





Singapore General Hospital SingHealth

# Bridging Discoveries and Knowledge for Care Transformation in

Academic Medicine

> SingHealth Duke-NUS OBGYN Academic Clinical Programme Progress Report 2016



**Prof Ivy Ng** Group CEO, SingHealth

It's been six years since the SingHealth Duke-NUS Obstetrics and Gynaecology Academic Clinical Programme (OBGYN ACP) was launched, and we look back with pride at the significant advances that OBGYN ACP has made in this relatively short period of time. Among the notable achievements this year, I am proud to note that OBGYN ACP has officially launched their first named fund "Women's Health Research and Education" on 18 October 2016 in conjunction with the "Born in KKH" Event. This fund provides a channel for advancing research and education for

women's health, and ultimately translating medical breakthroughs into better care for patients.

OBGYN ACP celebrates this 6th year milestone by documenting some of the compelling successes in the field of O&G under the leadership of Adj Assoc Prof Bernard Chern Su Min. As a firm believer in delivering clinical excellence, the ACP has provided good support for their clinicians to embark on novel initiatives such as the launch of the Patient Empowerment Thrust, which provides an online library of counselling aids organized in convenient bundles on general O&G conditions. They have also collaborated with the Health Promotion Board to develop an application that empowers pregnant women to manage their pregnancy better.

Several clinicians successfully clinched research grants from the National Medical Research Council (NMRC) in the past year, and these will bring new perspectives in the field of O&G.

The journey of academic medicine has brought together the best minds of the medical community to not simply practice medicine, but to transform it and to push new boundaries. We look forward to even more ground-breaking work in the year ahead.



Prof Thomas Coffman Dean-Designate, Duke-NUS Medical School

The pursuit of excellence in clinical care, medical education and research remains a key focus for the SingHealth Duke-NUS Academic Medical Centre. Accordingly, we are delighted by the many exciting educational and research initiatives taking shape in the SingHealth Duke-NUS Obstetrics and Gynaecology Academic Clinical Programme (OBGYN ACP).

As the leading O&G training centre in the region, the OBGYN ACP has been organising courses that aim to advance the standard of trainees and further develop healthcare education in Singapore. The OBGYN ACP offers the next generation of

healthcare professionals the ability of taking their knowledge and skills in patient care to the next level. Substantial efforts have been made to develop and maintain KKH & SGH as ideal training sites for mastering the art and science of practicing O&G. Their investments in medical training and education have yielded significant positive results, as the SingHealth OBGYN Residency Programme has been continuously ranked among the top three residencies for last three years. The programme has also achieved re-accreditation by ACGME-I with excellent results in 2014, and was named the Best SingHealth ACGME-I Program in AY15 & AY16 and the Most Improved SingHealth ACGME-I Program in AY15.

The OBGYN ACP remains well-positioned as the hub for translational and clinical research in the field of O&G. In this regard, the ACP was awarded an NMRC Collaborative Centre Grant to advance the Metabolic Health Outcomes of Women and Children. More recently, OBGYN ACP was also awarded a Research Grant to lead a study with SGH and NUH on the impact of Zika virus in the O&G sphere. We anticipate that these research successes signify just the beginning of many more exciting developments that will continue to transform and advance the field of research in O&G.

We are proud of the accomplishments of the OBGYN ACP since its inception in 2011. They continue to lead in the way healthcare is taught and managed, by improving the quality of medical education and maintaining high standards in their clinical work. Together, they have combined cutting-edge research initiatives and innovative medical knowledge with excellent patient care, providing a gateway to the global stage.



Adj Assoc Prof Bernard Chern Su Min Academic Chair OBGYN Academic Clinical Programme

The SingHealth Duke-NUS Obstetrics and Gynaecology Academic Clinical Programme is pleased to announce the new leadership appointments of the following OBGYN ACP Faculty, Adjunct Associate Professor Tan Lay Kok, Vice Chair Clinical, Adjunct Associate Professor Tan Heng Hao, Deputy Vice Chair Clinical, and Adjunct Associate Professor Timothy Lim Yong Kuei, Deputy Vice Chair Research, with effect on 1 October 2016. The appointment of Vice Chair and Deputy Vice Chair Clinical will empower both to spearhead various cross-institutional clinical initiatives aim at improving women's quality of care and delivering new models of care. The Deputy Vice Chair Research will continue to play an integral role in facilitating and overseeing research initiatives, allowing OBGYN ACP to be established as the central hub for clinical and translational research.

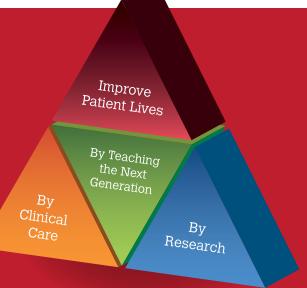
We have achieved excellence and recognition in our SingHealth OBGYN Residency Programme with the outstanding results being translated into excellent overall ranking. The SingHealth OBGYN Residency Programme has been listed as the top-ranked programme for two consecutive years. Our faculty are awarded the RiSE Awards annually for their exemplary contributions towards the structuring of the programme and commitment towards nurturing future generations of healthcare professionals. Adj Asst Prof Jason Lim Shau Khng received the AM•EI Golden Apple Award in 2016 in recognition for his notable contributions to healthcare education.

The SingHealth Duke-NUS OBGYN ACP has been playing the central role of championing remarkable activities that allow us to be the leading O&G healthcare provider in Singapore. We have recruited clinician scientists, Prof Jim Zhang Jun and Dr Mahesh Sangrithi, who will be embarking on impactful research projects that foster collaborations with other institutions and partners, allowing us to make significant advancements in the OBGYN specialty. We will continue to build on the three pillars of Education, Research and Clinical to improve patients' lives and deliver the highest standard of care to them.

### SHARED MISSION

The OBGYN ACP has a mission to improve lives of patients through excellent clinical care, education and research. To fulfil this mission, team work is paramount as no single individual or department can work alone. The OBGYN ACP comprises clinicians from KK Women's and Children's Hospital and Singapore General Hospital. To catalyse cross-fertilization of ideas and sharing of resources, collaborations are constantly forged between institutions to achieve our goals in Academic Medicine.

To deliver excellent 0&G Services, Education and Research in order to ensure world class clinical outcomes.



### 3 SINGHEALTH DUKE-NUS OBGYN ACP



Chairman

**Deputy Chairman** 

**Chair of Obstetrics** 

Chair of Gynaecology



Department of O&G Adi Assoc Prof Chern Su Min Bernard



Department of Urogynaecology Adj Assoc Prof Han How Chuan



Department of Maternal Fetal Medicine Prof Yeo Seow Heong George



Department of Gynae Oncology Adj Assoc Prof Lim Yong Kuei Timothy



Department of Reproductive Medicine Adj Assoc Prof Tan Heng Hao









### SingHealth OBGYN Residency Programme



Programme Director Adj Asst Prof Manisha Mathur

### SingHealth OBGYN Residency Programme



Programme Director Adj Asst Prof Jessie Phoon Wai Leng (KKH)

### SingHealth Postgraduate Year 1 (PGY1)







### Duke-NUS Medical School OBGYN Clerkship



Coordinator Assoc Prof Tan Thiam Chve

### NUS Yong Loo Lin School of Medicine OBGYN Clerkship





Coordinator Adj Asst Prof

Sonali Prashant

### Lee Kong Chian School of Medicine OBGYN Clerkship





Adj Senior Lecturer Kathirvel Rajeswari

# ACADEMIC CHAIR Adj Assoc Prof Chern Su Min Bernard ACADEMIC DEPUTY CHAIR Adj Assoc Prof Tan Hak Koon Head of Department Advisor ACADEMIC DEPUTY **Reproductive Medicine** Adj Assoc Prof Yu Su Ling Gynae Oncology Adj Prof Ho Tew Hong Maternal Fetal Medicine Adj Assoc Prof Tan Lay Kok Urogynaecology Adj Asst Prof Chua Hong Liang Deputy Program Deputy Program Coordinator Adj Assoc Prof Yong Tze Tein (SGH) Coordinator Adj Asst Prof Manisha Mathur (KKH)

Updated as of March 2017

### **5** WHAT'S HAPPENING IN THE CAMPUS

01 JANUARY

### 12 to 15 January 2017

MRCOG Part 2 and Part 3 Examination Course

### 16 January 2017

OBGYN ACP Workplan & Budget 2017





### 9 February 2017

Pre-congress Workshop: OBSTETRICS<sup>Core</sup> Course (OBStetric TEam TRaining In Core Skills)

### 10 to 12 February 2017

13th Singapore ISUOG Course in conjunction with the Combined Scientific Meeting of the College of 0&G, Singapore and 0&G Society of Singapore



02 March 2017 OBGYN ACP Pitch for Grant Review Session

### 03 to 05 March 2017

2nd Basic and Advanced Colposcopy and Management of Preinvasive Disease of the Genital Tract Courses

### 04 March 2017

4th Academic Medicine Leaders Forum



**08 April 2017** SingHealth Duke-NUS OBGYN ACP Retreat

### 21 to 22 April 2017

OBGYN Residency Freshmen Orientation: Onboard Briefing and Orientation Games Day

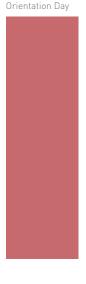


**27 May 2017** OBSTETRICS (OBStetric TEam TRaining In Core Skills) Course

# 0 JUNE

**15 to 16 June 2017** 7th Maternal Medicine Course

24 June 2017 Senior Residency



# 08 AUGUST

### 04 August 2017

OBSTETRICS<sup>Core</sup> Course (OBStetric TEam TRaining In Core Skills) for FM Residents

### 10 August 2017

JULY

2017

04 to 06 July

**Regional Congress** 

of APAGE 2017:

Anatomy and

Innovation:

Overcoming

Difficulties in

Challenging

07 July 2017

**OBGYN** Residency

29 July 2017

Residency Open

14 & 28 July

Midwives Training

OBSTETRICS

SingHealth

House

2017

Year One Orientation

Surgeries

Residency in SingHealth Excels (RiSE) Awards Ceremony 2016

### 19 August 2017

Inaugural Obstetrics Anal Sphincter Injuries (OASIS) Hands-on Workshop

### 19 August 2017

12th Gynaecological & Early Pregnancy Ultrasound Workshop

### 25 August 2017

OBGYN ACP Patient Safety Day: A Change of Mindset and Culture

# 09 SEPTEMBER

### 03 September 2017

SingHealth Duke-NUS Gala Dinner

### 09 September 2017

3rd Advanced Colposcopy and Management of Preinvasive Disease of the Genital Tract Course

### 14 September 2017

SingeHealth Residency Graduation and Best Junior Doctors Awards

### 15 September 2017

4th SingHealth Duke-NUS Clinical Practice Improvement Day

### 17 September 2017

4th SGH SOAR (Starting Out on Assisted Reproduction)

### 29 to 30 September 2017

3rd SingHealth Duke-NUS Education Conference

### 30 September 2017

Public Forum: Reproductive Medicine – A Glimpse Into Your IVF Journey



### 28 October 2017

Public Forum: Menopause – Breezing through Menopause (English & Chinese)



### 10 November 2017

5th SingHealth Duke-NUS OBGYN ACP Education Day

### 12 November 2017

SingHealth Duke-NUS OBGYN ACP Great Eastern Women's Run 2017

### 17 November 2017

CaSH : Contraception and Sexual Health Workshop

### 24 November 2017

5th SingHealth Duke-NUS OBGYN ACP Research Day

### 25 November 2017

Residency Games Day

# 12 DECEMBER

### 08 December 2017

Inaugural AM•EI Faculty Development Course: Strategies for Giving Feedback



### 7 MILESTONES



Retreat group photo taken at National Gallery, Aura Sky Lounge

### 12 March 2016 – SingHealth Duke-NUS OBGYN ACP Retreat

The annual retreat serves as a platform for reviewing achievements and progress of the various aspects of OBGYN ACP in the past year, as well as share ideas and insights about how OBGYN ACP can continue to advance. The retreat was enjoyable, with interesting group discussions about the strengths, weaknesses, opportunities and threats for our hospitals and ACP, as we work towards creating a vibrant academic medicine culture.

### 4 – 6 April 2016 - Academic Medicine Advisory Council (AMAC) 2016

The Academic Medicine Advisory Council (AMAC) provides the SingHealth Board and the Duke-NUS Governing Board independent advice and guidance on the development of Academic Medicine. During the three-day review with the Academic Medicine community, OBGYN Academic Clinical Programme had a fruitful engagement with AMAC Members and shared on the initiatives and activities that were developed and implemented.



The panel of invited guest speakers discussing the challenges of academic medicine



(From left to right) Dr Li Mingyue, Dr Muhammad Fairuz B Abdul Rahman, Dr Mok Zhun Wei, Dr Li Xin Yi, Prof Chay Oh Moh, Dr Serene Thain Pei Ting, Dr Stella Rizalina Sasha and Dr Manisha Mathur (Programme Director)

# 30 July 2016 - SingHealth Residency Open House 2016

The SingHealth Residency Open House is an annual event where different specialty training programmes offered by SingHealth are showcased to prospective residents. The OBGYN Residency Program Director, Dr Manisha Mathur, and Residents were on hand to provide information about our programme, as well as share insights derived from personal experience. It was a fruitful occasion as medical students had the opportunity to gain a deeper understanding about the different specialties.

### 12 August 2016 - 4th SingHealth Duke-NUS OBGYN ACP Education Day in Conjunction With SingHealth OBGYN Residency Graduation 2016

The SingHealth Duke-NUS Education Day aims to allow our clinician educators to cross-share their various OBGYN education projects and initiatives. Clinicians can also listen to quest speakers sharing education-related topics. We were honoured to have Assoc Prof Kevin Tan, Programme Director of SingHealth Neurology Residency, and Ms Joyce Teo, Assistant Institutional Coordinator, SingHealth Graduate Medical Education, who delivered an engaging co-presentation on "Moving Beyond Survey Data for Programme Evaluation: Striving Towards a Zootopia". The day's programme was further enriched by interesting presentations which included "Assessing Knowledge, Attitudes, Skills and Values: A Holistic and Objective Approach to Assessment of Residents (Harvard Macy Project)" by Dr Manisha Mathur. "Overseas Elective at Guy's Hospital and St Thomas' Hospital, London" by Dr Lily Kho Chye Lee, "LKC Medicine Posting, Learning Objectives, Curriculum and Assessment" by Dr Kathirvel Rajeswari and a showcase of O&G teaching videos by Dr Li Xin Yi and Dr Manisha Mathur.







Prof Ho Tew Hong doing the opening speech

Assoc Prof Kevin Tan and Ms. Joyce Teo receiving the token of appreciation from Prof Ho Tew Hong

The event was marked by a special milestone as we witnessed the handing over of the Program Director (PD) baton to Dr Manisha Mathur, by Assoc Prof Bernard Chern Su Min and witnessed by Assoc Prof Lim Boon Leng.



Assoc Prof Bernard Chern receiving his plaque from Assoc Prof Lim Boon Leng for his outstanding contributions to SingHealth OBGYN Residency



Dr Manisha Mathur received the Programme Director baton from outgoing Programme Director Assoc Prof Bernard Chern

The OBGYN Residency Graduation begun with a speech by the AY2015 Education Chief Resident and Graduate, Dr Celene Hui Yan Yan, and the certificates were presented by Prof Chay Oh Moh. The graduates were Dr Lim Yu Hui, Dr Chuah Theng Theng, Dr Ee Tat Xin, Dr Sharon Foo Anqi, Dr Celene Hui Yan Yan, Dr Qi Maili and Dr Lily Kho. The Top Graduate of Class 2012 was Dr Lim Yu Hui.



Dr Lim Yu Hui Dr Chuah Theng Dr Ee Tat Xin Theng



Angi

A REAL







Foo Dr Celene Hui Yan Yan Dr Qi Maili

Dr Lily Kho Chye Lee

The event ended with Prof Chay Oh Moh presenting the OBGYN Education awards. The following awards were presented:

OBGYN ACP Education Awards	Awardees
Best R5 Resident (July 2015 to June 2016)	Dr Ho Weng Yan
Best R4 Resident (July 2015 to June 2016)	Dr Qi Maili
Best R3 Resident (July 2015 to June 2016)	Dr Ng Zheng Yuan
Best R2 Resident (July 2015 to June 2016)	Dr Ng Qiu Ju
Best R1 Resident (July 2015 to June 2016)	Dr Poo Zi Xi
Best CREOG score (July 2015 to June 2016)	Dr Serene Thain Pei Ting











Best R2 Resident – Dr Ng Qiu Ju

Best R3 Resident – Dr Ng Zheng Yuan

– Best R4 Resident – Dr Qi Maili

Best R5 Resident – Dr Ho Weng Yan

Best CREOG Score – Dr Serene Thain

### 4 November 2016 - 4th SingHealth Duke-NUS OBGYN ACP Research Day

The SingHealth Duke-NUS OBGYN ACP Research Day is a dedicated platform for sharing the latest research achievements of OBGYN residents in the field of Obstetrics & Gynaecology. The event's highlights included an explorative talk about the future of research by Assoc Prof Sng Ban Leong, an enlightening talk about the Progesterone and Miscarriage: A True Link of Myth? by Assoc Prof Tan Thiam Chye, an intriguing talk about Evidence-based Gestational Diabetes Mellitus (GDM) Screening by Prof Tan Kok Hian and an interesting talk about Developing the Next Generation Biomarkers for Endometriosis, and its Implication for Underpinning Biology and Clinical Translation by Assoc Prof Jerry Chan Kok Yen.

The event was warmly attended by faculty, residents and trainees. A total of 36 submissions were received. It ended with the presentation of four oral presentation awards in two categories – "Clinical Research" and "Basic and Translational Research".

Award Category	Study Title	
Best Oral Presentation Award – Clinical Research Awardee: Dr Serene Thain Pei Ting Mentor: Adj Prof Tan Kok Hian	Spontaneous Preterm Birth and Cervical Length in a Pregnant Asian Population	
Merit Award Oral Presentation Award – Clinical Research Awardee: Dr Valerie Yeap Shu Xian Mentor: Assoc Prof Tan Thiam Chye	Is There a True Association Between Progesterone Deficiency and Early Pregnancy Miscarriages? A Prospective Cohort Study Of Serum Progesterone Distribution In 700 High-Risk And Normal Pregnancies	Pro
Best Oral Presentation Award – Basic and Translational Research Awardee: Dr Adele Wong Pek Choo Mentor: Prof Hong Wanjin & Dr Joanne Ngeow	Mutation Spectrum of POLE and POLD1 Mutations in South East Asian Women Presenting with Grade 3 Endometrioid Endometrial Carcinomas	A lot of
Merit Award Oral Presentation Award – Basic and Translational Research Awardee: Dr Poo Zi Xi Mentor: Dr Ravinder Singh	Optimal HbA1c Threshold 5.5% (37mmol/mol) in Pregnancy to Identify Women at Risk of Gestational Diabetes and Adverse Pregnancy Outcomes in Singapore	
<b>Pitch for Grant Award (2016)</b> Awardee: Dr Poo Zi Xi Mentor: Dr Ravinder Singh	Optimal HbA1c Threshold in First Trimester as a Screening Tool for Diabetes in Pregnancy and Predictor of Adverse Maternal-Fetal Outcomes	Pro Yor
<b>Pitch for Grant Award (2016)</b> Awardee: Dr Li Xin Yi Mentor: Prof George Yeo Seow Heong	Assessing the Knowledge, Attitudes and Choices Towards NIPT in Our Local Diverse Population	1
Pitch for Grant Award (2016) Awardee: Dr Evelyn Heng Yee Hsieh Mentor: Adj Assoc Prof Yu Su Ling	An Innovative Procedure to Investigate the Genetic Causes of Spontaneous Miscarriages using Hysteroembryoscopy and Chromosomal Microarray Analysis (CMA)	Ass





rof George Yeo Seow Heong giving e Research Day opening speech

Assoc Prof Sng Ban Leong sharing about the future of research



Prof Tan Kok Hian receiving the token of appreciation from Assoc Prof Lim Yong Kuei Timothy





Assoc Prof Jerry Chan Kok Yen and Assoc Prof Tan Thiam Chye receiving the token of appreciation from Prof Yeo Seow Heong George



Assoc Prof Tan Hak Koon presenting the Merit Oral Presentation Award – Clinical Research to Dr Valerie Yeap Shu Xian



Assoc Prof Tan Hak Koon presenting the Merit Oral Presentation Award – Basic and Translational Research to Dr Poo Zi Xi



Assoc Prof Tan Hak Koon presenting the Best Oral Presentation Award – Basic and Translational Research to Dr Adele Wong Pek Choo

### Appointments of Adjunct Associate Professor Tan Lay Kok as Vice Chair Clinical and Adjunct Associate Professor Tan Heng Hao as Deputy Vice Chair Clinical

A dedicated clinician in caring for women's and children's health and a champion for patient safety, Adj Assoc Prof Tan Lay Kok was appointed to the role of Vice Chair, Clinical of SingHealth Duke-NUS Obstetrics and Gynaecology Academic Clinical Programme on 1 October 2016.

Setting on the mission to **deliver patient care that is efficient**, **coordinated**, **safe**, **personalised**, **and of the highest quality and value**, **and to transform clinical practice to meet the changes and challenges in health care delivery**, Assoc Prof Tan believes both institutions (KKH and SGH) can synergistically combine their efforts in enriching patient care.

Together with his Deputy Vice Chair Clinical, Adj Assoc Prof Tan Heng Hao, appointed on 1 October 2016, they have been actively leading in initiating various cross-institution clinical initiatives and discussions including aligning current initiatives in OBGYN ACP with the clinical learning environment review by ACGME[Accreditation Council for Graduate Medical Education]. He has advocated for combined efforts in clinical quality and patient safety such as Patient Safety & Quality Improvement Bulletin, which will showcase clinical cases from both KKH and SGH, as well as a combined clinical dashboard that tracks clinical outcomes.

We believe there will be exciting opportunities for both institutions to work together and complement each other's strengths, ultimately improving women's and children's quality of care.





Adj Assoc Prof Tan Lay Kok

Adj Assoc Prof Tan Heng Hao

### Formation of Clinical Care Workgroup

Under the new leadership of Assoc Prof Tan Lay Kok, the Clinical Quality and Patient Safety Committee was formed to streamline the efforts in patient safety and the improvement of clinical quality. Members were assigned to either the first workgroup which covers Patient Safety, Care Transition and Supervision or the second workgroup which focused on Advancing Issues in Healthcare Quality and Professionalism. The committee also provides opportunities for new cross-institution collaboration and synchronised efforts in furthering safe and quality care.

### Appointment of Adjunct Associate Professor Timothy Lim Yong Kuei as Deputy Vice Chair Research

Adj Assoc Prof Timothy Lim Yong Kuei was appointed to the role of Deputy Vice Chair, Research of SingHealth Duke-NUS Obstetrics and Gynaecology Academic Clinical Programme on 1 October 2016. He will be assisting Professor Yeo Seow Heong George, Vice Chair Research, in facilitating and overseeing research initiatives in OBGYN ACP, as well as developing collaborations with other institutions, Academic Clinical Programmes, Academic Medicine Research Institute (AMRI) and research partners. Together, they will continue to champion ground breaking research and establish OBGYN ACP as the central hub for clinical and translational research.



Adj Assoc Prof Timothy Lim Yong Kuei

### **11** AWARDS AND ACHIEVEMENTS

### 26 January 2016 – SingHealth Quality Service Award 2016

The Singapore Health Quality Service Award is Singapore's first and largest dedicated platform for honouring healthcare professionals who have delivered quality care and outstanding service to patients. OBGYN Faculty were honoured for their exceptional contributions to healthcare at the sixth annual award ceremony. A special mention goes to Adj Asst Prof Suzanna Sulaiman, who clinched the Superstar Award in the Clinical Category. She was selected based on stringent criteria, such as testimonials by patients and colleagues, number of service awards and compliments received, as well as contributions to service quality and patient care.



Dr Suzanna Sulaiman receiving the Superstar Award from Prof Ivy Ng (left in photo), GCEO, SingHealth and Guest of Honour, Dr Amy Khor (right in photo), Senior Minister of State, Ministry of Health

Star Awardees	Gold Awardees	Silver Awardees
Assoc Prof Tan Thiam Chye	Adj Assoc Prof Philip Yam Kwai Lam	Adj Assoc Prof Timothy Lim Yong Kuei
Adj Asst Prof Khoo Chong Kiat	Adj Assoc Prof Tan Heng Hao	Adj Asst Prof Tan Vic Khi June
Adj Asst Prof Tan Kim Teng	Assoc Prof Jerry Chan Kok Yen	Dr Daniel Koh Seow Choon
Dr Lee Jiah Min	Adj Asst Prof Jessie Phoon Wai Leng	
	Adj Asst Prof Veronique Celine Viardot-Foucault	
	Dr Mohamed Siraj Shahul Hameed	
	Dr Kadam Pratima Datta	

### 29 January 2016 – SingHealth Doctors and Dentists Long Service Award 2016

The SingHealth Doctors and Dentists Long Service Award 2016 recognizes and appreciates doctors and dentists who have dedicated 10, 20, 30, 40 and even 50 years of their lives to patient care to Public Service and to SingHealth. This momentous occasion celebrated the conferment of Prof Ho Tew Hong with the title of Emeritus Consultant. The Long Service Award was given to Assoc Prof Chan Kok Yen Jerry, Dr Wei Wee-Stekly and Dr Wong Wai Loong.



Prof Ho Tew Hong is conferred the title of Emeritus Consultant. (From left to right) Prof Kenneth Kwek Yung Chiang, CEO, KKH; Mr Peter Seah, Chairman, SingHealth; Prof Ho Tew Hong; Prof Ivy Ng, GCEO, SingHealth



Dr Wei Wei Wee-Stekly received the Long Service Award (10 years)

### National Medical Research Council (NMRC)

The National Medical Research Council Awards Ceremony aims to recognize SingHealth Duke-NUS clinicians and researchers for their achievements and contributions to better healthcare outcomes. It provides a platform that fosters collaborations amongst healthcare institutions, academia and industries. The NMRC Awards were presented to OBGYN Clinician Scientists and Researchers to carry out translational and clinical research in Singapore, which addresses major challenges faced in healthcare, and potentially to transform the healthcare sector.

**Assoc Prof Tan Thiam Chye**, Senior Consultant, Department of 0&G, KKH, was awarded the Ministry of Health Industry Alignment Fund Category 1 (NMRC MOHIAFCAT1) grant for his project titled "Diagnostic Kit for Prediction of Spontaneous Miscarriage and Other Adverse Pregnancy Outcomes".

**Adj Asst Prof Tan Kai Lit**, Consultant, Department of Maternal Fetal Medicine, KKH, was awarded the Clinician Scientist - Individual Research Grant - New Investigator Grant (CS-IRG-NIG) for his study titled "Intrauterine Reduction in Growth Velocity as a Predictor of Poor Perinatal Outcome in Appropriately Sized Fetuses at Term".

### 29 April 2016 - National Team Excellence (Gold) Award

Dr Joella Ang Xiao Hong and her team (Dr Manisha Mathur: Mentor, Dr Shephali Tagore, Dr Ann Margaret Wright, Dr Sheri Lim Ee-Lin, Dr Chuah Theng Theng, Dr Yip Swee Lin and Dr Ng Zheng Yuan) have won the National Team Excellence (Gold) Award. The Team Excellence Award is a national award by the Singapore Productivity Association, a strategic partner to SPRING Singapore. It recognizes individuals' and teams' contributions to continuous improvement and innovation, and highlights models to inspire other organisations to emulate and scale to greater heights.

Their winning project promoted the use of MgS04 in women at risk of preterm delivery and implemented a protocol in the labour ward for usage of MgS04. This has led to better patient outcomes by preventing potential cases of cerebral palsy in newborn with potential cost-savings of the costly disease.







Assoc Prof Tan Thiam Chye



Dr Tan Kai Lit

### **13** AWARDS AND ACHIEVEMENTS

### 20 May 2016 – SingHealth Excellence Awards 2016 – Distinguished Mentor Award

Prof Ho Tew Hong, Emeritus Consultant and Vice Chair of Education for SingHealth Duke-NUS OBGYN ACP, was awarded the Distinguished Mentor Award at the 6th SingHealth Excellence Awards held at the Singapore Marriott Tang Plaza Hotel. The SingHealth Excellence Awards recognize SingHealth employees for their outstanding performance and achievements in the cluster and across the institutions, and their exemplary contributions to healthcare leadership, education, research and administration.



Prof Ho Tew Hong receiving the Distinguished Mentor Award from Mr Chee Hong Tat, Minister of State for Health



Dr Shephali Tagore receiving the award on behalf of 0&G, from Mr Gan Kim Yong, Health Minister

### 20 May 2016 - 8th National Health IT Summit – National Health IT Excellence Award

The theme of the 8th National Health IT Summit held at Singapore Expo was "Beyond Acute Care", and it focused on strategies and tools employed to extend healthcare resources beyond the traditional provider-centric, acute-care setting.

KKH, Division of 0&G, was awarded the "IT Excellence in Providing Quality of Care" award for the 'TrustedCare: Process Redesign for Elective Caesarean Section' project. The project was a collaborative effort between KKH's Division of 0&G and Integrated Health Information Systems (IHIS), and provided clinicians and healthcare staff a centralised view of information about patients undergoing elective caesarean section. This award recognises initiatives that contributed significant improvements in advancing patient safety, patient centricity, as well as quality and continuity of care.

### 11 August 2016 - 5th SingHealth Residency in SingHealth Excels! (RiSE) Awards 2016

The SingHealth Residency in SingHealth Excels! (RiSE) Awards honour and recognize key achievements and exceptional contributions of Residency Faculty and Residents. Held on 11 August 2016, our OBGYN Faculty and Residents were recognised for their excellence in academic and clinical work.

### **Best ACGME-I Program Award**

The Best Program Award honours the top-performing program according to the ACGME-I survey. This was clinched by SingHealth OBGYN Residency Programme. SingHealth OBGYN Residency Programme received the award from Assoc Prof Lim Boon Leng, Designated Institutional Official, SingHealth Residency.



Best ACGME-I Program Award: Obstetrics and Gynecology Residency Program

### Most Improved ACGME-I Program Award

This award is granted to the program which has made the most improvement based on the ACGME-I survey, and encourages all Residency programs to strive for continuous improvement. SingHealth OBGYN Residency Programme received the award from Prof Chay Oh Moh, Associate Designated Institutional Official, KKH, SingHealth Residency.



Faculty Appreciation Award

This award is given out to faculty members of each program for their commitment to Residency training in their respective programs during their tenure. Assoc Prof Bernard Chern Su Min received the award from Prof Lim Shih Hui, Group Director of Education, Singapore Health Services.



Faculty Appreciation Award: Assoc Prof Bernard Chern Su Min

### Partners in Education Award

This award is presented to non-physician Faculty members who have played an important role in imparting their knowledge and experience to the Residents. Ms Kam Limin received the award from Dr Adrian Ee, CEO, SingHealth Polyclinics.



Partners in Education Award: Ms Kam Limin

### **Outstanding Faculty Award**

This award honours faculty members for their dedication and contributions to SingHealth Duke-NUS Residency programmes. OBGYN Faculty, Adj Assoc Prof Philip Yam Kwai Lam, Adj Assoc Prof Devendra Kanagalingam, Adj Assoc Prof Timothy Lim Yong Kuei, Adj Asst Prof Manisha Mathur, Adj Asst Prof Jason Lim Shau Khng, and Dr Felicia Chin Hui Xian received the award. Prof Kenneth Kwek Yung Chiang, CEO, KKH, presented the award to the recipients.



Outstanding Faculty Award: Adj Assoc Prof Philip Yam Kwai Lam, Adj Assoc Prof Devendra Kanagalingam and Adj Asst Prof Manisha Mathur (from left to right)

### **Outstanding Resident Award**

The Outstanding Resident Award is an accolade awarded to the top 5% of residents from their respective cohorts, in recognition of their consistent clinical and academic performance. OBGYN Residents, Dr Ng Zheng Yuan, Dr Poo Zi Xi, Dr Ho Weng Yan, Dr Qi Maili, and Dr Ng Qiu Ju clinched this award. Prof Alex Sia Tiong Heng, CMB, KKH, presented the awards to the awardees.



Outstanding Resident Award: Dr Ng Zheng Yuan and Dr Poo Zi Xi

### **Inspiring Resident Educator Award**

The Inspiring Resident Educator Award recognizes residents who have made exceptional contributions to mentoring their peers and juniors, and encourages lifelong learning and sharing of knowledge. OBGYN Residents, Dr Serene Thian Pei Ting, Dr Joella Ang Xiao Hong, and Dr Ng Xin Hui Ada received the award. Prof Alex Sia Tiong Heng, CMB, KKH, presented the awards to the residents.



Inspiring Resident Educator Award: Dr Serene Thain Pei Ting and Dr Joella Ang Xiao Hong

Most Improved ACGME-I Program Award: Obstetrics and Gynecology Residency Program

### **15** AWARDS AND ACHIEVEMENTS

### 22 September 2016 - SingHealth Residency Graduation and Best Junior Doctors Awards 2016

The SingHealth Residency Graduation and Best Junior Doctors Awards 2016 celebrate the graduation of Residents and recognize the achievements of Junior Doctors and SingHealth Chief Residents. Our OBGYN Resident, Dr Li Mingyue received the Best Junior Award in recognition for her outstanding clinical performance and contributions towards healthcare.



 $\mbox{Dr}$  Li Mingue receiving the Best Junior Doctor Award from Prof Ivy Ng, Group CEO, SingHealth



Adj Asst Prof Lim Shau Khng Jason (centre) with Prof Ivy Ng and Prof Thomas Coffman during the award ceremony

### 24 September 2016 - AM•El Golden Apple Awards 2016 - Outstanding Young Educator Award (Medical)

Adj Asst Prof Lim Shau Khng Jason, Consultant, Department of 0&G, SGH, was presented the Outstanding Young Educator Award (Medical) at the AM•EI Golden Apple Awards 2016. The awards recognize and honour outstanding educators in SingHealth and Duke-NUS who have demonstrated excellence in teaching, their passion and dedication transforming teaching and helping to raise standards of healthcare education.

### 18 October 2016 - NUS Awards and Appreciation Nite (AAN) 2016 - Medsoc Outstanding Tutor Award

Adj Asst Prof Kathirvel Rajeswari, Consultant, Department of 0&G, KKH, was awarded the Medsoc Outstanding Tutor Award at NUS Awards and Appreciation Nite (AAN) 2016 on 18 October 2016 at University Cultural Centre, NUS. The AAN recognizes and celebrates students' achievements in various areas, and a special tribute was given to the outstanding tutors who were nominated by the students as exemplary role models.



Adj Asst Prof Kathirvel Rajeswari receiving the Medsoc Oustanding Tutor Award

### National Day Awards 2016

The National Day Awards are a means of recognising various forms of merit and service to Singapore. 187 individuals from the SingHealth Duke-NUS family were honoured with the Awards in recognition of their exemplary contributions to SingHealth's Academic Medical Centre, patients and Singapore's success. For SingHealth 0&G, Adj Assoc Prof Chern Su Min Bernard, Adj Assoc Prof Yong Tze Tein and Adj Asst Prof Tan Kim Teng received the Long Service Medal for their continual dedication to academic medicine.





Adj Assoc Prof Chern Su Min Bernard

Adj Assoc Prof Yong Tze Tein



Adj Asst Prof Tan Kim Teng

### 29 November 2016 – Yong Loo Lin School of Medicine Dean's Award -Teaching excellence AY 2015/2016

Adj Asst Prof Tan Wei Ching, Senior Consultant, Department of 0&G, SGH, was presented with the prestigious Dean's Award for Teaching Excellence 2016. The award recognizes educators who have shown an exceptional dedication to academic education, and recognizes their outstanding teaching and mentoring.



Adj Asst Prof Tan Wei Ching

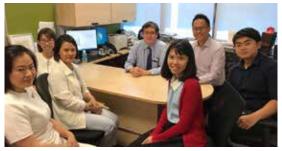
### 20 - 22 June 2016 - Top Scoring Abstracts of the RCOG World Congress 2016

At the RCOG World Congress 2016 held at the International Conference Centre (ICC) in Birmingham UK, Dr Ng Qiu Ju achieved the top scoring abstract with her NORA work on Placental growth factor (PIGF) and soluble FMS-like tyrosine kinase -1 (sFlt-1) in pregnant Asian population under the mentorship of Prof Tan Kok Hian.

The paper, authored by Dr Ng Qiu Ju, Dr Jonathan Han You Xiang, Prof George Yeo Seow Heong, Prof Kenneth Kwek Yung Chiang and Prof Tan Kok Hian, was also published in 'Special Issue: Top Scoring Abstracts of the RCOG World Congress 2016, 20–22 June 2016, ICC Birmingham, United Kingdom June 2016 BJOG 123 (S2), 33.

DJUU Obsteerics and G	
NO. 11.11.11.11.11.11.11.11.11.11.11.11.11	Abstracts
Free Communication Oral Presentations	
Tuesday 30 June 2016	
	of the historylam. Hence, where differences may have to be place
Maternal Medicine (PCIb)	into account when investigating the predictive value of these
ROLAN	hometers for pre-scherpric in the total population.
Recental growth factor (HGF) and voluble HMS-like	
tyrosine kinase -1 (JPD-1) in pregnant Asian	
population	
Sta. Q.J. Han, J. Yee, SHG; Kwek, K; Tan, KH	
10: Monucle and Children's Stephal, Support	
biostation Prevalangels is a multi-systemic disase and in	
man pathephysiology is purely understand. Placeted pro-	
angingmic and antiangingmic manufiles agents such as placental arrests factors (PEU), and adults frontiles tomains linear 1 (cPE).	
It play a rightleast role in the pathogenesis of pre-scherepis.	
Not malles an conducted in Barope with a lack of data from	
Asian population. Hence, we aim to analyze the PRP and oR2-1	
tend in the local population. Methods This multi-to part of the Neurand and Chantrics Elisio	
Assessment (NCRA) properties othert made conducted in KK	
Women's and Children's Despital. We muturized 1927 acamen with	
singlistics programming at +1.6 + 0 words of promotificour between September 2010 and November 2013. Maternal writes samples were	
adjusted at four different time points. VI (+14 wells), 32 (18-	
27 method, VP (28-32 method and VA) more than 74 method.	
Baults Out of the 2020 scenes, 414 (NL2N) patients completed	
all if antenatal visits. As sitee participants were lost to follow-up, we shall all the subcomes of the remaining X38 (94.1%) parlamin.	
The mean material age is 31d years old (15.0), mean gravide is	
1.9 (3.1.8) and mean parity is 6.6 (3.6.9). There ware 407 (50.94)	
Other waters, 148 (29%) Make women, 148 (17%) Indian	
scenes and 84 (9%) were of other ethnicities. Then were 30 patients (22%) who developed are ethnicate, of which 51(9),961	
were of early once and 17 (85%) were of law once.	
The mean PEOP level increases till the and of the second trimemer	
(9) 475 Inform in ductment in the later part of the programmy while of b-1 increases of globa in the early stimuters (9) - 921	
while d'b 1 increases dightly in the early bitmenters (V1-V2) before it disc in V2 will an increase in the late stage of	
programmers. The Oxioner propulation has a lower FEF mean and	
light diki man while the Indian patients have a much lower	
#3 mass and ligher PEP mean as compared to the Chinese patients and this was statistically significant (P < 0.05).	
patients and this was materially significant (P < 0.08). Pre-adjumptic automic have reach lower PEF levels and an order	
coast of rise in offs. I leads in programsy as compared to patients	
alto do not have pre-edampsia,	
Gandiasian The mend of PEEF and offs 1 in the local program population is consistent with other studies conducted. It is	
peptition to consider with other mades conducted. It is interesting to note that there are other differences in the means	

### **17** CLINICAL CARE



Temasek Foundation Cares GDM Programme Workgroup (clockwise from centre) Prof Tan Kok Hian (Principal Investigator), Ng Mor Jack, Ang Boon Yew, Tey Wan Shi, Ding Na, Asmira Bte Mohamed Rahim and Tan Mei Yu



### Temasek Foundation Cares (TFC) – Gestational Diabetes Mellitus Programme

Along with the declaration of War on Diabetes, TFC aims to improve the management of Gestational Diabetes Mellitus (GDM) in pregnant women to reduce risk of Type 2 Diabetes in these women subsequently. As found in the GUSTO study of KKH and NUH, 10 per cent of women with GDM developed full-blown diabetes within five years of childbirth, when they were only in their 30s. There is at least a seven-fold increased risk of developing T2DM in the future compared with those who did not have GDM in their pregnancy. With a 1 million dollars funding from Temasek Foundation Cares, KKH has embarked on TFC on 1st October 2016 to establish an early detection and optimal manage of Gestational Diabetes Mellitus through tracked follow up and education programme to increase awareness among mothers. The three-year pilot programme led by Prof Tan Kok Hian, Programme Lead, Head and Senior Consultant, Perinatal Audit and Epidemiology Unit, Division of O&G, aims to reduce risk of Type 2 Diabetes in these women subsequently. The tracked follow up continues even after these women have given birth to check on the development of their diabetic condition after delivery. It is estimated that the programme will benefit about 5,400 women with GDM over 3 years.

Asmira Bte Mohamed Rahim, Nurse Clinician, sharing on the Supervised Blood Sugar Profile Programme with the patient

### KKH In Partnership with People's Association to Organise Talks to Highlight Risks of Gestational Diabetes

As part of the efforts on War on Diabetes, KK Women's and Children's Hospital has partnered with People's Association to launch a series of talks to raise public awareness on preventing diabetes in women and children. Women are especially important in the War on Diabetes, as they play key roles in their community and can be major influences in encouraging healthy lifestyle as the main caregiver. The first of these talks was successfully kicked off on 24 September 2016 at Changi-Simei Community Club with Adj Prof Tan Kok Hian and Assoc Prof Fabian Yap Kok Peng discussing on Gestational Diabetes and Childhood Obesity respectively. Residents from Changi-Simei CC learnt about the importance of screening for gestational diabetes during pregnancy and how to ensure optimal growth rate for their children among many other tips for leading a healthy lifestyle. The talk was also graced by Senior Minister of State, Dr Amy Khor Lean Suan and Grassroots Leaders for East Coast Group Representation Constituency and Fengshan Single Member Constituency. More than 300 residents attended and had a fulfilling day participating in physical activities try-out and cooking demonstrations after the talks.



Prof Tan Kok Hian speaking on Gestational Diabetes

### Patient Empowerment Thrust

The Patient Empowerment Thrust was officially rolled out on the 18 March 2016. The initiative was spearheaded by 0&G Senior Consultants, Adj Assoc Prof John Tee Chee Seng and Dr Tan Kim Teng, mainly led by Senior Resident Champions (Dr Janice Tung Su Zhen and Dr Tan Shu Qi), and endorsed by Prof Alex Sia Tiong Heng, Prof Kenneth Kwek Yung Chiang and Adj Assoc Prof Bernard Chern Su Min.

The Patient Empowerment Thrust is the production of an online comprehensive accessible resource consisting of counselling aids organized in convenient bundles for general O&G conditions. It includes concise hand-outs with useful diagrams and pathways, numbers and local services, consent addendums and written information for patients in the outpatient clinics, delivery suite and emergency clinic. This initiative will benefit both clinicians as well as patients. With the visual aids and discussion guides provided, clinicians are able to provide detailed and consistent explanations when consulting with patients, while reducing errors of omission. Patients are also empowered to have a better understanding of their own conditions which will enable them to make informed decisions and increase compliance to treatments. Moreover, the written information serves as an easy reference and a reminder for patients.



### The launch of Patient Empowerment Thrust - 18 March 2016

A Division of 0&G initiative led by Prof John Tee and Dr Tan Kim Teng Resident Champions: Dr Janice Tung Su Zhen and Dr Tan Shu Qi Endorsed by Prof Alex Sia, Prof Kenneth Kwek and Prof Bernard Chern



# E-Healthy Pregnancy Journey in an Application in Collaboration with Health Promotion Board

The Pregnancy Health Journey is developed in collaboration with Health Promotion Board to enable pregnant women to take charge of their health during pregnancy. From recommended exercises to suggested food, the application provides personalised health recommendations based on the user's height, weight and period of pregnancy. Users may also take part in challenges, track their activities and share their progress with other users. With a library of important guides to various aspects of pregnancy, this may help to dispel myths and misconceptions about pregnancy and empower women to manage their pregnancy better. The application is expected to launch mid-2017. The team was led by Assoc Prof Tan Thiam Chye, Senior Consultant, Department of 0&G, Dr Michelle Lim Hui Ping, Senior Resident, Division of 0&G, and Dr Tan Shu Qi, Senior Resident, Division of 0&G.

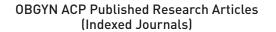


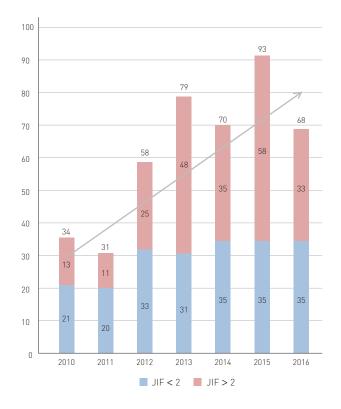
Pregnancy Health Journey Workgroup (from left to right): Dr Michelle Lim Hui Ping, Assoc Prof Tan Thiam Chye (Lead Investigator) and Dr Tan Shu Qi





### Research KPIs (Indexed Publications) - 2010 to 2016





### Integrated Platform for Research in Advancing Metabolic Health Outcomes in Women and Children (IPRAMHO)

The IPRAMHO Study Group, was awarded a grant quantum of \$5 million from the National Medical Research Council (NMRC) Centre Grant, Collaborative Pot, announced in March 2017.

IPRAMHO, which stands for the Integrated Platform for Research in Advancing Metabolic Health Outcomes of Women and Children, is a multi-institutional research initiative, comprising of KK Women's and Children's Hospital (KKH), SingHealth Polyclinics (SHP) & National Healthcare Group Polyclinics (NHGP). The study group led by Lead Principal Investigator, Adj Prof Tan Kok Hian, will allow two of Singapore's largest public primary health care providers (SHP & NGHP) to come together to work with KKH, the largest tertiary and main referral centre for Paediatrics, Obstetrics and Gynaecology in Singapore. The study group will focus on how to best meet the complex challenges of advancing metabolic health with effective population prevention strategies and optimal diabetes and weight reduction programs, supported by evidence based collaborative joint research.

This new synergy on collaborative metabolic health research in women and children will propel our primary care from segmented primary care providers to be the leading global multi-professional metabolic health research hub and ultimately, improve the quality of care for our women and children.



(From left to right): Co-Investigators: Adj Asst Prof Ang Seng Bin, Assoc Prof Tan Ngiap Chuan, Adj Asst Prof Tang Wern Ee and Lead Investigator, Prof Tan Kok Hian

### Zika Virus in Pregnancy in Singapore - A Multi-Centre Prospective National Longitudinal Study

Zika virus (ZIKV), a relatively unknown arbovirus has suddenly come to the spotlight of the media and is causing major concern in public health, infectious disease and perinatal circles. There are certain conditions currently suspected to be linked to ZIKV. These include possible associations with autoimmune, neurological and neurodevelopmental conditions such as Guillian-Barre syndrome, as well as the feared complication of microcephaly and other central nervous system anomalies in fetuses and newborn from mothers possibly exposed to ZIKV in pregnancy. The recent ZIKV outbreak in Singapore is certainly worrying both on a population level and on an individual level when considering the potential implications on unborn children and their long term outcomes.

The study hopes to provide an insight of the infection mechanisms and of the interplay between the virus and the pregnant host's immune system, specifically in the local population. This might later give rise to vaccines or therapeutic strategies to prevent or fight a ZIKA outbreak in Singapore and to better specific treatments for infected people.

The principal investigator, Assoc Prof Tan Thiam Chye, OBGYN Clinician Scientist, was awarded the National Medical Research Council – ZIKA Response Research Fund. The grant proposal titled "Zika Virus in Pregnancy in Singapore - A Multi-Centre Prospective National Longitudinal Study" received a total funding quantum of \$999,640 on 1 March 2017. The study led by KK Women's and Children's Hospital Division of 0&G will collaborate with Singapore General Hospital Department of 0&G, National University Hospital Department of 0&G and Duke-NUS Emerging Infectious Diseases Programme to study the serology of ZIKA infection as well as fetal and obstetric outcomes. The co-investigators in this study comprise Prof Yeo Seow Heong George, Assoc Prof Tan Hak Koon, Assoc Prof Tan Lay Kok, Prof Yong Eu-Leong, Assoc Prof Chan Shiao-yng, Prof Biswas Arijit, Prof Ooi Eng Eong and Prof Truls Ostbye.



Zika Virus in Pregnancy in Singapore Workgroup (from left to right): Lee Pei Sian, Assoc Prof Tan Thiam Chye (Principal Investigator) and Erica Nuriyah Fadziulah

### A Non Human Primate Model for Intrauterine Haemopoietic Stem Cell Transplantation for Betaglobinopathies

Inherited genetic disease such as Thalassaemia, collectively affects 1 percent of all births, many of which causes irreversible damage even before birth. Thus, intervening before birth may alleviate or cure the disease before damage occurs. Moreover, the developing immune system is immature and the delivery of stem cells from another donor may be possible without the toxic effects of treatment necessary for postnatal treatment. A pre-clinical model is proposed for the treatment of Thalassaemia in a clinically relevant animal model.

This study aims to investigate on the intervention of inherited genetic disease such as Thalassaemia before birth. By giving the affected baby some bone marrow stem cells from their mother, they may be able to correct the anaemia associated with this disease, and effect a cure even before the baby is born. The successful completion of this proposal will set the stage for the fetal therapy of Thalassaemia.

SingHealth Duke-NUS OBGYN ACP Faculty, Assoc Prof Jerry Chan Kok Yen, Senior Consultant, Department of Reproductive Medicine, was one of the six recipients from SingHealth to be awarded the highly coveted National Medical Research Council (NMRC) – Clinician Scientist Award under the Senior Investigator Category on 12 January 2017. He received a total funding quantum of \$3,900,000 for his grant proposal titled "A Non Human Primate Model for Intrauterine Haemopoietic Stem Cell Transplantation for Betaglobinopathies". The study involves collaboration conducted with many renowned research institutions like Singapore Immunology Network (SIgN), National University of Singapore, Duke-NUS Medical School Singapore, SingHealth Experimental Medicine Centre, Children's Hospital of Philadelphia, University College London, University of Queensland and University of California.



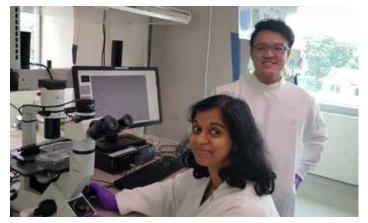
(Fifth from left): Principal Investigator, Assoc Prof Jerry Chan Kok Yen and his research team

### Limiting Vascularization of Implanted Endometrial Tissues as a New Strategy for Endometriosis Therapeutic Management

Endometriosis, one of the most common disease entities confronting gynaecologists, is defined as the presence of endometrial tissue outside the uterus. The presence of these ectopic tissues evokes an estrogen-dependent chronic inflammatory process. This disease affects 6% to 12% of women of reproductive age and up to 50% in subfertile women. Patients may present with various forms of pain, subfertility, or a combination of these problems. The cellular and molecular origins, pathophysiology, and progression of endometriosis remain unknown. Hence, endometriosis remains a challenging condition that frustrates clinicians, scientists and patients alike, and poses problems in determining how best to treat patients once its presence has been confirmed.

Current medical treatment of endometriosis is directed at symptom relief by suppressing the involved hormones. These therapeutic options have significant side effects and are not helpful when couples plan for children. Hence, the development of new, non-hormonal therapies is urgently needed. The implanted tissues are like normal cells and they are filled with blood vessels as they require oxygen and nutrients. Without a blood supply, the tissues cannot grow much bigger than a pin head. Collapsing this network of blood vessels inside the implanted tissues is an attractive novel, approach to suppressing implanted tissue growth and the disease itself.

They have identified a fat molecule which potentially sustains blood vessel networks, and they seek to investigate the effects of this fat molecule on blood vessels and evaluate the usefulness of blocking its



Assistant Professor Lee Yie Hou (background) with research officer Ms. Dulani Wimalachandra (foreground) in the laboratory

production. Working in a multi-disciplinary team comprising of biochemists, bioengineers, immunologists and gynecologists, the team conducts the study using 3D cell culture systems and state-of-art, high-throughput analytical platforms. These innovative research tools will aid in determining key cellular and molecular interactions. Information gleaned from this study will potentially help in developing new drugs for endometriosis management.

Asst Prof Lee Yie Hou was awarded the Young Individual Research Grant from the National Medical Research Council and received a total funding quantum of \$300,000 for the project on 19 December 2016. He will be closely collaborating with Bio-Engineers, Clinician-Scientists as well as Immunologists from Duke-NUS Medical School, Singapore-MIT Alliance for Research & Technology, and Singapore Immunology Network (A\*STAR).

### **Selected Publications**

Yung CF, Yeo KT, Yeo GSH, Thoon KC. Zika virus and microcephaly: Case ascertainment and quantifying risk. BMJ 2016;352:i781 (Responses) (JIF: 19.97)

Cheng TS, Loy SL, Toh JY, Cheung YB, Chan JK, Godfrey KM, Gluckman PD, Saw SM, Chong YS, Lee YS, Lek N, Chong MF, Yap F. Predominantly nighttime feeding and weight outcomes in infants. Am J Clin Nutr. 2016 Aug;104(2):380-8. doi: 10.3945/ajcn.116.130765. Epub 2016 Jul 6. (JIF:6.77)

Sng BL, Siddiqui FJ, Leong WL, Assam PN, Chan ES, Tan KH, Sia AT. Hyperbaric versus isobaric bupivacaine for spinal anaesthesia for caesarean section. Cochrane Database of Systematic Review. 2016; NA(9):NA-NA (Article; E Published Only in Print/E-collection) (JIF:6.2)

Lee YH, Cui L, Fang J, Chern BS, Tan HH, Chan JK. Limited value of pro-inflammatory oxylipins and cytokines as circulating biomarkers in endometriosis - a targeted 'omics study. Sci Rep. 2016 May 19;6:26117. doi: 10.1038/srep26117. (JIF:5.23)

Wee CY, Tuan TA, Broekman BF, Ong MY, Chong YS, Kwek K, Shek LP, Saw SM, Gluckman PD, Fortier MV, Meaney MJ, Qiu A. Neonatal neural networks predict children behavioral profiles later in life. Hum Brain Mapp. 2017 Mar;38(3):1362-1373. doi: 10.1002/hbm.23459. Epub 2016 Nov 16. (JIF:4.96)

Loh TP, Tee JC, Tee NW, Cheng WL, Thevarajah M, Sabir N, Chew YY, Sethi SK, Khoo CM. Association between thyroid function tests and anti-thyroid peroxidase (TPO) antibodies in pregnancy. Endocrine. 2016 Sep;53(3):865-7. doi: 10.1007/s12020-015-0844-y. Epub 2016 Jan 4. (JIF:3.88)

Toh JY, Yip G, Han WM, Fok D, Low YL, Lee YS, Rebello SA, Saw SM, Kwek K, Godfrey KM, Chong YS, Chong MF. Infant Feeding Practices in a Multi-Ethnic Asian Cohort: The GUSTO Study. Nutrients. 2016 May 13;8(5). pii: E293. doi: 10.3390/nu8050293. (JIF:3.76)

de Seymour J, Chia A, Colega M, Jones B, McKenzie E, Shirong C, Godfrey K, Kwek K, Saw SM, Conlon C, Chong YS, Baker P, Chong MF. Maternal Dietary Patterns and Gestational Diabetes Mellitus in a Multi-Ethnic Asian Cohort: The GUSTO Study. Nutrients. 2016 Sep 20;8(9). pii: E574. (JIF:3.76)

Lin YM, Lim JF, Lee J, Choolani M, Chan JK, Reuveny S, Oh SK. Expansion in microcarrier-spinner cultures improves the chondrogenic potential of human early mesenchymal stromal cells. Cytotherapy. 2016 Jun;18(6):740-53. doi: 10.1016/j.jcyt.2016.03.293. [JIF:3.63]

Tham EK, Tan J, Chong YS, Kwek K, Saw SM, Teoh OH, Goh DY, Meaney MJ, Broekman BF. Associations between poor subjective prenatal sleep quality and postnatal depression and anxiety symptoms. J Affect Disord. 2016 Sep 15;202:91-4. doi: 10.1016/j.jad.2016.05.028. Epub 2016 May 25.(JIF:3.30) Cheng TS, Loy SL, Cheung YB, Godfrey KM, Gluckman PD, Kwek K, Saw SM, Chong YS, Lee YS, Yap F, Chan JK, Lek N; GUSTO study group. Demographic Characteristics, Health Behaviors Before and During Pregnancy, and Pregnancy and Birth Outcomes in Mothers with Different Pregnancy Planning Status. Prev Sci. 2016 Nov;17(8):960-969. doi: 10.1007/s11121-016-0694-8. [JIF:2.93]

Zhang B, Yeo RW, Tan KH, Lim SK. Focus on Extracellular Vesicles: Therapeutic Potential of Stem Cell-Derived Extracellular Vesicles. Int J Mol Sci. 2016 Feb 6;17(2). pii: E174. doi: 10.3390/ijms17020174. Review. (JIF:2.86)

Cheng TS, Loy SL, Cheung YB, Godfrey KM, Gluckman PD, Kwek K, Saw SM, Chong YS, Lee YS, Yap F, Chan JK, Lek N:GUSTO study group. Demographic Characteristics, Health Behaviors Before and During Pregnancy, and Pregnancy and Birth Outcomes in Mothers with Different Pregnancy Planning Status. Prev Sci. 2016 Nov;17(8):960-969. doi: 10.1007/s11121-016-0694-8. (JIF:1.51)

GSH Yeo, EWH Thia, A Bhatia. Presacral echogenic mass during mid-trimester scanning: is it benign. Prenatal Diagnosis. 36():44-45, Jul 2016. (JIF:1.31)

Tan JK, Tan EL, Kanagalingam D, Yu SL, Tan LK. Multiple pregnancy is the leading contributor to cesarean sections in in vitro fertilization pregnancies: An analysis using the Robson 10-group classification system. J Obstet Gynaecol Res. 2016 Sep;42(9):1141-5. doi: 10.1111/jog.13032. Epub 2016 Jun 2. (JIF:1.07)

Lim YK, Lek SM, Yeo SH. Obstetric care after radical abdominal trachelectomy in a patient with stage IB1 cervical cancer: A case report and a review of medical literature. Gynecol Oncol Rep. 2016 Jul 29;17:86-8. doi: 10.1016/j.gore.2016.07.005. eCollection 2016 Aug. (JIF:0.95)

Thia E, Thain S, Yeo GS. Fetoscopic laser photocoagulation in twin-to-twin transfusion syndrome: experience from a single institution. Singapore Med J. Singapore Med J. 2017 Jun;58(6):321-326. doi: 10.11622/smedj.2016067. Epub 2016 Apr 8. (JIF:0.60)

Nadarajah R, Rajesh H, Wong KY, Faisal F, Yu SL. Live birth rates and safety profile using dydrogesterone for luteal phase support in assisted reproductive techniques. Singapore Med J. 2017 Jun;58(6):294-297. doi: 10.11622/smedj.2016080. Epub 2016 Apr 19. (JIF:0.60)

Wong TC, Lau CQ, Tan EL, Kanagalingam D. Decision-to-delivery intervals and total duration of surgery for caesarean sections in a tertiary general hospital. Singapore Med J. 2017 Jun;58(6):332-337. doi: 10.11622/smedj.2016098. Epub 2016 Jun 1. (JIF:0.60)

Yung CF, Chong CY, Yeo KT, Liew C, Ng LC, Tan NW, Yeo GSH, Tee NW, Lin RT, Tan TC, Rajadurai VS, Chan JK, Thoon KC. Zika Virus: An Evolving Public Health Threat. Ann Acad Med Singapore. 2016 Apr;45(4):148-51. [JIF:0.51]

### <sup>23</sup> EDUCATION

### 7 to 10 April 2016 - 12th ISUOG Outreach Course and 7th COGS Scientific Congress 2016

The 11th ISUOG Outreach Course, in conjunction with the 7th Scientific Congress of the College of Obstetricians & Gynaecologists (COGS), was organized by the ISUOG Teaching and Training Centre (TTC) and chaired by Prof George Yeo Seow Heong. Organized as a regional event, its aim is to promote ways of reaching out to countries in the region where systematic teaching is unavailable or underdeveloped, as well as to provide training and teaching tools for local teachers and systems to achieve a greater impact of learning.

The faculty comprised many world-renowned speakers from France, India, Netherlands, Norway, Taiwan, USA, Korea, Japan, Italy, China, Hong Kong and Austria. Overall, the sessions covered a variety of aspects of obstetrics ultrasound and updated regional colleagues on the latest developments in obstetrics ultrasound, as well as issues commonly encountered in the faculty's daily practice. The congress was well received and attended by 313 delegates from 27 countries.

Pre and post congress workshops were organized.

## 1) Combined Obstetrics Resuscitation and Emergencies (CORE)

The workshop covered the management of a range of obstetrics emergency situations, and comprised didactic teaching, as well as interactive drills that provide hands-on experience of technical skills, teamwork and decision-making in simulated obstetrics emergency situations. The workshop aimed to improve awareness of obstetric emergencies and reduce preventable harm to mothers and their babies. Delegates also gained knowledge of labour ward processes and systems.



The CORE Faculty

Delegates at the Maternal Resuscitation station.

### 2) Essential Obstetric Ultrasound Course

This was a 2-day Obstetric Ultrasound Course comprising of Lectures and Hands-on Ultrasound. The course was a compulsory requirement for delegates who wished to enroll into KKH ISUOG TTC Obstetric Ultrasound Training Programme. Delegates who completed the Obstetric Ultrasound Training syllabus, submission of logbooks and exams would obtain a certificate for obstetric ultrasonography.





Hands-on training on the latest development in Fetoscopy by Professor Yves Ville and Professor Takeshi Murakoshi

### 3) 6th Fetoscopy Workshop

The one-day workshop consisted of lectures, live demonstration as well as hands-on practical. It aimed to introduce delegates to the latest development in Fetoscopy, especially in the treatment of Twin to Twin transfusion syndrome. Management of interesting and controversial monochorionic twins was covered in the workshop.

### 13 to 17 June 2016 - Regional Congress of APAGE 2016: Anatomy and Innovation: Road to Safe and Efficient Pelvic Surgery

The regional congress was jointly organized by KK Hospital's Minimally Invasive Surgery (MIS) unit in conjunction with OBGYN ACP, and the Asia Pacific Association for Gynecological Endoscopy and Minimally Invasive Therapy (APAGE). It was chaired by Adj Assoc Prof Bernard Chern Su Min and the faculty team comprised of renowned laparoscopic surgeons from Singapore, Japan, Taiwan, France, Australia and other countries in the region.

Based on the central theme "Anatomy and Innovation: Road to Safe and Efficient Pelvic Surgery", the congress was an international scientific platform for cross-sharing of expertise and discussing the techniques and treatment approaches in the management of gynaecological complications via laparoscopy. The congress was well received and attended by over 200 delegates across the Asia-Pacific region.

The main congress included live surgeries and the showcasing of latest medical innovation in endoscopy, and were performed by world renowned laparoscopy experts. Topics like tips and tricks behind laparoscopic radical hysterectomy and innovative ways of making morcellation safer were explored. The highlights of the event were the pre-congress workshops, which included a surgical masterclass with internationally acclaimed Assoc Prof Alan Lam and Singapore's first gynaecological cadaveric workshop under the helm of Prof Vito Chaintera from Italy. Participants received direct pointers in surgical techniques and learnt new techniques in dissection and morcellation during the workshops.



Group photo at Academia



Assoc Prof Alan Lam demonstrating in the Surgical Masterclass



Adj Assoc Prof Timothy Lim Yong Kuei, Course Director, presenting the token of appreciation to invited overseas guest speaker, Prof Margaret Cruickshank



Participant using the colposcopy simulator to practice the LEEP technique

# 30 September to 2 October 2016 - Inaugural Basic and Advanced Colposcopy and Management of Pre-Invasive Disease of the Genital Tract Courses

The Inaugural Basic and Advanced Colposcopy and Management of Pre-Invasive Disease of the Genital Tract Courses were led by Adj Assoc Prof Timothy Lim Yong Kuei, Course Director and Head of Department of Gynaecological Oncology. Professor Margaret Cruickshank, Vice Chair, Education Committee, IFCPC (The International Federation of Cervical Pathology and Colposcopy) and the multi-disciplinary team of faculty from KKH Department of Gynaecological Oncology, SGH Department of Obstetrics and Gynaecology and KKH Department of Pathology and Laboratory Medicine came together to share their expertise and experience.

The courses included hands-on practical sessions for participants to further develop their clinical excellence through improved competence in diagnostic colposcopic procedures under close supervision and guidance from the faculty. The LEEP workshop provided opportunities for participants to enhance their techniques using the colposcopy simulator designed by Dr Quek Swee Chong, allowing a realistic clinical experience. Many participants expressed feeling more confident in the management of pre-invasive diseases of the lower genital tract and how to perform colposcopy in difficult situations.

# 1 August 2016 - Singapore- India Collaboration for Better Maternal, Child Health Services

In collaboration with the Singapore International Foundation (SIF), the three-year multi-track project "Enhancing Maternal and Child Health Services Programme" co-led by Adj Assoc Prof Tan Hak Koon, has been launched in Bangalore, India. The project is designed to share knowledge and enhance the capacity of healthcare workers in managing high-risk pregnancies, and obstetric and neonatal emergencies so as to reduce infant and maternal mortality and morbidity. Carried out in partnership with the local government hospitals, the project will create quality care and health services for pregnant women and babies in Karnataka. The team and Singapore's great healthcare infrastructure and low infant and maternal mortality rates were both mentioned in the local news media.



News Publication from The Times of India, 2 August 2016, page 4 (left) and The Hindu, 2 August 2016 (right)



Launch Ceremony of Enhancing Maternal and Child Health Services Programme in Karnataka (India) on 1 August 2016



The training team for the Enhancing Maternal and Child Health Services Programme in Karnataka (India)

# The Young and the Faceless. A Project of Engagement, Education and Evaluation of PGY1

The Health Professions Educators' Essentials (HaPEE) is an inter-professional programme, and is the sister course to the Harvard Macy Institute's US programmes. This programme effectively utilizes pedagogies to empower clinical educators to engage and educate healthcare professionals

Adj Assoc Prof Yong Tze Tein's project was awarded in accordance with the HaPEE program, and its aim is to engage and ensure all PGY1 get a good foundation as clinical doctors and acquire skills which align with academic medicine, such as practice-based learning, in order to inspire them to become model doctors. The project hopes to encourage departments to invest more time and effort in engaging house officers and involving them more in patient care, as well as giving them clear objectives and expectations of their postings.

### Assessing Knowledge, Attitudes, Skills and Values: A Holistic and Objective Approach to Assessment of Residents

The Harvard Macy programme on "A Systems Approach to Assessment in Health Professions Education programme" provides a platform for educators to apply systems thinking in designing programs to support the continuous quality improvement of trainees, faculty, and curricula at their academic institutions.

To further enhance the residents' assessment process, Dr Manisha Mathur, Programme Director, SingHealth OBGYN Residency, attended the programme and embarked on a project aimed at making the process inclusive, holistic and objective, to recognize the efforts of the residents who are already contributing in these areas. The project also hopes to encourage all residents to develop themselves towards a well-rounded doctor equipped with the appropriate attitudes and values. Besides employing the usual methods of assessments, such as in-training exam, resident case load and multisource/ 360° feedback, the project team aimed to include the measuring of numbers of scholarly projects submitted, teaching activities and resident involvement in extracurricular residency. The new process was successfully implemented for the evaluation of 2015-2016 and the transition was smooth. All residents were aware and clear about the new criteria as well as its intended. aims.

### **PUBLIC FORUMS**

Both KKH and SGH are actively engaged in raising awareness and opportunities for the audience members to gain insights on the various pertinent O&G issues at the public and general practice forums. The forums have received overwhelming support from the public.

20 August 2016 – Public Forum titled "Getting that Big Fat Positive (BPF) – A Guide to Assisted Reproduction and IVF" by Department of Reproductive Medicine, KKH

9 October 2016 – Public Forum titled "Menopause – Living Well & Loving Life (English and Chinese)" by Dr Ang Seng Bin, Department O&G, Menopause Unit, KKH

26 November 2016 - General Practice Forum titled "Abnormal Uterine Bleeding: Understanding Endometrial and Cervical Cancer" by Department of Gynaecological Oncology, KKH



Dr Janice Chin Pui See presented on the Gynaecological Oncology General Practice Forum



Dr Liu Shuling presented on the Reproductive Medicine Public Forum

### LECTURES AND TALKS

OBGYN ACP has played a pivotal role in supporting and facilitating renowned overseas experts' visits in the sharing of knowledge and skills amongst healthcare professionals in the field of Obstetrics and Gynaecology.

28 July 2016 – Lecture by Prof Jim Zhang Jun, Perinatal Epidemiologist, Shanghai Jiaotong University, Labour Patterns in Contemporary Obstetrics Population

18 November 2016 – Lecture by Prof Haywood Brown, President Elect of ACOG and Former Chair of Department of Obstetrics and Gynaecology, Duke University Medical Centre, Zika Virus in pregnancy – From USA perspectives



Prof Haywood Brown



Prof Jim Zhang Jun

### <sup>27</sup> PHILANTHROPY

16 October 2016 - Launch of Women's Health Research and Education Fund in Conjunction with Born in KKH



Presentation of Tai Sun's donation cheque to Prof Kenneth Kwek Yung Chiang and Prof Alex Sia Tiong Heng. Presented by Tai Sun Director Sandy Lim.

KK Women's and Children's Hospital broke the Guinness World Record for the "Largest Reunion of People Born in the Same Hospital" with 2,241 people on 16th October 2016. In conjunction with the momentous event, the Women's Health Research and Education Fund under SingHealth Duke-NUS OBGYN Academic Clinical Programme was officially launched, with a generous donation of \$50,000 by home-grown heritage snack foods brand Tai Sun (Lim Kee) Food Industries. The fund will focus on advancement of research and education for women's health relating to women's cancer, pregnancy & childbirth, fertility & parenthood, and women's health: menopause, endometriosis and incontinence.



### 13 November 2016 – Great Eastern Women's Run 2016

SingHealth Duke-NUS OBGYN Academic Clinical Programme is happy to once again partner Great Eastern Women's Run 2016. The amount of approximately \$66k raised from corporate teams' registration was jointly contributed to the two beneficiaries this year, Breast Cancer Foundation (BCF) and our very own "Women's Health Research and Education Fund" under SingHealth Duke-NUS OBGYN ACP.



Prof Kenneth Kwek Yung Chiang (third from left) and Ms Noor Quek, President of Breast Cancer Foundation, receiving the cheque from Ms Grace Fu, Minister for Culture, Community and Youth, and CEO of Great Eastern, Mr Norman Ip.

### A. SingHealth Duke-NUS Obstetrics and Gynaecology Academic Clinical Programme (OBGYN ACP)

NAME	DESIGNATION
Adj Assoc Prof Chern Su Min Bernard	Academic Chair
Adj Assoc Prof Tan Hak Koon	Deputy Academic Chair
Ng Mor Jack	Manager

### I) SingHealth Duke-NUS (Education)

NAME	DESIGNATION
Adj Prof Ho Tew Hong	Academic Vice Chair, Education
Adj Assoc Prof Tee Chee Seng John	Academic Deputy Vice Chair, Education
Lim Li Shan Melissa	Senior Executive
Kam Limin	Executive
Loh Pei Ting Peggie	Executive
Anita Kurup	Executive

### II) SingHealth Duke-NUS (Research)

NAME	DESIGNATION
Prof Yeo Seow Heong George	Academic Vice Chair, Research
Adj Assoc Prof Lim Yong Kuei Timothy	Academic Deputy Vice Chair, Research
Nicole Lee Kim Luan	Asst Manager
Zheng Jiayun	Clinical Research Coordinator
Wang Qingyi Estella	Clinical Research Coordinator
Cheong Hui Shi	Clinical Research Coordinator
R Abarna	Clinical Research Coordinator

### III) SingHealth Duke-NUS (Clinical)

NAME	DESIGNATION
Adj Assoc Prof Tan Lay Kok	Academic Vice Chair, Clinical
Adj Assoc Prof Tan Heng Hao	Academic Deputy Vice Chair, Clinical
Tey Wan Shi	Executive

### IV) SingHealth Duke-NUS (OBGYN Residency)

NAME	DESIGNATION
Adj Asst Prof Manisha Mathur	Programeme Director
Huang Linghui Belinda	Assistant Programme Manager
Ang Yiqian Felicia	Programme Executive
Lim Wei Sian Wileen	Programme Executive
Yvonne Tang Pui Har	Associate Executive

### V) SingHealth Duke-NUS (ACP Finance)

NAME	DESIGNATION
Chun Lye Har Joyce	Director
Ong Hua	Deputy Director
Tay Gek Peng Tracy	Manager
Lin Enyu Evelyn	Assistant Manager
Neo Siew Shih Cherise	Senior Account Assistant

### **B. Education**

### I) SingHealth Obstetrics and Gynecology Residency Program



NAME	DESIGNATION
Adj Asst Prof Manisha Mathur	Programme Director
Adj Prof Ho Tew Hong	Programme Evaluation Committee, Chairman
Adj Asst Prof Jessie Phoon Wai Leng	Associate Programme Director (KKH Campus)
Adj Assoc Prof Tan Lay Kok	Associate Programme Director (SGH Campus)
Adj Assoc Prof Chern Su Min Bernard	Programme Core Faculty (KKH Campus)
Adj Assoc Prof Yam Kwai Lam Philip	
Assoc Prof Chan Kok Yen Jerry	
Adj Assoc Prof Tan Heng Hao	
Assoc Prof Tan Thiam Chye	
Adj Asst Prof Khoo Chong Kiat	
Adj Asst Prof Shephali Tagore	
Adj Asst Prof Wong Wai Loong	

LEE KONG CHIA SCHOOL OI MEDICINE

Adj Assoc Prof Devendra Kanagalingam Programme Core Faculty (SGH Campus)

Adj Asst Prof Jason Lim Shau Khng

II) Duke-NUS Medical School (a collaboration between Duke University, Durham and National University of Singapore) OBGYN Clerkship



NAME	DESIGNATION
Adj Assoc Prof Chern Su Min Bernard	OBGYN Programme Leader
Assoc Prof Tan Thiam Chye	Programme Coordinator
Adj Asst Prof Sonali Prashant Chonkar	Deputy Programme Coordinator
Toh Bee Ling	Senior Executive
Yap Mei Hsien Mabel	Clinical & Faculty Affairs Admin
Nur Edaliza Osman	Asst

III) National University of Singapore Yong Loo Lin School of Medicine (NUS Medicine) OBGYN Clerkship



### KKH

NAME	DESIGNATION
Adj Asst Prof Khoo Chong Kiat	Program Director
Adj Asst Prof Manisha Mathur	Deputy Program Coordinator
Lim Li Shan Melissa	Senior Executive

### SGH

NAME	DESIGNATION
Adj Assoc Prof Devendra Kanagalingam	Program Coordinator
Adj Assoc Prof Yong Tze Tein	Deputy Program Coordinator
Geetha D/O Arumuga Vandayar	Associate Executive

### IV) Lee Kong Chian School of Medicine (a collaboration between Nanyang Technological University and Imperial College London) OBGYN Clerkship

NAME	DESIGNATION
Adj Assoc Prof Tan Heng Hao	Clerkship Lead
Adj Senior Lecturer Kathirvel Rajeswari	Clerkship Deputy Lead
Lim Li Shan Melissa	Senior Executive
Kam Limin	Executive

### C. SingHealth & Duke-NUS – JOAM, AM·EI, AMRI

### I) Joint Office of Academic Medicine (JOAM)

NAME	DESIGNATION
Prof Soo Khee Chee	Deputy Group CEO, Research and Education, SingHealth Senior Vice Dean, Clinical, Academic & Faculty Affairs, Duke-NUS
Prof Tan Kok Hian	Group Director, Academic Medicine, SingHealth Senior Associate Dean, Academic Medicine, Duke-NUS Medical School
Foo Suan Jong	Director
Maung May Lay, Katheryn	Deputy Director

### II) Academic Medicine Education Institute (AM-EI)

NAME	DESIGNATION
Prof Sandy Cook	Interim Vice Dean, Education
Prof Lim Shih Hui	Co-Director

### III) Academic Medicine Research Institute (AMRI)

NAME	DESIGNATION
Prof Wong Tien Yin	Vice Dean, Office of Clinical Sciences, Duke-NUS Medical School Head, Academic Medicine Research Institute (AMRI)
Prof Ecosse Lamoureux	Lead, Clinical Health Services Implementation Research (CHIC), Office of Clinical Sciences, Duke-NUS Medical School
Assoc Prof Tan Say Beng	Senior Associate Dean, Office of Clinical Sciences, Duke-NUS Medical School

### D. Faculty and staff of OBGYN ACP

### I) KK Women's and Children's Hospital A) Division of 0&G

NAME	DESIGNATION
Adj Assoc Prof Chern Su Min Bernard	Chairman & Senior Consultant
Adj Assoc Prof Tan Heng Hao	Deputy Chairman & Senior Consultant
Adj Assoc Prof Timothy Lim Yong Kuei	Deputy Chairman & Senior Consultant
Prof Yeo Seow Heong George	Chief of Obstetrics & Emeritus Consultant
Adj Prof Ho Tew Hong	Chief of Gynaecology & Emeritus Consultant
Prof Tan Kok Hian	Senior Consultant
Adj Assoc Prof Tee Chee Seng John	Senior Consultant
Adj Asst Prof Tan Kim Teng	Senior Consultant
Lim Boon Heng Bryan	Assistant Director
Ong Phei Hong	Senior Executive
Toh Guat Nee Liam	Executive
Nurul Syaza Binte Razali	Senior Clinical Research Coordinator
Nyo Mie Win	Clinical Research Coordinator
Chan Hong Heng	Medical Laboratory Technologist
Low Siok Eng Fiona	Senior Secretary
Lim Teck Wee	Senior Associate Executive

### B) Department of Gynaecological Oncology

NAME	DESIGNATION
Adj Assoc Prof Lim Yong Kuei Timothy	Head & Senior Consultant
Adj Assoc Prof Yam Kwai Lam Philip	Senior Consultant
Adj Asst Prof Lim Sheow Lei	Senior Consultant
Adj Asst Prof Chin Pui See Janice	Consultant
Adj Asst Prof Wong Wai Loong	Consultant
Dr Ieera Madan Aggarwal	Consultant
Adj Instructor Tewani Girish Komal	Consultant
Dr Wang Junjie	Associate Consultant
Dr Felicia Chin Hui Xian	Associate Consultant
Dr Yi Yi Wynn	Principal Resident Physician
Associate in Education Namuduri Ramapadmavathi Devi	Staff Physician
Choo Joo Chin Annie	Executive
Lin Xiao Hui	Senior Clinical Coordinator
Rigobert Elaine Anna	Clinical Coordinator
Shirley Cheng Li Jiuan	Senior Associate Executive

### C) Department of Maternal Fetal Medicine

NAME	DESIGNATION
Prof Yeo Seow Heong George	Chief of Obstetrics, Head & Emeritus Consultant Department of Maternal Fetal Medicine
Adj Prof Kwek Yung Chiang Kenneth	Chief Executive Officer, Senior Consultant
Dr Lai Fon Min	Head and Visiting Consultant Antenatal Risk Assessment Unit
Adj Asst Prof Shephali Tagore	Head & Senior Consultant, Peripartum Unit Director, 0&G International Medical Programmes
Adj Prof Tan Kok Hian	Head & Senior Consultant Perinatal Audit and Epidemiology Unit
Adj Asst Prof Thia Wee Hong Edwin	Head and Senior Consultant Obstetrics Ultrasound & Prenatal Diagnostic Unit

Adj Asst Prof Tan Kai Lit	Consultant
Adj Asst Prof Wright Ann Margaret	Consultant
Adj Instructor Ilka Tan	Associate Consultant
Dr Koh Seow Choon Daniel	Associate Consultant
Dr Sim Wen Shan	Associate Consultant
Low Poh Hoon Esther	Assistant Director
Dr Yeo Tai Wai	Chief Scientific Officer
Nicole Lee Kim Luan	Assistant Manager
Liew Sin Yi Cindy	Executive
Du Ruochen	Executive
Norain Bte Kassim	Senior Clinical Coordinator
Christy Cao Yu Hua	Senior Clinical Coordinator
Ng Bee Yen Karina	Clinical Coordinator
Moe Thiha	Clinical Coordinator
Tan Poh Ling Dina	Clinical Coordinator
Padma Lata	Statistical Officer
Ong Si Min Serene	Associate Executive
Lim Wai Mun Jasmine	Senior Associate
Siti Zubaidah Omar	Associate

### D) Department of O&G

NAME	DESIGNATION
Adj Assoc Prof Chern Su Min Bernard	Head & Senior Consultant
Assoc Prof Tan Thiam Chye	Head of Unit, Inpatient Service, Senior Consultant
Adj Asst Prof Khoo Chong Kiat	Head of Unit, Ambulatory Service, Senior Consultant
Adj Asst Prof Tan Vic Khi June	Senior Consultant
Adj Asst Prof Khong Chit Chong	Senior Consultant
Adj Asst Prof Mariamma George	Senior Consultant
Adj Asst Prof Suzanna Sulaiman	Consultant

Adj Asst Prof Manisha Mathur	Consultant
Dr Lee Jiah Min	Consultant
Adj Asst Prof Wei Wei Wee-Stekly	Consultant
Adj Asst Prof Kathirvel Rajeswari	Consultant
Adj Instructor Alexandriia See Tze Ann	Associate Consultant
Adj Instructor Freda Khoo Wan Yu	Associate Consultant
Dr Julian Kang Hean Leng	Associate Consultant
Adj Asst Prof Sonali Prashant Chonkar	Staff Physician
Dr Shahul Hameed Mohamed Siraj	Staff Physician
Dr Anju Bhatia	Senior Staff Registrar
Dr Karuna Mary Lional	Senior Staff Registrar
Dr Pramanick Angsumita	Senior Staff Registrar
Dr Shailaja Devi Anipindi	Staff Registrar
Dr Ni Ni Soe	Staff Registrar
Dr Boricha Yash Bhanji	Senior Resident Physician
Dr Khoo Shiang Pyng Tiffanie	Resident Physician
Dr Anthonette Delos Santos Flores	Clinical Associate
Dr Ereso Genalyne Alavado	Clinical Associate
Dr Marydith Faith Francisco Velasquez	Clinical Associate
Dr Nerissa Zapanta Alilin	Clinical Associate
Dr Ami Jay Unarkar	Clinical Associate
Dr Rashi Srivastava	Clinical Associate
Mohamed Yazid Bin Mohamed Abidin	Executive
Trish Koon Hui Ping	Clinical Research Coordinator
Doris Ong Mah Lay	Clinical Research Coordinator
Zhang Yali	Clinical Coordinator
Sheila Xiong Xi	Senior Associate Executive
Lim Hwee Theng Irene	Senior Associate Executive
Noridahyati Binte Suhaimi	Associate Executive
Lee Hock Ann Alvin	Associate Executive

### E) Department of Reproductive Medicine

NAME	DESIGNATION
Adj Assoc Prof Tan Heng Hao	Director, IVF; Head &Senior Consultant
Adj Asst Prof Sadhana Nadarajah	Senior Consultant
Assoc Prof Jerry Chan Kok Yen	Senior Consultant
Adj Asst Prof Viardot-Foucault Veronique Celine	Consultant
Adj Asst Prof Phoon Wai Leng Jessie	Consultant
Adj Instructor Tan Tse Yuen	Consultant
Adj Instructor Liu Shuling	Consultant
Dr Mahesh Nataraj Sangrithi	Consultant
Dr Mishra Nidhi	Clinical Associate
Lim Chet Ling	Manager
Lim Ee Lyn	Senior Executive
Khoo Su Ling, Charmaine Ann	Executive
Ng Xiang Wen	Senior Research Assistant
Hartini Binte Mohamed Senin	Senior Associate Executive

### F) Department of Urogynaecology

NAME	DESIGNATION
Adj Assoc Prof Han How Chuan	Head & Senior Consultant
Dr Kazila Bhutia	Associate Consultant
Dr Kadam Pratima Datta	Senior Staff Registrar
Dr Priyanka Singh	Senior Staff Registrar
Wong Ah Chun Judy	Executive
Peh Sin Ee Jolene	Clinical Research Coordinator

### II) Singapore General Hospital Department of O&G

NAME	DESIGNATION
Adj Assoc Prof Tan Hak Koon	Head & Senior Consultant
Adj Prof Ho Tew Hong	Emeritus Consultant
Adj Assoc Prof Yu Su Ling	Senior Consultant
Adj Prof Tay Sun Kuie	Senior Consultant
Adj Prof Ng Sen Ark Charles	Emeritus Consultant
Adj Assoc Prof Yong Tze Tein Senior Consultant	
Adj Asst Prof Chua Hong Liang	Senior Consultant
Adj Assoc Prof Tan Lay Kok	Senior Consultant
Adj Assoc Prof Devendra Kanagalingam	Senior Consultant
Adj Asst Prof Tan Wei Ching	Senior Consultant
Adj Asst Prof Hemashree Rajesh	Senior Consultant
Adj Asst Prof Tan Eng Loy	Senior Consultant
Adj Asst Prof Jason Lim Shau Khng	Consultant
Adj Asst Prof Ravichandran Nadarajah	Consultant
Dr Lim Liqing Serene	Associate Consultant
Dr Yang Liying	Associate Consultant
Dr Andy Tan Wei Keat	Associate Consultant
Dr Renuka Devi	Senior Staff Registrar
Liam Lay Peng Christine	Senior Secretary
Geetha D/O Arumuga Vandayar	Associate Executive

### E. BST and AST

S/N	NAME
1	Dr Goh Siak Ming
S/N	NAME
<b>S/N</b> 1	NAME Dr Shilla Mariah Yussof

3 Dr Lee Wai Yen

### F. Residency Cohort

I) Senior Residency, Year 6 (2011 Intake)

NAME
Dr Chua Ka-Hee
Dr Chuah Theng Theng
Dr Ho Weng Yan
Dr Huang Youjin Eugene
Dr Jung Jingjin Jacqueline
Dr Koh Meiling Serena
Dr Lee Cheng Sim Jill
Dr Lee Wai Kheong Ryan
Dr Lim Hui Ping Michelle
Dr Seet Meei Jiun
Dr Tan Shu Qi
Dr Thain Pei Ting Serene

### 13 Dr Tung Su Zhen Janice

### II) Senior Residency, Year 5 (2012 Intake)

S/N	NAME
1	Dr Ee Tat Xin
2	Dr Foo Anqi, Sharon
3	Dr Ho Ping Ling
4	Dr Hui Yan Yan Celene
5	Dr Kho Chye Lee Lily
6	Dr Koe Suan-Li Liana
7	Dr Lim Yu Hui
8	Dr Muhammad Fairuz B Abdul Rahman
9	Dr Ng Xin Hui Ada
10	Dr Qi Maili
11	Dr Wan Kai Jing
12	Dr Samantha Rachel Yeo Mei-E

### III) Junior Residency, Year 4 (2013 Intake)

S/N	NAME
1	Dr Ang Xiao Hong Joella
2	Dr Lim Ee-Lin Sheri
3	Dr Ho Xin Yi
4	Dr Li Xin Yi
5	Dr Mok Zhun Wei
6	Dr Ng Zheng Yuan
7	Dr Tan Chiew Ping Caroline
8	Dr Tan Wan Chin Julia
9	Dr Wong Ker Yi
10	Dr Yip Swee Lin

### IV) Junior Residency, Year 3 (2014 Intake)

S/N	NAME
1	Dr Chua Hui Kiang Angeline
2	Dr Goh Shu Ying Charissa
3	Dr Ku Chee Wai
4	Dr Lee Jia Yi
5	Dr Lim Whui Whui
6	Dr Loh Jia Min Michelle
7	Dr Ng Qiu Ju
8	Dr Ng Yang Huang Grace
9	Dr Shivani Durai
10	Dr Tong Carmen

### V) Junior Residency, Year 2 (2015 Intake)

S/N	NAME
1	Dr Stella Rizalina Sasha
2	Dr Han You Xiang Jonathan
3	Dr Kwek Lee Koon
4	Dr Liu Jiayi
5	Dr Pamela Sandriany Partana
6	Dr Poo Zi Xi
7	Dr Ng Yifan
8	Dr Pang Si Ying

### V) Junior Residency, Year 1 (2016 Intake)

S/N	NAME
1	Dr Cheong Pei Shan Cassandra
2	Dr Chia Xue Ling Michelle
3	Dr Dhilshad Bte Muhd Abdul Qadir
4	Dr He Song
5	Dr Li Mingyue
6	Dr Lim Poh Ting
7	Dr Siew Jia Yun Shayna
8	Dr Smita Lakhotia
9	Dr Wang Wanxuan
10	Dr Yong Xiaogi

### Progress in Obstetrics & Gynaecology – Perspectives from a Rapidly Evolving OBGYN Academic Department

**Bernard CHERN, Kok Hian TAN** 

SingHealth is the largest amongst the 3 healthcare clusters in Singapore. Through SingHealth's strategic partnership in Academic Medicine with the Duke-NUS Medical School (jointly established by Duke University and the National University of Singapore since 2005), the OBGYN academic department or Academic Clinical Programme (OBGYN ACP) was officially rolled out in May 2011. OBGYN ACP was one of the first academic combined entities to be launched in SingHealth Duke-NUS Academic Medical Centre (AMC) from its original clinical departments. It comprised staff, faculty, residents and physicians of Department of Obstetrics & Gynaecology (0&G) in Singapore General Hospital and the larger Division of Obstetrics & Gynecology (with 1 general 0&G department and 4 specialty departments) in KK Women's and Children's Hospital. The formation of this model is consistent with practices in most academic medical centres in the world, where partnership between a healthcare provider and a university provides an accelerated synergistic framework in improving healthcare, and medical education and research.

In reviewing SingHealth Duke-NUS OBGYN ACP since 2011, we observed rapid change with tremendous progress in our ACP over the past 6 years. This rapid progression and its activities are well documented in our annual Progress Review & Report Publications of SingHealth Duke-NUS OBGYN Academic Clinical Programme.<sup>1</sup> The progress made are very significant, especially in education and research arenas.

OBGYN ACP's residency & medical student training has been developed into effective & well-coordinated teaching programmes within OBGYN ACP structured framework & integrated with our AMC. SingHealth OBGYN Residency Programme has been continuously ranked among the top three residencies for last three years. The programme has also achieved re-accreditation by ACGME-I with excellent results in 2014, and was named the Best SingHealth ACGME-I Program in AY15 & AY16 and the Most Improved SingHealth ACGME-I Program in AY15. We have evolved from adhoc training arrangements to a very well-coordinated system to effectively teach and manage medical students from our 3 local medical schools, namely YLL-NUS, Duke-NUS & LKC-NTU; and foreign elective medical students.

We have initiated and developed various high-quality education programs including Basic and Advanced Colposcopy and Management of Pre-Invasive Disease of the Genital Tract Courses; Gynaecological Laparoscopy & Surgical Complication Management Training Program (Basic & Advance) ISUOG 0&G Ultrasound Outreach Course; and Obstetric Team Training in Core Skills. We have now become the leading 0&G training centre in the region, organising impactful courses that advance the standards of residents and faculty to the highest and further develop 0&G education and training landscape in Singapore and our region.

Our publications and grants have increased significantly from 34 peer reviewed publications in 2010 and \$2,170,866 in grant awards in 2011; to 73 peer reviewed publications in 2016 and \$3,699,307 in grant awards in 2016. We have now 2 clinician scientists and 2 clinician scientist residents. Some of the grant awards include Integrated Platform for Research in Advancing Metabolic Health Outcomes in Women and Children (IPRAMHO); Zika Virus in Pregnancy in Singapore - A Multi-Centre Prospective National Longitudinal Study; A Non-Human Primate Model for Intrauterine Haemopoietic Stem Cell Transplantation for Betaglobinopathies and Limiting Vascularization of Implanted Endometrial Tissues as a New Strategy for Endometriosis Therapeutic Management. The OBGYN ACP is now very well-positioned as the hub for translational and clinical research in the field of 0&G.

The rapid progress and advancement are in tandem with a positive change of academic medicine culture which is necessary for optimal progress and sustainability. Our academic culture survey for 3 consecutive years showed consistent improvement in positive responses in

many dimensions including Leadership & Management Support for Academic Medicine; Supervisor & Departmental Support for Academic Medicine; Communications & Feedbacks on Academic Medicine; Learning & Innovation Environment; Academic Scholarly Activities; Academic Faculty Development; Academic Teamwork within and across Institutions; Relating Clinical Service to Research and Education; Academic Clinical Staffing; Satisfaction & Remuneration for Academic Medicine and Organizational Learning.<sup>2</sup>

Some key aspects which we have introduced which were important to this positive change in culture and in promoting progress were creation of academic forums & various platforms; funding optimization & philanthropy development; and proactive talent recruitment with provision of protected time for faculty and residents. Strong academic clinical leadership is crucial.

We brought students, residents, staff, faculty together and create opportunities for them to network and work together, in many regular events. These were achieved by creating academic forums & various platforms. Annual ACP events were started since 2011: OBGYN ACP Research Day, OBGYN ACP Education Day, OBGYN ACP Clinical Practice & Quality Improvement Day and OBGYN ACP Strategic Academic Retreat. These events enhanced understanding and collaborations within our ACP department and promoted teamwork within & across Institutions.

OBGYN ACP optimized its funding to carry out effective programs while ensuring sustainability. Besides its usual funding sources within the department and hospital, the ACP actively explored competitive grant opportunities at the AMC and national levels. Philanthropy development, hitherto undeveloped was initiated as this allowed for greater resource support for the ACP programs. OBGYN ACP officially launched the first named fund "Women's Health Research and Education Fund" in 2016, in conjunction with the "Born in KKH" Event, celebrating the 50th anniversary of KKH being the world's busiest maternity hospital in 1966 (Guinness World Record). This fund provides a channel for advancing research and education for women's health (women's cancer, pregnancy & childbirth, fertility & parenthood, and women's health issues: menopause, endometriosis and incontinence), and ultimately translating medical breakthroughs into better care for patients.

Collaboration between institutions was enhanced with supports from these funding and encouraged by our group leadership. Two highly successful examples were that from SingHealth Duke-NUS AMC grants awarded for development of a regional obstetric emergency training program; and the development of an international endometriosis network. The obstetric emergency training program allowed international collaboration to train the trainers and attracted local & international participants for its regular course. The endometriosis network encouraged research collaboration between centers around the world and produced substantial research output. These academic relationships helped to attract talent & learners and enhance inter-institutional collaborations. One important strategy since its inception has been for OBGYN ACP to leverage on the AMC resources including Academic Medicine Research Institute (AMRI) and Academic Medicine Education Institute (AMRI).<sup>3</sup>

There was a concerted proactive recruitment effort by the OBGYN ACP. The recruitment was successful with the hire of quality service registrars & clinical associates and these physicians relieved the very busy workload in the department and allowed the department to give faculty and residents protected time for academic and scholarly activities and training. In addition, talents with potential as clinician scientists were engaged. A night float roster system was introduced and was enhanced with higher intake of residents. The arrangement of night calls in each month allowed the residents and the faculty to have adequate rest. The reduction of fatigue contributed to the increased enthusiasm amongst the residents in learning. With more residents and soon more faculty, it will stand us in good stead for future advancements and challenges.<sup>4-6</sup>

We have also made significant progress in the clinical domain. Some of these achievements were TrustedCare Elective Cesarean Section (a structured evidenced based pathway supported by IT data analytics and financial instruments of measure); Patient Empowerment Thrust (an online comprehensive accessible resource consisting of counselling aids organized in convenient bundles for general 0&G conditions);

routine gestational diabetes screening with IADPSG criteria (based on the evidence of GUSTO and our KKH cost effectiveness study by KKH with Duke-NUS) and the E-Healthy Pregnancy Journey in a Health App, in collaboration with Health Promotion Board.

In OBGYN ACP's next phase, with the timely appointments of Vice Chair & Deputy Vice Chair Clinical in 2016, we are now looking to further improve clinical quality and services, taking it to the next level supported by our ACP academic rigor and outcome & process reflections. The Vice Chair & Deputy Vice Chair Clinical have been actively leading in various cross-institution clinical initiatives and discussions including aligning current initiatives in OBGYN ACP with the clinical learning environment review by ACGME (Accreditation Council for Graduate Medical Education). Activities in the works include the Patient Safety & Quality Improvement Bulletin to showcase clinical cases from both KKH and SGH, as well as a combined clinical dashboard that tracks clinical outcomes. A OBGYN ACP Patient Safety Day incorporating RCA, Patient Communications and Clinical Crisis Management workshops is being organized. These efforts in patient safety, Care Transition, Supervision, Healthcare Quality and Professionalism. The committee also provides opportunities for new cross-institution collaboration and synchronises efforts in furthering safe and quality care.

We believe there will be more exciting opportunities for OBGYN ACP and our related institutions to work together and to complement each other's strengths, ultimately improving women's and children's quality of care. The hard work & dedication of our staff and faculty have been instrumental in the rapid progress of our ACP and they are commended.

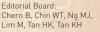
### **References:**

- Chern B, Ng MJ, Tey WS, Kurup A, Loh P, Tan KH. Progress Review & Report Publications of SingHealth Duke-NUS OBGYN Academic Clinical Programme, SingHealth Duke-NUS Academic Medical Centre. Shaping the Landscape of Academic Medicine 2011/2012; Our Journey in Academic Medicine 2013; Forging New Frontiers in Academic Medicine 2014; Charting New Horizons in Academic Medicine 2015.
- 2. Tan KH, Ng MJ, Tey WS, Tan HK, Chern B. Survey on Academic Medicine Culture, Enablers & Barriers in a Newly Formed Academic Department in Singapore. J Hosp Admin. 2016; 5(5):30-40
- Goh SH, Tan KH, Kamei RK, Koo WH, Cook S. Academic Medicine Education Institute (AM·EI): Transforming the Educational Culture of Health Professionals. Annals Academy of Medicine Singapore 2015; 44:172-7
- 4. Goh SL, Chern B, Ng MJ, Tan KH. Introduction of the Night Float System in OBGYN Residency Program Singapore J Obst & Gynae. 2013; 44(1):10-14
- Tagore S, Chern B, Goh SL, Tan LK, Kwek K, Tan KH. Specialist training in obstetrics and gynecology in Singapore: transition to structured residency program. J Grad Med Educ. 2012; 4(2):272-255
- Condon AF, Ng MJ, Chern B, Tan KH. Attitudes of Faculty and Junior Doctors towards a Structured Residency Program. Singapore J Obst & Gynae. 2011; 42(1):29-32



Editorial Board: Chern B, Chin WT, Ng MJ, Lim M, Tan HK, Tan KH

Progress Review & Report Publications of SingHealth Duke-NUS OBGYN Academic Clinical Programme, SingHealth Duke-NUS Academic Medical Centre Shaping the Landscape of Academic Medicine 2011/2012



Progress Review & Report Publications of SingHealth Duke-NUS OBGYN Academic Clinical Programme, SingHealth Duke-NUS Academic Medical Centre Our Journey in Academic Medicine 2013



Editorial Board: Chern B, Chin WT, Ng MJ, Lim M, Tan HK, Tan KH

Progress Review & Report Publications of SingHealth Duke-NUS OBGYN Academic Clinical Programme, SingHealth Duke-NUS Academic Medical Centre Forging New Frontiers in Academic Medicine 2014

Editorial Board: Tan KH, Loh P, Ng MJ, Lim M, Tan HK, Chern B

Progress Review & Report Publications of SingHealth Duke-NUS OBGYN Academic Clinical Programme, SingHealth Duke-NUS Academic Medical Centre Charting New Horizons in Academic Medicine 2015





Editorial Board: Tan KH, Loh P, Kurup A, Tey WS, Ng MJ, Tan HK, Chern B

Progress Review & Report Publications of SingHealth Duke-NUS OBGYN Academic Clinical Programme, SingHealth Duke-NUS Academic Medical Centre Bridging Discoveries and Knowledge for Care Transformation in Academic Medicine 2016

# OUR PIONEER MEDICAL RESEARCH & ADVANCES

- Pioneered in-vitro fertilisation (IVF) research in Asia, producing the region's first IVF baby and first Gamete Intra-Fallopian Transfer (GIFT) baby.
- 2 Performed Singapore's first IVF treatment and live birth for a patient with ovarian cancer
- 3 Invented a new procedure to create an artificial vagina for women born without a vagina (Sheares Operation).
- Conducted Asia's only human papilloma virus (HPV) vaccine trial FUTURE II Study – a worldwide trial on a vaccine that is now widely used to protect women against cervical cancer.
- Partnered the global MAGPIE trial, establishing Magnesium Sulphate as the gold standard of care for treatment of hypertension in pregnancy (preeclampsia).

# HOW YOUR GIFT CAN CHANGE MEDICAL SCIENCE

When you give to the OBGYN Academic Clinical Program, your gift helps to develop better methods to predict, prevent and treat disease, and prepare the next generation to lead in research that improves medical care.

Professor Tan Kok Hian and his team discovered potential new biological markers that can identify women at risk of pre-eclampsia (high blood pressure) during pregnancy. This helps doctors to provide early intervention for the safety of the mother and baby.

# MAKING A GIFT

### **Contribution form**

this line to close

Fold along

My gift is in support of the OBGYN Academic Clinical Program (ACP) for Research & Education Programmes.

Name of Donor:
Address:
Date of birth: Contact number:
Email:
lam
An individual donor [NRIC/FIN number:] (required for Singapore residents, for auto-inclusion of donations in IRAS assessment)
A corporate donor [UEN:]
(required for auto-inclusion of tax deduction in your corporate tax return)
My gift
A monthly gift of S\$ for months
A one-time gift of S\$
Payment method
Cheque enclosed [cheque no]
(please make the cheque payable to ' <b>NUS</b> ', and pen ' <b>OBGYN ACP</b> ' on the back of the cheque along with your contact details)
Credit card type: Visa MasterCard American Express
Card number:
Expiry date:(MM/YY)
Signature: Date:
I do not wish to be identified as the donor of this gift in KKH/Sing- Health/Duke-NUS/NUS publicity materials.

### Keep me up-to-date

Please send me the free KKH hospital newsletter Special Delivery (6 issues per year)



Singapore General H SingHealth

Children's and Children's Hospital

BUSINESS REPLY SERVICE PERMIT NO. 02315

# րերինըներերիների

# SingHealth Duke-NUS OBGYN Academic Clinical Program

c/o Corporate Communications KK Women's and Children's Hospital 100 Bukit Timah Road Singapore 229899

# HELP US CHANGE WOMEN'S LIVES

SingHealth DukeNUS

ACADEMIC MEDICAL CENTRE

OBSTETRICS & GYNAFCOLOGY

> Singapore General Hospital

Children's Hospital



Research helps us change the lives of women and give them and their babies a healthy future. You can help to:

- Translate medical breakthroughs into cures
- Fund programmes to improve care
- Shape the next generation of leaders in healthcare

**Obstetrics & Gynaecology** (or OBGYN, O&G) relates to the care of women in pregnancy and delivery (obstetrics) and the care of women's diseases (gynaecology).

Postage will be paid by addressee. For posting in Singapore only.



SingHealth Duke-NUS Obstetrics and Gynaecology Academic Clinical Programme

KK Women's and Children's Hospital Level 3, Children's Tower 100 Bukit Timah Road Singapore 229899

Information correct as of 31 March 2017