





*Thriving amidst  
COVID  
challenges  
in Academic  
Medicine*



SingHealth Duke-NUS OBGYN  
Academic Clinical Programme  
(ACP) Progress Report 2020







**Prof Ivy Ng**  
Group CEO,

In this issue of the SingHealth Duke-NUS Obstetrics and Gynaecology Academic Clinical Programme (OBGYN ACP) Progress Booklet, I wish to congratulate OBGYN ACP on their successes in FY20/21. This was a difficult year for everyone in healthcare. However, OBGYN ACP has taken on the challenges well and continues to thrive with outstanding accomplishments.

In January 2021, the Asia Pacific Maternal & Child Metabolic Health Conference & Integrated Platform for Research in Advancing Metabolic Health Outcomes of Women and Children (IPRAMHO) International Meeting was well-received and attended by over 500 local and overseas delegates from 13 countries. The hybrid format meeting was led by OBGYN ACP with SingHealth Duke-NUS Paediatric Academic Clinical Programme and the theme was 'Optimal Metabolic Health for Women and Children'. The Singapore Integrated 24-Hour Activity Guidelines for Children and Adolescents was launched during the meeting. An Asian Pacific consensus on 24-Hour Activity Guidelines for Children and Adolescents was also achieved and published. There was also a timely focus on metabolic health and GDM in women in the Asia Pacific. On 5 February 2021 the Obstetrics Emergency Course programme was streamlined and adapted into a "lite" format to accommodate the strong interest from doctors outside O&G, such as Family Medicine and Emergency Medicine doctors.

Prof Jerry Chan, was named in Clarivate's list of Highly Cited Researchers 2020. Both Dr He Song, OBGYN Resident and Dr Loy See Ling, Research Fellow won the SingHealth Publish! Award 2020 under the mentorship of Prof Tan Kok Hian and Prof Jerry Chan respectively. Both Profs Tan & Chan, in their roles as Theme/Key Principal Investigators, were awarded the NMRC Large Collaborative Grant on Metabolic Health in Asian Women and their Children. We also celebrated the successful completion of the Residency Programme for 11 OBGYN graduating residents on 27 November 2020. Congratulations to OBGYN ACP and all residents who graduated!

The journey of OBGYN ACP in Academic Medicine has been challenging but rewarding. Despite the COVID pandemic, OBGYN ACP, as a key member of our SingHealth Duke-NUS Academic Medical Centre, continues to forge new frontiers and expand horizons through education, research and innovation. I encourage all in OBGYN ACP to press on to achieve even better clinical and academic outcomes in the years ahead!



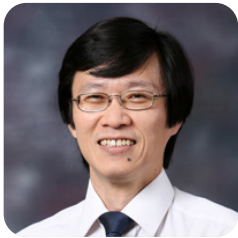
**Prof Thomas Coffman**  
Dean, Duke-NUS  
medical school

I am very pleased to help introduce the progress report from the Obstetrics and Gynaecology Academic Clinical Programme (OBGYN ACP) for the financial year 20/21. This review documents OBGYN ACP's notable academic achievements made during the past 12 months. Historically, the OBGYN ACP has been a leader in medical education within our SingHealth Duke-NUS Academic Medical Centre (AMC), nurturing new generations of aspiring healthcare professionals and helping them to shape the future of medicine and OBGYN.

Indeed, OBGYN ACP faculty members have been recognised with prestigious education awards. I first wish to congratulate Professor Tan Kok Hian on receiving the AM·EI Golden Apple Awards 2020 Generativity Award for Educators, which recognises his spirit of actively paying it forward by nurturing and mentoring the next generation of educators. In addition, Dr Manisha Mathur was conferred RiSE! Programme Director Award 2020 award. This award recognises her exemplary dedication to graduate medical education for SingHealth Residents. I am delighted to highlight Dr Jason Lim Shau Khng who was conferred the Wong Hock Boon Society-SMA Charity Fund Outstanding Mentor Award 2021 in appreciation of his efforts in and commitment to guiding medical students through their research work. Finally, I commend other OBGYN ACP award winners who were celebrated for their teaching contributions at events including the RiSE! Award presentation, Yong Loo Lin School of Medicine Dean's Award presentation 2020, and Teacher's Day 2020. This spate of awards provides an ongoing testament to the enduring pursuit of educational excellence within OBGYN ACP.

Over the course of the financial year, the OBGYN ACP marked several highlights including the Education Day on 23 October 2020, which focused on adjusting and adapting medical education during the COVID-19 pandemic while striving towards excellence in medical education. Together with AM·EI, OBGYN ACP organised the “AM·EI Faculty Development Course – Strategies for Giving Feedback on 29 January 2021” to equip faculty with skills and confidence for providing constructive feedback in challenging circumstances. The course, expertly led by Professor Sandy Cook, along with Drs Mathur, Jill Lee, Ho Weng Yan and Sim Wen Shan, was a great success.

The OBGYN ACP continues to excel in its triple mission of providing cutting-edge clinical care, carrying out impactful research, and providing undergraduate, graduate and postgraduate training for healthcare professionals. These accomplishments contribute to the strong foundation of academic medicine in our AMC while advancing reproductive and women’s health for Singapore and the world.



**Prof Tan  
Hak Koon**  
Academic Chair  
SingHealth  
Duke-NUS OBGYN  
Academic Clinical  
Programme

Year 2020 has not been an easy year for OBGYN ACP. When COVID-19 first hit our shores, we monitored it closely and learnt to deal with it every step along the way. With our vigilance and attentiveness to detail, we protected our patients, and ensured safety for our team, families and friends. The pandemic has brought unprecedented changes and I am grateful that so many of you have gone above and beyond your call of duty to help during the difficult time.

Despite the uncertainty, we continued to strengthen our Academic Medicine leadership structure by the addition of highly respected and committed faculty.

I am delighted to announce the appointments of Prof Jerry Chan as OBGYN ACP Vice Chair Research, Dr Manisha Mathur as OBGYN ACP Deputy Vice Chair Education (Postgraduate) and Dr Suzanna Sulaiman as OBGYN ACP Deputy Vice Chair Clinical. With the dedication of Prof Jerry Chan, Dr Manisha Mathur and Dr Suzanna Sulaiman, I am confident that OBGYN ACP will continue our vibrant and exhilarating endeavours towards Academic Medicine excellence.

I am also proud of the continued achievements of our SingHealth OBGYN Residency Programme where we continued to maintain our programme excellence. Many of our faculty were recognised in the annual RiSE Awards for their exemplary contributions towards structuring of the programme and commitment towards nurturing future generations of doctors. In the research front, we have obtained the highest publication records by our residents and won numerous awards such as the runner-up for Robert G. Edwards Prize Paper Award, NMRC Open Fund Large Collaborative Grant Award and Highly Cited Researchers 2020 (by Clarivate). These awards are place markers in OBGYN ACP Academic journey.

As we celebrate our milestones and accomplishments, let us continue our excellence in Academic Medicine 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 O&G Services, Education and Research in order to ensure world class clinical outcomes”

# SingHealth Duke-NUS OBGYN ACP (as of 31 March 2021)



# Overview of Events (2021)

8–9  
January

Asia Pacific Diabetes in Pregnancy (APDIP) Conference & Integrated Platform for Research in Advancing Metabolic Health Outcomes of Women and Children (IPRAMHO) International Meeting 2021

9  
July

CORE Course

1  
February

LKC AY20/21 medical student posting starts

9  
July

OBGYN Residency R1 Orientation

5  
February

CORE Lite

22 & 29  
July

TRUST (instrumental delivery course)

18  
June

LKC AY20/21 medical student posting ends

26  
September

Course for OG/Radiologists in Pelvic Ultra-Sonography (CORPUS)

18  
June

7<sup>th</sup> Clinical Practice Improvement & Patient Safety Day

4  
October

10th Anniversary of OBGYN and Paediatrics ACP

21  
June

SingHealth Residency Open House 2021 (via Zoom)

29  
October

9th OBGYN ACP Education Day 2021

5  
July

YLL medical student posting starts

9  
November

SingHealth Residency Graduation 2021 (via Zoom)

**18 December 2020 – Singapore Obstetrics and Gynaecology Research Network (SORN)**

## **Singapore OBGYN Research Network (SORN)**

A Network Among **OBGYN** Professionals to Foster and Promote **World Class Research** To Improve Patient Care



This initiative is a collaborative research network between the three public hospitals offering maternity services – KKH, SGH and NUH, to better synergise high quality translational research. Established in July 2020, SORN is led by the inaugural chair Prof Jerry Chan, to unify the three maternity hospitals in improving maternity care in Singapore.

SORN aims to share ideas, identify gaps in knowledge, develop areas of research and multicentre clinical trials, as well as foster closer communication within O&G teams in Singapore. Under SORN, KKH, SGH and NUH are working together on COVID-19 research, and common yet severe O&G conditions such as atypical endometrial hyperplasia and pre-eclampsia.

## 22 February 2021 - Launch of STORK



Launch of the KKH STORK centre on 22<sup>nd</sup> February 2021

In Singapore, there is an increasing prevalence of pregnant women with pre-existing medical conditions, such as diabetes mellitus, hypertension and morbid obesity, forming complex high risk pregnancies which can impact on maternal and fetal health. This increasing number of complex high risk pregnancies call for an urgent need for change from the former model of care for high risk pregnancies – where women had their pregnancy and pre-existing medical conditions managed in silos – to a new model of care that manages the mother’s health holistically with an integrated approach.

To meet these needs, KKH launched the one-**ST**op **O**bstetric high **RisK** (STORK) Centre on 22<sup>nd</sup> February 2021 to provide integrated care for women with complex and high risk pregnancies involving obstetric and medical specialists, nursing and allied health professionals.

Led by specialists from the Department of Maternal Fetal Medicine, this one-stop, integrated service facilitates collaborative and multidisciplinary care, which helps not only to optimise the preconception health of women with high risk medical or obstetric conditions, but also supports these pregnant women throughout the different aspects and stages of their pregnancy journey.

STORK Centre Doctors	
STORK Centre Lead:	Dr Serene Thain
STORK Centre Advisors:	A/Prof Tan Lay Kok, Dr Shephali Tagore
STORK Centre Care Team:	Dr Ann Margaret Wright
	Dr Ilka Tan
	Dr Sim Wen Shan
	Dr Ryan Lee
	Dr Grace Ng
	Dr Sharon Foo
	Dr Anju Bhatia



Clinic services under STORK Centre

# Awards and Achievements

## 14 January 2020 – Singapore Health Quality Service Award

The Singapore Health Quality Service Award (SHQSA), organized by the SingHealth Duke-NUS Academic Medical Centre (AMC) is the largest platform committed to recognizing the efforts of healthcare professionals who have delivered outstanding service and quality care to patients. Many OBGYN ACP faculty members were honoured for their exemplary contributions to healthcare at the annual award.

Star Awardees	Gold Awardees	Silver Awardees
A/Prof Han How Chuan	A/Prof Tee Chee Seng John	Dr Suzanna Sulaiman
Dr Shephali Tagore	Dr Tan Shu Qi	Dr Lee Cheng Sim Jill
Dr Sadhana Nadarajah	Dr Seet Meei Jiun	Dr Huang Youjin, Eugene
Dr Liu Shuling	Dr Wang Junjie	Dr Lim Ee-Lin Sheri
Dr Thia Wee Hong Edwin	Dr Priyanka Singh	Dr Chua Ka-Hee
Dr Boricha Yash Bhanji	Dr Ku Chee Wai	Dr Anju Bhatia
Dr Ilka Tan	Dr Lim Hui Ping Michelle	Dr Lionel Karunamary
Dr Koh Seow Choon Daniel	Dr Sim Wen Shan	Dr Li Xin Yi
	Dr Kang Hean Leng Julian	Dr Thain Pei Ting, Serene
	Dr Angsumita Pramanick	Dr Ang Xiaohong Joella
	Dr Ni Ni Soe	Dr Kho Chye Lee
	Dr Mahesh Nataraj Sangrithi	Dr Qi Maili
	Dr Loh Jia Min Michelle	Dr Ng Zheng Yuan
		Dr Geetha Visvalingam
		Dr Koh Meiling, Serena
		Dr Yeo Mei-E Samantha Rachel
		Dr Ho Xin Yi

## 21 August 2020 – SingHealth Residency in SingHealth Excels! (RISE!) Awards 2020

The SingHealth Residency in SingHealth Excels! (RISE) Awards commemorate the achievements of residency programmes, faculty and residents, as well as showcase their outstanding contributions in medical education. Our SingHealth Obstetrics and Gynaecology (OBGYN) Residency Programme received a total of 14 awards this year.

### RISE! – Programme Director Award 2020

This prestigious award recognises a Programme Director for their exemplary dedication towards graduate medical education in SingHealth Residency. This year, Dr Manisha was conferred the award for her continuous commitment and passion towards the OBGYN Residency Programme.

### RISE! – Faculty Achievements

The **Outstanding Faculty Award** recognizes the commitment of faculty in mentoring residents and helping to nurture them to reach their potential.

<b>Outstanding Faculty</b>	Dr Lee Cheng Sim Jill
	Dr Manisha Mathur
	Dr Ravichandran Nadarajah
	A/Prof Devendra S/O Kanagalingam
	Dr Lim Yu Hui
	Dr Jason Lim Shau Khng
	Dr Ku Chee Wai

### RISE! – Resident Achievements

The **Outstanding Resident Award** is presented to the top 5% of residents from their respective cohorts who have done exceptionally well in both clinical and academic domains of medical education. Residents who have made exceptional contributions to mentoring and guiding their fellow peers and juniors were recognized with the **Inspiring Resident Educator Award** for lifelong learning and sharing of knowledge. The **Resident Committee Appreciation Award** recognizes the numerous contributions of Resident representatives in the development of programs for their peers and juniors.



<b>Outstanding Resident Award</b>	Dr Lim Whui Whui
	Dr Sasha Stella Rizalina
	Dr Lim Poh Ting
<b>Inspiring Resident Educator Award</b>	Dr Ku Chee Wai
<b>Resident Committee Appreciation Award</b>	Dr Jonathan Han Youxiang
	Dr Tiffany Wong Tuck Chin



# Awards and Achievements



Group photo at the KKH Teacher's Day 2020.

## 21 October 2020 - KKH Teacher's Day 2020

The KKH Teacher's Day was held from 12 - 1.30pm at the KKH Auditorium on 21 October 2020. The event celebrates the resilience and passion in educating undergraduates, and to show appreciation to faculty for their sterling contributions to undergraduate medical education. Dr Sheri Lim Ee-Lin, Dr Sonali Prashant Chonkar and Dr Ku Chee Wai received Certificates of Appreciation for their significant contributions in teaching undergraduates.

## 24 November 2020 - NUS YLL Dean's Appreciation 2020

The YLL Dean's Appreciation for Clinical Teachers commemorates the efforts of faculty in undergraduate teaching. A/ Prof Yong Tze Tein, Dr Sonali Chonkar and Dr Sheri Lim were awarded the **AY19/20 Dean's Award for Teaching Excellence**, which recognizes faculty who have shown commitment in educating medical students during their attachments to the hospital. Dr Tan Shu Qi was awarded the **AY19/20 Special Recognition Award**, an accolade given to tutors who have made a lasting impact on graduating students who were surveyed. Dr Ku Chee Wai, Dr Joella Ang Xiaohong, Dr Carmen Tong and Dr Kwek Lee Koon were given the **AY19/20 Junior Doctor Teaching Award**, which commends junior doctors for their outstanding teaching of medical students.

### Dean's Award for Teaching Excellence



A/Prof Yong Tze Tein  
Head & Senior Consultant



Dr Sheri Lim  
Consultant



Dr Chonkar Sonali Prashant, Consultant



Dr Tan Shu Qi  
Consultant

### Special Recognition Award

### Junior Doctor Teaching Award



Dr Ku Chee Wai  
Senior Resident



Dr Kwek Lee Koon  
Senior Resident



Dr Joella Ang  
Associate Consultant



Dr Carmen Tong  
Senior Resident

## 24 January 2021 – AM•EI Golden Apple Awards 2020

The AM•EI Golden Apple Awards award faculty with active teaching roles in the SingHealth Duke–NUS Academic Medical Centre (AMC), recognising and honouring outstanding educators in SingHealth and Duke–NUS who have outstanding teaching contributions. **Prof Tan Kok Hian** was awarded the **Generativity Award for Educators**, which recognizes educators who exemplify the spirit of generativity by actively giving back to the education landscape through nurturing and mentoring other educators.



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## 30 January 2021 – WHBS-SMACF Outstanding Mentor Award 2021

Dr Jason Lim Shau Khng was conferred the Wong Hock Boon Society–SMA Charity Fund (WHBS–SMACF), Outstanding Mentor Award 2021. The award is in appreciation of his efforts and commitment in guiding medical students through their research work, particularly for the project “Comparison of Postpartum Incontinence Outcomes after Vacuum–Assisted and Forceps–Assisted Deliveries in a Tertiary Maternity Unit”.



## 8 – 9 January 2021 – Asia Pacific Diabetes in Pregnancy Conference & IPRAMHO International Meeting

The 4th year of Asia Pacific Diabetes in Pregnancy (APDIP) Conference & Integrated Platform for Research in Advancing Metabolic Health Outcomes of Women and Children (IPRAMHO) International Meeting was well-received and attended by over 500 local and overseas delegates.

Led by SingHealth Duke-NUS OBGYN Academic Clinical Programme and SingHealth Duke-NUS Paediatric Academic Clinical Programme under KKH, the theme this year is 'Optimal Metabolic Health for Women and Children'. In line with the theme, issues such as physical activity guidelines for children and adolescents, and Asia-Pacific perspectives in research studies on women's metabolic health were discussed. The Singapore Integrated 24-Hour Activity Guidelines for Children and Adolescents was launched by Guest-of-Honour Senior Minister of State for Health, Dr Janil Puthucheary. The set of guidelines aims at standardising advice on exercise, physical activity and diet for children and adolescents to improve their overall metabolic health. Joining with the professionals from Asia Pacific, the

faculty of OBGYN ACP took part actively to share their perspectives on gestational diabetes management.

The event went successfully with strong support of several key organizations – Perinatal Society of Singapore (PSS), College of Obstetricians & Gynaecologists, Singapore (COGS), College of Paediatrics & Child Health Singapore (CPCS), Obstetrical & Gynaecological Society of Singapore (OGSS), SingHealth Duke-NUS OBGYN Academic Clinical Programme, SingHealth Duke-NUS Paediatrics Academic Clinical Programme, Exercise is Medicine Singapore (EIMS), SingHealth Duke-NUS Sport & Exercise Medicine Centre, SingHealth Duke-NUS Diabetes Centre, Federation of Asia and Oceania Perinatal Societies (FAOPS) and the NMRC Collaborative Centre Grant – Integrated Platform for Research in Advancing Metabolic Health Outcomes in Women and Children (IPRAMHO) involving KK Women's and Children's Hospital, SingHealth Polyclinics and National Health Group Polyclinics.



1. Prof Tan Kok Hian giving an IPRAMHO updates on initiatives for Maternal & Child Metabolic Health
2. Guest-of-Honour Senior Minister of State Dr Janil Puthucheary giving an Opening Address



3. Launch of The Singapore Integrated 24-Hour Activity Guidelines for Children and Adolescents



4. Group photo with Guest-of-Honour Senior Minister of State Dr Janil Puthuchery with Prof Alex Sia, Assoc Prof Ng Kee Chong, Dr Benedict Tan, Dr Benny Lo, Assoc Prof Chan Yoke Hwee, Prof Tan Hak Koon and Prof Tan Kok Hian at the conference



5. Dr Benny Lo presenting poster to Guest-of-Honour Senior Minister of State Dr Janil Puthuchery

6. Assoc Prof Ng Kee Chong sharing College of Paediatrics & Child Health Singapore (CPCHS) initiatives for Child Metabolic Health





## Featured Projects - Clinical Quality Improvement

### (i) Setting up a dedicated abortion service and introducing a new medical TOP regimen for safer patient care and enhanced experience

**Project team members:** Dr Seet Meei Jiun, Dr Aimee Teong, APN Zhong Yu Ting, Dr Manisha Mathur

Induced abortion, or termination of pregnancy (TOP) of an unplanned and unwanted pregnancy is an essential component in women's health. A comprehensive abortion service includes the provision of legal, safe, stigma-free and high quality service in abortion and post-abortion care, contraception and collaboration with medical social services and mental health professionals.

The setting up of a dedicated one-stop TOP clinic with trained healthcare professionals and a standardised protocol has improved the efficiency of abortion care and this enhanced patients' experience. Furthermore, patients who are admitted to the ward for TOP are separated from other patients to allow more sensitive and respectful care.

Based on studies and international guidelines, medical TOP performed with a combined mifepristone (an anti-progestin) and prostaglandin regimen has been proven to be safe and efficient. It can be used from early gestation upon confirmation of pregnancy,

up to 24 weeks of gestation, which is the legal gestational age for abortion in Singapore.

With the introduction of combined medical TOP regimen use, women are given option to have TOP via the medical route, instead of the previously offered, surgical treatment only for women presenting in the first trimester. As a non-invasive procedure, women who opt for medical TOP can avoid surgical and anaesthesia complications. Furthermore, it has also reduced the operating theatre usage for TOP. This has resulted in better allocation of operating theatres to perform other high risk surgeries.

For women in the second trimester, this regimen resulted in a significant reduction in the median induction to abortion interval (from 834 to 416 minutes), number of prostaglandin doses (from three to two doses) needed to achieve abortion and length of hospital stay (from three to two days). Moreover, the number of women requiring a surgical evacuation of uterus for incomplete abortion has also reduced from 41.6% to 14.1%. The project included data prior implementation between November 2018 to February 2019 and post-implementation between November 2019 to February 2020.



### (ii) Optimising peri-operative sugar control in gynaecological patients with Type 2 Diabetes Mellitus (T2DM) in KK Women's and Children's Hospital

**Project team members:** Dr Tan Yin Ru, Dr Tan Shu Qi, Dr Yvonne Wong, Dr Tang Toon Wen, Dr Krystal Koh, Dr Rajeswari Kathirvel, Dr Rukshini Puvanendran, Dr Lu Hualong, Dr Derek Choong, Dr Rajive Dabas, Dr Suzanna Sulaiman

Diabetes is a common medical condition and is associated with higher rates of perioperative complications. Optimisation of

glucose levels perioperatively can minimise poor sequelae and promote better outcomes. A standardised protocol for perioperative management of diabetic patients was introduced in December 2017 for all patients with Type 2 Diabetes Mellitus admitted for elective gynaecological surgeries in KK Women's and Children's Hospital. Glucose monitoring was to be done regularly at 4 to 6-hourly intervals with a standardised insulin sliding scale (SCSI) and a Dextrose 5%-containing IV drip to be ordered according to the protocol. Compliance to the protocol was audited by reviewing SCSI and IV drips ordered. A year after implementation, the compliance rate to the protocol was 27%.

This project aims to improve compliance rates to the diabetic protocol from 30% to 80% within 12 months. The PDSA (Plan-Do-Study-Act) Cycle of improvement was employed.

To improve compliance rates, regular teaching sessions for junior doctors regarding appropriate glucose management were introduced. Regular email reminders regarding the protocol were sent. Protocols were also placed visibly in all wards for doctors' reference. We also enlisted the help of family physicians to review preoperative diabetic patients who were on insulin treatment to

optimise management in these high-risk patients. Fixed SCSI sets were also available in Citrix to minimise errors. After 3 PDSA cycles (September-December 2018, February-March 2019, September-October 2019), we achieved 84% compliance rate to the diabetic protocol.

A standardised guideline to optimise blood sugar management in perioperative diabetic patients is important and our team has implemented several interventions with good effect to improve compliance to the protocol.

## After-hours urgent FBCs: is it a true necessity?

**Project team members:** Dr Geetha Visvalingam, Dr Wong Shou Sheng Ian, Dr Kavimalar Ravi, Dr Tan Shu Qi, Dr Suzanna Sulaiman, Ms Ang Soh Hong, Dr Joyce Lam

A rise was noted in the number of after-hours full blood count (FBC) tests especially between 0400 to 0800 hours. Only one on-site haematology lab technologist handles all laboratory specimens in the hospital after-hours. With this rise, it was affecting the efficiency and productivity of our lab technologists who have to cover both O & G and Paediatrics services alone after official working hours and were becoming overwhelmed with the urgently requested samples and were worried that that the Turnaround time (TAT) of the clinically truly urgent samples will be compromised.

Our aim was to reduce the number of after-hours urgent FBC tests from O&G wards, particularly within 0400 to 0800, to less than 10% in a period of 3 months.

We did a root cause analysis and found 4 root causes and intervened at 2 root causes.

For the **human factor root cause**, we educated our clinicians and nurses regarding ordering FBC tests appropriately, and dispatching these tests from ward in appropriate coloured bags. For the **system factor root cause**, we noted that 'Time-critical' blood test orders were processed as urgent samples (1-hour TAT). These orders involve bloods to be taken at a specific timing but it was not necessary to be processed urgently. Only bloods ordered as 'STAT' are truly clinically urgent.

	Urgent (STAT)	Nont-Urgent	
		Routine	Time-Critical
Clinician Criteria	Clinician Emergencies	Non-Emergency cases	Post-op bloods needed to be taken btw 5 to 6am
Laboratory Criteria	TAT 1 hour	TAT 2 hours	Root Cause 4 Processed as per Urgent Lat Criteria

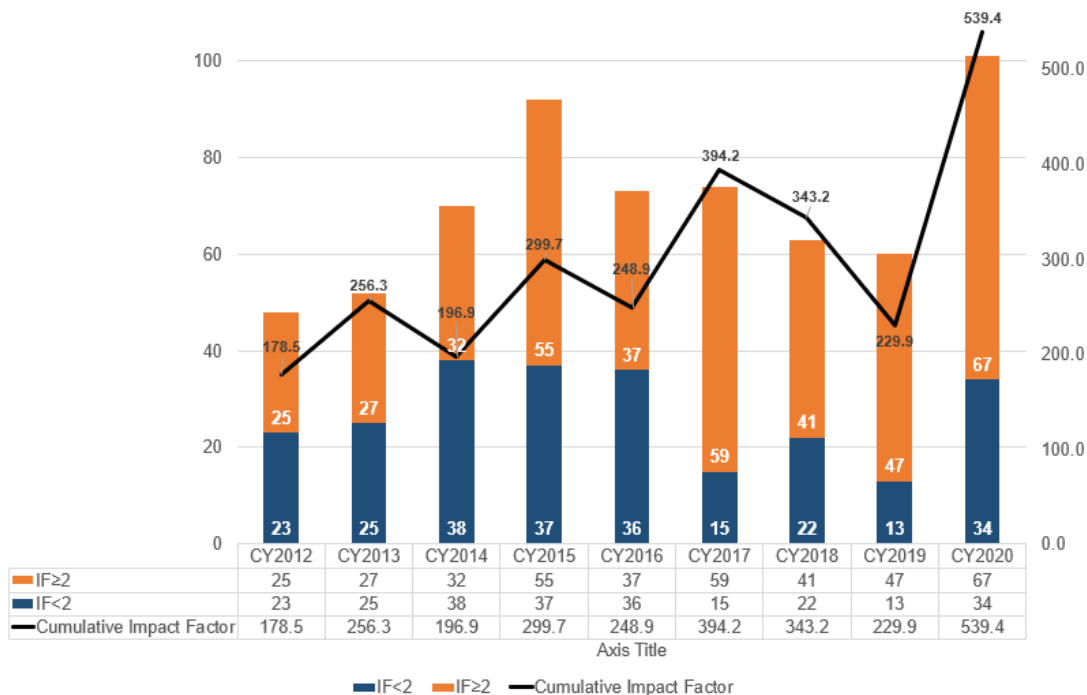
**Table 1.** Criteria for Urgent vs Non-Urgent vs 'Time Critical'

We needed to rectify this IT mapping of test and we recruited IT support to assist with reconfiguration of 'Time-Critical' tests to be reflected as 'Routine' tests (2-hour TAT) in the laboratory system.

Numbers of urgent FBCs pre-intervention ranged from 51% to 63% between January to August 2020. A significant sustained decrease in the number of urgent FBCs ordered was seen post-intervention to less than 5% between September to December 2020.

This significantly eased the urgent load on our haematology laboratory after hours. Laboratory staff are able to optimise the lab service and resources for our patients who truly require urgent blood tests after hours. This project highlighted an important fact that simple minor changes can bring about substantial impact on the efficient functioning of our system.

## Research Graph - 2012 to 2020






ACP	CY2012	CY 2013	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020
JIF ≥ 2	25	27	32	55	37	59	41	47	67
JIF < 2	23	25	38	37	36	15	22	13	34
Cumulative Impact Factor	178.5	256.3	197.0	299.8	249.0	394.2	343.24	229.9	539.4





## 11 December 2020 – 8th 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 residents and clinicians in the field of O&G. The event's highlights included an intriguing talk about "Do men with normal testosterone-oestradiol ratios benefit from letrozole for the treatment of male infertility?" by Dr Liu Shuling, a comprehensive talk by Associate Professor Fabian Yap on "Maternal and Child Health: Is it time for a Renaissance?", and an enlightening talk titled "Transforming the research landscape. Where are we going today?" by Professor Jerry Chan.

The virtual event was warmly attended by faculty, residents and trainees, and it was concluded with the announcement of OBGYN ACP Pitch-for-Grant 2020 Award Winners.

Awardee	Study Title
 Dr Grace Cheah	CESAR (Cesarean Effective Scar Apposition Research) study: Comparison of novel 3-R (recognition of the retracted muscles, and repair) cesarean section uterine closure technique with routine double-layer uterine closure on post-cesarean uterine scar thickness
 Dr Mark Lui	Is early postnatal oral glucose tolerance test (OGTT) comparable to the 6 weeks OGTT in women with gestational diabetes mellitus?
 Dr Qi Maili	Role of fluorescence near-infrared (NIR) imaging of indocyanine green (ICG) in sentinel lymph node biopsy for gynaecological cancers

Awardee	Study Title
 Dr Rajeswari Kathirvel	Role of Serum Progesterone in the Management of Pregnancy of Unknown Location
 Dr Selina Chin	A pilot study on patient satisfaction in cyclical versus continuous progestins in non-atypical endometrial hyperplasia in Singapore



## COVID-19 and its Impact on Education, Clinical Practice, and the Future

*Ku Chee Wai*

The coronavirus disease 2019 (COVID-19) pandemic, caused by Severe Acute Respiratory Syndrome coronavirus 2 (SARS-CoV-2), is a significant global crisis, affecting millions of people. The impact of COVID-19 is even greater in vulnerable populations, including pregnant women, who are at increased risk of complications that impact maternal and child health. This pandemic also resulted in unprecedented changes in the healthcare industry from patient care to medical education and clinical training.

As SARS-CoV-2 can spread via asymptomatic but infective carriers, social distancing became one of the main preventive measures in this pandemic. This inevitably transformed the mode of medical training, with most lessons transitioning from physical venue-based platforms (PVBP) to teleconferencing-based platforms (TBP). Our team had shown that TBP is a promising teaching modality in disease outbreaks allowing for greater convenience, better note-taking and ability to overcome administrative challenges. We also proposed a triphasic approach to tackle the challenges of TBP, focusing on the usage of multimodal teaching aids, contextual use of TBP and smoothening transition to TBP. The COVID-19 pandemic is also likely to have far-reaching implications on residency training. We identified the concerns our paediatric and obstetrics and gynaecology (O&G) residents had in three main areas – clinical training, clinical learning environment and psychosocial wellbeing, and suggested various interventions to alleviate the adverse effects of the pandemic on residency training.

An unprecedented outbreak of a novel virus like SARS-CoV-2 brought about significant concerns about its effects on high risks population such as pregnant women and their neonates. A nation-wide prospective study was conducted to evaluate outcomes in pregnant women with COVID-19 in Singapore. The study concluded that majority of COVID-19 infected pregnant women developed mild disease and the risk factors for severe disease were obesity and advanced age. Furthermore, there is generally a low likelihood of mother-child transmission if the infection is cleared well before delivery. There was also no definitive evidence of mother-to-child transmission via breast milk or placenta. Efficient and accurate diagnosis of COVID-19 is another pertinent area we explored.

Despite nasopharyngeal swabs (NPS) being the standard test for diagnosis of COVID-19, it has its disadvantages. NPS can only be performed by trained healthcare workers and medical staff must be in close contact with the patient which increases the risk of transmission. In light of such a dilemma, we conducted a cross-sectional study to validate the use of self-collected buccal swab and saliva as a diagnostic tool for COVID-19. We found saliva tests and buccal swabs to be in moderate agreement with NPS for the detection of SARS-CoV-2 with an overall agreement of 69 to 74%, and are reasonable alternatives to the current gold standard of NPS. We recommend initial screening NPS can be replaced with a saliva test or buccal swab for community testing due to its greater patient comfort and convenience in administration. Patients with a positive result can be managed as COVID-19 positive due to its high positive predictive value. However, a negative result would warrant a confirmatory NPS to avoid false-negatives. This workflow would greatly reduce the burden and costs on the healthcare system especially in the context where mass screening strategies are required and resources are scarce.

There were also significant changes made to the services KKH provides in view of the pandemic. When the national Disease Outbreak Response System Condition (DORSCON) was raised from yellow to orange on 7 February 2020, the clinical workflow in our Antenatal Diagnostic Centre was adjusted to mitigate transmission risks while causing minimal disruption to the services provided. On top of complying with hand hygiene and the use of personal protective equipment, manpower was segregated to preserve an active manpower unit in the event of an unprotected exposure to a COVID-19 patient. Thorough screening for all patients and accompanying persons were conducted and screen positive patients are then recommended for scan rescheduling or proceed with their ultrasound scan in the isolation room. These measures have been reviewed continually to adapt to the evolving pandemic situation.

Moving forward, vaccines have been developed to provide primary prevention against COVID-19 and ongoing studies are investigating the safety of these vaccines in pregnant women. Although pregnant women are at risk of infection and complications, the Ministry of Health, Singapore do not recommend COVID-19 vaccination during pregnancy due to limited information about its safety and efficacy

currently. In view of that, our team has crafted a patient information leaflet on COVID-19 vaccinations and the recommendations for women before, during and after pregnancy. We are conducting a study to elucidate the utility of such education tool. This will provide healthcare workers and policy makers the necessary information to guide future research, education, and implementation of vaccination programs for COVID-19 among these groups of women.

Taken together, apart from clinical care, research and education have been affected greatly by this pandemic. Everyone had to adapt

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## Chrononutrition during Pregnancy

Rachael Loo Si Xuan, Asst Prof Loy See Ling, Prof Jerry Chan Kok Yen, Assoc Prof Fabian Yap Kok Peng and research team

Night-time is a period when the body is naturally primed for rest in humans. Eating food at times that contradict body's natural circadian rhythms, such as eating during the inactive/ sleep phase has been shown to entrain the expression of clock genes in most peripheral tissues, e.g. liver, pancreas, skeletal muscle, adipose tissue, leading to misalignment between internal circadian rhythms. Consequently, there is a potential adverse effect on metabolic physiology, increasing the risk of diabetes, obesity, cardiovascular disease and possibly even cancer.

Chrononutrition reflects the basic concept that not only food quantity and quality, but also food timing is critical for the well-being of an individual. Evidence from women working night shifts during pregnancy indicates that circadian rhythm disruption has the potential to adversely influence pregnancy outcomes such as risk of miscarriage, prematurity, low birth weight and hypertensive disorders. In the general population, chronodisruption with the potential to affect pregnancy outcomes may also be seen in those with high energy intakes in the evening or at night. However, maternal night eating during pregnancy remains understudied.

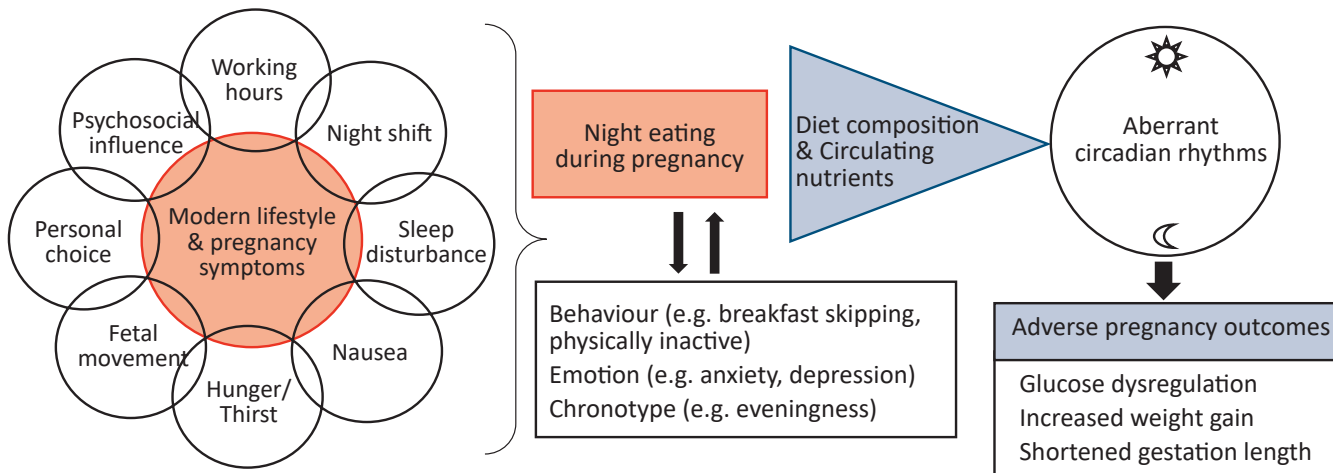
Overall, night eating is common during pregnancy, with estimated prevalences in different populations ranging from 15% to 45%. Modern lifestyle and the presence of pregnancy symptoms contribute to night eating during pregnancy, which is likely to coexist and may interact with multiple undesirable lifestyle behaviours. To our knowledge, only one study to date has explored the reasons for night eating among pregnant women. In a semi-structured interview study among African American pregnant women, altered sleep schedules, hunger, thirst, nausea, fetal movement and

personal choice were the common reasons for night eating (2000–0600 h).

Understanding the nutrient intakes of night eaters may help to elucidate potential mechanisms involved, examine effects of night eating on health, and to establish nutritional recommendations for pregnant women. Using data drawn from the Growing Up in Singapore Towards healthy Outcomes (GUSTO) prospective cohort study involving multi-ethnic Asian pregnant women in Singapore, compared to pregnant day eaters, night eaters had a higher intake of total dietary fat, but a lower intake of total dietary carbohydrate. Specifically, higher night–time intake of dietary fat was observed in this group of night eaters than day eaters (36% vs. 28%;  $p < 0.001$ ). Similarly, the GUSTO research group has observed that pregnant night eaters consumed lower amounts of total fruit and whole grains, and had a lower diet quality than day eaters. This suggests that unfavorable nutritional characteristics associated with night eating

have the potential to induce aberrant circadian rhythms in pregnant women, resulting in adverse metabolic and pregnancy outcomes.

Targeting nutrition as a strategy to optimize pregnancy outcomes is an important research agenda for scientists and dietitians/nutritionists. Timing of energy intake and diet composition appear as potential novel approaches to address metabolic complications during pregnancy and adverse birth outcomes. Food types, attitude, behavioral components (e.g., lifestyle and chronotype) and pregnancy symptoms relating to night eating are important aspects to be considered in the design of intervention that aims at addressing night eating. This will help to facilitate adherence and to better predict the effectiveness of a given intervention by accounting for these factors in the analysis. If the results are promising, management strategies for night eating should be addressed in nutrition guidelines and counselling for pregnant women.



**Figure 1. Potential contributors, associated characteristics and effects of night eating during pregnancy.**

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Loy SL, Loo RSX, Godfrey KM, Chong YS, Shek LPC, Tan KH, Chong MFF, Chan JKY, Yap F. Chrononutrition during Pregnancy: A Review on Maternal Night–Time Eating. *Nutrients*. 2020; 12:2783. <https://doi.org/10.3390/nu12092783>

## Are women in Singapore gaining weight appropriately during pregnancy?

*Dr He Song, Prof Kok Hian Tan & IPRAMHO/NORA Research Team*

Gestational weight gain (GWG) is a potentially modifiable risk factor of adverse pregnancy outcomes. Suboptimal weight gain during pregnancy has been associated with pregnancy complications that affect the wellbeing of mothers and their offsprings. Inadequate GWG has been linked to low birth weight, small for gestational age, preterm birth and failure to initiate breastfeeding, while excessive GWG is associated with increased risks of caesarean section, postpartum weight retention, higher birth weight, and overweight or obesity in childhood.

In 2009, the Institute of Medicine (IOM) published revised guidelines on GWG based on the short-term and long-term consequences of GWG on maternal, fetal and child health outcomes. The IOM 2009 guidelines are based on maternal pre-pregnancy body mass index (BMI) and are independent of age, race, parity, smoking and ethnic backgrounds. Many population-based studies have since compared GWG with IOM 2009 guidelines and most showed low adherence to IOM recommendation.

We conducted a prospective cohort study of 926 low-risk singleton pregnancy from 2010 to 2014 in KK Women's and Children's Hospital, Singapore. We analyzed predictors of GWG above and below IOM 2009 guidelines, the total GWG and rate of GWG in the second and third trimesters and compared it with IOM guidelines as well as other international and Asian-centered population studies. The mean (SD) of total GWG in our cohort was 11.8 (4.5) kg.

Compared to IOM 2009 guidelines, 40.7% of women in our cohort had total GWG within recommendation, 33% gained less and 26.2% gained more weight than IOM recommendation. Our local population has higher adherence compared to a recent meta-analysis of more

than one million pregnant women from diverse international cohorts where only 24.5% had GWG within IOM 2009 recommendations. When analyzed by BMI subgroups, more underweight and normal weight women achieved total GWG within IOM guidelines, compared to overweight and obese women. In addition, higher proportions of obese and overweight women gained more weight than IOM references.

Obese women in our cohort had a mean total GWG (9.1kg) that exceeded the upper limit IOM guidelines (9kg). We further presented data for obesity subcategories separately to show the means of total GWG of each subcategory, and the percentages of women in each obesity subcategory that exceeded, achieved or gained weight below IOM target GWG. It appears that Class III obesity had a higher chance of gaining excessive weight than IOM guidelines, with a mean total GWG of 14.5 kg and 75% of the group had total GWG that exceeded IOM guidelines.

In terms of predictors of GWG above IOM guidelines, we found that overweight (adjusted OR: 3.91 [95% CI: 2.60-5.88];  $p < .0001$ ) and obesity (adjusted OR: 4.78 [95% CI: 2.80, 8.15];  $p < .0001$ ) were independent significant risk factors of gaining excessive gestational weight in our cohort. This is consistent with data from the western countries.

Our study adds to the understanding of the characteristics of pregnancy weight gain in the Singaporean population where there is limited data. As the implications of excessive GWG could be profound and with the rising prevalence of overweight and obesity in the Southeast Asia, appropriate GWG advice and weight management for overweight and obese Singaporean women prior to and during pregnancy is paramount.

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## 24 June 2020 – SingHealth Residency Open House 2020

The SingHealth Residency Open House is an annual event where prospective residents gather to explore different specialty training programmes. For this year, the Open House was conducted via Zoom and over 150 medical students, HOs and MOs signed up for the session. Our OBGYN Programme Director, Dr Manisha Mathur, Faculty and Residents, shared with the participants on the programme and provided them with better insights into the different specialties within OBGYN. It was an engaging session for all parties involved.

## 17 July 2020 – R1 Orientation 2020

The Residency Programme had its annual run of the R1 Orientation on 17 July 2020. This year, the new batch of R1 residents were Dr Chua Shi Qi Monica, Dr Lim Wei Che@Santi, Dr Lui Kai Jie Mark, Dr Onn Pei Pei, Dr Tan Ying Hao, Dr Teong Chuin Ai Aimee and Dr Yen Yu Ting Desiree. Faculty, Chief Residents and Residents joined the session to give the R1s an overview and shared insights of the residency training. The orientation left the R1s engaged and equipped with various resources that they require to navigate the start of their residency training in OBGYN.

## 14 August 2020 – Inaugural Global Health Day

The global health curriculum was developed to provide residents with a foundational knowledge of global health; its scope, implications on medical practice, as well as opportunities for research and development. The Inaugural Global Health Day was held on 14 August 2020, 2 – 6pm on zoom. It opened with an overview of global health and covered topics such as infectious diseases, non-communicable diseases, maternal health in the region and children's health. The session was beneficial and well-received for participants, with all residents expressing positive feedback about their enjoyment of the session, faculty engagement and communication, and good learning objectives.

## 23 October 2020 – 8<sup>th</sup> SingHealth Duke-NUS OBGYN ACP Education Day

Education Day is a platform for clinicians to share achievements, as well as new educational initiatives and projects related to academic medicine. This year, the theme was "Education Amidst Disruption – Adaptive Strategies, Opportunities and Lessons Learnt", with the focus on adjusting and adapting medical education during the COVID-19 pandemic. The programme was held entirely on Zoom. We were honoured to have Prof Ian Curran, Vice Dean, Office of Education Duke-NUS Medical School, and Co-Director, Academic Medicine Education Institute (AM.EI), who delivered an inspiring presentation on "The Value and Challenges of Assessing Professionals". There were various COVID-19 related presentations, such as "COVID-19 in Singapore: Graduate Medical Education in The Face of a Global Pandemic" by Dr Jill Lee, and "MISSION Possible in the Time of COVID-19 –Facilitating MIS Training in Residents through Simulation to Blended Learning" by Dr Andy Tan.

## 5 February 2021 – CORE Lite

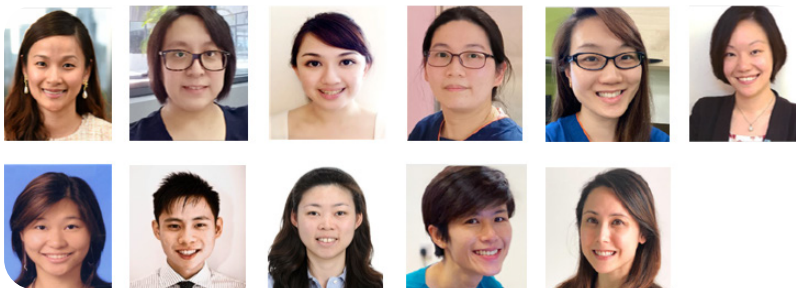
The Obstetrics Emergency Course programme was streamlined and adapted into a "lite" format to accommodate the strong interest from doctors outside O&G, such as Family Medicine (FM) and Emergency Medicine (EM) doctors from other SingHealth institutions. With a lighter course, the programme can be run multiple times a year without causing faculty fatigue. Two runs of CORE Lite have been run so far, with the inaugural run on 17 January 2020. The participants reported a significant increase in their confidence levels in handling various obstetrics emergencies, such as maternal resuscitation, post-partum haemorrhage and pre-eclampsia.



# Education Section

## 27 November 2020 - SingHealth Residency Graduation 2020

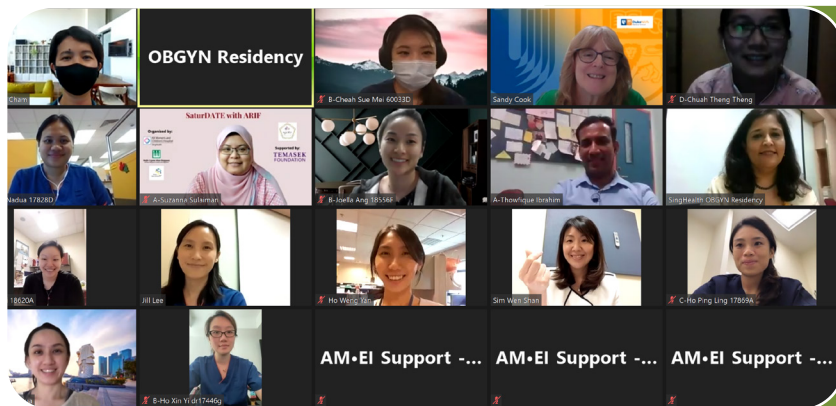
The SingHealth Residency Graduation celebrates the successful completion of Residency Programme for the graduating residents. This year, the graduating residents were Dr Ang Xiao Hong Joella, Dr Caroline Tan Chiew Ping, Dr Chua Hui Kiang Angeline, Dr Chuah Theng Theng, Dr Ho Xin Yi, Dr Li Xin Yi, Dr Lim Whui Whui, Dr Ng Zheng Yuan, Dr Wan Kai Jing, Dr Wong Keryi and Dr Yeo Mei-E Samantha Rachel.



*From Left to Right: (Top Row) Dr Ang Xiaohong Joella, Dr Caroline Tan Chiew Ping, Dr Chua Hui Kiang Angeline, Dr Chuah Theng Theng, Dr Ho Xin Yi, Dr Li Xin Yi (Bottom Row) Dr Lim Whui Whui, Dr Ng Zheng Yuan, Dr Wan Kai Jing, Dr Wong Keryi, Dr Yeo Mei-E Samantha Rachel*

## 29 January 2021 - AM.EI Faculty Development Course

The AM.EI Faculty Development Course – Strategies for Giving Feedback held its third run on the 29 January 2021. It was led by Prof Sandy Cook, Dr Manisha Mathur, Dr Jill Lee, Dr Ho Weng Yan and Dr Sim Wen Shan. The course included a role play segment that allowed participants to effectively utilize the DESC (Describe, Explain, Strategize and Consequences) model to provide constructive feedback in challenging scenarios. Concurrently, participants were able to identify barriers using this model and plan strategies to overcome these barriers, allowing them to understand the concept of giving, seeking and receiving feedback in a balanced manner. The interactive course allowed the participants to be fully engaged in the learning process and gain confidence in providing constructive feedback when faced with different challenging scenarios.



*From Left to Right: (Top Row) Ms Cham Wen Min Breana, Dr Cheah Sue Mei, Prof Sandy Cook, Dr Chuah Theng Theng (Second Row) Dr Karen Donceras Nadua, Dr Suzanna Sulaiman, Dr Ang Xiaohong Joella, Dr Thowfiq Kadavukarayil Ibrahim, Dr Manisha Mathur (Third Row) Dr Li Xinyi, Dr Lee Cheng Sim Jill, Dr Ho Weng Yan, Dr Sim Wen Shan, Dr Ho Ping Ling (Bottom Row) Dr Chua Hui Kiang Angeline, Dr Ho Xin Yi*



**Dr Tewani Komal**  
Consultant

## **Tan Chiew Lian Palliative Care Research and Education Fund**

The SingHealth Duke-NUS OBGYN ACP Tan Chiew Lian Palliative Care Research and Education Fund was established with the generous donation of \$1 million from the family of the late Madam Tan Chiew Lian. The donation was made in gratitude towards Clinical Assistant Professor Tewani Komal's and the KKH women's palliative team's care and support.

The Tan Chiew Lian Palliative Care Research and Education Fund, led by Clinical Assistant Professor Tewani Komal, aims to support research and education programmes and training opportunities to advance efforts in women's palliative care. The donation also provides support for vulnerable women undergoing palliative care treatment at KK Women's and Children's Hospital.

Currently, the Tan Chiew Lian Palliative Care Research and Education Fund has embarked on two projects:

1. Initiation of Dignity Therapy in Palliative Care Setting in Gynaecological Oncology patients to understand the notion of dignity and strategies to provide dignity conserving care to people facing a life-limiting illness in our local population; and
2. A grounded theory study exploring the impact of Arts and Music Therapy for symptom management and psychosocial care as part of the Women's Palliative Care Service (WPCS) program at an acute hospital.

With the establishment of the Tan Chiew Lian Palliative Care Research and Education Fund, OBGYN ACP aims to continue to advance and provide the best care possible to our palliative patients.

# Faculty Appointments *(As of 31st March 2021)*

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

Name	Designation
Clin Prof Tan Hak Koon	Academic Chair
Clin Prof Ho Tew Hong	Advisor
Prof Tan Kok Hian	Advisor Director of Office of Strategic Initiatives
Julin Wong Shuxian	Manager

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

Name	Designation
Clin Assoc Prof Tan Lay Kok	Academic Vice Chair, Education
Clin Assoc Prof Tee Chee Seng	Academic Deputy Vice Chair, Education
Kam Limin	Senior Executive
Anita Kurup	Executive
Kayda Soh Xin Yi	Executive

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

Name	Designation
Prof Jerry Chan Kok Yen	Academic Vice Chair, Research
Nurul Syaza Binte Razali	Senior Executive
Erlia Tan	Executive

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

Name	Designation
Clin Assoc Prof Yong Tze Tein	Academic Vice Chair, Clinical
Dr Suzanna Sulaiman	Academic Deputy Vice Chair, Clinical
Ang Yiqian Felicia	Senior Executive
Chan Hiu Gwan Madeline	Executive

## IV) SingHealth OBGYN Residency

Name	Designation
Dr Manisha Mathur	Programme Director
Lim Wei Sian Wileen	Senior Executive
Ong Liam Yen Charlene	Programme Executive
Tan Xinyi Evangeline	Programme Executive
Yvonne Tang Pui Har	Senior Associate Executive

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

Name	Designation
Chun Lye Har Joyce	Director
Lin Enyu Evelyn	Assistant Manager
Neo Siew Shih Cherise	Associate Executive

# Faculty Appointments (As of 31st March 2021)

## B) Education

### I) SingHealth Obstetrics and Gynaecology Residency Programme



Name	Designation
Dr Manisha Mathur	Programme Director
Clin Prof Ho Tew Hong	Programme Evaluation Committee, Chairman
Dr Yang Liying	Associate Programme Director (SGH Campus)
Dr Jill Lee Cheng Sim	Associate Programme Director (KKH Campus)
Clin Assoc Prof Chern Su Min Bernard	Programme Core Faculty (KKH Campus)
Clin Assoc Prof Yam Kwai Lam Philip	
Dr Ho Weng Yan	
Dr Shephali Tagore	
Dr Wong Wai Loong	
Dr Jessie Phoon Wai Leng	
Dr Suzanna Bte Sulaiman	Programme Core Faculty (SGH Campus)
Clin Assoc Prof Devendra Kanagalingam	
Dr Lim Shau Khng	
Dr Andy Tan Wei Keat	

### VI) Lee Kong Chian School of Medicine OBGYN Clerkship



Name	Designation
Dr Kathirvel Rajeswari	Principal Lead
Dr Li Xinyi	Posting Lead
Kayda Soh Xin Yi	Executive

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



Name	Designation
Clin Assoc Prof Tan Lay Kok	OBGYN Programme Leader
Dr Ee Tat Xin	Programme Coordinator
Toh Bee Ling	Assistant Manager
Nur Edaliza Osman	MD Programme OBGYN Secretariat

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



#### KKH

Name	Designation
Dr Manisha Mathur	Lead Coordinator
Dr Sheri Lim Ee-Lin	Deputy Coordinator
Anita Kurup	Executive

#### SGH

Name	Designation
Clin Assoc Prof Devendra Kanagalingam	Lead Coordinator
Clin Assoc Prof Yong Tze Tein	Deputy Coordinator
Geetha D/O Arumuga Vandayar	Senior Associate Executive

# Faculty Appointments *(As of 31st March 2021)*

## C) SingHealth Duke-NUS

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

Name	Designation
Prof Wong Tien Yin	Deputy Group CEO, Research and Education, SingHealth Vice Dean, Office of Academic & Clinical Development, Duke-NUS
A/Prof Chow Wan Cheng	Group Director, Academic Medicine, SingHealth Senior Associate Dean, Academic Medicine, Duke-NUS
Foo Suan Jong	Director
Maung May Lay Katheryn	Deputy Director

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

Name	Designation
Prof Ian Curran	Co-Director
Prof Chan Choong Meng	Co-Director
Prof Sandy Cook	Deputy Director
Dr Phua May Ling	Chief Strategic Planning

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

Name	Designation
Prof Wong Tien Yin	Deputy Group Chief Executive Officer, Research and Education, SingHealth; Vice Dean, Academic & Clinical Development, Duke-NUS Medical School
Prof Patrick Casey	Senior Vice Dean, Research, Duke-NUS Medical School
A/Prof Tan Say Beng	Group Chief Research Officer, SingHealth; Senior Associate Dean, Research, Duke-NUS Medical School

# Faculty Appointments *(As of 31st March 2021)*

## D) Faculty and staff of OBGYN ACP

### I) KK Women's and Children's Hospital

#### A) Division of O&G

Name	Designation
Clin Prof Tan Hak Koon	Chairman & Senior Consultant
Clin Assoc Prof Chern Su Min Bernard	Senior Consultant
Prof Tan Kok Hian	Senior Consultant
Clin Assoc Prof Tee Chee Seng John	Senior Consultant
Dr Tan Kim Teng	Senior Consultant
Lim Boon Heng Bryan	Assistant Director
Ong Phei Hong	Senior Executive
Toh Guat Nee Liam	Senior Executive
Low Siok Eng Fiona	Senior Executive
Lim Teck Wee	Executive
Chan Hong Heng	Medical Laboratory Technologist

#### B) Department of Minimally Invasive Surgery

Name	Designation
Clin Assoc Prof Chern Su Min Bernard	Head & Senior Consultant
Dr Wei Wei Wee-Stekly	Senior Consultant
Dr Lee Jiah Min	Senior Consultant
Dr Michelle Lim Hui Ping	Consultant
Dr Jung Jingjin Jacqueline	Consultant
Dr Hui Yan Yan Celene	Consultant

Name	Designation
Dr Shahul Hameed Mohamed Siraj	Senior Staff Physician
Zhang Yali	Senior Clinical Coordinator
Lim Hwee Theng Irene	Executive

#### C) Department of Gynaecological Oncology

Name	Designation
Dr Wong Wai Loong	Head & Senior Consultant
Clin Assoc Prof Yam Kwai Lam Phillip	Emeritus Consultant
Dr Chin Pui See Janice	Senior Consultant
Dr Ieera Madan Aggarwal	Senior Consultant
Dr Tewani Girish Komal	Senior Consultant
Dr Wang Junjie	Consultant
Dr Felicia Chin Hui Xian	Consultant
Dr Ho Weng Yan	Consultant
Dr Qi Maili	Consultant
Dr Lim Yu Hui	Consultant
Dr Ng Zheng Yuan	Associate Consultant
Dr Ng Qiu Ju	Associate Consultant
Dr Namuduri Ramapadmavathi Devi	Senior Staff Physician
Choo Joo Chin Annie	Senior Executive
Lin Xiao Hui	Senior Clinical Coordinator
Shirley Cheng Li Jiuan	Senior Associate Executive

# Faculty Appointments *(As of 31st March 2021)*

## D) Department of Maternal Fetal Medicine

Name	Designation
Clin Assoc Prof Tan Lay Kok	Head & Senior Consultant
Prof Tan Kok Hian	Senior Consultant Head, Perinatal Audit and Epidemiology Unit
Dr Shephali Tagore	Senior Consultant Director, O&G International Medical Programmes
Dr Tan Vic Khi June	Senior Consultant Head, Obstetric Ultrasound & Prenatal Diagnostic Unit Deputy Director, ADC/AMC
Dr Lai Fon Min	Visiting Consultant Head, Antenatal Risk Assessment Unit
Dr Wright Ann Margaret	Senior Consultant
Dr Ilka Tan	Consultant
Dr Sim Wen Shan	Consultant
Dr Thain Pei Ting Serene	Consultant
Dr Lee Wai Kheong Ryan	Consultant
Dr Ng Yang Fang Grace	Associate Consultant
Dr Foo Anqi Sharon	Associate Consultant
Dr Anju Bhatia	Staff Physician
Dr Lionel Karunamary	Staff Physician
Dr Yeo Tai Wai	Chief Scientific Officer
Liew Sin Yi Cindy	Senior Executive

Name	Designation
Tan Poh Ling Dina	Senior Clinical Coordinator
Norain Bte Kassim	Senior Clinical Coordinator
Christy Cao Yu Hua	Senior Clinical Coordinator
Ng Bee Yen Karina	Clinical Coordinator
Moe Thiha	Clinical Coordinator
Mahadavi Padma Lata	Statistical Officer
Serene Ong Si Min	Associate Executive
Jasmine Lim Wai Mun	Senior Associate
Siti Zubaidah Omar	Associate

## E) Department of O&G

Name	Designation
Dr Suzanna Sulaiman	Head & Senior Consultant Head of Unit, Inpatient Service
Dr Manisha Mathur	Deputy Head & Senior Consultant Head of Unit, Ambulatory Service
Dr Khong Chit Chong	Senior Consultant
Dr Mariamma George	Senior Consultant
Dr Kathirvel Rajeswari	Consultant Head, Urgent O&G Centre
Dr Julian Kang Hean Leng	Consultant
Dr Seet Meei Jiun	Consultant
Dr Kho Chye Lee	Consultant



# Faculty Appointments *(As of 31st March 2021)*

Name	Designation
Dr Sheri Lim Ee-Lin	Consultant
Dr Serena Koh Meiling	Associate Consultant
Dr Yip Swee Lin	Associate Consultant
Dr Geetha Visvalingam	Associate Consultant
Dr Ng Xin Hui Ada	Associate Consultant
Dr Ho Ping Ling	Associate Consultant
Dr Ho Xin Yi	Associate Consultant
Dr Chua Hui Kiang Angeline	Associate Consultant
Dr Samantha Rachel Yeo Mei-E	Associate Consultant
Dr Chuah Theng Theng	Associate Consultant
Dr Sonali Prashant Chonkar	Staff Physician
Dr Boricha Yash Bhanji	Staff Physician
Dr Ni Ni Soe	Senior Staff Registrar
Dr Ami Jay Unarkar	Clinical Associate
Mohamed Yazid Bin Mohamed Abidin	Senior Executive
Sheila Xiong Xi	Executive
Noridahyati Binte Suhaimi	Senior Associate Executive
Trish Koon Hui Ping	Clinical Research Coordinator
Doris Ong Mah Lay	Clinical Research Coordinator
Erica Nuriyah Fadziulah	Clinical Research Coordinator
Lee Pei Sian	Clinical Research Coordinator

## F) Department of Reproductive Medicine

Name	Designation
Dr Sadhana Nadarajah	Head & Senior Consultant
Dr Phoon Wai Leng Jessie	Director, IVF Centre & Senior Consultant
Prof Jerry Chan Kok Yen	Senior Consultant
Dr Viardot-Foucault Veronique Celine	Senior Consultant
Dr Tan Tse Yuen	Consultant
Dr Liu Shuling	Consultant
Dr Chua Ka-Hee	Consultant
Dr Tan Shu Qi	Consultant
Dr Ee Tat Xin	Associate Consultant
Dr Wong Ker Yi	Associate Consultant
Lim Chet Ling	Manager
Ng Xiang Wen	Assistant Manager
Lim Ee Lyn	Senior Executive
Khoo Su Ling, Charmaine Ann	Senior Executive
Hartini Binte Mohamed Senin	Senior Associate Executive

# Faculty Appointments *(As of 31st March 2021)*

## G) Department of Urogynaecology

Name	Designation
Dr Chua Hong Liang	Head & Senior Consultant
Clin Assoc Proc Han How Chuan	Senior Consultant
Dr Kazila Bhutia	Consultant
Dr Huang Youjin Eugene	Consultant
Dr Jill Lee Cheng Sim	Consultant
Dr Kadam Pratima Datta	Senior Staff Registrar
Dr Priyanka Singh	Senior Staff Registrar
Dr Li Xinyi	Associate Consultant
Wong Ah Chun Judy	Senior Executive
Peh Sin Ee Jolene	Clinical Coordinator
Tong Kim Feng Cheryl	Senior Patient Service Associate

## H) Department of Menopause

Name	Designation
Dr Ang Seng Bin	Head & Consultant
Dr Rukshini Puvanendran	Senior Consultant
Dr Lee Mi Li Jean Jasmin	Associate Consultant
Dr Lu Hualong	Staff Registrar
Tan Siao Ling Catherine	Senior Secretary

## II) Singapore General Hospital

### Department of O&G

Name	Designation
Clin Assoc Prof Yong Tze Tein	Head & Senior Consultant
Clin Prof Ho Tew Hong	Emeritus Consultant
Clin Prof Ng Sen Ark Charles	Emeritus Consultant
Clin Prof Tan Hak Koon	Senior Consultant
Clin Assoc Prof Yu Su Ling	Senior Consultant
Clin Prof Tay Sun Kuie	Senior Consultant
Clin Assoc Prof Devendra Kanagalingam	Senior Consultant
Dr Tan Wei Ching	Senior Consultant
Dr Hemashree Rajesh	Senior Consultant
Dr Jason Lim Shau Khng	Senior Consultant
Dr Ravichandran Nadarajah	Consultant
Dr Lim Liqing Serene	Consultant
Dr Yang Liying	Consultant
Dr Andy Tan Wei Keat	Consultant
Dr Lee Wai Yen	Associate Consultant
Liam Lay Peng Christine	Senior Secretary
Geetha D/O Arumuga Vandayar	Senior Associate Executive
Perrie Saw Siew Hong	Senior Associate



## E) Residency Cohort

### I) Senior Residency, Year 6 (2012 Intake)

S/N	Name
1	Dr Abdul Rahman Muhammad Fairuz – SSR
2	Dr Wan Kai Jing – SSR

### II) Senior Residency, Year 6 (2013 Intake)

S/N	Name
1	Dr Tan Wan Chin Julia – SSR

### III) Senior Residency, Year 6 (2014 Intake)

S/N	Name
1	Dr Goh Shu Ying Charissa – SSR
2	Dr Goh Siak Ming – SSR
3	Dr Ku Chee Wai – SSR
4	Dr Lee Jia Yi – SSR
5	Dr Loh Jia Min Michelle – SSR
6	Dr Ng Qiu Ju – SSR
7	Dr Shivani Durai – SSR
8	Dr Tong Carmen – SSR

### IV) Senior Residency, Year 6 (2013 Intake)

S/N	Name
1	Dr Mok Zhun Wei

### V) Senior Residency, Year 6 (2015 Intake)

S/N	Name
1	Dr Stella Rizalina Sasha
2	Dr Liu Jiayi
3	Dr Pamela Sandriany Partana
4	Dr Poo Zi Xi

### VI) Senior Residency, Year 6 (2016 Intake)

S/N	Name
1	Dr Smita Jindal

### VII) Senior Residency, Year 5 (2015 Intake)

S/N	Name
1	Dr Kwek Lee Koon

### VIII) Senior Residency, Year 5 (2016 Intake)

S/N	Name
1	Dr Cheong Pei Shan Cassandra
2	Dr Dhilshad Bte Muhd Abdul Qadir
3	Dr He Song
4	Dr Lim Poh Ting
5	Dr Wang Wanxuan
6	Dr Yong Xiaoqi

# Faculty Appointments *(As of 31st March 2021)*

## IX) Junior Residency, Year 4 (2015 Intake)

S/N	Name
1	Dr Ng Yifan
2	Dr Han You Xiang Jonathan

## X) Junior Residency, Year 4 (2016 Intake)

S/N	Name
1	Dr Li Mingyue
2	Dr Siew Jia Yun Shayna

## XI) Junior Residency, Year 4 (2017 Intake)

S/N	Name
1	Dr Lau Chang Qi Hester
2	Dr Lee Shi Hui
3	Dr Tan Yin Ru
4	Dr Wong Wan Yu Yvonne

## XII) Junior Residency, Year 3 (2018 Intake)

S/N	Name
1	Dr Chun Phoy Cheng Rachel
2	Dr Koh Miao Lin Krystal
3	Dr Lim Shu Hui
4	Dr Tang Toon Wen
5	Dr Tang Yafang
6	Dr Wong Tuck Chin Tiffany

## XIII) Junior Residency, Year 2 (2017 Intake)

S/N	Name
1	Dr Chia Bin Kai

## XIV) Junior Residency, Year 2 (2019 Intake)

S/N	Name
1	Dr Cheah Hui Shi Grace
2	Dr Chin Hui Men Selina
3	Dr Chua Zu'Er Amelia
4	Dr Kwek E-Jyn Michelle
5	Dr Ng Yan Shun
6	Dr Quak Wen Yu

## XV) Junior Residency, Year 1 (2020 Intake)

S/N	Name
1	Dr Chua Shi Qi Monica
2	Dr Lim Wei Che@Santi
3	Dr Lui Kai Jie Mark
4	Dr Onn Pei Pei
5	Dr Tan Ying Hao
6	Dr Teong Chuin Ai Aimee
7	Dr Yen Yu Ting Desiree

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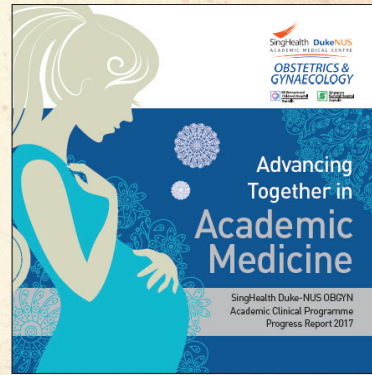
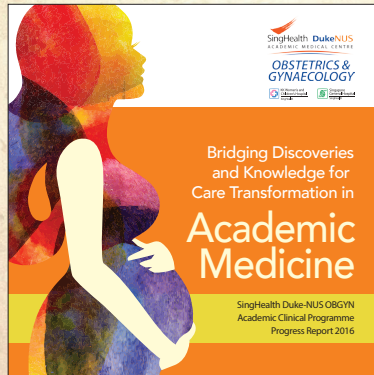


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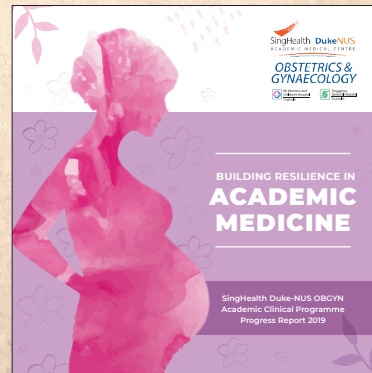
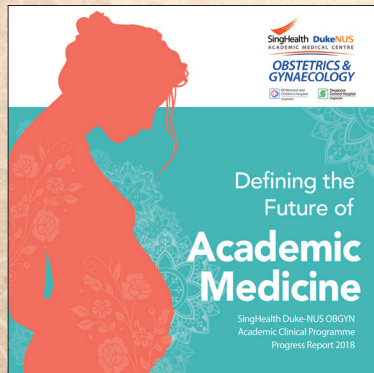


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Information correct as of 31 Dec 2021