



**Eureka-Singapore**

**Monsoon Certificate Course in Translational Medicine**

**20 – 24 November 2023**

**One°15 Marina Club, Sentosa, Singapore**

**Organised By:**



Name:

*“Translational Medicine (TM) is defined as the resolution of unmet medical needs through the use of technology, creativity and scientific method. The field of translational medicine encompasses molecular medicine, intellectual property, financing, regulation, preclinical and clinical trial studies, among other disciplines.”*

Unlike traditional courses, the Eureka Monsoon Certificate Course in Translational Medicine (MCC) is tailored to individual needs. Expect five days of complete seclusion from work and an intense experience with the expert faculty members. MCC is not solely based on lectures but on learner-centred discussions, mentoring by internationally recognised leaders, and exploration of real-life case studies. Skills garnered from this programme will help individuals and team members to address the challenges facing drug development today and bridge the divide between concept and patient.

The MCC is targeted at researchers interested in translational research and looking to further expand their skill sets or individual career development, be it in research, academia and/or industry.

Students can expect to:

- Analyse the business, scientific and regulatory aspects of TM, and develop critical-thinking skills to approach and explore the challenges
- Examine case studies, and develop creative problem-solving strategies and novel skills to build new kinds of teams
- Hone their abilities to communicate effectively across broad audiences
- Be inducted into the Eureka Network upon graduation – having direct access to a vast network of accomplished peers, leaders and partners in TM – all building bridges and closing gaps to form a global community of TM professionals

## ABOUT EUREKA

The vision of the Eureka Institute for Translational Medicine (Eureka) is to develop translational medicine to address unmet medical needs. More specifically, Eureka’s mission is to build and foster a global community of translational medicine professionals to advance the application of biomedical innovation for the tangible benefit of patients and society as a whole.

Eureka is a not-for-profit institute founded by an international group of leaders in translational medicine. Eureka’s overall strategy is to catalyse, integrate and impact education, research and policy-making in an international translational medicine ecosystem that benefits society. The institute does this through education and building a community of translational scientists.

Among the activities of Eureka are an annual International Certificate Course in Translational Medicine in Siracusa, Italy.

Eureka partners with major universities worldwide: SingHealth Duke-NUS Academic Medical Centre, Stanford Maternal & Child Health Research Institute, Bocconi University, Drexel University, National Foundation of Emergency Medicine, University of Catania, University of Miami, University of Arizona, University of Toronto, Università Vita Salute San Raffaele, Icahn School of Medicine at Mount Sinai, United Arab Emirates University and the UMC Utrecht. Nutricia Research, Parent Project Muscular Dystrophy, Nature Research and University College London are also supporters of Eureka ([www.eurekainstitute.org](http://www.eurekainstitute.org)).

## Edited and Compiled by The Eureka Institute for Translational Medicine

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Dear Participants

The Monsoon Certificate Course is an initiative that is part of the partnership between SingHealth Duke-NUS Academic Medical Centre and the Eureka Institute for Translational Medicine.

Our mission, which we are profoundly committed to, is to change Medicine by harnessing technology to address unmet medical needs. Our Ethos is “patients at the heart of all we do”. With this in our hearts and minds, we aim to be transformational locally, regionally and worldwide, by inspiring and catalysing growth through innovation, education through experience, and transformation through creativity and resilience. A major goal of our Academic partnership is transforming medicine and improving lives. Truly durable and meaningful transformation requires people as its foundation. We are proud to contribute, through this Monsoon Certificate Course, to the formation of the leaders of the future: YOU.

We welcome you with open arms and a warm smile for an exciting journey together.

Professor Ivy Ng  
Group CEO  
SingHealth



Professor Thomas Coffman  
Dean  
Duke-NUS Medical School



Dear Participants

It is my greatest pleasure and honour to welcome you to the Eureka-Singapore Monsoon Certificate Course in Translational Medicine (MCC), organised with the SingHealth Duke-NUS Academic Medical Centre. Translational Medicine faces many challenges and the only way to solve this definitely is to work together and find new solutions for the pressing problems we face. Eureka was founded over a decade ago to do just that, and to empower young translational scientists to overcome the many hurdles between bench and bedside.

Already it has become clear that many of the most promising new advancements and opportunities in TM sprout from this part of the world. As an example, SingHealth Duke-NUS Academic Medical Centre has been one of the first partners and promoters of Eureka. It is clear that Asia will play a pivotal role in the future of translational medicine. This course offers you all possibilities to explore and find your own personal role in this exciting field. A line up of experienced and innovative leaders in translational medicine is ready to help you to take the next steps in your career. I am confident that this course will offer everything you need to become a successful translational researcher.

I wish you an inspiring meeting!

Berent Prakken  
Vice-dean Education & Director of the Biomedical Education Center;  
Professor of Paediatric Immunology, University Medical Center Utrecht;  
Co-Founder, Eureka Institute



## ABOUT SINGHEALTH DUKE-NUS ACADEMIC MEDICAL CENTRE

The strategic partnership in Academic Medicine between Singapore Health Services and Duke-NUS Medical School builds on the collective strengths of the SingHealth Group and Duke-NUS' research and medical education capabilities. Together, they create a vibrant academic nexus for new discoveries, learning and care innovation – and bring it to where it matters most: Patients. The Academic Medicine efforts are enhanced with the establishment of the Academic Clinical Programmes (ACPs) and joint institutes, including the Academic Medicine Education Institute (AMEI) and Academic Medicine Research Institute (AMRI) which facilitate the active growth and development of driven scientists and educators into the SingHealth Duke-NUS family (<https://www.singhealthdukenus.com.sg/>).

## Speaker list 2023

**Salvatore Albani, MD, PhD,**  
Professor, Duke-NUS Medical School,  
Singapore;  
Director, Translational Immunology Institute,  
SingHealth Duke-NUS Academic Medical  
Centre;  
Senior Consultant, KK Women's and  
Children's Hospital;  
President, Eureka Institute for Translational  
Medicine

**Scott Compton, PhD**  
Professor & Senior Associate Dean for  
Medical Education,  
Programme Director, Master of International  
Translational Medicine (MITM),  
Deputy Head, Office of Education, Duke-NUS  
Medical School, Singapore;  
Co-Director, Monsoon Certificate Course

**Muhammad Raihan Jumat, PhD, FHEA**  
Assistant Professor, Duke-NUS Medical  
School;  
Co-Director, Monsoon Certificate Course;  
Lead Educator & Programme Coordinator,  
Master of International Translational Medicine

**Ann-Marie Chacko, PhD**  
Assistant Professor, Cancer & Stem Cell  
Biology Programme,  
Head, Laboratory for Translational and  
Molecular Imaging (LTMI),  
Co-Lead, Cancer ImmunoTherapy Imaging  
(CITI) Programme, Duke-NUS Medical School,  
Singapore

**Arcot Desai Narasimhalu, PhD**  
Emeritus Professor, School of Computing and  
Information Systems, Singapore Management  
University

**Audrey Lau, BA, MBA**  
Group Chief Communications Officer,  
SingHealth;  
Executive Director, SingHealth Fund

**Berent Prakken, MD, PhD**  
Vice-dean Education and Director of the  
Biomedical Education Center,  
Professor of Paediatric Immunology,  
University Medical Center Utrecht;  
Co-Founder, Eureka Institute for Translational  
Medicine

**Chriscavin Wijaya**  
Full-time Student

**Danny Soon, MBBS**  
Chief Executive Officer, Consortium for Clinical  
Research and Innovation Singapore;  
Executive Director, Singapore Clinical  
Research Institute;  
Interim Executive Director, Advanced Cell  
Therapy & Research Institute, Singapore

**David Wang Xinyuan, MD, MBA**  
Director, Centre of Technology & Development  
Office of Innovation & Entrepreneurship, Duke-  
NUS Medical School, Singapore

**Derrick Chan Wei Shih, BMedSci, BMBS,  
MCI, MRCPCH, CSCN, FAMS**  
Senior Consultant, KK Women's and  
Children's Hospital;  
Principal Lead Mentor – Clinician Innovator  
Development Programme (CINDP), CCSD;  
Programme Director - CINDP, Academic  
Development Department, Duke-NUS  
Medical, Singapore  
Lead (Culture Building and Developing Human  
Capital), Academic Medicine Innovation  
Institute;  
Director, SingHealth MedTech Office

**Enny Kiesworo, BSc (Pharmacy), MHA,  
MSc (HPPF)**  
Group Director, Research (Corporate Admin  
and Technology Development), SingHealth

**Joanne Ngeow Yuen Yie, MBBS (Melb),  
MMed, FRCP (UK), FAMS, MPH**  
Head, Cancer Genetics Service, Division of  
Medical Oncology, National Cancer Centre  
Singapore;  
Associate Professor, Lee Kong Chian School  
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**John C W Lim, MBBS, MSc, SM**  
Professor & Executive Director, Centre of  
Regulatory Excellence (CoRE), Duke-NUS  
Medical School, Singapore;  
Chairman, Consortium for Clinical Research &  
Innovation Singapore (CRIS);  
Senior Advisor, Ministry of Health, Singapore;  
Policy Core Lead, SingHealth Duke-NUS  
Global Health Institute

**Juliana Lim**  
Executive Director, Talent, SGInnovate

**Lye Whye Kei, BSc (Honours), PhD**  
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Office, SingHealth

**Michaela Seng Su-Fern, MBBS, MRCPCH,  
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Senior Consultant, Paediatric Brain and Solid  
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**Ng Chirk Jenn, MBBS, MMed (Family  
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Clinical Professor, Duke-NUS Medical School,  
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Senior Consultant, SingHealth Polyclinics

**Ng Kee Chong, MBBS, MMed (Paeds),  
FAMS**  
Chief Executive Officer (Designate), Changi  
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Deputy Group Chairman Medical Board  
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**Ooi Eng Eong, MBBS, PhD, FRCPATH**  
Professor, Programme in Emerging Infectious  
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Associate Dean, Early Research Career  
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Singapore

**Soo Khee Chee, MBBS, MD, FRACS, FACS,  
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Professor, Duke-NUS Medical School,  
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Visiting Consultant, Singapore General  
Hospital;  
Surgical Oncologist | Head & Neck Surgery

**Toh Han Chong, BSc (London), MBBChir  
(Camb), MRCP (UK), FRCP(Edin), FAMS**  
Senior Consultant (Division of Medical  
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(Strategic Partnerships), National Cancer  
Centre Singapore

**Valerie Chew Suk Peng, PhD**  
Assistant Professor, Duke-NUS Medical  
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Academic Medical Centre

**Wang Linfa, PhD**  
Professor, Programme in Emerging Infectious  
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Executive Director, Programme for Research  
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Singapore

**Wong Tien Yin, MBBS, MMed, MPH, PhD,  
FRCSE, FRANZCO, FRCOPHT, FAHMS,  
FAMS**  
Founding Head and Chair Professor, Tsinghua  
Medicine, Tsinghua University;  
Senior Advisor, SingHealth & Singapore  
National Eye Centre

**Yeo Joo Guan, MBBS (S'pore), MMed  
(S'pore), MRCPCh (UK), PhD (S'pore)**  
Vice Chair (Research), SingHealth Duke-NUS  
Paediatrics Academic Clinical Programme;  
Senior Consultant, Division of Medicine, KK  
Women's and Children's Hospital;  
Clinician-Scientist, Translational Immunology  
Institute (TII), SingHealth Duke-NUS  
Academic Medical Centre

**Organisers**

Eureka Institute for Translational Medicine  
[www.eurekainstitute.org](http://www.eurekainstitute.org)

**Organising Committee**

Salvatore Albani  
 Scott Compton  
 Raihan Jumat

**In Partnership with:**

SingHealth Duke-NUS Academic Medical Centre  
<https://www.singhealthdukenus.com.sg>

**Course Coordination**

Benjamin Lim, +65 9730 9311

**Course Venue**

NOVA Room  
 One°15 Marina Club  
 11 Cove Drive, Sentosa Cove, Singapore 098497  
<http://one15marina.com>



**How to get there**

1. By One°15 Marina shuttle bus (see instruction provided in the following)
2. By Car

**By One°15 Marina shuttle bus**

1. Shuttle bus pick up point is from Harbourfront MRT Station Exit D taxi stand. Please see below schedule.
2. Upon alighting, turn right and walk along the brick pathway to the clubhouse.
3. Once entering the clubhouse, proceed to the lobby where there will be signs pointing you to the event's venue.

Shuttle operating schedule to One°15 Marina	
From Harbourfront MRT Station Exit D taxi stand (Mon-Fri)	
	07:00
	07:45
	08:10
	08:30
From One°15 Marina to Harbourfront MRT Station	
	17:10
	17:40
	18:10
	18:30

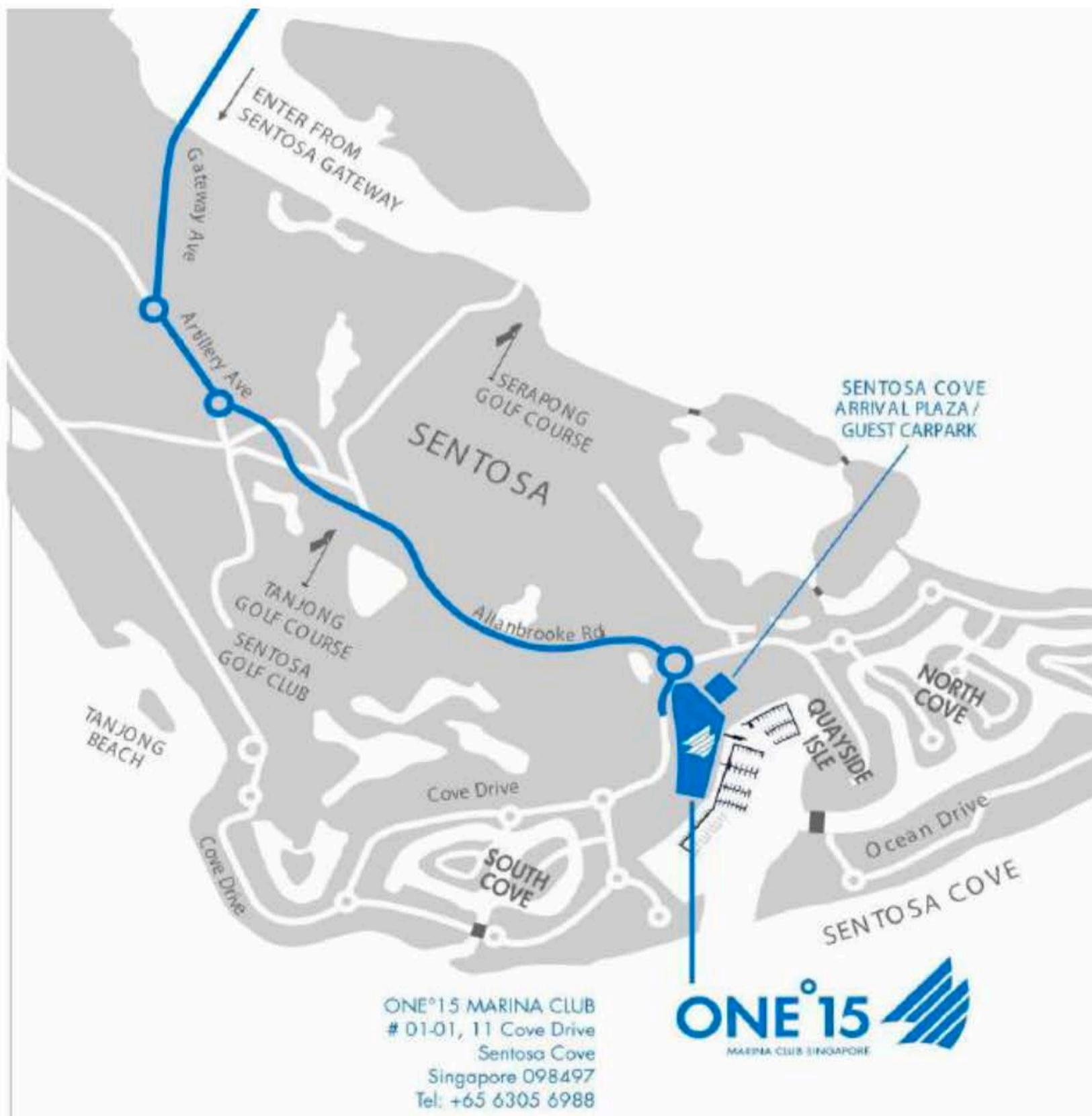


**Important note:**

Pre-arranged transport IN and OUT of One°15 Marina is provided at stipulated timings only. Kindly arrange your own transport at own cost, if you miss it.

**By Car****ARRIVAL BY PRIVATE CAR OR TAXI:**

1. Remove your cashcard prior to arrival at Sentosa Gantry
2. Scan your QR Code at the gantry upon entry at lanes 1 to 6 only.
3. Turn left to Artillery Avenue at the first roundabout after the Sentosa Gateway gantry.
4. Continue straight to Allanbrooke Road, towards Sentosa Cove.
5. Upon reaching Sentosa Cove, make a right turn to Cove Drive at the dolphin fountain roundabout and keep to your left.
6. Turn left at the first turn and enter ONE°15 Marina Sentosa Cove Singapore.
7. Turn left down the ramp to the Sentosa Cove Visitors Carpark to park your vehicle.
8. Walk towards the marina, situated behind Cold Storage and 7-11 at the carpark entrance.
9. Turn right and walk straight to ONE°15 Marina.
10. Take the spiral staircase in front of WOK°15 Kitchen to level 1.
11. Turn right to the Lobby and our staff will guide you to the event venue.



## Event Confirmation Letter

A hardcopy of the event confirmation letter **MUST** be presented to gain free entry into Sentosa when travelling by car.

The event confirmation letter can also be shown to the driver when travelling by One Degree 15 Marina club shuttle bus.



Sentosa Development Corporation (GST Reg No.MB-8100139-6)  
39 Artillery Avenue, Singapore 099958  
TAX INVOICE/RECEIPT

Media Code:

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## Monsoon Certificate Course 2023



**REMOVE CASHCARD  
BEFORE SENTOSA  
GANTRY**

### Island Partners Event (Variable Unique)

ONE15 Marina Sentosa Cove, Singapore

**Validity: 20/11/2023 to 24/11/2023**

Order No.: 9TQYV93P

Transaction No.: T:1061.28.231027.2

Terms & Conditions:

- Not for Re-Sale, Non-Refundable and Not Transferable.
- Reminder to remove cashcard before entering Sentosa vehicle gantry.

## Eureka Dynamic Sessions

A significant element of the programme is going to involve YOU talking, either one-to-one or in small groups. The aim of all these sessions is to help you to learn from each other and the faculty directly, and to focus on those parts of translational medicine, and a career in translational medicine, that matter most to you.

### The Magic Bullet

This case examines the full translational tightrope of a targeted therapy, from lead identification to Phase II and III clinical trials. You will work in depth with the case in a pre-allocated small-group setting over two separate sessions (Thursday and Friday).

Through this case, you'll grapple with the development of a therapy intended for a targeted sub-population, and explore the issues arising in the post-market phase. In addition, you will discuss and determine research and business strategies necessary to "translate" a potential therapeutic and co-develop its companion biomarker. Parallel concepts of collaboration and team will also be explored.

#### Recommended Reading:

Slamon DJ et al. Use of chemotherapy plus a monoclonal antibody against HER2 for metastatic breast cancer that overexpresses HER2. *N Engl J Med.* 2001 Mar 15;344(11):783-92. PMID: 11248153. Available at <http://www.nejm.org/doi/full/10.1056/NEJM200103153441101>

Spector NL, Blackwell KL. Understanding the mechanisms behind trastuzumab therapy for human epidermal growth factor receptor 2-positive breast cancer. *J Clin Oncol.* 2009 Dec 1;27(34):5838-47. Epub 2009 Nov 2. Review. PMID: 19884552

### Speed Consulting

"Speed Consulting" provides the opportunity for you to have a series of one-on-one discussions with individual faculty for 10 minutes each. Who you talk with and on what topics are your choices!

Please consult the faculty biographies in this booklet prior to completing the signup sheet, which will be prominently displayed and made available from Monday.

There will be two sessions: Tuesday and Thursday late afternoons.

For some sessions, you will be allocated to a specific group (The Magic Bullet; Mentoring; Presentations). For Speed Consulting, you will choose who you want to meet and/or which topic you want to discuss.



### Mentoring

You will each present a dilemma you are currently facing to a small group of peers. You will be allocated to a group, which will be mentored by a faculty member. Your fellow course participants will act as a consultation group. The objective is to advance personal learning while practising and improving approaches to, and organisation of, problem solving.

Reflections using practical real-world problems will anchor the concepts raised in the didactic portion of the programme.

As some of you already know, work with or have worked with some of the faculty members, every effort will be made to ensure you have "neutral" tutors guiding the sessions. In addition, unless otherwise specified and agreed to by the group, discussions in the mentoring session are treated as confidential.

You will have your first session on Thursday morning, then come back together on Friday morning.

## Raising Your Communication Game

### The Eureka Presentation Workshop

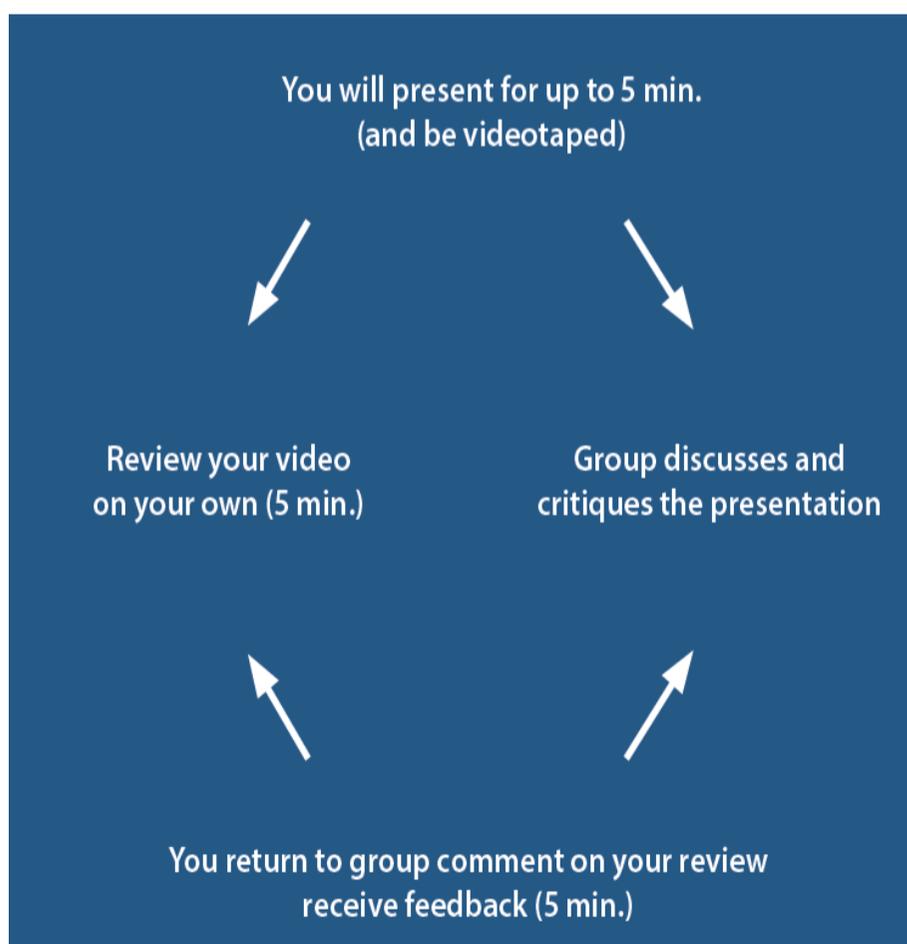
*Communication is not something you add on to science; it is the essence of science.*

- Alan Alda

Bad presentations are a contagion, spread by fear and lack of preparation. In this session, we discuss unusual and effective techniques for engaging in clear scientific communication, using techniques gleaned from the TED talks series, from the Alan Alda Center for Communicating Science at Stonybrook University, and the experience of our mentors and instructors. Goals of this interactive and experiential session are to raise each presenter's speaking game, with improved audience awareness and focus, including a focus on tailoring communication style to the audience and predictable, high audience engagement.

In addition to a brief introductory session focused on general concepts of excellent scientific communication, this session will involve TED-talk type presentations by each participant in a small group setting. Each presentation will be recorded. After the presentation, the speaker will then review her/his own tape in private. During this time, the group will prepare constructive feedback for the presenter. Afterward, the group gets back together to hear the presenter's own reflections and provide feedback intended to further raise that presenter's game.

For those interested, tips on giving feedback are provided in the material for this session.



## Feedback Tips

### Definition

The process of giving data back to the participant for the purpose of bringing about change.

Feedback involves responding specifically to an event or occurrence, whether that event be good or bad. Positive and negative feedback should be distinguished from complimenting and criticising.

Evaluation is an assessment of a learner's achievement and/or performance.

1. Feedback should be undertaken with the observer and participant working as allies with common goals. Begin by discussing respective expectations.
2. Feedback should be descriptive rather than evaluative.
3. Feedback should deal with specific events, rather than generalisations.
4. Feedback should be well-timed, and expected, in close proximity to the event, but not when – the recipient is post-call or angry about the issue; facts are missing; or both sides of the situation have not been explored.
5. Feedback should be based on first-hand data.
6. Feedback should be focused on behaviours that are amenable to change.
7. Feedback should involve sharing of information, rather than giving advice, leaving the receiver free to decide for themselves in accordance with their own goals and needs.
8. Feedback can be structured to include subjective data, as long as it is clearly labeled as such.
9. Feedback should be checked to insure clear communication by having the receiver try to rephrase the feedback.
10. Feedback should be followed by attention to the consequences of feedback.

11.

### 12. Taking the Plunge

1. Be clear about the purpose of the feedback session.
2. Get the receiver's perspective as to how things are going.
3. The sandwich technique (i.e., good / bad / good) isn't always reliable.
4. Ask the recipient to offer solutions.
5. Develop solutions to the problem, and a plan to improve the situation.



# Course Schedule



**Monday, 20th November 2023**

Time	Title & Speakers
08:30-09:00	<b>Registration</b>
09:00-10:00	<b>Introductions / Briefings about Speed Consulting</b> Speaker: Raihan Jumat
10:00-10:15	<b>Break</b>
10:15-11:15	<b>Translational Medicine Overview</b> Speaker: Salvatore Albani
11:15-12:15	<b>Patient and Society</b> Speakers: Toh Han Chong & Chriscavin Wijaya  <b>Abstract</b>  Childhood cancer survivors often go through different challenges in their cancer treatment journey. One of their challenges is coping with treatment and its side effects. This session will shed light on a childhood cancer survivor's journey with treatment and how it changed his life. It is important for medical professionals to understand how cancer treatment affects patients' lives so that we can better support them through this journey.
12:15-13:30	<b>Buffet Lunch @ Bar Nebula Level 1</b>
13:30-14:30	<b>Digital Health</b> Speaker: Ng Chirk Jenn
14:30-15:30	<b>How to get to a First In-Human Trial</b> Speaker: Michaela Seng Su-Feng
15:30	<b>Day Ends</b>



## Tuesday, 21st November 2023

Time	Title & Speakers
08:30-09:00	<b>De-Briefing</b> Speaker: Raihan Jumat
09:00-10:00	<b>The COVID Vaccine Journey</b> Speaker: Ooi Eng Eong
10:00-10:15	<b>Break</b>
10:15-11:15	<b>Philanthropic Funding</b> Speaker: Audrey Lau
11:15-12:15	<b>Impactful Venture</b> Speaker: Arcot Desai Narasimhalu
12:15-13:30	<b>Set Lunch @ Latitude Bistro</b>
13:30-14:30	<b>Stakeholder Management (Part 1)</b> Speaker: Salvatore Albani
14:30-14:45	<b>Briefing about Presentation Workshop</b>
14:45-15:45	<b>Presentation Workshop</b> See p.8 on Eureka Dynamic sessions for details  <b>Facilitators</b> <ul style="list-style-type: none"> <li>• Ann-Marie Chacko</li> <li>• Joanne Ngeow Yuen Yie</li> <li>• Raihan Jumat</li> <li>• Salvatore Albani</li> <li>• Scott Compton</li> <li>• Yeo Joo Guan</li> </ul>
15:45-16:00	<b>Break</b>
16:00-16:15	<b>Briefing about Speed Consulting</b>
16:15-17:15	<b>Speed Consulting 1</b> See p.7 on Eureka Dynamic sessions for details  <b>Facilitators</b> <ul style="list-style-type: none"> <li>• Ann-Marie Chacko</li> <li>• Derrick Chan Wei Shih</li> <li>• Joanne Ngeow Yuen Yie</li> <li>• Raihan Jumat</li> <li>• Salvatore Albani</li> <li>• Scott Compton</li> <li>• Yeo Joo Guan</li> </ul>
17:15	<b>Day Ends</b>

## Wednesday, 22nd November 2023

Time	Title & Speakers
08:30-09:00	<b>De-briefing</b> Speaker: Raihan Jumat
09:00-11:15 (With 15 mins break)	<b>The Foundation and the future of Clinical Development</b> Speakers: Danny Soon & John CW Lim
11:15-12:15	<b>Stakeholder Management (Part 2)</b> Speaker: Salvatore Albani
12:15-13:30	<b>Buffet Lunch @ Bar Nebula Level 1</b>  <b>Poster Presentation by MITM Students</b>
13:30-15:30 (With 15 mins break)	<p><b>Inequalities &amp; Inequities in Healthcare &amp; Science</b> Speakers: Ann-Marie Chacko, Valerie Chew Suk Peng &amp; Joanne Ngeow Yuen Yie</p> <p><b>Abstract:</b></p> <p>Despite the understood necessity as a matter of science and ethics, the underrepresentation of sex, gender, ethnic, and racial minorities in drug development, and in clinical research more generally, still persists. Further, these disparities impact diversity in research and innovation, as well as career opportunities and growth, including impact on salaries, funding, entrepreneurship, and leadership</p> <p><b>Learning objectives:</b></p> <p>This session aims to share experiences, dissect views and opinions such that by the end of this session, participants will be able to:</p> <ol style="list-style-type: none"> <li>1. Identify and address health disparities in clinical research and in science, particularly in academic leadership and entrepreneurship.</li> <li>2. Identify approaches that can be implemented to integrate the different dimensions of diversity to address health inequalities and inequities.</li> </ol> <p><b>Preparation by Participants (Reading Materials)</b></p> <ol style="list-style-type: none"> <li>1. The fraught quest to account for sex in biology research (2022 Nature News Feature). <a href="https://www.nature.com/articles/d41586-022-02919-x">https://www.nature.com/articles/d41586-022-02919-x</a></li> <li>2. Historical comparison of gender inequality in scientific careers across countries and disciplines (PNAS 2020). <a href="https://www.pnas.org/content/117/9/4609">https://www.pnas.org/content/117/9/4609</a></li> <li>3. Gender in the Global Research Landscape (Elsevier Report 2017) <a href="https://www.elsevier.com/_data/assets/pdf_file/0008/265661/ElsevierGenderReport_final_for-web.pdf">https://www.elsevier.com/_data/assets/pdf_file/0008/265661/ElsevierGenderReport_final_for-web.pdf</a></li> <li>4. Systemic racism persists in the sciences (Science 2020) <a href="https://science.sciencemag.org/content/369/6502/351">https://science.sciencemag.org/content/369/6502/351</a></li> </ol> <p><b>Pre-Session Thought Questions for Participants</b></p> <ol style="list-style-type: none"> <li>1. What type of experiences have you faced in your career based on disparities in healthcare?</li> <li>2. Do you have any suggestions on how to overcome the disparities in healthcare and science?</li> </ol>

## Wednesday, 22nd November 2023 (Continued)

Time	Title & Speakers
15:30-15:45	Break
15:45-16:45	<b>Career Trajectory Dissection (Remote Session)</b> Speaker: Berent Prakken
16:45	<b>Day Ends</b>



## Thursday, 23rd November 2023

Time	Title & Speakers
08:30-09:00	<b>De-briefing</b> Speaker: Raihan Jumat
09:00-10:00	<b>Protecting Intellectual Property</b> Speaker: David Wang Xinyuan  <b>Abstract</b>  Intellectual property (IP) plays an essential role in both the research and teaching functions of universities and research institutes. Through their R&D and teaching activities, universities and research institutes produce results in the form of inventions, scholarly publications, databases, confidential information, computer programs, etc. Many of these can be protected by IP. This session will make an introduction to IP and IP rights, and will discuss how to protect IP.  <b>Learning Objectives</b> <ol style="list-style-type: none"> <li>1. Understand IP and IP rights.</li> <li>2. Understand IP ownership.</li> <li>3. Learn how to protect IP.</li> </ol> <b>Preparation (Reading Materials)</b>  <a href="https://www.ipos.gov.sg/about-ip">https://www.ipos.gov.sg/about-ip</a>
10:00-10:15	<b>Break</b>
10:15-11:15	<b>Mentoring Session 1</b> See p.7 on Eureka Dynamic sessions for details  <b>Mentors</b> <ul style="list-style-type: none"> <li>• Ann-Marie Chacko</li> <li>• Ng Kee Chong</li> <li>• Salvatore Albani</li> <li>• Soo Khee Chee</li> <li>• Yeo Joo Guan</li> </ul>
11:15-12:15	<b>SG Startup Enterprise</b> Speaker: Lye Whye Kei

## Thursday, 23rd November 2023 (Continued)

Time	Title & Speakers
12:15-13:30	<b>Set Lunch @ Latitude Bistro</b>
13:30-14:30	<b>Magic Bullet (1/3)</b> See p.7 on Eureka Dynamic sessions for details  <b>Facilitators</b> MITM Students
14:30-15:30	<b>Magic Bullet (2/3)</b> See p.7 on Eureka Dynamic sessions for details  <b>Facilitators</b> MITM Students
15:30-15:45	<b>Break</b>
15:45-16:45	<b>Speed Consulting 2</b> See p.7 on Eureka Dynamic sessions for details  <b>Facilitators</b> <ul style="list-style-type: none"><li>• Ann-Marie Chacko</li><li>• Derrick Chan Wei Shih</li><li>• Raihan Jumat</li><li>• Salvatore Albani</li><li>• Scott Compton</li><li>• Yeo Joo Guan</li></ul>
16:45	<b>Day Ends</b>



## Friday, 24th November 2023

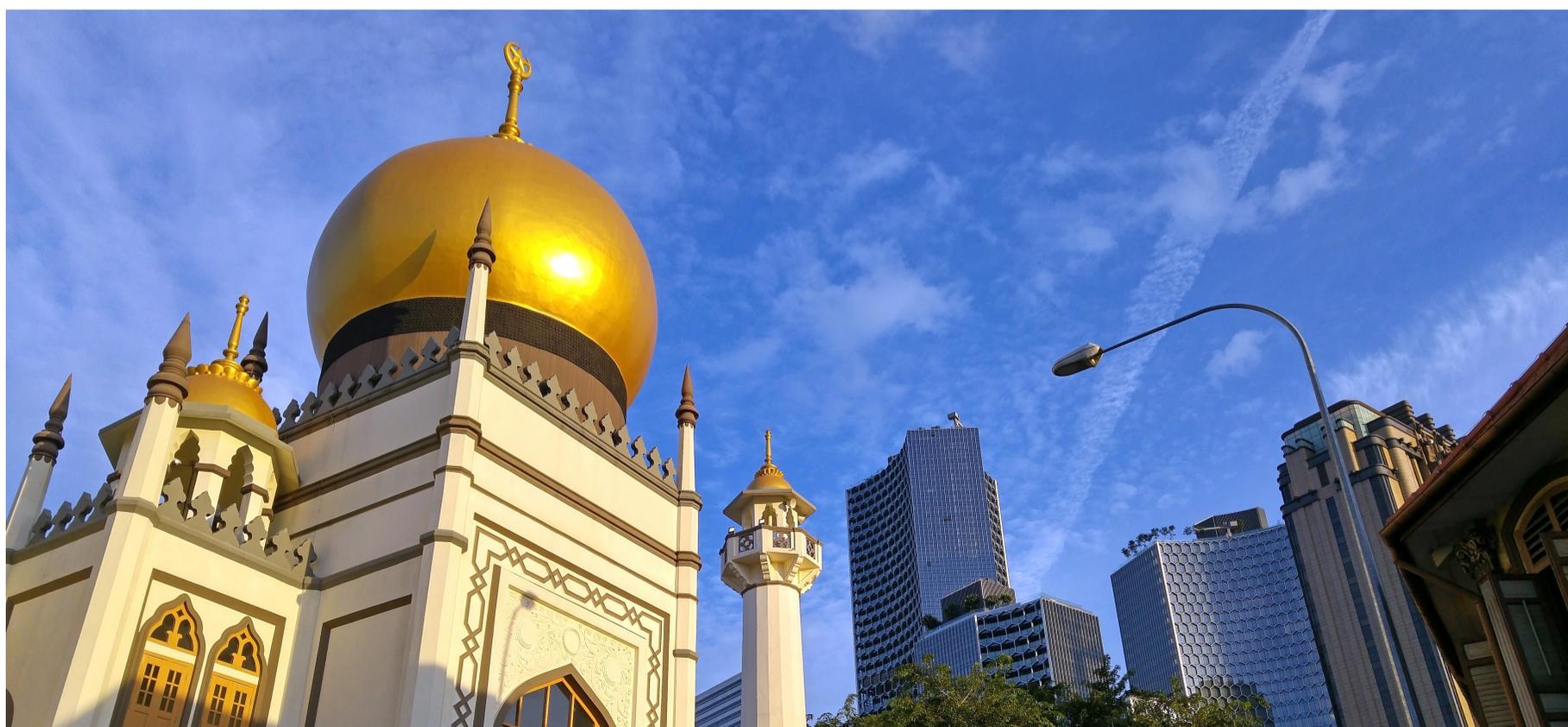
Time	Title & Speakers
08:30-09:00	<b>De-briefing</b> Speaker: Raihan Jumat
09:00-10:00	<b>“Handyman” to “Batman” - My Career Journey in Uncovering the Mystery of Bats and Bat-borne Viruses</b> Speaker: Wang Linfa  <b>Learning Objectives</b> <ol style="list-style-type: none"> <li>1. My high school dream of becoming an engineer</li> <li>2. Handyman as a “hobby”</li> <li>3. Accidentally becoming a biologist</li> <li>4. My first “meeting” with a deadly virus in Australia</li> <li>5. Hunting the origin of viruses</li> <li>6. Passion for bat research</li> <li>7. Learning from bats: translating bat knowledge to biomedical applications</li> </ol>
10:00-10:15	<b>Break</b>
10:15-11:15	<b>Mentoring Session 2</b> See p.7 on Eureka Dynamic sessions for details  <b>Mentors</b> <ul style="list-style-type: none"> <li>• Ann-Marie Chacko</li> <li>• Enny Kiesworo / Yeo Joo Guan</li> <li>• Ng Kee Chong</li> <li>• Salvatore Albani</li> <li>• Soo Khee Chee</li> </ul>
11:15-12:15	<b>Building a Deep Tech Eco-System</b> Speaker: Juliana Lim  <b>Abstract</b>  In this session, Juliana Lim, Executive Director, Talent, SGInnovate, will provide an introduction to Singapore’s research, innovation and enterprise (RIE) landscape, and how these initiatives work together to support and drive our emerging tech ecosystem forward.  <b>Learning Objectives</b> <ol style="list-style-type: none"> <li>1. An overview of Singapore’s RIE strategy</li> <li>2. Translating research to commercialisation: SGInnovate’s approach to innovation</li> <li>3. A closer look at Singapore’s Deep Tech ecosystem and its various domains</li> <li>4. Case studies: Developing Singapore’s Deep Tech talent pipeline to support our growing companies</li> </ol>
12:15-13:30	<b>Lunch @ Wok 15</b>
13:30-14:30	<b>Magic Bullet (3/3)</b> See p.7 on Eureka Dynamic sessions for details  <b>Facilitators</b> MITM Students

**Friday, 24th November 2023 (Continued)**

Time	Title & Speakers
14:30-15:30	<p data-bbox="347 337 817 370"><b>The Journey is the Destination</b></p> <p data-bbox="347 373 694 406">Speaker: Wong Tien Yin</p> <p data-bbox="347 447 480 480"><b>Abstract</b></p> <p data-bbox="347 521 1921 1119">The career journey of the "academic clinician", whether it is a clinician-scientist or translational scientist, typically follows a pathway in three overlapping phases: Training, Consolidation, and Impact. During the Training phase, the person undergoes intensive graduate studies (e.g., PhD) and further training to hone his/her research skills (e.g., post-doc fellowships), with the main focus of the acquire depth and expertise, and skills in writing papers and grants. During the Consolidation phase, the person develops a focused research program with grants, papers and presentations, and aims for independence typically as an tenured Associate Professor. The last phase of Impact is longer and more complex and is determined by the person's career aspiration and "sweet spot" (the intersection of training, expertise and personal goals) The person may choose research leadership, continuing to build on his/her focused research program but with a larger team of post-docs and students and aims to be an international leader of that particular field. On the other hand, the person may choose administrative leadership (e.g., as Chair of Department or Vice-Chair of Research) in which case the focus is on developing others and supporting programs outside of his/her area; "softer" skills in cultural sensitivity, people and systems management, business and political acumen are needed. In different phases, personal and family choices and sacrifices are inevitable. This talk will cover some of these skills with lessons gleaned over 20+ years in academia working in the four countries: US, Australia, Singapore and China. The journey itself is the destination.</p> <p data-bbox="347 1160 654 1193"><b>Learning Objectives</b></p> <ol data-bbox="398 1234 1870 1421" style="list-style-type: none"> <li>1. Appreciate the different "phases" of an academic and scientific career in medicine, biotechnology and healthcare</li> <li>2. Understand necessary ingredients of success in different "phases"</li> <li>3. Review personal goals, motivations and aspirations, to make considered career decisions in different "phases" understanding pros and cons of different choices</li> </ol> <p data-bbox="347 1462 521 1495"><b>Preparation</b></p> <p data-bbox="347 1536 1573 1613">1: McKinney RE Jr. The Daunting Career of the Physician-Investigator. Acad Med. 2017 Oct;92(10):1368-1370. doi: 10.1097/ACM.0000000000001869. PMID: 28767494.</p> <p data-bbox="347 1654 1481 1832">2: Weggemans MM, van der Schaaf M, Kluijtmans M, Hafler JP, Rosenblum ND, Prakken BJ. Preventing Translational Scientists From Extinction: The Long-Term Impact of a Personalized Training Program in Translational Medicine on the Careers of Translational Scientists. Front Med (Lausanne). 2018 Nov 9;5:298. doi: 10.3389/fmed.2018.00298. PMID: 30474027; PMCID: PMC6237913.</p> <p data-bbox="347 1874 1512 1983">3: Stoller JK. Developing physician-leaders: a call to action. J Gen Intern Med. 2009 Jul;24(7):876-8. doi: 10.1007/s11606-009-1007-8. Epub 2009 May 20. PMID: 19455370; PMCID: PMC2695517.</p> <p data-bbox="347 2025 1073 2058"><b>Pre-Session Thought Questions for Participants</b></p> <ol data-bbox="398 2099 1665 2285" style="list-style-type: none"> <li>1. Where are you at the different stages of your career (Training, Consolidation, Impact)?</li> <li>2. What is your immediate (1-3 year) goals?</li> <li>3. What is your longer term (5-10 years) career aspiration</li> <li>4. What are your strengths and weaknesses</li> <li>5. Who are your role models?</li> </ol>
15:30-15:45	<b>Break</b>

## Friday, 24th November 2023 (Continued)

Time	Title & Speakers
15:45-16:45	<p><b>Being an Eurekaian - How to make an impact as an Eurekaian?</b> Speakers: Ann-Marie Chacko &amp; Yeo Joo Guan</p> <p><b>Abstract</b></p> <p>Over 1,000 people from over 35 countries and all continents have attended at least one Eureka's event and are now part of the Eureka Network. The Eureka network, which comprises all TM stakeholders (patients, scientists, clinicians, research institutes, funding agencies, biotech startups, industries, investors, regulatory authorities, and decision-makers), is a fertile ground for the generation of a healthy ecosystem and innovative initiatives. In this session, we will present the current "Eureka Impact" priorities for the network and highlight how you can contribute to the success of the Eurekaian mission.</p> <p><b>Learning Objectives:</b></p> <ol style="list-style-type: none"> <li>1. Identify how your personal Eurekaian experience can impact your TM network.</li> <li>2. Develop strategies and actions to create a proactive community of Eurekaians and know its transformative power.</li> </ol> <p><b>Pre-session Thought Questions for Participants:</b></p> <ol style="list-style-type: none"> <li>1. What do you hope to gain from attending Eureka Monsoon Certificate Course?</li> <li>2. What can you offer to the Eureka Network?</li> </ol>
16:45-17:00	<b>Closing Remarks</b>
17:00	<b>Day Ends</b>
17:15	<b>MITM Students gather to proceed dinner</b>





## ABOUT SINGAPORE

Though physically small, Singapore is an economic giant. It has been Southeast Asia's most modern city for over a century. The city blends Malay, Chinese, Arab, Indian and English cultures and religions. Its unique ethnic tapestry affords visitors a wide array of sightseeing and culinary opportunities from which to choose. A full calendar of traditional festivals and holidays celebrated throughout the year adds to its cultural appeal. In addition, Singapore offers luxury hotels, delectable cuisine and great shopping! The island nation of the Republic of Singapore lies one degree north of the Equator in Southern Asia. The country includes the island of Singapore and 58 or so smaller islands. Because of its efficient and determined government, Singapore has become a flourishing country that excels in trade and tourism and is a model to developing nations. The capital city, also called Singapore, covers about a third of the area of the main island.

Located at the tip of the Malay Peninsula, Singapore's tropical climate welcomes both leisure and business travellers year round. The island republic's excellent infrastructure enables visitors to enjoy its many sites and attractions in a safe, clean and green environment. Award winning Changi Airport provides airlinks to major cities around the world. The train and subway systems are clean, fast and efficient. In addition, its state-of-the-art cruise terminal has established Singapore as one of the premier cruising centre of South East Asia and an exciting port of call on any Asian cruise itinerary.

In the city, there is no need for a car. Public transportation is excellent and walking is a good way to explore the city. All major attractions are also accessible by tour bus. Since the city is only 60 miles (100k) from the equator, the tropical temperatures do not vary much. Rainfall is fairly evenly distributed through the year. No matter when you choose to visit, warm weather will be abundantly available. The visitor is struck immediately by Singapore's abundance of parks, nature reserves, and lush, tropical greenery.

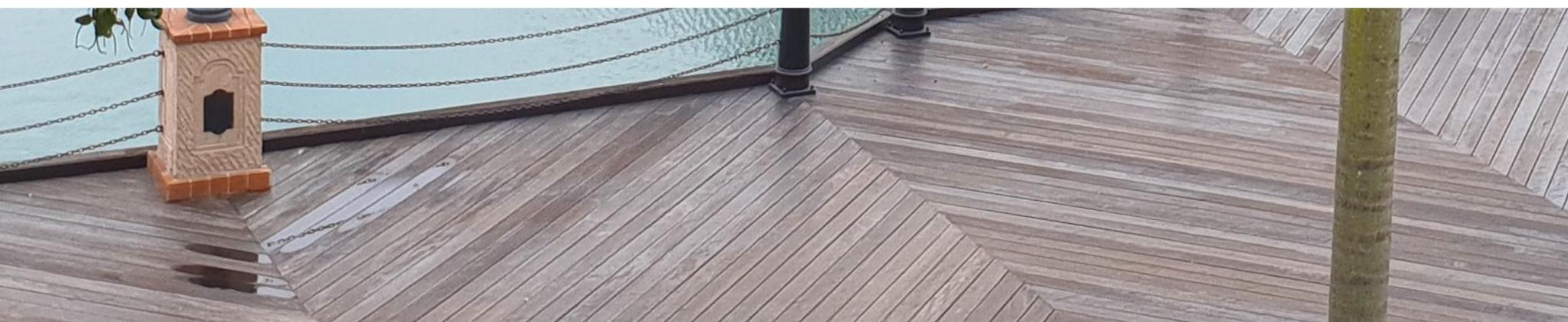
Singapore's progress over the past three decades has been remarkable, yet the island has not been overwhelmed by development. Visitors will discover a wealth of historical treasures from the past, in the beauty of older buildings, values and traditions that have survived in the face of profound social and geographical change.

Visit <http://www.visitsingapore.com/en/> for more information.

## Notes



# Faculty Biographies





**Salvatore Albani, MD, PhD**

My field of research is to understand and manipulate human immunity to ultimately and tangibly improve Health. I have developed a comprehensive technology platform which pivots on high dimensionality approaches, including cytometry, 10X single cell next generation RNA sequencing and in vitro functional modelling. We have developed Artificial Intelligence (AI) tools to distill mechanistically and clinically relevant knowledge from the interfaces among these high complexity datasets and the clinical data. By leveraging on this platform, validated predictive modelling is developed. This platform enables fundamental progress in several translationally relevant, first in class scientific contributions, which span across disease areas ranging from Autoimmunity to Cancer. It is important to emphasise the unifying conceptual framework to conceive mechanistic and therapeutic manipulations of the human immunome not as an intervention on discrete pathways which stand isolated and can be switched on and off, but rather as the sophisticated manipulation of a gradient of pathways and cell subsets which are inextricably inter-laced, and can be modulated within a continuum of intensity, comparable to what a rheostat does to the intensity of lighting in a room. I look at the architecture of the Immune System and its therapeutic manipulation by evolving from fragmentation to a continuum gradient balanced on homeostasis and tilted by perturbations such as disease or even conventional therapy.

My contribution is to have conceived and evolved this concept to tangible applications. Each of the projects can bring a solution to unmet needs. Combined, the platform advances Science by looking holistically and with high dimensionality at mechanisms of immune imbalances, thus leading to the identification of novel immune therapeutic targets which we are developing for restoration of immune homeostasis. Some of the most advanced projects include:

- 1) Defining for the first time an AI-driven, high dimensional architecture of the healthy Immunome (EPIC), and assessing the effects of Disease as perturbations of this architecture;
- 2) Conceiving and developing Chimeric Antigen Receptor Treg (CARTreg) as an entirely novel approach to cellular immunotherapy of transplant rejection, graft versus host disease and systemic autoimmunity;
- 3) Conceiving and developing new composition of matter and next steps for the development to commercial fruition of a Phase IIb – ready, first in class immunotherapy for Rheumatoid Arthritis; 4) A theragnostic platform to predict the opportunity to withdraw patients with arthritis from biologics. My work has been published in most relevant Journals of high calibre (H-Index 52 and 10,730 citations), and generated a diverse portfolio of more than 100 patents. This work is the foundation of my entrepreneurial activities, currently pivoted on Ananda Immunotherapies, PTE LTD, of which I am the scientific Founder and Chairman.

I am very active in education. Indeed, a most rewarding part of my professional life is to infect others with my passion for what I do, and to share my experiences, my successes and my failures. I am the co-founder and President of the Eureka Institute for Translational Medicine, an international organisation focused on the advancement of Translational Medicine through research, education and policy shaping.



**Scott Compton, PhD**

Professor Scott Compton is the Senior Associate Dean for Medical Education and the Programme Director for the Duke-NUS Master of International Translational Medicine (MITM) degree programme. He is also a member of the Eureka Institute for Translational Medicine. As a researcher, Professor Compton has focused his efforts on improving outcomes from out-of-hospital cardiac arrest, enhancing palliative emergency medicine, and improving medical education. He has an established mentor and educator, having been recognised for his teaching at every level of the educational spectrum and has been awarded the Golden Apple Award for Generativity for Educators from the Academic Medicine Education Institute of Duke-NUS / SingHealth Academic Medical Centre.

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**Muhammad Raihan Jumat, PhD, FHEA**

Dr Raihan Jumat is an educationalist with a background in molecular virology. As a newly appointed faculty member at Duke-NUS, Raihan oversees the Master's in Translational Medicine program. Raihan facilitates learning amongst students and the diverse panel of faculty over the 2-year course. He trained in Team-based Learning and has designed and taught undergraduate as well as post-graduate classes according to evidence-based principles. While initially focused on respiratory viruses and environmental microbiology, Raihan's research interests now include burnout in medical students and digital tool usage amongst faculty. As an educator, Raihan promotes open and frank conversations on learning and fostering the exchange of ideas and synthesis of novel concepts.





**Ann-Marie Chacko, PhD**

As an Assistant Professor in the Duke-NUS Programme in Cancer and Stem Cell Biology, and Head of the Duke-NUS Laboratory for Translational and Molecular Imaging (LTMI), Prof Ann-Marie Chacko work to combine molecular imaging efforts in drug discovery and early drug development. Through academic and industrial collaborations through Duke-NUS' world-class research programs, she lead the translational efforts for a portfolio of *in vivo* PET, SPECT, CT and optical imaging agents that span key therapeutic areas including oncology, immunology, and infectious disease.

She currently leads a national consortium, the Cancer Immunotherapy Imaging (CITI) Programme, which received a S\$22M grant in late 2018. The CITI Programme aims to address the urgent call for biomarker-driven approaches to monitor tumour immune responses, leveraging on the expertise of its strong multidisciplinary team across 10 research organisations in Singapore.

Prof Chacko is committed to educating a new generation of scientists and clinician-scientists, through outreach, teaching, and mentorship. In particular, she leads the SingHealth Duke-NUS Women in Science (WinS) Network to support the professional development of female research scientists and clinician-scientists across all professional and training levels. Her flag-ship effort is the Career Advancement Programme (WinS-CAP) for early career scientists, providing in-depth training workshops, and faculty-peer mentor sessions to address some of the unique challenges faced by women scientists.

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**Arcot Desai Narasimhalu, PhD**

Desai is a Professor Emeritus at the Singapore Management University's School of Computing and Information Systems and concurrently an Adjunct Professor at the Singapore Management University's School of Business. He consults for governments, universities, corporates and start-ups.

Desai has more than forty years of innovation design, development, management and commercialisation experiences. He has directed groups whose intellectual properties have been transferred to companies such as Apple, Computer Associates, Fujitsu, Hitachi, IBM, Internet Appliances, National Semiconductors, Siemens and Singapore Technologies. His team's IP was used to create high tech start-ups including Hotcard, SecureAge, Trustcopy and XiD Technologies.

Desai established one of the premier Cyber Security teams in Asia in the 1990s at the then Institute of Systems Science, headed Dr Robert Deng. His team's cyber security solutions were licenses to companies such as Singapore Technologies, HP, Internet Appliances and Computer Associates. Some of the IP was also bundled to create SecureAge, a cyber security solution provider.

Desai has developed proprietary innovation opportunity identification and design methods for Adjacent innovations, Business model innovations, Disruptive Innovations, Incremental innovations and Service innovations. His students have started companies based on innovations they identified using these methods.

Desai has also developed methods for designing and implementing innovation culture in large institutions. He had oversight and first hand responsibility in creating and nurturing innovation culture at Kent Ridge Digital labs and Singapore Management University.

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**Audrey Lau, BA, MBA**

Ms Audrey Lau is the Group Chief Communications Officer at Singapore Health Services (SingHealth) overseeing Communications, Patient Experience and Development. She holds a concurrent appointment as Executive Director, SingHealth Fund, a company limited by guarantee that enhances the governance and transparency in fundraising and grant-making for the SingHealth cluster through research, education, innovation to improve patient-care services, patient safety and quality care for patients.

Prior to joining SingHealth, Ms Lau spent a number of years in the financial, social services and transport industries and has extensive experience in corporate communications, community relations, branding, corporate social responsibility and strategic planning and management. Ms Lau has a BA from the National University of Singapore and MBA from Singapore Management University.

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**Berent Prakken, MD, PhD**

Berent Prakken (MD, PhD) is vice-dean and director of the biomedical education centre at the University Medical Center Utrecht (UMCU), the Netherlands. He is also professor of paediatric immunology at the UMCU and honorary professor at the University of Ghent, Belgium. Berent Prakken has built a translational research lab that focused on regulation of inflammation and biomarker development in human in inflammatory diseases. He received numerous national and international awards and grants for his work. The work of his group is published in all major international journals, including Nature Medicine, PNAS, Immunity, the Lancet, JCI and in various Nature journals. Over the years he successfully mentored more than 40 PhD students. Prakken serves in various national and international research advisory boards and was member of the Dutch National Health Council ('Gezondheidsraad'). He was vice-chair of Medical Ethical Review Board (IRB) of the UMCU. Berent Prakken is president of the Paediatric Rheumatology European Society (PRES) and member of the EULAR executive committee. He is member of the steering committee of UCAN (international federation facilitating biological research in arthritis) and has set up the first international platform for biological studies in arthritis (UCAN-U, [www.ucan-u.org](http://www.ucan-u.org)).

Berent Prakken's personal commitment is to training & education and to improve the impact of science. Unconventional thinking, collaboration and crossing boundaries inspire him, just as his close friendship with Salvo Albani, Norm Rosenblum and the other board members of Eureka. As co-founder and board member he enjoys the journey on which Eureka is taking them.



**Chriscavin Wijaya**

Chriscavin is a 25 year old Indonesian who was diagnosed with High-Risk Acute Lymphoblastic Leukaemia in December 2013 at the age of 15. He had two relapses in 2015 and 2017 and was the first patient to receive CAR-T Cell Therapy in Singapore in March 2018. He has been involved with several foundations and is currently an undergraduate in Singapore Management University's College of Integrative Studies as the inaugural cohort.

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**Danny Soon, MBBS**

Assoc. Prof. Danny Soon is Chief Executive Officer at the Consortium for Clinical Research and Innovation, Singapore (CRIS) and concurrent Executive Director at the Singapore Clinical Research Institute (SCRI). Danny is appointed as the Interim Executive Director, Advanced Cell Therapy and Research Institute, Singapore (ACTRIS) effective from 1 September 2022, for a period of 2 years, or until a new Executive Director is appointed for ACTRIS. As the inaugural CEO, Danny has the responsibility of bringing together five research programmes and platforms under the auspices of CRIS, promulgating synergies and strategies, building corporate functions to service the entire entity.

Danny was previously the Executive Director of Biomedical Research Council (BMRC) in A\*STAR. His team in BMRC was responsible for incepting and coordinating efforts and programmes in drug development, precision medicine, medical technology and biomanufacturing. Previously, Danny also held the role of founding and Acting CEO of the Experimental Biotherapeutics Centre. In this role, where he and his team were responsible for setting up a brand new centre for biotherapeutics development.

Danny has long experience in drug development, having worked at Eli Lilly and Company for 15 years, where he headed up the Lilly-NUS Centre for Clinical Pharmacology (LNUS). As the Managing Director and Principal Investigator, Danny had responsibility and oversight for all clinical Phase 1 studies conducted and operations in the unit. Studies conducted included first-in-human studies, biomarker development work, human physiology investigations and pivotal registration PK studies, in



**David Wang Xinyuan, MD, MBA**

David Wang is the Director of Centre of Technology Development and Assistant Professor at Duke-NUS. David has years of experiences in intellectual property management, technology acceleration and commercialisation, and new ventures. From 2017 to 2020 David was a Senior Acceleration Manager at Innovation Ventures of Cincinnati Children's, an international leader in paediatric medicine, research and education. He led the assessment, identification, acceleration management of Cincinnati Children's most promising biomedical programs, resulting in translational value creation and closure of massive transactions in licensing, product co-development, and venture investment. Prior to joining Cincinnati Children's, David founded a life science company and secured \$6 million venture funding for the company.

As the company founder, he managed whole cycle of product development and translated pioneering concepts into FDA-approved proprietary products. Previously, David worked for a number of years as a senior innovation manager at Cleveland Clinic, as a license manager at the University of Rochester, and as a drug discovery scientist at Pfizer. David received Bachelor (MBBS) and Master of Medicine from Hunan Medical University in China, and MBA from the University of Michigan. David has catalysed the translation of innovations into real world solutions for unmet biomedical needs, led and provided expert advising and coaching to innovators over the total product life cycle, created start-up ventures, raised first seed capital, and led to rounds of venture capital and corporate partnerships. David has negotiated and completed numerous transactions in licenses, options, product co-development, and seed/venture investments. David received 2020 Educational Institution and Federal Laboratory Partnership Award for his outstanding works in technology transfer and management of collaboration between Cincinnati Children's and NIH. David secured Certified Licensing Professional (CLP) designation in 2021.

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**Derrick Chan Wei Shih, BMedSci, BMBS, MCI, MRCPCH, CSCN, FAMS**

Derrick Chan is Senior Consultant of Paediatric Neurology at KK Women's and Children's Hospital, Singapore. He received his medical degree from Nottingham University, U.K., and a Masters in Clinical Investigation in NUS, Singapore. He trained in Great Ormond Street Hospital and the Royal Children's Hospital in Melbourne in paediatric neurology and EEG and a Paediatric Epilepsy Fellowship at the Hospital for Sick Children in Toronto, Canada. He set up the paediatric comprehensive epilepsy programme for the systematic evidence-based evaluation, investigation and management of children with seizures, including epilepsy surgery, the ketogenic diet and vagus nerve stimulator at KKH. He has published on the epidemiology of seizures and epilepsy in children and pediatric electroencephalography in epilepsy. He was a pioneer recipient of the A\*STAR BioEngineering Programme grant and developed computer vision-based seizure detection systems in conjunction with A\*STAR Institute of Infocomm Research (I<sup>2</sup>R). He set up, led and published a study on the relationship of HLA\*B1502 alleles with carbamazepine in severe cutaneous drug reactions in the Singapore paediatric population. He holds research grants in cost containment and implementation in epilepsy pharmacogenomics and is developing a commercial HLA-B\*1502 testing kit together with A\*STAR Institute of Materials Research and Engineering (IMRE) and NanoBioLab. He led the development of SG-Inspire, a ventilator for pandemic and resource-limited settings, which received 4 grants and broad media coverage. His NMRC CSA work on translational immunology in epilepsy with SingHealth Duke NUS Translational Immunology Institute was published in Nature Neuroscience. He leads the Clinician Innovator Development Programme at Duke-NUS Academic Development Department in the Office of Academic and Clinical Development.

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**Enny Kiesworo, BSc(Pharmacy), MHA, MSc(HPPF)**

Enny's responsibilities span from developing research strategies, overseeing the management of research grants, ensuring financial sustainability & strategy management of research core platforms and strategic programs at SingHealth, to facilitating multi-institutional research collaborations across SingHealth institutions and with external collaborator(s). As part of her responsibility, Enny oversees the management of SingHealth's technology transfer & commercialisation offices, animal ethics secretariat, development of national facility for large animal research and compliance to research regulatory such as Personal Data protection. As one of the drivers in the development of Academic Medicine Research Institute (AMRI) - *an innovative formation which brings together various functions of research in SingHealth and DukeNUS* -, Enny plays a critical role in supporting the development of researchers and research support staff careers within the SingHealth Duke-NUS Academic Medical Centre.

Enny obtained her Pharmacy Degree before pursuing a Masters in Health Administration (MHA) in Tulane University, USA under USAID's Scholarship, and another Masters in Health Policy, Planning and Financing (HPPF) in London School of Economics & Political Sciences and London School of Hygiene and Tropical Medicine under British Chevening Award.

Her professional background covers various aspects of biomedical and health care systems, spans from being a Hospital Consultant with a US healthcare group - National Medical Enterprises, Inc in Singapore -, Business Manager in-charged for Pre-Analytical Solutions and Diagnostics Business with Becton Dickinson (Indonesia and Singapore), to Hospital Operations (managing outpatient and inpatient operations), facility and programs expansion, fund raising, public education and various corporate functions at The Cancer Institute (the previous name of NCIS@NUHS) and management of multi-site clinical trials at Singapore Clinical Research Institute (SCRI).



**Joanne Ngeow Yuen Yie, MBBS (Melb), MMed, FRCP (UK), FAMS, MPH**

Associate Professor Joanne Ngeow, is a Senior Consultant in Division of Medical Oncology at the National Cancer Centre Singapore (NCCS). Assoc Prof Ngeow currently heads the NCCS Cancer Genetics Service with an academic interest in hereditary cancer syndromes and translational clinical cancer genomics. Her current clinical focus and research revolves around understanding cancer predisposition by studying cancers clustering in families, young adults and in families with multiple / rare cancer presentations. After completing her undergraduate medical studies at the University of Melbourne, Australia, in 2001, she completed her Internal Medicine training at the Singapore General Hospital and trained in Medical Oncology at NCCS. She was awarded consecutive fellowships by the SingHealth Research Foundation, National Medical Research Council and the Ambrose Monell Foundation to complete formal clinical and bench training as the Ambrose Monell Cancer Genomic Medicine Fellow at the Genomic Medicine Institute, Cleveland Clinic, Ohio. In 2015, she completed her Masters of Public Health at the Bloomberg School of Public Health, Johns Hopkins University, with a focus in cancer epidemiology and health economics making her one of a handful of individuals globally with skills spanning translational science, clinical genetics and health services research.

In 2018, Assoc Prof Ngeow joined Lee Kong Chian School of Medicine as Associate Professor while continuing to lead the clinical cancer genetics service and research programme in inherited cancer syndromes at NCCS. Assoc Prof Ngeow has published over 150 peer reviewed papers in such journals as the *Journal of Clinical Oncology*, *Annals of Oncology*, *Human Molecular Genetics*, *Journal of Clinical Endocrinology and Metabolism*, *Gastroenterology*. She is an Associate Editor for *Endocrine-Related Cancers* and *Human Molecular Genetics*. Her interests outside of academic medicine includes Asian art history, pottery and painting.



**John C W Lim, MBBS, MSc, SM**

Professor John Lim is founding Executive Director of the Centre of Regulatory Excellence (CoRE) at the Duke-National University of Singapore Medical School, inaugural Chairman of the Consortium for Clinical Research & Innovation Singapore (CRIS), Senior Advisor at Singapore's Ministry of Health, and Policy Core Lead at the SingHealth Duke-NUS Global Health Institute.

Professor Lim is an experienced healthcare professional, government administrator and national regulator. He graduated in medicine from the National University of Singapore and holds postgraduate degrees in public health from NUS and health policy and management from Harvard University. He is a Fellow of the Academy of Medicine Singapore and a Specialist in Public Health Medicine under the Singapore Medical Council.

Formerly Chief Executive Officer of Singapore's Health Sciences Authority and Deputy Director of Medical Services in MOH, Professor Lim has also held other senior positions in Singapore's Health and Education ministries. His current roles promote capacity building, scientific excellence and innovation for health regulation and systems in Southeast Asia and Asia-Pacific. He is a member of the Singapore Food Agency Board, Singapore Medical Council, US Pharmacopoeia Council of the Convention and Asia-Pacific Regional Chapter Chair, Davos Alzheimer's Collaborative Leadership Group, and APEC Harmonisation Center Advisory Board, among others.

Professor Lim has been awarded the DIA Global Connector Inspire Award and the Regulatory Affairs Professional Society's Founder's Award for leadership in promoting global collaboration, and shaping regulatory practice and policy throughout his career.



**Juliana Lim**

As Executive Director – Talent, Juliana tackles tech talent challenges faced by many companies and industries. She leads SGInnovate's talent development efforts, overseeing the organisation's Deep Tech Central strategy – connecting startups and talent with the resources and opportunities they need to build and scale companies tackling tomorrow's biggest challenges.

Working with like-minded partners, Juliana and her team have implemented various programmes and initiatives that have connected almost 20,000 talent with Deep Tech startups. In expanding the Deep Tech talent network, she is focused on three main areas – building new pipelines, increasing engagement touchpoints, and attracting talent to startups.

Under her leadership, the team also designed and launched Summation, Singapore's first Deep Tech-focused apprenticeship initiative. The programme provides a platform for aspiring STEM talent to gain practical experience through hands-on projects with Deep Tech startups, in areas such as artificial intelligence, machine learning and blockchain.

Prior to joining SGInnovate, Juliana led teams across the Human Resource function in organisations such as SP Group, NTUC First Campus (NFC), the National Heritage Board, Central Provident Fund Board and the Ministry of Education. Her experience spans areas including talent attraction, benefits and rewards, learning and development and business partnering.

Juliana has a Bachelor of Economics (1<sup>st</sup> Class Hons) from Murdoch University and a Masters in Strategic Human Resource Management from the University of New South Wales.



**Lye Whye Kei, BSc (Honours), PhD**

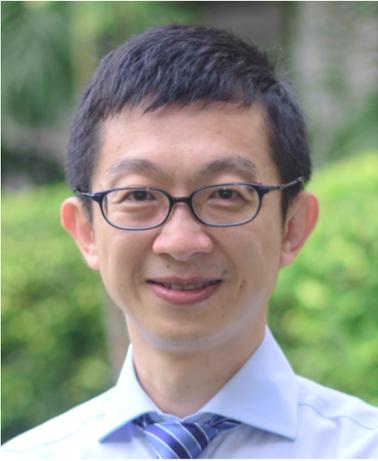
Dr. Lye is the Director of the SingHealth Intellectual Property Office (SHIP). He was previously the Director of Business Development (Future Health Care) at the NTUitive Pte Ltd, the technology transfer arm of the Nanyang Technological University in Singapore where he led the creation of several programs to support the translational development of drugs/therapeutics and medical devices. Prior to NTU, Dr. Lye was CTO-founder of Setagon, Inc., a startup which developed several proprietary stent technologies, including a metallic nonporous surface modification for medical devices such as coronary stents. Setagon obtained over US\$5.5 million in venture financing and was acquired by Medtronic. Whye-Kei is the primary inventor of the acquired technology and has over 28 patents/patent applications. His technical experience includes work in the fields of nanoscale materials, micro-electromechanical systems, and biological nanosystems. He has a B.Sc. (Honours) from the California Institute of Technology, and a PhD from Yale University.

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**Michaela Seng Su-Fern, MBBS, MRCPCH, FRACP**

Dr. Michaela Seng is a paediatric haematologist/oncologist with a clinical niche in haematopoietic stem cell transplant (HSCT) and a research interest in translational cell therapies. She graduated from NUS, completed paediatric training in Singapore, and further specialised in paediatric oncology and transplant in Sydney, Australia. Dr. Seng is the PI/Co-I of several novel cell therapy trials and has been involved in the entire process from the conceptualisation of the studies, manufacturing validations, regulatory submissions, IIT negotiations, setting up of correlative assays, generation of pilot clinical data, and the final authorisation of the investigator-initiated clinical trials. Her work in a third-party viral specific T-cell bank by cytokine capture, the first in the world, was published in 2020 (PMID 32838213). Dr. Seng serves as the BMTCT clinical facility director and BMTCT research lead in the Children's Blood and Cancer Centre, with the goal to drive the collaborative translation of innovative cell therapies in paediatric oncology.



**Ng Chirk Jenn, MBBS, MMed (Family Medicine), PhD**

Prof Ng is a Senior Consultant at SingHealth Polyclinics, and a Clinical Professor at Duke-NUS Medical School. His research expertise is in the field of shared decision making, implementation science, digital health and men's health. He has collaborated with local and international clinicians, researchers and industry partners to develop, evaluate and implement digital health and e-learning solutions including patient decision aids, screening health application for men, Covid-19 symptom monitoring system and reusable learning objects. He currently leads that EmPaTHy research programme that aims to enhance primary care delivery using technology; he also leads Digital Health Research for the Family Medicine Academic Clinical Programme. He sits in the SingHealth ODySSEy committee, PhD Scholarship Review Panel and Academy of Medicine HealthierSG Outcome Workgroup.

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**Ng Kee Chong, MBBS, MMed (Paeds), FAMS**

Assoc Prof Ng Kee Chong graduated from the Faculty of Medicine, National University of Singapore in 1989. He pursued specialty training in Paediatrics and joined KK Women's and Children's Hospital (KKH) in 1997. He was awarded a Ministry of Health (Singapore) fellowship in post-graduate training (1998-1999) at the Hospital for Sick Children in Ontario, in Paediatric Emergency Medicine. He earned his Master in Business in Business Administration in 2015 from Singapore Management University.

Assoc Prof Ng was Chairman of the Emergency Preparedness Committee at KK Women's and Children's Hospital (KKH) from 1997 to 2016, leading the hospital's disaster response following the Indian Ocean tsunami in 2004.

He was Head of the Children's Emergency at KKH from 2005 to 2016, and co-chair of the Ministry Of Health Toxicology Clinical Practice Guidelines Workgroup from 2009 to 2011. With the setting up of the Paediatrics Singhealth Academic Clinical Programme (PAEDS ACP), Assoc Prof Ng was appointed as Chairman from 2011. Assoc Prof Ng was also appointed Chairman, Division of Medicine, KKH, from 2012-2017, and Campus Director of KKH Medical Innovation & Care Transformation, in 2015. He was appointed as Chairman Medical Board 1 May 2017.

Assoc Prof Ng is currently a member of the Ministry of Health National Trauma Committee, and Vice-President of Singapore Resuscitation & First Aid Council (SRFAC) as well as a member of the MOH Mass Casualty Review Committee and Clinical Lead (SingHealth) for the WHO-Emergency Medicine Team (EMT) for MOH. He is Chair of the Pediatrics Taskforce of the International Liaison Committee on Resuscitation (ILCOR).

Assoc Prof Ng is Adjunct Associate Professor with the Duke-NUS Medical School and Yong Loo Lin School of Medicine and was the Past President of the College of Paediatrics and Child Health, Academy of Medicine Singapore.



**Ooi Eng Eong, BMBS, PhD, FRCPath**

Eng Eong trained in medicine at the University of Nottingham and completed his PhD studies on molecular epidemiology at the National University of Singapore. His research interest includes dengue pathogenesis and host response to virus infection and vaccination. His laboratory integrates clinical studies with basic virology and immunology to gain deeper understanding of dengue pathogenesis and immunity. He received the Clinician-Scientist (Senior Investigator) Awards in 2010, 2014 and 2019, and was recently awarded the Singapore Translational Research Award, all by the National Medical Research Council of Singapore. He is a member of the Scientific Advisory Board of *Science Translational Medicine* and an Editorial Board member of *PLoS Biology*.

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**Soo Khee Chee, MBBS, MD, FRACS, FACS, FAMS**

Prof Soo Khee Chee is a surgical oncologist specialising in head and neck oncology and complex abdominal and soft tissue tumours in Singapore. He brings more than 40 years of experience in the public & private sector of treating and managing both local and international patients who presented with cancers of all stages and from all walks of life. Prof Soo was the former Head of the Department of Surgery at the Singapore General Hospital, Chair of the NUS Department of Surgery and the Founding Director of the National Cancer Centre Singapore. He was also the Senior Vice Dean of Duke NUS Medical School and now continues to hold the Benjamin Shears Professorship in Academic Medicine. He has been recognised as the pioneer and leading cancer surgeon in Singapore. He introduced complex surgeries like peritonectomies for previously inoperable cancers in the abdominal cavity and major intra-abdominal tumours. He is recognised to have performed the most complex of surgeries for cancers in this region.



**Toh Han Chong, BSc (London), MBBChir (Camb), MRCP (UK), FRCP(Edin), FAMS**

Dr Toh Han Chong is Deputy CEO (Strategic Partnerships), National Cancer Centre Singapore and tenured full Professor at the Duke NUS Medical School. Dr Toh obtained his BSc (Intercalated) from the University of London in 'Infection and Immunity' and his medical degree from the University of Cambridge, UK. His oncology and translational research training were at the Singapore General Hospital, Massachusetts General Hospital, Harvard Medical School and at the Center for Cell and Gene Therapy, Baylor College of Medicine, Houston Texas, USA. Dr Toh is alumni of the Harvard Business School General Management Program. He is Principal Lead, Cellular Immunotherapy at the SingHealth Duke NUS Cell Therapy Centre.

Dr Toh is recipient of National Senior Clinician Scientist Award in 2017 and National Medical Excellence Award (NMEA) in 2018 for his pioneering work in cell and immunotherapy for cancer. He leads the NMRC LCG VICTORY (Virus-Induced Cancers Translational Oncology and immunology) grant and is recipient of the NMRC STaR Award 2022 focusing on the translational understanding and therapeutic development for viral and non-viral hepatocellular carcinoma and is active in HCC and other gastrointestinal cancer basic science, clinical research and clinical trials. He is European Society for Medical Oncology (ESMO) faculty for Cancer Immunology and on the ESMO Scientific Committee 2024. Dr Toh has published over 140 peer review journal papers.

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**Valerie Chew Suk Peng, PhD**

Dr. Chew graduated with a PhD in immunology from Agency of Science, Technology and Research (A\*STAR) Graduate Scholarship program in Singapore. Dr Chew then started her postdoctoral training in Singapore Immunology Network (SIgN), A\*STAR focusing on tumour immunology. Since 2015, Dr Chew joined Translational Immunology Institute (TII), SingHealth Duke-NUS to advance her professional career in tumour immunology research. She also holds assistant professor position with Duke-NUS Medical School.

Dr Chew is the key researcher leading the project on understanding the impact of tumour immune microenvironment on clinical outcome in patients with hepatocellular carcinoma (HCC). Her work has gained recognition with multiple grant awards and high impact journals including Gut, Journal of the National Cancer Institute, Nature Genetics, and Journal of Hepatology.



**Wang Linfa, PhD**

Prof Wang is a Professor in the Programme in Emerging Infectious Diseases at Duke-NUS Medical School and the inaugural Executive Director of the Programme for Research in Epidemic Preparedness and Response (PREPARE), Singapore. He is one of the world's leading experts in zoonotic diseases, bat immunology and pathogen discovery.

His early research was at the Monash Centre for Molecular Biology and Medicine. In 1990, he joined the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australian Animal Health Laboratory (AAHL) where he played a leading role in identifying bats as the natural host of the Severe Acute Respiratory Syndrome (SARS) virus. His research then extended from bat-borne viruses to better understand virus-bat interaction and how bats co-exist with a large number of viruses without developing clinical diseases. His recent research contributions include developing antibody based serological tests to detect the SARS-CoV-2 virus, responsible for the COVID-19 outbreak, and the early and successful culture of the virus from an infected patient sample. His team is currently focusing on research into the origin of SARS-CoV-2, developing assays which can better assess vaccine efficacy in the context of a potential immunity passport strategy and novel vaccination strategy to broaden protective immunity against future variants and emerging SARS-related coronaviruses.

Prof Wang is a member of multiple World Health Organisation committees on COVID-19. His work has been recognised internationally through various international awards, numerous invited speeches at major international conferences and more than 500 scientific papers including many top scientific publications in Science, Nature, New England Journal of Medicine, Lancet, along with nine patents and many invited book chapters. He holds a number of honorary positions and memberships and has received numerous awards.

Prof Wang was elected to the Australian Academy of Technological Sciences and Engineering in 2010, the American Academy of Microbiology in 2021 and most recently the Australian Academy of Science in 2023, in recognition of his expertise in new and emerging diseases. He received the Singapore's President Science Award in 2021. He is also active internationally by serving on various editorial boards for publication in the areas of virology, microbiology and infectious diseases. He is currently the Editor-in-Chief of the Virology Journal.

Prof Wang holds a PhD degree from the University of California, Davis USA and a Bachelor's degree from the East China Normal University, Shanghai China.



**Wong Tien Yin, MBBS, MMed, MPH, PhD, FRCSE, FRANZCO, FRCOPHT, FAHMS, FAMS**

Prof Wong is an ophthalmologist and physician-scientist who completed medical school at the National University of Singapore (NUS) and has a MPH and PhD in epidemiology from the Johns Hopkins University, USA. In 2022, he took up a new position as Chair Professor and Founding Head of Tsinghua Medicine at Tsinghua University, China. Over the past two decades, Prof Wong has served in multiple leadership positions in Singapore and Australia. His last position was Arthur Lim Professor and Medical Director of the Singapore National Eye Center and concurrently Deputy Group CEO, SingHealth, and Vice-Dean, Duke-NUS Medical School. Prof Wong has also served as Chairs of Departments of Ophthalmology at NUS and University of Melbourne, Australia.

Prof Wong's research portfolio covers broad medical and public health problems, with a recent interest and focus on digital health and AI. He has published >1,500 papers (h-index >200, multi-year highly cited researcher), given >500 invited named, plenary and symposium lectures, and received >US\$100 million in grant funding. Prof Wong has been recognised with multiple international awards, including Arnall Patz Medal (Macula Society), the Jose Rizal Medal (Asia Pacific Academy of Ophthalmology), the Friedenwald Award (ARVO, USA), amongst others. He has received Singapore's President's Science as well as the President's Science and Technology Award. He is an elected international (foreign) member of the US National Academy of Medicine.

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**Yeo Joo Guan, MBBS (S'pore), MMed (S'pore), MRCPCh (UK), PhD (S'pore)**

Dr Yeo Joo Guan is a Senior Consultant in Paediatric Medicine at KK Women's and Children's Hospital. He earned his M.B., B.S. and Masters of Medicine (Paediatric Medicine) from the National University of Singapore (NUS) in the year 2000 and 2006 respectively. During his advanced speciality training, he obtained his PhD from the Department of Microbiology, Immunology programme, NUS, on the role of serine protease C1s in lupus pathogenesis supported by the Ministry of Health's Healthcare Research Scholarship in 2014.

Following the completion of his advanced speciality training in 2015, he was mentored by Professor Salvatore Albani (Translational Immunology Institute), working on the holistic, multi-dimensional interrogation of the immunome of childhood-onset Systemic Lupus Erythematosus with the dual translational goals of identifying predictors of clinical fate and novel therapeutic targets for manipulation.

He is happily married with 6 children and has a supportive wife seeing him through his endeavour to become a successful clinician scientist with the hope of making a difference in improving the care of paediatric rheumatological patients through translational medicine.

In his free time, he is actively involved in organising outdoor scouting activities for children as a volunteer adult leader. He believed that influencing the next generation either through holistic education in non-academic skills, in addition to his work as a researcher are important life goals that are worth pursuing.