# SMA news

For Doctors, For Patients

VOL. 53 NO. 12 | DECEMBER 2021 | MCI (P) 077/12/2021


# MEDICAL EVACUATION TO THE RESCUE


Highs and Realities of **Air Medical Transport**

Taking the Next Step with **Health Connective**

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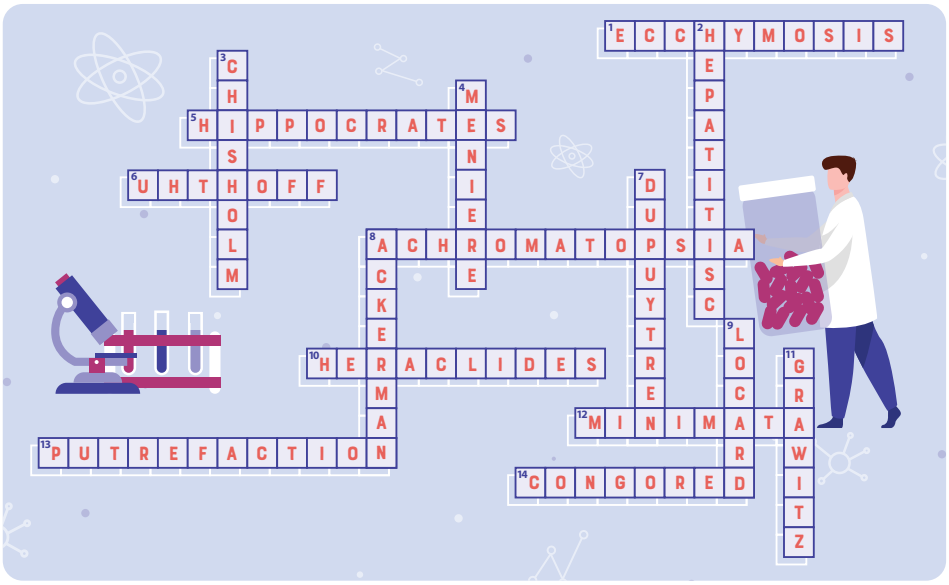

# The EDITOR'S MUSINGS


## Dr Tina Tan

*Editor*

Dr Tan is a psychiatrist with the Better Life Psychological Medicine Clinic, and a visiting consultant at the Institute of Mental Health. She is also an alumnus of Duke-NUS Medical School. Between work and family life, she squeezes time out for her favourite pastimes – reading a good (fiction) book and writing.



## Dr Lim Ing Haan

*Guest Editor*

Dr Lim is the first female interventional cardiologist in Singapore. She is an early adopter of new technology and is a key opinion leader in international cardiology conferences. She shares a clinic with her twin sister, an ENT surgeon in Mount Elizabeth Hospital. Travel, fine food, family love and friendships are the things that keep her going.


This issue of *SMA News* isn't as light as it ought to be, considering it is December. But then, it is because we have a lot to share with you – our readers. We feature articles on medical evacuation, which was especially important in the earlier days of the pandemic and continues to be a crucial part of ensuring that the sick get the medical treatment they need.

We also feature this year's Honorary Members and Merit Award recipients, all of whom are, in my humble opinion, deserving of the recognition they have received.

In addition, I wish to highlight the Health Connective initiative, supported by SMA, intended to provide a collaborative platform between doctors and insurers. Healthcare insurance will no doubt continue to be a prickly issue that needs to be addressed; SMA hopes that by supporting this initiative, there will come a sustainable and feasible resolution of some of the pre-existing challenges.

The month of December is typically meant for unwinding. After all, it is the end of the year, albeit a whirlwind one. Just when we thought life would carry on, the Omicron variant comes along like one of those sneaky Loki variants. Only time will tell how that will pan out in the grand scheme of things. In the meantime, stay safe and carry on.

Another year has passed by, interspersed with Phase 2 and Phase 3 Heightened Alert without the drama of the lockdowns. The eerie silence and sparse traffic on the roads in April 2020 were somewhat gut-wrenching to experience. When I was the lone runner on the roads, I wondered whether I was witnessing the end of the world. Fast forward to 2021, we now enjoy more than the usual traffic. Innumerable cyclists compete with the usual road users, chasing buses and sometimes illegally trying their luck on the expressways, prompting a slew of new road safety signs. The ubiquitous green of Grab delivery has also blended into our subconscious.

I downloaded Checkpoint.sg in March 2020. Initially, it was to check if we may run out of fresh eggs and vegetables, then it was with sadness as I saw the empty roads. 29 November 2021 finally marked the day the Singapore-Malaysia Vaccinated Travel Lane (VTL) opened after much delay, though tragically too late for some. Separation from loved ones in the pandemic is something constantly replayed.

Air VTLs were established earlier than our land VTL. Overnight, polymerase chain reaction tests became the passport for travel. The dizzying rate of changes to VTLs and Stay-Home Notices was not for the faint-hearted. The mere mention of travel bubbles became a taboo. Students studying in the UK fared slightly better than those in Australia. I sincerely applaud the decisiveness of students who chose to transfer.

The buzzword in 2021 is "living with COVID-19". The nightclub and karaoke lounge saga was Singapore's ignoramus lesson in social reopening, threatening our pristine image on the world stage. We survived the Tan Tock Seng Hospital, Mandarin Hotel, Jurong Fishery, and horrors of all, the bus interchange clusters. Our vaccination drive has been a success. While healthcare workers are still mandated to undergo twice weekly nasal antigen rapid tests, the Ministry of Defence has already been using saliva tests since May 2021. This is, however, a topic for another day.

I hope 2021 is a year of transition to a better world. Just as how the 2021 United Nations Climate Change Conference provided a structure to protect and restore ecosystems, the pandemic produced a hybrid work model and shared economy that hopefully invokes a healthier lifestyle. See you all next year! ◆

# CARE IN THE AIR:

## The Highs and Realities of Air Medical Transport

Text and photos by Dr Charles Johnson

Medical evacuation (medevac) is the long-distance transfer of patients between medical facilities or from non-medical facilities, such as homes, to hospitals and vice versa. In Singapore's context, all medevacs (other than local military helicopter casualty evacuations) are international. Medevacs can be grouped into evacuation (ie, the emergency or urgent transfer of a patient to a higher level or more appropriate medical facility), or repatriation, which is the planned (less time-sensitive) return of a patient to his/her home country (with medical support provided en route).

### A short history of the air ambulance

The use of air as a means of casualty evacuation is a story that grew out of war and misery. In the late 1800s, hot air balloons were used to evacuate injured soldiers from the battlefields of the Crimean War and the Siege of Paris. In World War I, stretchers were strapped to the fuselage or wing bases of biplanes as the world's first air ambulances. Patients were exposed to the elements in what could only be described as the ride of their lives. No patient access or medical care could be provided during flight.

World War II saw the use of air ambulances on a larger scale as combatants with previously non-survivable war injuries were evacuated to field hospitals and away from the front lines for life- and limb-saving surgery. It is from here that air ambulance growth truly took off.

The Korean and Vietnam Wars of the 1950s and 1960s cemented the use of helicopters as a means of rapid casualty extrication from the field to definitive care. In the late 1970s, civilian helicopter emergency medical services (EMS) and flying doctor-type services started, giving reality to the concept of the golden hour in major trauma and hope in medical emergencies even in remote or difficult-to-access communities.

### Singapore's air ambulance operations

Singapore has established itself as a leading tertiary medical hub and thus is a frequent destination for critically ill patients or those with complex medical issues within the region. As such, Singapore is a base for fixed wing international air ambulance operations. As the distances covered are great and flight times long, only jets are utilised for air ambulance operations in Singapore.

In the context of our small country, helicopter search and rescue operations and EMS are only operated by the military. Our air force accepts civilian requests for assistance for medical emergencies on ships on a case-by-case basis.

An air ambulance also means multiple transfers, involving a ground transfer to airport, aircraft loading, the flight itself and another road trip to the receiving hospital. All this needs to be coordinated well.

### What is a jet air ambulance?

This is a small private jet that has been extensively modified to fit the role of a flying ambulance and critical care facility. The range of such an aircraft is about 3,000 km. This translates to about five hours flying time. The air ambulance flies at the same speed as a commercial airliner. All ASEAN countries are thus within reach of non-stop air ambulance. Anything further afield will require refuelling stops. The furthest I have personally flown in an air ambulance is from South America to Singapore – a total of five refuelling stops and 32 hours in a small aircraft. Quite an adventure…

#### Who and what is inside an air ambulance?

The air ambulance is usually crewed by four people, comprising a pilot, co-pilot and medical team (a flight physician and nurse or paramedic). The crew work closely together, with pilots aiding in stretcher loading and the medical team helping to make coffee or serve meals to weary pilots. Camaraderie and teamwork are a must.

The aircraft will usually have the following equipment:

- One or two stretcher bays (ie, up to two patients)


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- A stretcher loading system
- Oxygen (sufficient for the entire case and buffer)
- Multi-parameter monitoring
- All manner of intravenous fluids with the exception of blood products (due to international health regulations)
- Advanced cardiac life support and intensive care unit (ICU) drugs with syringes/infusion pumps
- Airway management supplies and ventilator
- Trauma supplies
- Defibrillator and pacing
- Extended point of care diagnostics like ultrasound and 12-lead ECG

There will also be two additional seats for accompanying family members (they will be watching all that goes on), additional equipment or crew. Space on an air ambulance is treasured, so all nooks and crannies tend to be filled with equipment, stores, food and more. There is a small lavatory at the aircraft rear, especially important for the longer flights.

**When is an air ambulance activated?**

1. When the country or present medical facility cannot support with the expertise or level of care required for a critically ill patient.
2. When a critically ill patient in a foreign country has to return to his/her home country (generally as a repatriation for continued, supportive or palliative care).
3. Patient or family requests for second opinion care (usually private cases).
4. In special circumstances such as political instability, natural or manmade disasters, and recently, pandemics.

## Physiology (and physics) when flying

The pressure in the atmosphere decreases with altitude. Most aircraft cabins are pressurised to about 5,000 to 10,000 feet altitude, with a corresponding drop in oxygen partial pressure. The percentage of oxygen is actually the same (21%) at all altitudes; however, it is 21% of a smaller number as one goes higher. The barometric pressure at sea level is 760 mmHg, while at 10,000 feet, it is 534 mmHg. Breathing cabin air may thus be equivalent to breathing air with only 15% oxygen at sea level, instead of 21%. The net result is that there is 29% less oxygen in the cabin air compared with at sea level. On a pulse oximeter, this can mean about a 5% drop in oxygen saturation (sats), not significant for normal lungs but critical for patients with baseline low sats, where the drop pushes values into the steep part of the oxygen dissociation curve. This translates into decreased oxygen carriage and tissue hypoxia. This is one of the main reasons one tends to feel fatigue after a long flight. Supplemental oxygen or even assisted ventilation may thus be essential to prevent patients tipping into hypoxemic respiratory failure.

In addition, Boyle's Law (*remember physics back in school?*) applies such that as you ascend in altitude (or to the surface if diving), gas expands to a greater volume due to decreased pressure exerted on it. This is clinically important for patients to consider as gas in the chest (pneumothorax), skull (pneumocephalus due to a fracture in the base of the skull), middle ear, gastrointestinal tract (closed loop intestinal obstruction) or other places can expand and result in decompensation or tissue injury.

Aircraft cabins have low humidity, so adequate hydration for patients (and crew) is required. This, together with the limited mobility of patients result in true increased risks for deep vein thrombosis (DVT) and the dreaded pulmonary embolism. Pre-flight DVT prophylaxis with low molecular weight heparin may be required for at-risk patients.

In cases of patients with recent dive history, decompression illness or closed air spaces within the body, we may request for the air ambulance to fly at sea-level pressurisation. This however, means flying at a lower altitude, slower speeds and with a greater fuel burn, resulting in a shortened range.

## Costs of an air ambulance

The cost of jet air ambulance operations can range between S$5,000 and S$7,000 per hour, not including airport fees and other miscellaneous expenses. As flights are calculated two ways, you can see how the costs quickly add up. So, it is important to have adequate travel insurance when you travel.

Also, do remember that most travel insurance policies do not cover pre-existing illnesses or complications related to it. Neither do they cover self-folly (like falling when drunk) or certain higher risk activities (eg, diving or rock climbing). Read the fine print when buying a travel policy and if unsure, seek clarification.

Additionally, do not expect that just because you have travel insurance, there would be a team waiting to rescue you in times of need. Insurance companies will require detailed medical information (which may be difficult to obtain due to language and other barriers) and even upon activation, aircraft operations require landing permits, country authorisations and more. It can take days to rescue a patient from a remote medical facility. The pandemic, with its border closures and quarantine restrictions, has made this process even more challenging.

Finally, every private jet flight emits significant greenhouse gases way up in the atmosphere, where they do the most harm. As such, I always review the clinical or operational indications for an air ambulance, and where alternatives such as commercial flights are safe and viable, these should be offered. Expenses are not just in dollars.

## What information is needed to activate a medevac?

In order to start the process of planning an evacuation, we require:

- Medical details and clinical information (in the form of a report or through communication with the treating physician, etc). The more detailed the better, but realistically we often work with scant or inaccurate information so as not to delay evacuation and compromise care.

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- Location of patient and contact details to communicate with the patient or companion at the scene.
- Passport details of the patient and companion (if any).
- Details of receiving medical facility/ accepting physician (we can assist if requested).
- How medevac will be financed (ie, private, insurance or corporate payment).

## Other modes of international medevac

In addition to air ambulance, patients can also be transferred on commercial flights (subject to airline and local authority approvals) on a stretcher or seated (with wheelchair assistance). Infusions, oxygen and even ventilators can be used in such transfers. The main advantages of commercial flight medevacs are the significantly lower costs (no private jets involved) and ability to fly further (eg, Singapore to Europe) without refuelling stops. However, commercial flight transfers require about a week to plan and approve and are usually reserved for clinically stable patients.

We also do medevacs by road (advanced life support or ICU ambulance) up north to Malaysia (and even Thailand) and occasionally do sea ambulance responses. Sea ambulance will generally be from Indonesian or Malaysian islands or even from ships at sea.

## Special medevac operations

### Infectious disease medevacs

We developed the capacity and capability to transfer infectious disease patients after SARS about 18 years ago. Patient containment and isolation systems were acquired after the Ebola epidemic, but it was only with COVID-19 that we finally operationalised what we had long prepared for. I have since transferred several dozen COVID-19 patients to and from various countries in Asia, and our team has evacuated them by air, land and sea ambulance.

Incidentally, the air inside an air ambulance and commercial aircraft is completely expelled and fresh air taken in every few minutes during flight. It is not recirculated like in an enclosed room. As such, the real risks of picking up an airborne infectious disease is probably significantly higher at the airport than in the actual aircraft.

### Complicated cases

We have also done medevacs for patients on extracorporeal membrane oxygenation and intra-aortic balloon pumps, and multiple casualty medevacs. This is usually for situations like post-natural disasters or terrorist incidents. I leave neonatal and infant transfers to my esteemed paediatric colleagues from KK Women's and Children's Hospital and the National University Hospital.

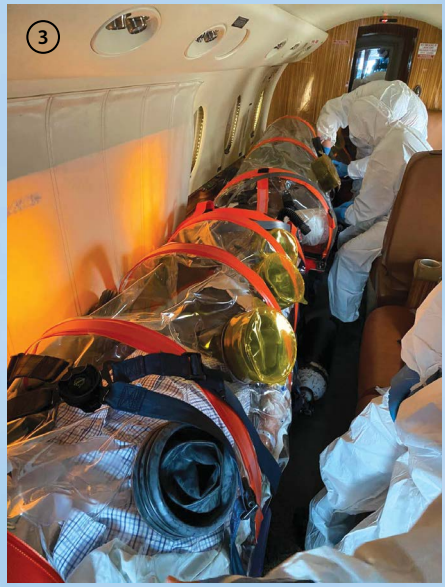
The complexity of a medevac case may not depend on just the clinical condition. Other challenges we have faced include:

- Patients losing or having their travel documents stolen
- Officials demanding bribes
- The clinical status of the patient deteriorating before help arrives
- Cultural, religious or family disputes or differences arising
- Rough weather, technical issues delaying flights or requiring unscheduled stops
- Language and communication barriers
- Flight or medical crew falling ill (and still having to get the job done)

## The challenges, highs and lows of doing medevacs

As a medevac physician, no two cases or days are the same. I like waking up not knowing how the day may end. Medevac is not just about the actual delivery of care in the air – there is a lot that goes on in the back end in terms of operational planning, coordination and logistics support. Everyone works in a closely knit team – almost a family I would say.

I have been doing medevacs as an escort physician for the past 20-odd years, initially as a young locum doing flights on my off days while working in a hospital and now running our own private medevac operations. Over the years, I have learnt the ins and outs of clinical care in challenging




environments while dealing with the nuances and realities of working with different healthcare systems, practices and boundaries. The fast-paced work and uncertainty is an adrenaline rush. Travelling to off-the-beaten-track locations lends a twinkle to my eye, and the chance to help heal with compassion warms my heart.

In summary, medevacs are about the start of a journey to heal. We cannot always cure but we always offer hope. Kindness counts. ◆

***Legend***

*1. Air ambulance (Learjet 45) at Hanoi airport, awaiting patient loading*

*2. Sea ambulances can travel at 30 knots and access international waters*

*3. Inside an air ambulance with two COVID-19 patients on their way back to Singapore for continued care*

Dr Johnson is an emergency physician and medical director of Hope Medical Services. In 2005, he helped establish Hope Medical Services, delivering private pre-hospital services in basic and advanced life support care on land, air and sea. Since the onset of COVID-19, his focus has been on the challenges of transferring pandemic patients internationally.

# The Ripple Effect of Change

Text and photo by Dr Tan Yia Swam

Life has been surreal. The accompanying photograph in this article was taken on 26 January 2020. It was the second day of the Lunar New Year, and an emergency meeting had been called to discuss the detection of COVID-19 cases in Singapore and the supportive measures to be rolled out.

## Family and friends

Just like that, 23 months have gone by. My youngest child grew from a toddler to a small boy. My eldest, from a big boy to a pre-teen. I crossed the big 4-0 quietly, without the big celebration I would have wanted. It has been more than two years since my move to private practice and I am entering my second year as President of the SMA. The river of life and time is flowing fast, and I have seemingly been swept along…

This period has been eventful. I have kept a list of all the stressful events that have happened, and will probably need to see a therapist someday, when I can find the time to. In the meantime, sporadic meetings with friends will have to suffice!

If nothing else, physical isolation has taught me one thing: no man is an island. *No woman either, for that matter*. Family and friends have sustained me through this period. Staying strong for our loved ones – whether it is our spouse, parents or kids (or furkids!). Talking to friends, listening to each other's woes, sharing in their grief and triumphs. Friends who share on their Facebook pages or who privately updated me on their personal illnesses, deaths in the families and relationship problems. Friends who share funny stories, insights or memes that make me LOL (laugh out loud) in the middle of work. These little connections mean so much to me.

My healthcare family must include the SMA Council – while some members have come and gone, we have all somewhat kept in touch over the past 16 years! The newer extended family would include the Multilateral Healthcare Insurance Committee (MHIC) as well. Just like any family, there are cliques, some disagreements, and so many different personalities in the mix. Imagine a large family, with in-laws, cousins twice removed, relatives in their second marriages, etc. It is complex – people may have their differences, but one thing we all have in common is the desire to put patients first.

## Advocacy and self-governance

It was after much discussion and deliberation within the SMA Council that we published the Position Statement on "Troubled Integrated Shield Plans" on 25 March 2021.[1] This required courage and unity. Council members shared their concerns and fears of repercussion, yet many put forth the need and indications to take a stand – for doctors and for patients.

This Position Statement triggered its own small tidal wave of change which resulted in the appointment of the MHIC[2] with representatives from the Academy of Medicine, Singapore, Consumers Association of Singapore, Fee Benchmarks Advisory Committee, Life Insurance Association, private hospitals and SMA, of course.

Since its inception on 27 April 2021, the MHIC has been having much needed discussions on issues affecting the entire healthcare ecosystem – issues impacting healthcare cost, patient autonomy and professional practices.

Meetings were held monthly, mostly via Zoom – it is no easy feat to coordinate the schedules for over 20 busy people, and additional sub-committee meetings were held almost on a weekly basis. I thank Deputy Secretary (Policy) Ms Ngiam Siew Ying for her leadership in chairing a diverse group and getting strongly opinionated leaders of the profession to come to the table to wade through pain points, agree on important targets and come to an equitable proposal.

Some important decisions have been made, with a key one being the formation of a Clinical Claims Resolution Process, announced on 9 November.[3]

I am glad that SMA has had a hand in bringing about these changes. I have always held that SMA can make a difference when we lobby appropriately, for the right cause. While platforms like Facebook, WhatsApp and Change.org seem to be convenient vehicles to raise a ruckus and gain a following, might does not make right. I urge readers to look through previous issues of *SMA News* to better understand the complexity of healthcare financing, and resist asking for a simple one-dimensional solution.

With the Ministry of Health-led announcement of a fairer system for patients, the SMA is following through the momentum by taking a big, practical step to help support the much-needed transformation in the healthcare ecosystem.

## Health Connective: a real-life solution

Health Connective is a collaborative effort of three technology partners in the healthcare space – Smarter Health, Assurance Technology and Health Catalyst – to provide a unified platform to improve the efficiency and effectiveness of the interactions between the key stakeholders in the healthcare ecosystem. SMA supports this initiative.

One oft-heard complaint by doctors and insurers is that "There is too much paperwork!", followed by "This increases time and costs!" and "There's no transparency!" Having a single platform for all users – patient, doctor, hospital and insurer – to communicate effectively will greatly reduce this element.

In this issue, we will outline some of our aspirations for Health Connective (see page 14). You have a part to play as well. It was Barack Obama who said, "Change will not come if we wait for some other person or some other time. We are the ones we've been waiting for. We are the change that we seek."

I hope you will join me and be part of that change. ◆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Dr Tan is a mother to three kids, wife to a surgeon; a daughter and a daughter-in-law. She trained as a general surgeon, and entered private practice in mid 2019, focusing on breast surgery. She treasures her friends and wishes to have more time for her diverse interests: cooking, eating, music, drawing, writing, photography and comedy.


# HIGHLIGHTS

## From the Honorary Secretary

Report by Dr Ng Chew Lip

### SMC's clarification regarding CME points

SMA recently wrote to the Singapore Medical Council (SMC) suggesting an extension of the Continuing Medical Education (CME) cap for Category 3A (raised from 10 to 20 points) and to award core points for COVID-19-related CME activities for another CME cycle.

In response, SMC has clarified that for doctors whose Practising Certificates are expiring in December 2022:

(a) CME activities related to COVID-19 will continue to be considered core points for all doctors as requested by SMA, given that acquiring the latest knowledge on COVID-19 is important for all medical practitioners.

(b) The cap for Category 3A however will revert to 10 points.

We thank SMC for the above clarification.

### Healthcare Services Act – updates on implementation

The Ministry of Health (MOH) has issued a circular (No. 162/2021) highlighting that the implementation of Phase 2 and 3 of the Healthcare Services Act (HCSA) will be deferred to the end of 2022 and end of 2023, respectively.

Please refer to the MOH circular at https://bit.ly/3D8kNbV for more details.

Some Members have enquired if there has been a change in the vaccination exemption for measles. Please refer to the MOH FAQ on the Healthcare Services (General) Regulations at https://bit.ly/3krbKfb, specifically Q37. There is no change to what was announced previously.

> *"37. We understand that there are exemptions whereby certain age groups need not be vaccinated. Who is exempted/not exempted? Why are there such age-group exemptions?*
>
> - *Healthcare workers who do not have evidence of immunity against measles will have to be vaccinated against measles. The exception is if they are Singaporeans or Permanent Residents (PRs) born in Singapore before 1 January 1975. Serological studies have shown that there is a high level of immunity against measles (~100%) in these cohorts.*
> - *There is no age-group exemption for the diphtheria vaccination requirement. All workers in healthcare who do not have evidence of immunity against diphtheria will have to be vaccinated against diphtheria.*

For further queries on HCSA, please contact MOH at HCSA_Enquiries@moh.gov.sg.

Dr Ng is an ENT consultant in public service. After a day of doctoring and cajoling the kids at home to finish their food, his idea of relaxation is watching a drama serial with his lovely wife and occasionally throwing some paint on a canvas.

### Clinical Claims Resolution Process established

From 9 November 2021, a Clinical Claims Resolution Process (CCRP) has been established to resolve claim disputes of a clinical nature between private Integrated Shield Plan (IP) policyholders, IP insurers, medical practitioners and medical institutions. IP insurers are also expanding their panels to include a wider pool of specialist doctors by end 2021.

More details can be found at https://bit.ly/3CacOd3.

Specifically, the objective of the CCRP is to address clinical-related IP disputes, leveraging the expertise of Academy of Medicine, Singapore specialists and medical directors of the IP insurers. SMA runs a Complaints Committee (CC) which may handle one-off, less complex IP cases raised by medical practitioners which do not meet the "three incidents trend threshold", as well as complaints raised by patients against medical practitioners.

Further information on the scope of SMA CC is available at https://www.sma.org.sg/feedback.

As a member of the Multilateral Healthcare Insurance Committee (MHIC), SMA participated in multiple meetings with the other stakeholders in the past six months. There have been many honest discussions and debates on the various problems. We are glad that some progress has been made, and believe that the CCRP will be an avenue for fairness. We also welcome the expansion of the number of doctors on panels. SMA will continue to monitor and seek feedback from our Members as we believe that all patients should have open access to the doctors of their choice, without undue financial pressures from their IPs. In the remaining two-year term of SMA's MHIC appointment, we will continue to work together to ensure fairness for doctors, and for patients. ◆

# SMACF FUNDRAISING APPEAL 2021

## A call for donations for medical students in need

**RECEIVE A COMPLIMENTARY COLLAPSIBLE CAR SUNSHADE WITH A DONATION OF S$100 OR MORE**

**Available in 5 different designs!**

*Designs will be allocated at random*

Scan to find out more

# More Than Just Giving

## Supporting Tomorrow's Doctors Today

Text by Ronnie Cheok,
Assistant Manager, SMA Charity Fund

Since the inception of the SMA Charity Fund (SMACF) in 2013, we have been blessed by the support of many loyal donors who unfailingly give to our cause without fanfare or publicity.

To these loyal supporters, donating is so much more than just giving. It is a calling to support medical students who aspire to serve in the profession but are in need of a helping hand to tide them through their financial challenges, especially amid this turbulent economic environment.

Not all heroes wear capes, and as the saying goes, we share with you two unique fundraising initiatives by doctors who shared their passion for food through their creative ideas.

### How To Eat

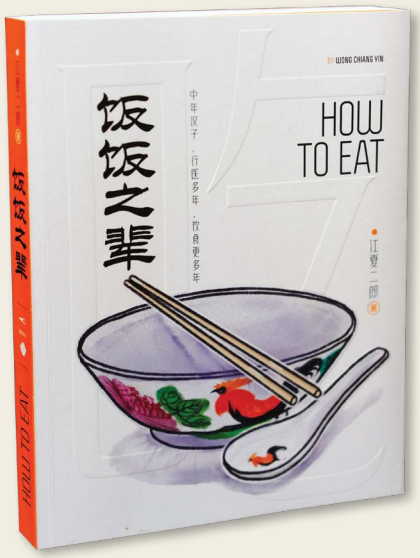
"The quintessential food guide for serious foodies" is how I would describe this wonderful book by SMACF Board Member Dr Wong Chiang Yin, a Singapore born and bred Cantonese boy – as he describes himself in the book.

On what inspired him to celebrate the launch of the book by raising funds for SMACF through book sales, Dr Wong shared that "the SMACF is something very close to my heart. It was during my stint as President of SMA that I felt SMA should get into the charity sector, mainly by looking after our own medical students who may find it difficult to cope with living expenses."

Why pick SMACF as a beneficiary? Dr Wong shared a bit of his own personal experience: "I was a recipient of financial assistance from the Lee Foundation when my father passed away in my second year of medical school. The Foundation paid half my tuition fees from Year 3 to 5 and I am always grateful to them for this."

Through this initiative, Dr Wong hopes to inspire medical students to look out for and give generously to those in need among us, especially when they become doctors themselves.

Dr Wong shared that the most enjoyable part of the initiative was "when you see the strong support your friends and colleagues show you by ordering the book. The book's first print of 3,000 copies sold out in about two months and it is now into its second print."




Finally, Dr Wong appeals to readers: "The SMACF needs to raise at least $250,000 a year to keep things going, so please continue to support SMACF by giving generously and/or buying *How to Eat*."

Dr Wong has a final piece of advice for us foodies. "Never get fat on bad food!"

The way to a man's heart is through his stomach, and our next story certainly seems to shed some light into this age-old adage.

## A very special bowl of wonton noodles

"The project was a curious coincidence between two events," quipped Dr Khoo Bee Sim, doctor, chef and architect of this amazing fundraiser.

Dr Khoo elaborated: "The first was the launch of Dr Wong Chiang Yin's book, within which he described how he sought advice on how to cook barbequed pork, or char siu. The second was a candid conversation between a couple of close friends over some bowls of home-cooked char siu noodles; that conversation, where we jokingly suggested that we'd open a noodle shop, planted the seed of the idea that eventually became the project."

On the campaign and its subsequent reaction, Dr Khoo shared that "it was a means of raising good money, through the honest endeavour of cooking food for people who love to eat. And the reaction was fantastic! I don't think we felt burdened to adhere to a particular vision or theme – we just wanted to cook noodles and raise money. Thanks to a host of very active Facebook friends, I was a little overwhelmed by the amount of orders, but I think 650 bowls later, I can comfortably say we accomplished what we set out to do."

Dr Khoo had this to say about choosing SMACF as a beneficiary: "I think on a personal level the SMACF was the natural place to start as a beneficiary. My husband is a part of SMA and has been so for many years. I also have friends in the SMA. So to me, I understood their values and the good work they've put in for the medical community, and I've always felt a close personal connection to those involved in it. Given these pandemic times, medical school students face the dual pressure of studying for themselves and being put into a system where they become frontline defenders of our healthcare system. There is nothing more heart-breaking than a willing medical student whose only barrier to achieving personal success is the lingering background stresses of having to work part-time just to pay his/her way through medical school. And so we thought – if we could make a difference for that one student, that would be time well spent."

On the most enjoyable part of the campaign, Dr Khoo quipped: "I think there were two parts. On an external front, this project was a quirky way to reconnect with friends I hadn't spoken to in a long while. I was humbled and touched by the friends who made their way from all over Singapore to pick up the food, as well as helped deliver to other friends and coordinate orders. However, as a mother of two growing boys, my favourite part of the process was spending time with them. Now that they are in or completing university, I realised I never found a good time to teach them how to cook their favourite dishes. I'm just grateful that we got this moment to look back on, years down the road when they've all grown up, graduated and forged their own paths."

In conclusion, Dr Khoo had this advice to share with all readers: "Try to give your best at whatever you do, even if it's just a bowl of wonton noodles."

## Being part of the cause

Every year since our inception, we receive a deluge of applications from medical students seeking financial assistance in order to tide them through their years in medical school. Their stories are heartfelt and their pleas desperate. We at SMACF seek to fulfil every appeal from these students but as in all things financial, we are limited by the funds we can raise.

We have been supporting needy medical students for the last eight years and many of them have graduated and contributed significantly by living up to the ethos of curing sometimes, healing often and comforting always. You can support us by initiating fundraisers such as those by Dr Wong and Dr Khoo or by donating to our SMACF Fundraising Appeal 2021 campaign. ◆

Scan the QR code below or visit https://bit.ly/SMACFAppeal2021 to donate today.

# Taking the Next Step with Health Connective

Text by Dr Lee Hong Huei and Dr Tan Yia Swam

The SMA 61st Council Position Statement on Troubled Integrated Shield Plans (IPs)[1] ("Position Statement"), issued on 25 March 2021, triggered a cascade of events which led to the formation of a 12-member Multilateral Healthcare Insurance Committee (MHIC) on 14 April 2021 "*to provide a platform for healthcare providers, payors, consumer representatives and the Government to collaboratively address issues related to health insurance*".[2] The MHIC's appointment came into effect on 27 April 2021.

Many have hailed this as a major step in the right direction of improving the communication, consensus building and coordination of efforts between key stakeholders in addressing long-standing issues. However, judging by the complexity of the issues that need to be tackled, it is important to recognise that it will be a herculean effort to reform decades-old practices which have accumulated partly due to the inability of the profession to engage effectively in discussions pertaining to the "*business* of medicine". In a sense, the negative impact on the "*practice* of medicine" has reached a stage where we can no longer afford to ignore it.

## Some initial thoughts: the garlic and the onion

The current healthcare ecosystem is like a head of garlic – each stakeholder (insurers, doctors and healthcare facilities) is a standalone "clove". There are very little well-thought-out coordinating processes that are targeted at optimising the entire ecosystem. Over the years, individual stakeholder efforts to optimise their respective sub-components have in fact resulted in sub-optimisation of the entire healthcare ecosystem. The healthcare ecosystem "garlic" is, well, "pungent" (and some might say "repugnant"!). The Position Statement highlighted some of these viz. highly exclusive panels with non-transparent selection criteria and non-acquiescence with established fee benchmarks. These practices have a direct and significant impact on patient autonomy as well as untoward influence on the practice of medicine by doctors, which would ultimately impact the quality of care.

It is time for us to transform into an "onion" – a well-defined core with well-designed "layers" built around the core which gives the onion a sustainable and stable structure. With proper and thoughtful handling, the onion is tantalisingly aromatic and flavourful.

The "core" is really a *simplified*, *standardised* and *systemised* platform that facilitates the *efficient* and *effective* interaction between all stakeholders of the healthcare ecosystem. This will allow individual stakeholders to add on the respective "layers" they need to achieve their individual organisation's goal.

SMA recognises that beyond raising the issues through the Position Statement, we need to demonstrate our commitment to finding efficient and effective solutions. It is with this in mind that SMA has made a decision to support "Health Connective" – a collaborative effort of three technology service providers: Smarter Health, Assurance Technology and Health Catalyst. This solution neither requires SMA to contribute to the cost of development and operations of Health Connective, nor partake in any potential commercial arrangements.

## Enabling connections

As the name suggests, the primary goal of this initiative is to provide "connections". As a start, Health Connective intends to provide a technology platform to consolidate information pertaining to all doctors (especially those in the private sector). This consolidated directory of doctors will be the basis for *group representation* in discussions with insurers. The objective is to make it easy for insurers to connect *directly* with doctors who are keen to work with them to service their client base. All doctors are invited to create and maintain their own professional profiles at https://www.healthconnective.sg from 4 January 2022.

This will also make it possible for insurers to carry out their empanelment contracting activities through Health Connective. This "Smarter Contracting" capability will allow the contract terms and fee schedule to be made available for registered doctors to review. Those who are keen to pursue these opportunities can then apply for the respective contracts directly with the insurers through Health Connective. All subsequent contract maintenance activities (eg, contract updates and renewals) will also be managed through the platform. This will provide much needed transparency in the contracting relationship between insurers and doctors. It will also enable SMA to arbitrate, should the need arise.

Apart from contract management, Health Connective will also enable some core processes, such as appointment scheduling, pre-authorisation and claims submission, to operate on the platform. Insurers may adopt these generic processes to make it easier for doctors to handle the administrative workload that often accompanies the servicing of their clients. To further simplify this interaction, Health Connective will provide connectivity with compliant clinic management systems to enable more efficient data exchanges. In essence, it is Health Connective's intention to reduce the multiple touchpoints that doctors currently have to manage.

## It is now your turn

The Workgroup (comprising representatives from Smarter Health and SMA) that has been tasked to bring Health Connective to fruition has been working tirelessly in the background to enlist the participation of technology service providers, insurers and hospitals to be early adopters of Health Connective.

We are happy to report that Health Connective will go live on 4 January 2022 commencing with the onboarding of interested doctors. We are concurrently working on securing collaborating partners from other major segments of the healthcare ecosystem. These collaborations will be progressively announced.

Your role in engendering the much-needed change in the healthcare ecosystem is simple: sign up for an account at **https://www.healthconnective.sg,** if you are open to including insurer-backed contracts as part of your practice. The creation of an account and participation in "Smarter Contracting" is **free of charge**. Your active participation is important as it will impact the effectiveness of SMA's engagement with insurers. The more doctors we represent, the greater our ability to shape the discussion.

Remember, this is just the beginning. Putting together an efficient and effective "onion core" will enable us to actively manage future "layers" in response to the evolving needs of the healthcare ecosystem. We all have a role to play to safeguard the accessibility and affordability of healthcare. We must never repeat our faux pas in the past where our failure to actively engage in influencing the "*business* of medicine" has allowed it to adversely impact the "*practice* of medicine".

The Position Statement has jump-started the process of renewal. We must see it to completion. None of us is as smart as all of us. **We** can make a difference, **together**.


Visit https://bit.ly/3Hjr6v1 to view the infographic in full detail


### References

1. *Singapore Medical Association. SMA 61st Council Position Statement on Troubled Integrated Shield Plans (IPs). 25 March 2021. Available at: https://bit.ly/2OLi98g.*
2. *Ministry of Health. MOH appoints Multilateral Healthcare Insurance Committee. 14 April 2021. Available at: https://bit.ly/3mMmpAZ.*


Dr Lee is a veteran healthcare administrator with over 20 years of experience in private healthcare. He has helmed multiple Chief Executive positions across the entire healthcare continuum in his tenure at IHH Healthcare. With several like-minded colleagues, he started Smarter Health to make healthcare accessible,affordable and accountable across Southeast Asia.

Dr Tan is a mother to three kids, wife to a surgeon; a daughter and a daughter-in-law. She trained as a general surgeon, and entered private practice in mid 2019, focusing on breast surgery. She treasures her friends and wishes to have more time for her diverse interests: cooking, eating, music, drawing, writing, photography and comedy.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# Safe Trips

## For Your Patients and Friends

Text and photo by Dr David Teo Kwang Joo

The recent spate of vaccinated travel lane (VTL) announcements has brought great excitement for many, particularly as the holiday season draws near. For many, the VTLs are a sign of the long-awaited resumption of travel. This has given rise to a phenomenon known as "revenge travel", where there is a pent-up demand for travel, making up for lost time and opportunities over the past two years. However, the travel landscape that travellers will encounter abroad will be vastly different, and much more complex compared to pre-pandemic days. As doctors, how can we support and prepare travellers in this new landscape?

### Travel advice in the new normal

Doctors would usually have travellers (their patients, friends, colleagues, relatives or family members) approaching them for medical advice prior to travel. In some instances, these are very specific requests, such as certification for fitness to travel, which may even be a requirement from their companies for business trips.

When approached for such requests prior to the COVID-19 pandemic, most doctors would share their knowledge on travel medicine, centring around two categories:

(a) Stabilising any chronic conditions before travel.

(b) Providing preventive medicine advice and chemoprophylaxis (if required), including for malaria, and vaccinations for yellow fever, meningococcal diseases, typhoid, etc.

Some doctors would advise travellers to bring a medical kit with some common over-the-counter medications (paracetamol, antihistamines, charcoal tablets, etc). Others may also recommend and prescribe a course of oral antibiotics, subject to exclusion of drug allergies (most prescribed include Augmentin, Ciprobay or Klacid). Travellers with underlying medical conditions would need a review to ensure their medical conditions are controlled before travelling and that sufficient medication is brought for the trip.

With the increase in complexity and risks faced when travelling today, we would recommend that doctors also look into four additional areas.

#### COVID-19 vaccination

Travellers should be fully vaccinated before they travel (regardless of their destinations). When vaccine boosters are due, it is recommended for travellers to receive their booster before travelling.

#### COVID-19 risk factors

Chronic illnesses (eg, diabetes mellitus, hypertension, coronary heart disease), immunosuppressive conditions, age, obesity, smoking and pregnancy are factors that may increase the risk of severe disease when infected by COVID-19.

#### COVID-19 risk at destination

A surge in cases and an upward trend may indicate a higher risk of COVID-19 transmission, even to vaccinated travellers. Besides preventive measures such as vaccinations, we need to look at the daily number of new cases. The higher the number of daily cases, the higher the risk of community transmission. Understanding the destination's COVID-19 positive test rate is also a good indicator of risks. The World Health Organization recommends a COVID-19 positive test rate of below 5%.

#### Destination health facilities

As we are aware, COVID-19 vaccination does not provide 100% protection against the virus. While vaccination does reduce the risk of hospitalisation and severe disease, it is important to consider the destination's health facilities, especially for those with COVID-19 risk factors. Such considerations include low COVID-19 active cases per million (with a preference of three digits and below), low case fatality rates, low intensive care unit occupancy rates and of course, good health facilities.

## Helping all have a SAFE TRIP

Travellers should remain abreast of the different COVID-19 testing requirements when travelling, which may vary from antigen rapid tests (ART) and polymerase chain reaction (PCR) tests, to pre-departure and on-arrival testing. As these testing requirements are constantly evolving, we recommend doctors to refer their patients to the International Air Travel Association or the respective countries' embassy website for the latest inbound measures. Undeniably, these measures and fluctuating guidelines will be a source of stress for some travellers. When travelling during the COVID-19 pandemic, a traveller may feel anxious over various situations, such as facing issues of quarantine upon arrival even if travelling via VTLs or testing positive during an on-arrival COVID-19 test and being subjected to an isolation period of at least ten days. Doctors should take note of those with mental health concerns and provide appropriate medical advice ahead of travel.

I share below an easy to remember **SAFE TRIP** mnemonic I developed to assist doctors when advising their patients on the topic of travel.

**S ubject**

Subject refers to the traveller who may be the patient, friend, colleague or family member.

**A ssistance**

Assistance refers to the availability of a helpline for the traveller in the event of an incident or illness.

**F itness to travel**

Fitness to travel, especially for those with underlying chronic illness or other COVID-19 risk factors.

**E nvironment**

Environment refers to the COVID-19 risk and non-COVID-19 health risks that the traveller may be exposed to during the trip, including at the accommodation and methods of transportation.

**T ests**

Testing requirements: travellers should understand the different country-specific requirements for COVID-19 testing (eg, pre-departure versus on-arrival, ART versus PCR tests).

**R esilience**

Mental resilience: travellers need to be mentally prepared and ready to face the risk of prolonged isolation should they test positive for COVID-19 (even if asymptomatic). Asymptomatic COVID-19 cases in certain locations such as Hong Kong are managed in hospitals and not in hotels.

**I nsurance**

A comprehensive travel insurance which includes COVID-19 coverage is recommended. In addition, if a senior individual must travel, a high insurance coverage amount is preferred. Senior travellers should check on the coverage during travel and upon return to Singapore (or their home country). The coverage is typically much lower compared to younger travellers.

**P reventive measures**

Preventive measures including safe distancing, wearing of face masks and maintaining personal hygiene are important even for vaccinated travellers.

In addition to the above, medical professionals should also be aware that other infectious diseases, such as acute gastroenteritis, dengue, malaria and yellow fever also exist in endemic countries. Meanwhile, security and safety concerns such as being exposed to the risk of accidents (through transport, work or residence), crime, civil unrest and natural disasters also remain when travelling.

## Overseas evacuations

In the event of a worst-case scenario, where travellers face medical emergencies abroad and a medical evacuation is needed, engaging an experienced provider is highly recommended. This is especially so as the processing time for handing medical evacuations for both COVID-19 and non-COVID-19 cases has taken on a new level of complexity amid the pandemic. In recent years, International SOS has brought many Singaporeans, including COVID-19 patients, safely home. We have transported COVID-19 patients, either single case or multiple casualties, as well as stable or ventilated cases in Patient Medical Isolation Units using our special air ambulances.

In all, while travel is back, restrictions and complexity are here to stay. Advising travellers on the new travel landscape and precautions will help ensure a smooth, safe trip and return. While there is no crystal ball to anticipate the challenges or risks that a trip might bring, travellers who are equipped with information, advice and resources to navigate this new environment will be empowered with confidence and resilience when travelling.

Have a SAFE TRIP! ◆

***Legend***

*1. International medevac with our Intensive Care Unit medical team on the dedicated air ambulance*

Dr Teo oversees International SOS' 24/7 Assistance Centres across Asia, protecting the workforce from health and security threats. He has invaluable experience in medical incident management and has developed medical response plans for many organisations ranging from corporates to schools. He also conducts medical training, medical audits and evaluation of on-site medical capabilities.

# MEDEVAC AEROMEDICAL SERVICES IN SINGAPORE

Text and photos by Dr Winston Jong

Medical retrievals in and out of Singapore have been around for a long time. Our ability to transfer sick patients safely coupled with our high standard of healthcare has made Singapore an attractive medical hub.

## The effects of COVID-19

In February 2020, the COVID-19 virus invaded Singapore. This quickly cascaded into a series of drastic changes in the aeromedical scene. The Ministry of Health (MOH) implemented new measures to safeguard our people against this invasion, which completely changed our lifestyle overnight.

On 17 March 2020, the flow of traffic along the Causeway between Johor and Singapore was halted. On 7 April 2020, Changi Airport came to a standstill. This coincided with the implementation of the nationwide circuit breaker. A Stay-Home Notice was imposed on 9 April 2020 to all returning Singaporean citizens, Permanent Residents and Long-Term Pass Holders. Short-term visitors were abruptly denied entry. The frequency of flights in and out of Singapore was much reduced. This was when our aeromedical wings were clipped.

In the good old days, once EMA Global received a request for a medical evacuation (medevac), we were able to be airborne on the same day. Getting entry into Singapore was usually not a concern even for patients who otherwise needed visas, as we could have an emergency visa issued at Seletar Airport on arrival for both the patient and the companion.

With the implementation of the circuit breaker however, all patients who wish to enter Singapore require the approval of MOH. Approval is obtained by the treating physician who has to justify why the patient needs treatment in Singapore. MOH would typically respond in two weeks, and the rejection rates are high. Two weeks of waiting can seem very long when the patients are sick and require urgent medical attention. Many have died while waiting for approval to enter Singapore. When MOH approval has been granted, the family still has to apply for the quarantine process through the Immigration and Checkpoints Authority. These processes are time-consuming and the delays make treatment of critical cases impossible.

Border restrictions also meant that our medical teams were not allowed to pass through immigration to receive the patients at their hospital. Instead, patients are brought to the airport to meet our team on the tarmac. Although this can be done, it is not good medical practice for the local team to bring sick patients on multiple supports to the airport. It is also not good practice to hand over sick patients on the tarmac where the ambience is not conducive to exchanging equipment and passing over the care of the patient. As a consequence of this regulation, we now tend to evacuate more stable patients where the continuation of care is not as crucial.

With the clamping down of patients entering Singapore, patients from neighbouring countries requiring medical treatment look to countries like Malaysia and the Philippines instead. The Malaysia Healthcare Travel Council can grant medical visas within two to three days and the country has attracted a substantial number of foreign patients. Manila has also attracted foreign patients for medical treatment via their Inter-Agency Task Force. Working with their Department of Health, foreign patients continue to seek treatment there. In some ways, Singapore has lost out on this medical tourism.

## Adapting to the changes

The Singapore aerospace scene has drastically changed during this pandemic. Medevac patients used to consume 80% of the total flying hours in and out of Seletar Airport. Now, genuine patients consume only 20% of the total flight hours. The high frequency of non-medevac flights is partly due to the lack of commercial flights and these chartered flights, often termed "taxi flights", are now used by less-sick patients. Of the patients we handled, the majority of them were repatriations or foreign patients returning to their home countries. A handful of the cases bypassed Singapore and headed towards Kuala Lumpur and Manila. The few coming to Singapore were returning Singaporeans, Permanent Residents and Long-Term Pass Holders who have the right of abode in Singapore.

For any flight out of Singapore, we must inform MOH of our movements, including flight itinerary, the patient's condition, names of medical and flight crew and their polymerase chain reaction (PCR)/antigen rapid test status. This is to avoid having to serve quarantine upon our return home. When there is a patient on board, we have to don personal

protective equipment at all times, adding to the discomfort of the medical team. This is despite the patients' negative PCR results.

Whenever we handle a COVID-19 patient, there must be a Portable Medical Isolation Unit (PMIU) on board with negative pressure inside. There is a standard protocol in handling the PMIU. They are heavy (60 kg) even when empty and there is limited access to the patient inside. All procedures like intravenous cannulation and application of added oxygen must be done before the PMIU is closed. After the patient has been offloaded, there is a protocol for deep cleaning approved by MOH, as well as for the disposal of contaminated attire and medical waste.

## Facing new challenges

One of the most challenging cases EMA Global has done in this COVID-19 era was to medevac a Singaporean from Hanoi to Singapore. He was a 68-year-old male working there, and he suffered an acute myocardial infarction which was complicated with a cardiac arrest. After resuscitation, he was put on arterio-venous extracorporeal membrane oxygenation (AV ECMO) and maintained on four inotropes. He was ventilated and sedated with two sedatives. A few days later, his family requested that he be repatriated to Singapore for further management.

We have done many ECMO and intra-aortic balloon pump transfers in the past, even from continent to continent. Ordinarily, this would not be a difficult task for us, but in this COVID-19 era, we were unable to receive the patient in the hospital – we had to receive him at the Hanoi airport. When the team saw him, he was attached to a ventilator, six infusion pumps and a cardiac monitor with the ECMO running. With 20 people watching, the glaring sun and the high background noise on the tarmac, we switched the equipment one at a time before even touching the ECMO. In less than 60 seconds, we exchanged the ECMO machines. We had of course done a few dry runs before we left Singapore. We then flew him home safely.

We know post-pandemic travel will continue to look different as the world slowly returns to "normal". It is imperative to ensure travellers and patients have access to quality medical transportation. EMA Global will react to any global medical situation with adaptability and flexibility to make medical transfers as safe as possible. We are also inspired to look for solutions to problems we have never encountered before and take pride in some of the amazing missions we have successfully undertaken in the face of these challenges. To blue skies ahead. ◆



***Legend***

*1. Exchange of ECMO machines on the tarmac, possibly the first such instance being done*

*2. Transfer of care on the tarmac with full personal protective equipment*

Dr Jong started a medical assistance company in 1991 as a hobby. This hobby has evolved into the current EMA Global, the first assistance company in the Asia Pacific to be accredited by EURAMI. They now have 24/7 alarm centers in Singapore, Kuala Lumpur, Manila and Guangzhou, and service clients from all corners of the globe handling the most difficult cases.

# NEW HOBBIES, NEW EXPERIENCES

Upon publication of this month's column, Christmas would be well underway in the UK. Among the many festivities, Christmas holds a special place in the UK. Giant Christmas trees are set up in the heart of city centres, colourful lights adorn every nook and cranny, and my personal favourite – the vibrant Christmas markets with stalls selling all sorts of Christmas goodies and crafts! It is hard not to be infected with the joyous spirit of Christmas this time of the year. With our hearts full of the comfort and warmth Christmas promises, allow me to share some of the highlights from the Singapore Medical Society of the United Kingdom's (SMSUK) activities in the past months.

Back in summer, we held our highly-anticipated orientation camp for first-year medical students – Med(UK)ated'21 OCamp. This year's OCamp was centred around the theme of cells, and freshmen were split into groups named Red Blood Cells, Neurones, Dendritic Cells… you get the idea. Lasting three days and held over Zoom, participants led by their orientation group leaders (OGLs) played a myriad of games to earn points for their groups. The SMSUK committee was blown away by the teamwork and creativity demonstrated by our first years during the games, mascot design contest and cheer creations. OCamp was a success made possible by the passion and dedication of the organising committee, positive energy and support from the OGLs, and effervescent enthusiasm of our freshmen. It was our pleasure to organise this event and we wish them all the best on their exciting journey as we warmly welcome them to our wonderful SMSUK family!


*Med(UK)ated'21 OCamp*

At around the same time, SMSUK also organised our three-in-one event – a combination of our Freshers, Members and Alumni Gathering (FMA), Pre-departure Talk (PDT) and Dental Dinner (DD) titled FMA-PDT-DD-21. Having three concurrent events held in a single Zoom meeting brought together many participants and speakers from various backgrounds. Through FMA-PDT-DD 21, our freshmen were able to gain valuable tips from their seniors before embarking on their journey to the UK. Through the same event, our medical and dental members were also able to hear insights and advice from clinicians practising in Singapore and the UK on issues surrounding the medical and dental landscape in both countries.

In line with year-end reflections, we invited members to share with us some of the hobbies they picked up in the UK.

**Chin Sue-Kay,**
*Editor, SMSUK*

*Text by Ashwin Venkatakrishnan*

*Ashwin is a Year 3 medical student at the Imperial College London.*

A new hobby I picked up in the UK was squash. I had played tennis as my co-curricular activity in high school and initially planned to continue playing it in university. However, my experience during my first social tennis session in London drove me to reconsider the decision. Having arrived from hot and humid Singapore just a week before, I was completely unprepared for the chilly and windy conditions that met me on the outdoor courts. I was then motivated to switch to a similar racquet sport that was played in a warm indoor environment and squash fits the bill perfectly!

I joined a couple of taster sessions held by my college club and was quickly hooked. Being able to ricochet the ball off the side walls added a whole new dimension to the game. I also saw it as a golden opportunity to remain fit, since the shorter dimensions of the court meant that the ball came back pretty quickly and there was less time to "rest" between shots as compared to tennis.

Joining the club was also an ideal way for me to get acquainted with students from other medic groups, years and even courses. On top of forging new friendships and strengthening old ones, it also helped me enter my college family! Having skipped my "Mums & Dads" get-together for another hall event (free food, yay!), I was pleasantly surprised to meet my "Dad" for the first time at the squash court (who fortunately forgave my transgression)!

My past two years in squash have been a lot of fun, but with social activities reopening this year, I plan to try out other societies with an open mind. My entry into squash was pretty serendipitous, so who knows what new hobby I will pick up this year!


*Text by Sammi Lim*

*Sammi is a Year 2 medical student at the University of Manchester.*

Since beginning medical school, I have learnt over time the importance of maintaining both a healthy mind and body, through recharging and rejuvenation. I have since explored various ways of accomplishing that, in the form of exercising and cooking healthy meals.

The upcoming semester promises to be challenging with the sheer amount of content to be covered. To cope with that, I started going for yoga classes at my university in order to keep fit and relieve stress. I enjoy how the yoga sessions allow me to empty my mind while doing some stretches, inversions and simple exercises. I always feel really refreshed after attending these yoga classes and have made it a point to attend at least two each week. I am glad to have discovered the supportive yoga community and forged new friendships through my new hobby.

Apart from exercise, I have also been learning to cook healthily this year with the help of cookbooks. A healthy gut equates to a healthy mind! I have been on a plant-based diet for many years now and I know the importance of having a balanced diet with sufficient nutritional intake. This means that I have to be open to trying out different types of fruits, vegetables and other plant-based products. My cooking skills have definitely improved since starting university, but there is still much room for improvement. When I am cooking while listening to my music playlist, it helps me to relax and unwind from studying.

Medical school life is hectic and sometimes stressful. I am grateful for my new hobbies as they have been instrumental in helping me cope with the daily grind and adding colour to my university life. ◆

# Honouring Outstanding Contributions

**The SMA Honorary Memberships and SMA Merit Awards are traditionally given out during the SMA Annual Dinner. Due to the prevailing pandemic restrictions, the dinner was unable to be held this year. Despite this, the Association is proud to confer on A/Prof Cheong Pak Yean and Dr T Thirumoorthy the SMA Honorary Memberships – the highest honour that SMA bestows on individuals with significant contributions to the medical profession. Additionally, the SMA Merit Awards were presented to three well-deserving doctors. Congratulations to all our recipients!**

## SMA HONORARY MEMBERSHIP

### CITATION FOR

## *A/Prof Cheong Pak Yean*

Text by A/Prof Goh Lee Gan

I am delighted to give this citation for A/Prof Cheong Pak Yean for the SMA Honorary Membership 2021. Pak Yean is a man of many talents, with tremendous drive and a good heart. Let me focus on three areas where he has contributed greatly to the SMA and the medical profession; namely, as a leader-innovator, teacher-academic and generalist physician.

### Leader-innovator

I first met Pak Yean when he was 15. That was 60 years ago in 1964, when he joined the stage crew of the Drama Society in Anglo-Chinese School. I was then his stage crew leader. Our job was the quick set-up of the stage for the actors and actresses to bask in the limelight.

He joined the Faculty of Medicine, University of Singapore (now the National University of Singapore [NUS]) in 1968. As President of the Medical Society when he was a third year medical student, he organised travelling health exhibitions which toured schools around Singapore. He moved on to helm the Asian Regional Medical Students' Association and used the opportunity to initiate rural health projects in Semarang, Central Java and Sumatra Utara in neighbouring Indonesia. These projects exposed medical students and young doctors to health issues of the developing world.

After graduation, Pak Yean did his national service and chose to specialise in internal medicine. 1979 was a fruitful year for Pak Yean, as he passed both the Master of Medicine in Internal Medicine from NUS and the Collegiate Membership of the Royal Colleges of Physicians.

At this juncture, Pak Yean decided to take the road less travelled. Instead of growing along the track of hospital senior clinician and administrator, he decided to start Cheong Medical Clinic in 1980 in the outback of Jalan Jurong Kechil, in a pre-war shophouse built by his grandfather, Mr Cheong Chin Nam, in 1923.

In his clinic practice, Pak Yean saw the benefits of GP clinics working together to share resources and also the need to upskill the clinic assistants of GP clinics. His innovative mind got to work and he championed the development of the Health Maintenance Office Pte Ltd (HMOPL), an innovative co-operative owned by doctors. The HMOPL also developed a pharmaceutical drug warehouse and a clinic computerisation programme with software running on affordable personal computers with a friendly interface.

Training of clinic assistants was boosted through the setting up of a clinic assistants' course in collaboration with the Institute of Technical Education (ITE) and the Association of Private Medical Practitioners. The rest is history. He was appointed to the Board of Governors of ITE in 2003 to oversee the development of healthcare assistants for the nation.

Pak Yean served as President of the SMA for three years from 1996 to 1999. He contributed in three professional domains: he expanded the SMA Ethics Committee into a Complaints Committee; set up the SMA Centre for Medical Ethics and Professionalism with Dr T Thirumoorthy; and advocated for a guideline of fees and actively participated in professional representation in a Parliamentary Select Committee investigating fees in primary care. In the context of fee guidelines, he also helped to define the ethical boundaries of fees such as "profit-sharing" of doctors with non-doctors, fee-sharing among doctors, and the pharmaceutical trade between doctors and pharmacists.

When the public sector healthcare system in Singapore was restructured in 2000, Pak Yean was invited to be a member of the Board of Directors of the National Healthcare Group and he served six years in the Group Human Resource committee.

Pak Yean also revitalised the Medical Association of South East Asian Nations during his term as its Secretary General.

## Teacher-academic

From Pak Yean as a leader-innovator, we move to another aspect of his life work – that of a teacher-academic. Pak Yean was a member of the college team charged with the task of developing family medicine (FM) training on the broad front of Graduate Diploma, Master of Medicine (MMed) and Fellowship levels using the Dreyfus model of skill


*The 38th SMA Council 1997/1998 when A/Prof Cheong Pak Yean was President of SMA*

acquisition. He was appointed Adjunct Associate Professor at the NUS Yong Loo Lin School of Medicine (NUS Medicine) in 2000 and at Duke-NUS Medical School in 2019, and participated actively in developing FM into what is now familiar today.

The first task for Pak Yean was the development of the MMed Private Practitioners' Stream (PPS) to be on par with the Ministry of Health Traineeship Programme, such that trainees in both the stream and programme sit the same MMed (FM) examination. He set up the Graduate FM Centre above his clinic in 1998 as a training venue for the first group of FM trainees. His energy and vision has yielded great results innovating portfolio-based learning and ambulatory care rounds. In fact, many of the FM leaders of today grew from this MMed (FM) PPS stream. The College of Family Physicians Singapore awarded him the Albert and Mary Lim Award for these achievements in 2010.

Pak Yean introduced the paradigm of family medicine as "One Discipline, Many Settings". This paradigm has helped to develop family medicine in the intermediate care setting and also in long-term care. He was appointed Clinical Consultant to the FM Continuing Care Department when it was set up in Singapore General Hospital in 2006.

Even with these busy FM developmental activities, Pak Yean still finds time to be an undergraduate tutor and examiner for medical students in NUS Medicine. Many have benefitted from being in his clinic for their FM postings.

He also published numerous papers in medical literature including nine in peer-reviewed journals, and was honoured with fellowships from the College of Family Physicians Singapore and Academy of Medicine, Singapore, as well as from the Royal Colleges of Physicians of UK and the American College of Physicians.

## Generalist physician

Pak Yean, through his training as an internist and exposure in primary care, found psychotherapy to be valuable in integrating the various aspects of family medicine. In 2007, he embarked on formal training in psychotherapy and developed a biopsychosocial approach to practice which he documented in three published books. He now trains doctors in these integrative skills as generalists with a focus on medical communication and humanities.

## From physician to family and friends

Pak Yean is not only a successful and innovative physician, he is also a man with a great family and close circle of friends. His wife Irene is the manager of his practice, and his life and soulmate. He has three sons: Sean, a film producer, and Ian and John who are both lawyers. His family is now extended by three talented young women, Yi Ling, Melissa and Janice, and two wonderful grandchildren, Mikaela and Micah.

He is privileged to have had a fulfilling professional career and to work with so many doctors in the roads towards the goals that epitomise SMA's slogan: "For Doctors, For Patients".

I present to you A/Prof Cheong Pak Yean as most worthy of being conferred the SMA Honorary Membership.

CITATION FOR

# *Dr T Thirumoorthy*

Text by Dr Lee Pheng Soon

Dr T Thirumoorthy (Dr Thiru) grew up in Malacca and Kuala Lumpur and joined the University of Malaya as a student in 1967. He was heavily involved in student leadership for the final three years of his studies, successively holding the roles of President, Medical Society, University of Malaya; Secretary-General, Asian Regional Medical Students' Association; and finally, Chairman, Students' Council, University of Malaya Students' Union. All this notwithstanding, he graduated with his MBBS in 1972, with the Best All-Round Graduating Student Medal, University of Malaya. In time to come, he would earn clinical fellowships in dermatology from the US and the UK, as well as Master degrees in Healthcare Ethics and Law from the University of Manchester, and in Counselling from Monash University.

## Training and medical service

Dr Thiru completed his housemanship in Johor Bahru General Hospital, then joined the Malaysian Armed Forces where he was commissioned Captain and awarded "Most Outstanding Trainee Officer, Malaysia Medical and Dental Corps".

He went on to be trained in internal medicine and dermatology in the UK from 1976 to 1979 and returned to Singapore to start as a registrar in Middle Road Hospital. He subsequently describes his career in medicine in five phases, parallels of which may resonate with many doctors.

## An unexpected challenge: the AIDS epidemic

Dr Thiru recalls first hearing about AIDS at a conference in New Zealand in 1980. Before long, he was working alongside Dr VS Rajan and other colleagues, deeply involved in all aspects of combating this epidemic. He was especially busy with education in AIDS, visiting Geylang to speak with commercial sex workers, as well as the Singapore Armed Forces to speak about condom use. He was one of the founding members of Action for AIDS Singapore, which under the leadership of Prof Roy Chan and others, has grown from strength to strength. Dr Thiru worked in both Middle Road Hospital and its successor, the National Skin Centre, in dermatology and venereology till 1990.

## Private practice

For the next 12 years, he worked as a consultant dermatologist in private practice.

## SGH dermatology service

In 2002, he was invited by Dr Vivian Balakrishnan (the then-Chief Executive Officer of Singapore General Hospital [SGH]) to be the Founding Director of the Dermatology Service at SGH, where he and his team pursued dermatology as a part of multidisciplinary care. This was an especially meaningful time for him as a dermatology leader: he had noticed the dwindling interest in medical dermatology, and understood the importance of a dermatology department within a general hospital.

Building SGH dermatology would offer those patients with extensive and severe dermatoses and multiple co-morbidities the advantage of being cared for holistically by a multidisciplinary team of doctors and nurses, with the dermatologist as the primary physician. He would remain there for 15 years, leaving as Visiting Consultant in 2017.

## Educator in Duke-NUS Medical School

From 2007 to 2017, he held a succession of positions in Duke-NUS Medical School (Duke-NUS), ranging from Associate Professor (Education); Director, Practice Course Year 2; and Faculty, Practice Course Year 1, where he taught subjects on clinical skills, professionalism, medical ethics, communications and healthcare law. He then moved to being Adjunct Faculty in the Student and Alumni Affairs office serving as College Master of Ransome College till July 2020. He currently holds the position of Adjunct Professor in the Academic Development Department of the Office of Academic and Clinical Development.

## Improving working systems

In 2013, he was offered an opportunity to work in the area of clinical and professional governance and took on the role of Independent Advisor (Clinic Practice) at Parkway Hospitals. In 2017, he was appointed Group Chief Medical Officer of IHH Healthcare, a position that he held till he retired in 2019.

## Service to the profession

Dr Thiru first got involved with the SMA's work in 1988 because of patient complaints. As a member of the Complaints Committee, he repeatedly saw very intelligent and capable doctors embroiled in all manner of dispute and strife. It occurred to him that sitting in the Complaints Committee was akin to firefighting, and there could be no reduction in the incidence of fires if there were no thought put to fire-prevention.

Strongly encouraged by two past SMA Presidents (A/Profs Cheong Pak Yean and Goh Lee Gan), Dr Thiru became the Founding Director of the SMA Centre for Medical Ethics and Professionalism (SMA CMEP) in 2000, within which he continues to tirelessly serve. Within four years, this very significant contribution to medical ethics and professionalism was recognised with the SMA Merit Award. He was subsequently re-appointed to helm the SMA CMEP as its Executive Director from 2011 to 2015, and then as its Academic Director from 2019 till present. He has been on the Lead Teaching Faculty of the Ministry of Health (MOH)/SMA Course on Ethics and Professionalism for Advanced Specialist Trainees since 2004, and he has therefore literally taught every Singapore-qualified specialist for more than 15 years.

He was an Elected Member of the Singapore Medical Council (SMC) from 2005 to 2008 and from 2014 to 2017, and continues to sit on the SMC Ethics Committee. He served as a Member of the MOH National Medical Ethics Committee from 2005 to 2012. He was also the Censor-In-Chief of the Academy of Medicine, Singapore (AMS) from 2012 to 2016.

*Founding forces of SMA CMEP reunited in friendship, c. 2018. L to R: A/Prof Cheong Pak Yean, Prof Tan Siang Yong, A/Prof Goh Lee Gan and Dr T Thirumoorthy*

## How did he do it?

Not every senior doctor has the chance to make a mark in so many aspects of medical professionalism. From a soldier helping to prevent disease and death during the AIDS epidemic, to a successful private practitioner being sought out to found the Dermatology Service in SGH; a teacher and mentor to batches of students at Duke-NUS, to an expert asked to improve systems in IHH Healthcare. One who has served in leadership roles in SMC, AMS and SMA. One whose dogged work over decades championing the thoughtful consideration of medical ethics and professionalism has resulted in an organisation like the SMA CMEP.

When asked how he did it, Dr Thiru thinks for a while. "Actually, it just happened; I did not plan this. Medicine has been good to me and has provided all these opportunities." Asked if he had any words of advice to others, he says, "It's important to try to be true to yourself. And if you can, be an advocate for medicine and the profession."

I therefore present to you Dr T Thirumoorthy – a man who has accomplished much and who has touched the lives of many – SMA Honorary Member 2021.

# SMA MERIT AWARDS

**Inaugurated in 2003, the SMA Merit Awards are presented annually in recognition of the recipients' significant contributions to the SMA and medical profession, social service to the community, or commendable personal achievements. Award recipients may be SMA Members, doctors, or non-medical professionals. This year, three recipients were awarded the SMA Merit Award.**

**Clinical A/Prof Gerald Chua** has contributed to the SMA Centre for Medical Ethics and Professionalism (SMA CMEP) on its leadership team and as a faculty member on the Medical Ethics, Professionalism and Health Law courses for senior residents and other related workshops. He has taught many cohorts of doctors that are close to completing their post-graduate training journey on topics ranging from medical professionalism, managing conflicts of interest and informed consent, to the legal and ethical considerations surrounding end-of-life care in the intensive care unit. Clinical A/Prof Chua was also Head of Medicine at Alexandra Hospital and later Ng Teng Fong General Hospital (NTFGH). He is currently the Chairman, Medical Board of NTFGH.

**A/Prof Cuthbert Teo** is committed to the training of future generations of doctors and specialists. To this end, he volunteers his time with SMA and the Academy of Medicine, Singapore (AMS). In the SMA, he volunteers in the "Professionalism and Ethics" course for advanced specialty trainees, as well on the editorial boards of both *SMA News* and the *Singapore Medical Journal*. In the AMS, he was chair of the Chapter of Pathologists (2009-2015), and currently serves as vice-chairman. Outside of the medical field, he volunteers his time with the Singapore Children's Society, where he has been honorary secretary since 2015. During the COVID-19 pandemic, he worked with the chief executive officer to implement policies and processes to ensure continued service continuity and safety of staff and beneficiaries.

**Dr Woon Yng Yng Bertha** serves the medical community by being active in various professional associations and organisations. From 2007 to 2021, she served as Council Member of the SMA. Her other roles included the Vice-Chairman of the Medical Indemnity Committee, Board Member of SMA CMEP, and being one of the Directors of SMA Pte Ltd. She represented SMA as a Councillor of the Confederation of Medical Associations in Asia and Oceania (CMAAO) from 2008 to 2018. Among other accomplishments, she was responsible for amendments to the CMAAO constitution to facilitate more timely inter-country medical cooperation in the face of increasing occurrence of natural disasters. ◆

# MEDI-CROSSWORDS

**Try not to use Google for this! *SMA News* and Dr Jipson Quah bring to you yet another instalment of our crossword puzzle! We hope you have a little fun solving this and do feel free to share this puzzle with your friends and colleagues. The answer key will be released with the next instalment.**




## ACROSS

3. Japanese surgeon of the Edo period who was the first recorded doctor to have used anaesthetic for surgery for a breast cancer patient and treated a further 156 patients with breast cancer (first name: Seishu)
5. A severe, often fatal illness in humans that causes severe viral haemorrhagic fever, transmitted to humans from fruit bats and spreads through human-to-human transmission
7. Set of symptoms that occurs as a consequence of drinking too much, commonly known as a "hangover"
8. First found in Malaysia, this virus is transmitted to humans from animals or contaminated foods, and can also be transmitted from human to human, potentially leading to severe deaths and illnesses
9. A British surgeon, he was a pioneer of antiseptic surgery and preventative medicine (first name: Joseph)
10. Low-temperature foods causing transient but painful headaches, commonly known as a "brain freeze"
12. The excessive flow of tears, often serving to clean and lubricate the eyes in response to an irritation
13. French physician who invented the stethoscope in 1816 (first name: Rene)
14. The first physician to emerge in Ancient Egypt, due to his extensive knowledge in medicine and how his medical teachings were among the first not completely driven by magic or mysticism

## DOWN

1. Numbness of an extremity due to pressure on the sensory nerve
2. A virus that is transmitted by direct contact with the bodily secretions of rodents which can potentially lead to severe symptoms such as haemorrhaging and kidney failure
3. The erection of hairs on the skin due to cold, fear or excitement, commonly known as "goosebumps"
4. An ancient Indian surgeon known as the "father of plastic surgery" who had completed a myriad of ground-breaking operations. He also developed unique and practical techniques to dissect the human body and study its structure
5. French oncologist and immunologist who carried out the first hematopoietic stem cell transplantation of bone marrow grafts to save patients suffering from leukaemia in 1958 (first name: Georges)
6. American physician known for inventing the first magnetic resonance imaging machine in 1977 (first name: Raymond)
11. The youngest of the four founding staff of Johns Hopkins Hospital, which included William Halstead, William Osler and William Welch. He is universally regarded as having established gynaecology as a surgical specialty (first name: Howard)

# A Different Pursuit

## PARROT-KEEPING

① Text and photos by
A/Prof Cuthbert Teo and Rupert Gwee

**Parrot-keeping can be a very satisfying hobby as parrots are attractive, colourful and highly intelligent; they can also be affectionate as each bird has its own individual personality. That is why they are called companion birds and affectionately "*fids*" or feathered kids by enthusiasts. A big attraction is that some can talk and interact with you! In this piece, A/Prof Cuthbert Teo speaks with Rupert Gwee, who holds a Bachelor of Science (Honours) in Microbiology which became very useful for his passion in keeping parrots but was only used very minimally in his working life, to learn more about his interesting hobby.**

### Could you start by telling us a bit more about parrots?

There are about 400 species of parrots ranging in size from the 7 cm parrotlet to the 1.2 m tall hyacinth macaw. The smaller species like budgerigar, lovebirds and cockatiel live up to between ten and 15 years. The larger species typically live around 40 to 50 years. The longest-lived documented parrot, a Major Mitchell's cockatoo (*Cacatua leadbeateri*) named Cookie lived over 82 years when it died in 2015. In Singapore, we have a few species of native parrots including the Blue-Crowned Hanging Parrot.

Parrots are characterised by their strong curved bill which is often used for climbing, as well as manipulating and cracking/crushing food and objects. They have strong legs and four-toed clawed zygodactyl feet (two toes pointing forward and two backward) which some species use dexterously almost like hands.

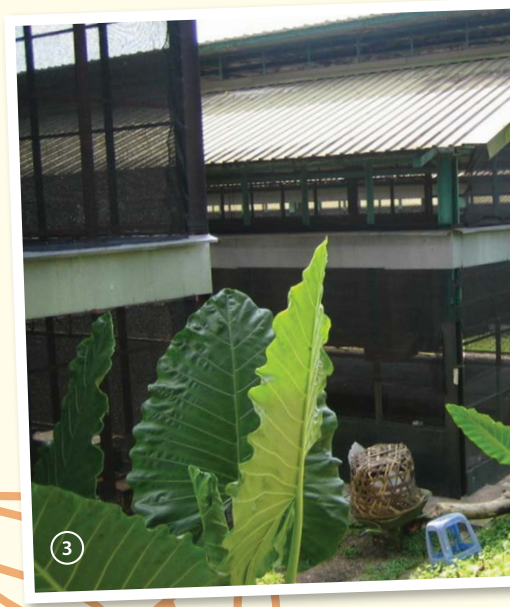
Most males and females of the same species look the same and parrot breeders often depend on laparoscopy or DNA to determine the gender of their birds. An interesting exception would be the eclectus parrot, where the males are bright green with an orange beak and the females are red with a black beak. For more than a hundred years, zoos have kept the males and females apart because they were so different looking, wondering why they never bred!

In the wild, most parrots nest in tree cavities, laying from one to seven white eggs at two-day intervals (which is why their eggs are paper white since they do not need camouflage). An exception is the monk parakeet which builds a colony-nest from sticks. Many countries classify monk parakeets as introduced pests, as escapees build nests on electric posts and overhead transformers, leading to electrical short circuits.

### How did your interest in birds begin?

I have had three bird-keeping episodes in my life. My interest first started when I hand-raised a baby Javan mynah (*Acridotheres javanicus*) when I was seven years old, with some help from my dad. It was tame and would fly to my shoulders whenever I called it. Sadly, it got sick and died before it was a year old.

When I was 12 years old, my paternal grandfather started keeping and breeding canaries and I followed suit. After three years, he had more than 200 canaries and I had over 20 heads. We woke up daily to the singing and trilling of canaries. However, it became too much of a five-hour chore for him to feed and clean them seven days a week. He sold them off and I did likewise.



③

In April 2000, I decided to buy and hand-raise an African Grey chick. I traced its leg-ring to the commercial parrot breeding farm where it had come from.

## Fateful day

It was a fateful day when I met Mr Patrick Tay, the executive director of Mandai Birds. We hit it off even though I had only about six months of experience and a handful of pet parrots, while he had eight aviary complexes and around two thousand birds. He invited me to visit whenever I wished and encouraged me to get into parrot breeding as many were endangered due to habitat loss and poaching.

This became a 19-year passionate hobby and I developed strong friendships with the farm owners and staff.

Sadly, I had to give it up when the farm moved to a much smaller location in the Neo Tiew area as the original site had to be returned to the Singapore Land Authority. At the peak, I had more than 1,100 heads from over 80 species and sub-species of parrots.

Over those years, I made many aviculture friends and met countless interesting people both locally and internationally. I was even invited to give a presentation at the 2005 AVES International Parrot Convention held biennially in Grafton, New South Wales, Australia.

## Why move from microbiology to birds?

It was pure chance that my life sciences background came in very handy in my parrot-keeping hobby. I became interested in parrots as companion birds because they are intelligent, have personalities and some can even talk!

Though most speak just a few words, African Grey parrots are known to have a vocabulary of around 1,000 words. Even small budgerigars can speak quite well but at a much faster talking rate and with softer voices. One exceptional budgie named Disco, who was featured on *BBC Earth*, had a repertoire of around 130 phrases!

Parrots bond with their owners. They recognise and remember individual persons and even other household pets! I have personally experienced pet parrots showing signs of depression, such as refusing to eat, becoming listless and feather chewing/plucking, when their owners give them up or pass away.

## How did you build your own personal bird collection?

I live in a seven-room Housing Development Board apartment in Yishun and had initially only wanted to keep parrots as companion birds.

However, the more I visited and saw the different aspects of how parrots were bred at the farm, the more I became intrigued with breeding them as a hobby. My previous experience breeding canaries provided an added nudge.

I then took the plunge and bought a proven pair of eclectus parrots in September 2001 and was elated when they produced their first pair of chicks just two months later. I became hooked and decided to register as a home breeder with the then Agri-Food and Veterinary Authority of Singapore in February 2002.

Thereafter I rapidly increased the number and species of my parrot collection but continued to house several breeding pairs at home as it allowed me to closely observe their breeding behaviours. The rest I kept at Mandai Birds. Over six years, I bred just over a hundred chicks in my living room before I moved all the breeding pairs to Mandai Birds in 2008.

I also found the gamut of do-it-yourself aspects to the hobby very satisfying, especially hand-making and marking my own open brass and closed aluminium leg-rings, assembling heater-circuits, etc.

## What are some of the challenges in large-scale parrot breeding?

Parrot breeding is manpower intensive. When you have eight aviary complexes and approximately 3,000 birds to feed and care for, standardisation and templated processes must be followed for hygiene and biosecurity purposes. Good record-keeping is also a must. Food preparation and feeding of the adult and fledged birds in the aviary complexes starts at 7 am and by 10 am, all birds must receive their food-rations and fresh water. Afternoons are for alternate day cage and floor jet-spray cleaning of the aviary complexes, general maintenance and repairs. Nest boxes are inspected on the 5th,10th, 15th, 20th, 25th and 30th of each month and some eggs are collected for artificial incubation, especially for the more valuable species, in order to encourage pairs to produce a second clutch of eggs. Aviary work ends around 5 pm each day.

### Power of observation

Keepers must be vigilant to spot behavioural changes, sick birds, incompatible pairs, aggression as well as changes in food intakes and faecal droppings. Coupled with good record-keeping, we discern patterns pointing to problems or tips on what works. One time, I noted an unusually big drop in the monthly egg-laying. I spent a few afternoons at the farm and realised that instead of later in the afternoons, the keepers went into the aviary complexes immediately after lunch and the change in routine had upset the breeding pairs. Another time, when a pressure pump became noisier than usual, there were suddenly no eggs laid.

Disease outbreaks do happen from time to time. The use of chicken dung fertiliser in surrounding areas can increase the number of flies which can cause sickness when they contaminate the food bowls. It is heart-breaking to lose proven pairs and rare specimens. We once had a bad experience when a water pipe behind our complex was accidentally damaged by other parties but the contaminated water continued to flow by gravity. We only discovered it because of the low water-pressure. In all, about 60 birds got sick and around 20 died because of it.

### Artificial incubation

Temperature and humidity control during artificial incubation are crucial for successful hatching of fertile eggs. As we have a limited number of incubators, several species may be incubated together. It takes experience to hand turn the eggs and make the adjustments needed to maximise the hatch rates of each species.

### Nursery management

Handfeeding the chicks in the nursery starts at 7 am and is done at two hourly intervals till 11 pm each day. As the number of chicks may balloon to more than 200 during peak periods, hygiene, human mistakes and mix-ups are a constant worry. The hand-feeding formula needs to be warm enough but not too hot, or else the chicks will develop a burnt crop. Toes may end up being caught in the wire-mesh or bedding, resulting in torn-off toenails or constriction injuries. Sometimes chicks will get slow or sour crop, where hand-feeding formula does not move to the stomach. The crop must then be pumped out and the chick rehydrated with fluids, medicated and kept under close watch. Splayed legs may also occur, and they would need to have a splint applied or their legs kept taped together so they don't overspread. It is amazing how early intervention can improve the quality of their final adult condition and quality of life!

Those interested to find out more about parrot-keeping and local breeders can reach out to Rupert at rupert.gwee@gmail.com.

***Legend***

1. *Dusky Lories*
2. *Black Palm Cockatoo pair*
3. *Aviary complex – outside*
4. *Blue and Gold Macaw chick*
5. *Bird flock's playtime*

A/Prof Teo is trained as a forensic pathologist. The views expressed in this article are his personal opinions.

Rupert graduated with a Bachelor of Science in Microbiology from the National University of Singapore in 1995 but did not use much of it throughout his 40 years of working life. However, it came useful in his passion of keeping parrots. He is married with four children and is heavily involved in voluntary work despite his job commitments.

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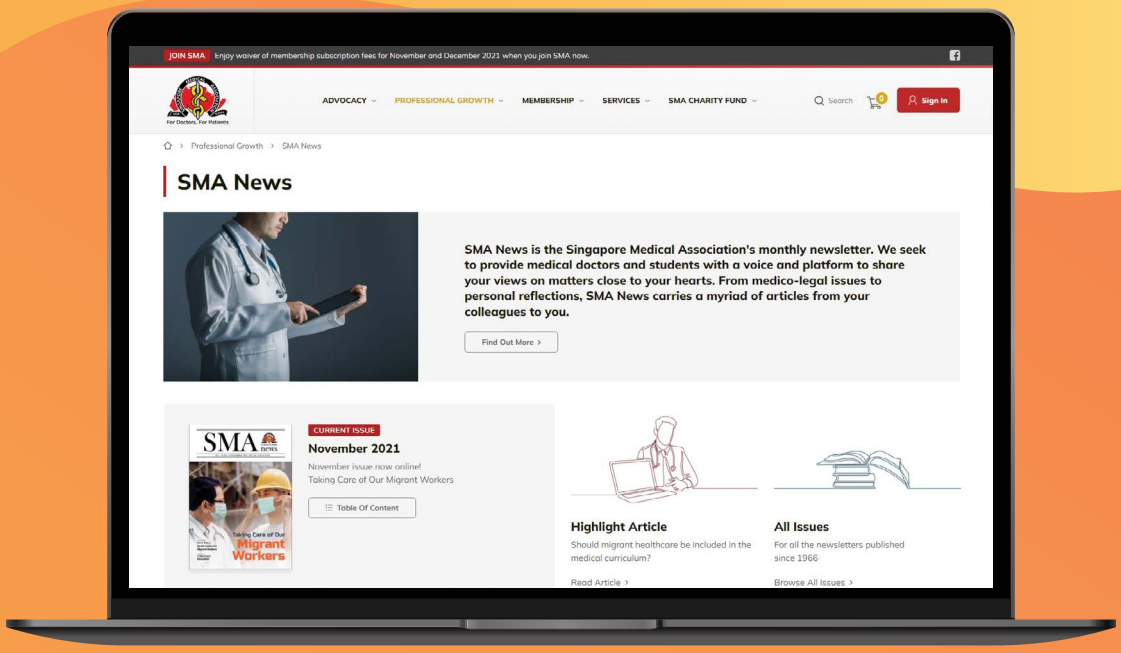


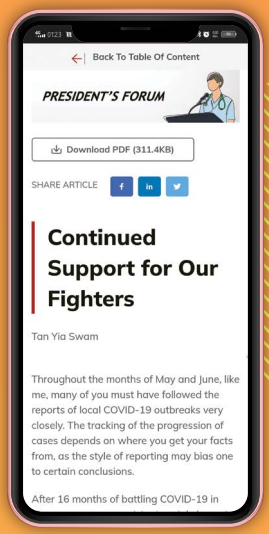


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**Takeover GP clinic** in D20. Serving HDBs, condos and corporates. Great location and frontage, all furnishings and equipment <5 years, next to MRT station exit with high footfall. CMS and EMR available. Call 9185 6008 for confidential discussion.

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**Established GP clinic** in Eunos/Ubi HDB neighbourhood looking for doctor with commitment to service community, and vision for partnership/takeover. Low capital outlay. Comfortable work pace and environment, family friendly working hours, appreciative patients. Please message 9778 8160 to explore.

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OneDoctors

**Full-time and regular** part-time family doctor positions available at our OneDoctors Family Clinic in Punggol Waterway Point branch. Please email to: onedoctorsfeedback@gmail.com your personal particulars and resume to arrange for an interview.

**Medical Oncologist needed** to helm practice in the east. Opportunity for practice partnership. Interested parties to email CV to hr@dyhpoon.com.

**Experienced GP/FP wanted** for partnership. Jumpstart your business ownership. Established clinic in Toa Payoh with great location and 8k+ patient base (majority private chronic). Good footfall of residents and working crowd. Call 9185 6008 for confidential discussion.

**Locum Doctor with** experience in Aesthetics required for weekday sessions starting from January 2022. Please submit a detailed resume to hr@livingstonehealth.com.sg or Whatsapp to 9029 3179.

## • MISCELLANEOUS •

**VPL with 610** and 530 handpieces $3,000; Multi Color Led $500; Daeshin IDS R2PL $12,000. Other used equipment are available. All equipment comes with 3 months warranty (except wear and tear). Enquire or interested, please email: drbcng@gmail.com.

醫院管理局
HOSPITAL AUTHORITY

*The Hospital Authority is a statutory body established and financed by the Hong Kong Government to operate and provide an efficient hospital system of the highest standards within the resources available.*

### 1. Associate Consultant Positions for Experienced Doctors without Full Registration

*(Anaesthesia / Anatomical Pathology / Cardiothoracic Surgery / Otorhinolaryngology / Radiology / Nuclear Medicine / Obstetrics & Gynaecology / Ophthalmology / Plastic Surgery / Neurosurgery)*

*(Ref: HO2104001)*

### 2. Service Resident Positions for Experienced Doctors without Full Registration

*(Anaesthesia / Clinical Oncology / Emergency Medicine / Family Medicine / Intensive Care / Internal Medicine/ Obstetrics & Gynaecology / Ophthalmology / Orthopaedics & Traumatology / Otorhinolaryngology / Paediatrics / Pathology / Psychiatry / Radiology / Nuclear Medicine / General Surgery / Cardiothoracic Surgery / Neurosurgery / Plastic Surgery)*

*(Ref: HO2104002)*

The Hospital Authority (HA) invites applications from experienced doctors who are not fully registered with the Medical Council of Hong Kong and yet have acquired relevant postgraduate qualifications set out in the Requirements to serve the community of Hong Kong. Doctors with relevant experience or specialize in **Anaesthesia**, **Anatomical Pathology** and **Radiology** are particularly welcomed.

There are ongoing enhancements of the recruitment scheme with expansion of recruitment scope and updated criteria. For more information on opportunities for non-locally trained doctors in HA and details of the posts, please visit HA website via the link: ***http://www.ha.org.hk/goto/limited_registration***.

The HKSAR Government has amended existing law to facilitate qualified non-locally trained doctors to practise in the public healthcare sector of Hong Kong. Doctors serving in HA under the new recruitment scheme who meet the predefined criteria will have opportunities to obtain full medical registration in Hong Kong without the need to undergo licensing examinations.

**Application**

Application should be submitted **on or before 31 March 2022 (Hong Kong Time)** via the HA website ***http://www.ha.org.hk*** (choose English language, click Careers ⟶ Medical).

**Enquiries**

Please contact Ms Alice Lam, Hospital Authority Head Office at **+ 852 2300 6359** or send email to **laa408@ha.org.hk**.

SMJ SMA news

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**Li Li Loy (6540 9174)**
**lili@sma.org.sg**

# Non-Executive Director

**Local equivalent of £27,600 plus expenses, plus £4,248 for appointment to each Sub-Committee**

We are the world's leading member-owned, not-for-profit organisation protecting the careers, reputations and financial security of doctors, dentists, healthcare professionals and organisations around the world. Founded in 1892, we take pride in the vital part we play within healthcare delivery by providing expert advice and support to almost 300,000 members worldwide.

We are seeking a Non-Executive Director based in Hong Kong or Singapore to join our Council (which is the Board of Directors of MPS and responsible for the running of MPS and its long-term success) to provide challenge and support to the Executive team, ensuring that MPS continues to thrive long into the future providing expert advice and support that our members trust and value.

As a Council member you are the voice of our members and are integral to our success by helping to shape and drive our ambitious business strategy. You will understand the complexities of working in the healthcare profession, ideally on a global scale.

You will be required to demonstrate high levels of integrity and role model outstanding standards of quality, probity and governance. Your ability to listen and constructively challenge in a board environment, to engage with other Non-Executive Directors and our Executive team will be critical in delivering our financial and strategic business objectives that benefit members.

Medical Protection Society is committed to creating a diverse Board that reflects the demographics of the members we serve. Experience of working in Private Medicine and at a Consultant level would be beneficial, but not essential. Some previous governance experience would also be beneficial.

The successful applicant will join the Medical sub-committee then later be invited to join other sub-committees, depending on experience and time commitments. During the 8-year tenure the successful applicant may wish to be considered for roles such as Chair of a Sub-Committee or ultimately, Chair of Council.

Approximate annual commitment will be around 18 days a year for Council and Sub-Committee meetings. Time will also be required to prepare for meetings and attend professional development. Meetings will be held on-line with the occasional requirement for travel to our London or Leeds office. As a global organisation we aim to set meeting times that are suitable for all attendees, however some flexibility will be required.

More information about our Council can be found on our website:
**https://www.medicalprotection.org/uk/about/organisation-and-finance/mps-council**

To be considered for this application please apply through the MPS careers site at:
**https://www.medicalprotection.org/uk/careers-at-mps.**

Applicants must be a Doctor, currently registered to practise medicine and either be a member of MPS and confirm their MPS Membership number in their application, or become a member of MPS at next indemnity renewal.

Closing date **Monday 31st January 2022**

MPS

FARRER PARK HOSPITAL

# 6TH ANNUAL SCIENTIFIC MEETING 2022

# HEALTHCARE FORWARD:
## NEW DIAGNOSTICS AND TREATMENT

**SATURDAY JAN 22, 2022 | 10 A.M. - 5 P.M.**

The Annual Scientific Meeting (ASM) returns for its sixth year with more insights into the change in disease patterns and emerging evidence-based clinical cases and updates covering sessions on:

- COVID-19
- Surgical Options for Sleep Apnea
- Topics in Surgical, Medical Oncology and Cardiology
- Dementia: Diagnostics, Behavioral, and Treatment
- Glucose Monitoring and medication adjustments

The ASM 2022 will be a virtual session.

SPEAKERS


Dr. Danny Soon


Dr. Loh Jiashen


Dr. Vina Doshi


Dr. Kua Ee Heok


Dr. Ravindra Singh Shekhawat


Dr. Santhosh Raj


Dr. Hsieh Wen-Son


Dr. Frances Lim


Dr. Kelvin Wong


Dr. Soon Sue Rene


Dr. Matthew Tan


Dr. Loh Poh Yen

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**SCAN QR CODE TO REGISTER NOW**

For more information on ASM 2022, please visit: bit.ly/FPH-ASM2022

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