caregivers – Towards Community Partnership for Perioperative Person-based Healthcare Model	Hee Hwan Ing	Paediatric Anaesthesia, KKH	Simon Lui	Information Systems Technology and Design
Towards an Intuitive Robot-assisted Device for Dexterous Microsurgical Tasks	Tan Ngian Chye	Division of Surgical Oncology, NCCS	Tan U-Xuan	Engineering Product Development

Course Sponsorship in 2015

Provide fund for tuition fees for candidates who are interested in formal research degrees (e.g. MCI, MSc programmes).

The individual below has been awarded course sponsorship in 2015.

Tan Ek Khoon

General Surgery, SGH
For Master of Public Health (Johns Hopkins Bloomberg School of Public Health)

CELEBRATING ACHIEVEMENTS

NMRC TRANSLATIONAL & CLINICAL RESEARCH FLAGSHIP PROGRAMME

NMRC TCR Flagship Programme focuses on studies into key areas, namely cancer, cardiovascular/metabolic disorders, neurosciences, infectious diseases and eye diseases. The programme brings together hospitals, national disease centres, universities and research institutes to facilitate bench to bedside discovery.



Prof Chow Kah Hoe Pierce
Hepatopancreatobilliary
and Transplant Surgery, SGH
Division of Surgical Oncology, NCCS

NMRC RESEARCH TRAINING FELLOWSHIP

The fellowship is awarded to outstanding and talented clinicians and health science professionals for research training or to pursue a graduate degree in research.



Dr Chen YongPaediatric Surgery,
KKH

HEALTHCARE HUMANITY AWARDS 2016

This award recognizes outstanding individuals for their tireless commitment to humanitarian efforts and their selfless contributions to improve the lives of those they serve.

Assoc Prof Tan Bien Keem Plastic, Reconstructive and Aesthetic Surgery, SGH



Dr Lee Shu Ying
Paediatric Anaesthesia,



TITLING PROMOTION

Congratulations to our newly promoted Adjunct Professor and Adjunct Associate Professors! (with effect from 1 April 2016)



Adj Prof Lo Ngai Nung Orthopaedic Surgery, SGH



Adj Assoc Prof Ong Choo Phaik Caroline Paediatric Surgery, KKH



Adj Assoc Prof Ong Yee Siang Plastic, Reconstructive and Aesthetic Surgery, SGH



Adj Assoc Prof Chan Weng Hoong Urology, SGH

PHILANTHROPY SAVES LIVES!

"Philanthropy is integral to our journey towards academic pursuit. It helps provide the necessary resource to explore innovative ideas that can meaningfully impact our patient outcome.

Suffice to say, no academic medical centre can be successful without philanthropy."

Dr Tan Hiang Khoon

hilanthropy goes beyond just raising the dollars. From a grateful patient's perspective, philanthropy is not transactional – it is transformative.

The true spirit of philanthropy is about offering a person who has the means, the opportunity to do something meaningful and make an impact on the lives of others. For some, it could be a form of closure after the passing of a loved one, whilst for others an expression of gratitude.

The establishment of trust and collaboration between the SGH Development Office and clinicians is critical to the success of the major gifts programme, as clinicians are best to leverage on relationships with grateful patients who are also donor prospects.

There are a few options to refer potential donor prospects to SGH Development Office:



OPTION 1: Contact SGH Development Office

The easiest way to refer a grateful patient or family member is to call SGH Development Office directly. Contact information is listed at the bottom of this page.



OPTION 2: Telephone or In-person Discussion

Another simple way to make a referral is to introduce a grateful patient prospect and SGH Development Office in a personal conversation.



OPTION 3: An Introductory Email

It may be appropriate to send an introductory email to a grateful patient or family member. SGH Development Office at your request can work with you or the department to develop a plan for the appropriate follow-up.

SGH DEVELOPMENT OFFICE

DIRECTOR, DEVELOPMENT
MS AMY GAY

6321 3920 | 9777 1474 | amy.gay@sgh.com.sg

EXECUTIVE, DEVELOPMENT

MS SEE TOH SUE ANN

6326 6474 | 9776 3001 | sue-ann.see.toh@sgh.com.sg

167 Jalan Bukit Merah Tower 5, #03-11 Singapore 150167

CONNECT



BIOMECHANICS LAB (BML)

RESEARCH FELLOW

DR WONG YOKE RUNG wong.yoke.rung@sgh.com.sg

CLINICAL AND RESEARCH DATABASE REGISTRY (CARAR)

EXECUTIVE

KHAIRUL ANWAR BIN ABDUL KARIM khairul.anwar.abdul.karim@sgh.com.sg

CLINICIAN SCIENTIST DEVELOPMENT (CDS)

• SEED GRANT

RESEARCH MENTORSHIP

COLLABORATIONS WITH INSTITUTES OF HIGHER LEARNING (IHL)

DEVICE DEVELOPMENT

MANAGER

EUGENE QUEK eugene.quek.y.t@sgh.com.sg

CORE ADMIN

SENIOR MANAGER, EDUCATION

LOW NGOR HENG

low.ngor.heng@sgh.com.sg

MANAGER, RESEARCH

EUGENE QUEK

eugene.quek.y.t@sgh.com.sg

EXECUTIVE, EDUCATION

LOH KAI KEE

loh.kai.kee@sgh.com.sg

EXECUTIVE, RESEARCH

HAN QI'EN

han.qi.en@sgh.com.sg

SENIOR ADMINISTRATIVE ASSISTANT

PAULINE FOO

pauline.foo.p.l@sgh.com.sg

ADMINISTRATIVE ASSISTANT, RESEARCH

WAI SI EN

wai.si.en@sgh.com.sg

DESIGNED BY

purplecircledesign