

## **Hybrid Conference**

**Student & Community Voices for Health Professions Education:** Engage, Enable & Empower

13 - 15 October 2023 International Medical University

Organised by:



Supported by:









Meet in Alaysia





# **ABOUT IMEC 2023**

Authentic student and community engagement in health professions education and healthcare could offer a foundation for empowerment and partnership. Health professions education curricula that expose students to meaningful community experiences allow a better understanding of how non-medical factors such as education, economic conditions, food security, housing, the environment, and social inclusion affect the quality of healthcare. In addition, a curriculum that increases students' choice, control, and collaboration opportunities could also increase their motivation and engagement. The inclusion of students and community voices in the way teachers teach, students learn, and are assessed not only offers diverse perspectives to improve the quality of educational outcomes but ultimately prepares future healthcare leaders to meet the growing and evolving demands of health and healthcare

The goal of IMEC 2023 is to connect healthcare professionals, curriculum planners, academics, students, and community bodies to rethink and engage with opportunities for engaging, enabling, and empowering students and communities to enhance health professions education.

# THE IMU-RON HARDEN INNOVATION IN MEDICAL EDUCATION AWARD (IMU-RHIME AWARD)



The IMU-Ron Harden Innovation in Medical Education Award was introduced with IMEC-2008 to fulfill two objectives:

to encourage innovations in medical education (medical = health professions)
to recognise innovations by academics which otherwise might go unnoticed

The award honours Professor Ronald Harden who played a crucial role in the inception of the International Medical University; and is a prestigious award because Ron is widely accepted as a "guru" in medical education worldwide. It carries a rolling trophy and cash prize of RM2,000.

# **IMU RHIME PAST WINNERS**

| 2008 - | John Paul Judson                           |  |
|--------|--|--|
|        | International Medical University, Malaysia |  |

- 2009 Thanikachalam, Sri Kumar Chakravarthi, A.Tay and Vijay Singh International Medical University, Malaysia
- 2010 Julie Chen, Diane Salter and LC Chan University of Hong Kong
- 2011 (6<sup>th</sup> AMEA Symposium) Arkendu Sen and Lakshimi Selvaratnam Monash University Sunway Campus, Malaysia
- 2012 (15<sup>th</sup> Ottawa Conference) Maria Ahmed Imperial College London, United Kingdom
- 2013 Muhamad Saiful Bahri Yusoff, Mohd Hamil Yaacob, Syed Hatim Noor and Abd Rahman Esa Universiti Sains Malaysia, Kelantan, Malaysia
- 2014 Romesh P Nalliah Harvard School of Dental Medicine, Massachusetts, United States of America
- 2015 Arkendu Sen and Lakshimi Selvaratnam Monash University Sunway Campus, Malaysia
- 2016 Chris O'Callaghan and Chris Williams Institute of Child Health, University College London, United Kingdom
- 2017 Prashanti Eachempati, Sumanth KN and Abd Rashid Hj Ismail Melaka Manipal Medical College, Malaysia
- 2018 Regi Septian, Tjahjodjati and Kuncoro Adi Padjadjaran University, Indonesia
- 2019 (10<sup>th</sup> AMEA Symposium) Madawa Nilupathi Chandratilake, Dilmini Karunaratne, Gamini Wijayarathna, Thashika Rupasinghe and Chamli Pushpakumara University of Kelaniya, Sri Lanka
- 2020 (19<sup>th</sup> Ottawa Conference) Elizabeth Wenghofer, Robert Steele, Tammy Wagner, Peter Yu and Nancy Dickey Texas A&M University College of Medicine, United States
- 2021 Nurhanis Syazni Roslan, Muhamad Saiful Bahri Yusoff, Karen Morgan, Asrenee Ab Razak & Nor Izzah Ahmad Shauki Universiti Sains Malaysia, RCSI-Perdana University & Ministry of Health Malaysia, Malaysia
- 2022 Vasudeva Rao Avupati, Mallikarjuna Rao Pichika, Mohd Zulkefeli, Lee Choy Sin, Zabibah binti Ibrahim, Hasnain Zafar Baloch International Medical University, Malaysia

# 16<sup>TH</sup> INTERNATIONAL MEDICAL EDUCATION CONFERENCE (IMEC 2023)

## **ORGANISING COMMITTEE**

ADVISORS Vishna Devi Nadarajah Institutional Development & International

**Er Hui Meng** Education & IMU Centre for Education

CHAIR Nilesh Kumar Mitra Teaching and Learning

**DEPUTY CHAIR Wong Pei Se** Teaching and Learning

SECRETARY I Norul Hidayah Mamat @ Muhammad IMU Centre for Education

SECRETARY II Bhavani Veasuvalingam IMU Centre for Education

SECRETARIATS Maithili Ratnam IMU Centre for Education

Nur Haslina Kamarudin IMU Centre for Education

#### MEMBERS

Hasnain Zafar Baloch E-Learning

Mohd Tanwyn Bin Mohd Khushairi IMU Centre for Lifelong Learning

Liong Siao Lin IMU Centre for Lifelong Learning

Janet Foo Wei Sum IMU Centre for Lifelong Learning

Noor Farahanna Aima Binti Muhd Asri IMU Centre for Lifelong Learning

Viswajid A/L Jayaraman

Mohd Rizal Bin Abdul Kahar

Rajajivan A/L Mariarockiam

S. Suresh Santhalingam Facilities Management and Administration

Vikneswary Gunalan Finance

Nor Zamelia binti Zainuddin Marketing



#### FRONT ROW FROM LEFT

- 1 Bhavani Veasuvalingam 2 Norul Hidayah binti Mamat @ Muhammad
- 3 Nilesh Kumar Mitra 4 Vishna Devi Nadarajah 5 Er Hui Meng 6 Wong Pei Se

#### BACK ROW FROM LEFT

- 7 Noor Farahanna Aima Binti Muhd Asri 🔞 Janet Foo Wei Sum
- 9 Mohd Tanwyn Bin Mohd Khushairi 🕕 Hasnain Zafar Baloch
- 🕦 Mohd Rizal Bin Abdul Kahar 😰 Maithili Ratnam 🚯 Nur Haslina Kamarudin

#### NOT IN THE PHOTO

Liong Siao Lin | Viswajid A/L Jayaraman | Rajajivan A/L Mariarockiam S.Suresh Santhalingam | Vikneswary Gunalan | Nor Zamelia Binti Zainuddin

# 16<sup>TH</sup> INTERNATIONAL MEDICAL EDUCATION CONFERENCE (IMEC 2023)

### **SCIENTIFIC COMMITTEE & SECRETARIAT**

ADVISORS Vishna Devi Nadarajah Institutional Development & International

**Er Hui Meng** Education & IMU Centre for Education

CHAIR Wong Pei Se Teaching and Learning

SECRETARY I Pathiyil Ravi Shankar IMU Centre for Education

SECRETARY II Siti Suriani binti Abdul Razak IMU Centre for Education

**SECRETARIAT Nur Hafizah binti Adnan** Teaching and Learning

Rohayati Raben IMU Centre for Education **Abdul 'Azim Roslan** IMU Centre for Education

MEMBERS Heethal Jaiprakash Learning Resources

**Leela V Sabapathy** Public Health & Community Medicine

**Mona Mohamed Ibrahim Abdalla** Human Biology

Adlina Suleiman Public Health & Community Medicine

Sivakumar Arunachalam Clinical Oral Health Sciences

Muneer Gohar Babar Clinical Oral Health Sciences Kok Yih Yih Applied Biomedical Sciences

**Ebenezer Chitra** Technology Enhanced Learning

**Sow Chew Fei** Clinical & Experiential Learning

Vasudeva Rao Avupati Pharmaceutical Chemistry

Thiagarajan Madheswaran Pharmaceutical Technology

Christina Gertrude Yap Monash University

## **SUPPORT TEAM**

- 1 Mohd Fadzil bin Zainal Anuar
- 2. Muhammad Aswandi bin Aminuddin
- 3. Mohd Lazry bin Abd Latif
- 4. Muhammad Rashidi Rahmat
- 5. Rayme Jibri

- 6. Nicholas Lim Thiam Fook
- 7. Ramesh Kumar
- 8. Aini Rafizah binti Abdul Aziz
- 9. Farhatun Amaliyyah Ab Murad
- 10. Koh Yen Lin
- 11. Shahril Mat Sohor



#### FRONT ROW FROM LEFT

- 1 Siti Suriani binti Abdul Razak 2 Wong Pei Se 3 Nilesh Kumar Mitra
- 🕢 Vishna Devi Nadarajah 5 Er Hui Meng 🜀 Pathiyil Ravi Shankar

#### BACK ROW FROM LEFT

- 7 Sivakumar Arunachalam (8) Adlina Suleiman (9) Mona Mohamed Ibrahim Abdalla
- 🔟 Sow Chew Fei 🕦 Ebenezer Chitra 😰 Abdul 'Azim Roslan 🔞 Kok Yih Yih
- 🙆 Muneer Gohar Babar 🚯 Vasudeva Rao Avupati 🔞 Leela V Sabapathy
- 🕦 Nur Hafizah binti Adnan 🔞 Heethal Jaiprakash 😳 Rohayati Raben
- 2 Thiagarajan Madheswaran

NOT IN THE PHOTO Christina Gertrude Yap

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# WELCOME MESSAGE FROM THE VICE-CHANCELLOR

**INTERNATIONAL MEDICAL UNIVERSITY (IMU)** 



It is a great honour and pleasure to welcome you all to the 16th International Medical Education Conference (IMEC) 2023. You all will agree that since the first IMEC convened in 2004, the conference has produced immense interest among medical and health professions educators worldwide for the last 15 years. Through IMEC, health professions educators and participants from diverse countries have been able to confidently network and actively engage with each other at local, regional and international levels. Before we begin the intellectual discussions via a repertoire of plenaries, symposiums and paper presentations, I take the opportunity to thank each of the speakers for takingpart in this conference. Like in previous years, the quality of the topics and the speakers is outstanding. The experience of the COVID-19 pandemic has taught us educators the immense value of collaboration with community members and students in the diverse aspects of medical and health professions education and healthcare. Student engagement in medical and health professions education is a complex multidimensional phenomenon which has attained great interest in the present decade. Students are actively being engaged in the construction of teaching and learning resources in many universities across the world. Apart from the domains of teaching and learning, students' time and energy should be engaged in medical research, in enhancement of the institutional governance and organisation of community activities.

IMU has always been actively associated with engaging, enabling and empowering the community through several collaborative IMU care activities. The Kampung Angkat Project (KAP) or Village Adoption Project at Kampung Tekir, Malaysia won First Place in the Mac Jannet Prize for Global Citizenship. MacJannet Foundation has acknowledged the exceptional student community engagement initiatives of the University. The inclusion of students and community voices not only offers diverse perspectives to improve the quality of educational outcomes, but it also prepares the students. who are the future healthcare leaders to meet the growing and evolving demands of health and healthcare.

IMEC 2023 explores topics on communitybased patient-centered interprofessional learning, social accountability of the students in curriculum activities, the institutional culture of engaging stakeholder's voices and student's role in leadership and collaboration. Discussions are also being made in the symposiums on how to empower students in engagement towards enhancing the quality of teaching and learning as wellas how disruptive technology like artificial intelligence can be used towards better student performance. It is also being explored whether systems of assessment can meet the needs of both students and the community.

I sincerely hope that the active interactions during the IMEC 2023 will connect healthcare professionals, curriculum planners, academics, community bodies and students towards generating strategies for better engagement of students and communities towards the development of sustainable healthcare and health professions education.

I would also like to thank the dynamic organising and scientific committee members for their ardent preparatory work towards making the conference possible. I extend my thanks to the reviewers and judges for the oral and e-poster presentations as well as the chairpersons and moderators for your contributions and efforts. I also sincerely thank the industry sponsors for their support and for showcasing future solutions at IMEC.

Thank you and I wish you all an enlightened conference.

Professor Abdul Aziz Baba Vice-Chancellor

# WELCOME MESSAGE FROM THE CONFERENCE CHAIR

**INTERNATIONAL MEDICAL UNIVERSITY (IMU)** 



On behalf of the IMEC 2023 Committee, I welcome you to the 16th International Medical Education Conference. The conference theme of "Student and Community Voices for Health Professions Education: Engage, Enable and Empower" presents opportunities for stimulating discussion about the inclusion of student and community voices in the diverse perspectives of medical and health professions education. It aims to address the need for authentic student and community engagement in the health professions education and healthcare to offer a foundation for meaningful partnership. The conference is actively discussing student empowerment through self-regulated learning, social accountability, and collaborative leadership in curriculum development. Students follow the patient's journey throughout the healthcare pathway, interacting with a range of representatives from the community. Thus, the community plays an important role in the making of a doctor or healthcare professional. A variety of discussions on community and student involvement in health professions education and healthcare are taking place through plenaries, symposia, and preconference workshops led by distinguished speakers from diverse backgrounds and experiences. It is our sincere hope that new ideas and inspiration will be generated from these discussions and interactive paper presentation sessions.

The hybrid conference is attended by delegates from 34 countries, including health professionals, educators, students, administrators, and policymakers. We aim to provide an engaging experience for online participants via the IMU virtual platform. We hope that the participants attending on-site will be able to interact widely and network with fellow participants, speakers, exhibitors, IMU staff, some members of the community and the students.

I want to thank the speakers, facilitators, session chairs, moderators, judges, reviewers, and sponsors. My appreciation and gratitude are extended to the members of the Organizing Committee, the Chair, and members of the Scientific Committee, IMU Centre for Lifelong Learning (ICL), IMU Centre for Education (ICE), as well as student helpers for their tremendous effort and continuous support to ensure the success of the conference. I offer my sincere thanks to the e-Learning, IT, Finance and Facilities Management departments for their invaluable help.

Once again, 'Welcome' and 'Selamat Datang' to IMEC 2023!

MANTA

Professor Nilesh Kumar Mitra Organizing Chair IMEC 2023



# PRE-CONFERENCE

# PRE-CONFERENCE PROGRAMME

## FRIDAY, 13 OCTOBER 2023 | DAY 1

| TIME      | PROGRAMME  | VENUE               |
|-----------|--|---------------------|
| 0900-1200 | Pre-Conference Workshop - P1a (Onsite)<br>Title: Using Cinema to Explore Student Empowerment and<br>Community Partnership in Health Professions Education<br>Facilitators:<br>Pathiyil Ravi Shankar (Malaysia), Anuradha Joshi (India),<br>Juhi Kalra (India)  | 1.12.09,<br>Level 1 |
|           | Pre-Conference Workshop 2 - P1b (Onsite)<br>Title: Effective Mentoring Conversations: Ask More, Tell Less!<br>Facilitators:<br>Benjamin Yen Seow Goh (Singapore), Marion Aw (Singapore),<br>Zhi Xiong Chen (Singapore)   | 1.12.02,<br>Level 1 |
|           | Pre-Conference Workshop - P1c (Onsite)<br>Title: Engaging Students and Faculty in Academic<br>Publishing: Strategies to Make Manuscript Submission and<br>Dissemination of Your Published Work More Successful<br>and Enjoyable<br>Facilitators:<br>Peter GM de Jong (Netherlands), Julie K Hewett (USA) | 1.12.13,<br>Level 1 |
|           | Pre-Conference Workshop - P1d (Onsite)<br>Title: Designing a Community-Based Patient-Centred<br>"reverse" Interprofessional Education (IPE) Learning Activity<br>Facilitators:<br>Weeming Lau (Malaysia), Pacifico Eric Eusebio Calderon<br>(Philippines), Wai-Tat Wong (China), Vivian Wy Lee (China)   | 1.12.06,<br>Level 1 |
|           | Pre-Conference Workshop - O1a (Online)<br>Title: Scenario Design in Simulation-based Education<br>Facilitators:<br>Sow Chew Fei (Malaysia), Chong Pek Sam (Malaysia)   | Online              |
|           | Pre-Conference Workshop - O1b (Online)<br>Title: Promoting Self-Regulated Learners<br>Facilitators:<br>Wong Pei Se (Malaysia), Norul Hidayah Mamat (Malaysia),<br>Ebenezer Chitra (Malaysia)   | Online              |
| 1200-1345 | Lunch Break  |                     |

| TIME      | PROGRAMME   | VENUE               |
|-----------|---|---------------------|
| 1300-1400 | IMU Clinical Skills and Simulation Centre Tour  |                     |
| 1400-1700 | Pre-Conference Workshop - P2a (Onsite)<br>Title: Disruptive Behavior – Impact on Well Being, and<br>How We Can Empower Individuals to Address<br>it Effectively<br>Facilitators:<br>Inthrani Raja Indran (Singapore), Marion Aw (Singapore),<br>Benjamin Yen Seow Goh (Singapore), Kristy Xinghan Fu<br>(Singapore) | 1.12.09,<br>Level 1 |
|           | Pre-Conference Workshop - P2b (Onsite)<br>Title: A Practical Guide for Implementing Socially<br>Accountability Values in Day-to-Day Curriculum Activities<br>Facilitators:<br>Mohamed Hassan Taha (UAE), Mohamed Elhassan (Ireland)   | 1.12.02,<br>Level 1 |
|           | Pre-Conference Workshop - P2c (Onsite)<br>Title: The Simulated Patient Program: From Theory<br>to Reality<br>Facilitators:<br>Chong Pek Sam (Malaysia), Sow Chew Fei (Malaysia),<br>Juliet Mathew (Malaysia), Jacintha Anita Aroksamy (Malaysia)  | 1.12.06,<br>Level 1 |
| 1400-1700 | Pre-Conference Workshop - O2a (Online)<br>Title: Overcoming the Challenges in Teaching Incoming<br>Learners during Clinical Practice<br>Facilitators:<br>Ahmed Al Hammadi (Qatar), Magda Wagdy (Qatar),<br>Marcellina Mian (Qatar), Amal Khidir (Qatar)   | Online              |
|           | Pre-Conference Workshop - O2b (Online)<br>Title: Making Effective Educational Videos<br>Facilitators:<br>Fabian Davamani Amalraj (Malaysia),<br>Vasudeva Rao (Malaysia), Muhammad 'Azizi (Malaysia),<br>Muhammad Aswandi (Malaysia)   | Online              |

# FRIDAY, 13 OCTOBER 2023 | DAY 1

| TIME      | PROGRAMME                            | VENUE                              |
|-----------|--------------------------------------|------------------------------------|
| 1430-1630 | 17th Niigata Meeting (By Invitation) | ICE Training<br>Centre,<br>Level 2 |
| 1800-2100 | Dinner (By Invitation)               |                                    |

# MAIN CONFERENCE DAY 2

# MAIN CONFERENCE PROGRAMME

## SATURDAY, 14 OCTOBER 2023 | DAY 2

| TIME      | PROGRAMME   | VENUE   |
|-----------|---|---|
| 0800-0815 | Registration  | Foyer, Level 4                                |
| 0815-0830 | Opening Ceremony  |   |
| 0830-0835 | Welcome Address<br>Nilesh Kumar Mitra (Organising Chair)  |   |
| 0835-0845 | <b>Opening Address</b><br>Abdul Aziz Baba (Vice Chancellor, IMU)  | Mei Ling                                      |
| 0845-0935 | Plenary 1<br>Title: Institutional Culture of Engaging Stakeholders' Voices<br>Raja Nur Shahkeerah (Malaysia) - Cultivating an Institutional<br>Culture that Values Students' Voices<br>Trudie Roberts (United Kingdom) - Health Professions Education:<br>Which Stakeholder Shoulder Have Primacy?<br>Chairperson: Ian Martin Symonds, Moderator: Muneer Gohar<br>Babar                                       | Young<br>Auditorium 2,<br>Level 4             |
| 0935-0945 | Photography Session   |   |
| 0945-1020 | Break, Networking & Visit Sponsor Page/ Exhibition Booths   |   |
| 1020-1120 | Symposium 1a<br>Title: Preparedness as Junior Doctors: Perspectives of<br>Learners of the Alpha Generation<br>Amanda Albert (Malaysia) - Taking Care of Mental Health<br>Joash Tan Loh (Malaysia) - Preparedness for Junior Doctors: Part<br>and Parcel of Medical Education<br>Kuhanesh Janardanan (Singapore) - The Road Less Taken<br>Chairperson: Nilesh Kumar Mitra, Moderator: Pathiyil Ravi<br>Shankar | Mei Ling<br>Young<br>Auditorium 2,<br>Level 4 |

| TIME      | PROGRAMME   | VENUE   |
|-----------|---|---|
| 1020-1120 | Symposium 1b<br>Title: Students as Catalysts: Leadership and Collaboration<br>Woon Shi Sien (Malaysia) - Students as Effective Change-<br>Makers<br>Jigyasa Sharma (Malaysia) - Peer Tutoring as a Catalyst for<br>Student Engagement<br>Quek Joo Wei Ethan (Singapore) - A Student-Led Approach to<br>Medical Education<br>Chairperson: Gnanajothy Ponnudurai, Moderator: Wong Pei Se  | Mei Ling<br>Young<br>Auditorium 1,<br>Level 4 |
| 1130-1230 | Symposium 2a<br>Title: Engaging, Enabling and Empowering the Students'<br>Voice in Teaching and Learning<br>Weeming Lau (Malaysia) - The Importance of Seeking Early<br>Feedback from Students<br>Wei-Han Hong (Malaysia) - Enhancing Communication Skills in<br>Year 1 Medical Students<br>Er Hui Meng (Malaysia) - Students as Partners in Quality<br>Assurance (QA) of Health Professions Education<br>Chairperson: Seow Liang Lin, Moderator: Sivakumar<br>Arunachalam  | Mei Ling<br>Young<br>Auditorium 2,<br>Level 4 |
|           | Symposium 2b<br>Title: Student and Community Engagement with Technology<br>Enhanced Learning (TEL))<br>Sow Chew Fei (Malaysia) - Bridging Boundaries:<br>Interprofessional Collaboration in the Development of<br>Technology-Enhanced Learning<br>Rohan Bates (Australia) - Exploring the Potential of Simulation<br>Learning Dashboard<br>Chase Sherwell (Australia) -Biometrics in Education: Leveraging<br>Physiological Data to Enhance Learning<br>Chairperson: Wong Pei Se, Moderator: Thiagarajan<br>Madheswaran | Mei Ling<br>Young<br>Auditorium 1,<br>Level 4 |

## SATURDAY, 14 OCTOBER 2023 | DAY 2

| TIME      | PROGRAMME   | VENUE  |
|-----------|---|--|
| 1230-1430 | Lunch Break<br>Talk by Gold and Silver Sponsors<br>Visit Exhibition   | Dewan<br>Chancellor and<br>Open Area,<br>Level 4 |
|           | IMU Clinical Skills and Simulation Centre Tour  | CSSC, Level G<br>Open Area,<br>Level 4           |
|           | Oral Presentation Session 1.1   |  |
|           | Oral Presentation Session 1.2   |  |
| 1330-1430 | Oral Presentation Session 1.3   |  |
|           | Oral Presentation Session 1.4   | Online   |
|           | E-Poster Presentation Session 1.5   |  |
|           | E-Poster Presentation Session 1.6   |  |
|           | E-Poster Presentation Session 1.7   |  |
| 1435-1535 | Symposium 3a<br>Title: Authentic Experiences and Mentoring to increase<br>Student's Motivation and Engagement<br>Peter GM de Jong (Netherlands)- The Use of Virtual and<br>Augmented Reality to Create Authentic Learning Experiences<br>Vishna Devi Nadarajah (Malaysia) - How Traditional Dissection<br>Room Teaching Impacts the Identity Formation of Students<br>Rina Masadah (Indonesia) - The Professional Development of<br>the Educator to Engage and Mentor Students<br>Chairperson: Chen Yu Sui, Moderator: Ebenezer Chitra Fabian | Mei Ling<br>Young<br>Auditorium 2,<br>Level 4    |

| TIME      | PROGRAMME   | VENUE  |
|-----------|---|--|
| 1435-1535 | Symposium 3b<br>Title: New Approaches to Education Delivery and<br>Assessment in the Era of Al<br>Nilesh Kumar Mitra (Malaysia) - Online Learning and Al-based<br>Intelligent Tutoring System<br>Maude E Phipps (Malaysia) - The Rise of Al: Rethinking<br>Assessment in Education<br>Ong Jiaxian (Malaysia) - Advantages and Disadvantages of<br>Using Al Among Students<br>Chairperson: Muneer Gohar Babar, Moderator: Vasudeva Rao | Mei Ling<br>Young<br>Auditorium 1,<br>Level 4    |
|           | Oral Presentation Session 2.1   | 1.12.02  |
|           | Oral Presentation Session 2.2   | 1.12.03  |
|           | Oral Presentation Session 2.3   | 1.12.06  |
|           | Oral Presentation Session 2.4   | 1.12.08  |
|           | Oral Presentation Session 2.5   | 1.12.09  |
| 1540-1640 | Oral Presentation Session 2.6   | 1.12.12  |
|           | Oral Presentation Session 2.7   | 1.12.13  |
|           | E-Poster Presentation Session 2.8   | 1.06.14  |
|           | E-Poster Presentation Session 2.9   | 1.06.16  |
|           | E-Poster Presentation Session 2.10  | 1.06.18  |
|           | E-Poster Presentation Session 2.11  | 1.12.07  |
| 1645-1730 | Plenary 2<br>Title: Systems of Assessment: Meeting the Needs of<br>Students and the Community<br>John Norcini (United States)<br>Chairperson: Tan Eng Lai, Moderator: Heethal Jaiprakash  | Mei Ling<br>Young<br>Auditorium 2,<br>Level 4    |
| 1730      | Tea and Networking  | Dewan<br>Chancellor and<br>Open Area,<br>Level 4 |



# MAIN CONFERENCE DAY 3

# MAIN CONFERENCE PROGRAMME

## SUNDAY, 15 OCTOBER 2023 | DAY 3

| Time      | Programme  | Venue  |
|-----------|--|--|
| 0800-0815 | Registration   | Foyer, Level 4                                   |
| 0815-0900 | Plenary 3<br>Title: 'It Takes a Community ( <del>village</del> ) to Raise a Doctor ( <del>child</del> )'<br>Richard Hays (Australia)<br>Chairperson: Trudie Roberts, Moderator: Kok Yih Yih<br>IMU-Ron Harden Innovation in Medical Education  | Mei Ling<br>Young<br>Auditorium 2,               |
| 0900-1000 | (IMU – RHIME) Presentations<br>Chairperson: Er Hui Meng, Moderator: Siti Suriani   |  |
| 1000-1030 | Break, Networking & Visit Sponsor Page/<br>Exhibition Booths   | Dewan<br>Chancellor<br>and Open<br>Area, Level 4 |
| 1030-1130 | Symposium 4a<br>Title: Community Participation in Health Professions<br>Education<br>Ong Kok Hai (Malaysia) - Bridging Communities, Creating<br>Opportunities<br>Sunthara Moorthy Subramaniam (Malaysia)- My Enchanting<br>Journey as a Simulated Patient<br>Chin Kin Fah (Malaysia) - The Contribution of "i . Silent Mentor"<br>Program in Medical Education - A Liberal Art Approach<br>Chairperson: Sow Chew Fei, Moderator: Wong Pei Se | Mei Ling<br>Young<br>Auditorium 2,<br>Level 4    |
|           | Symposium 4b<br>Title: ASPIRE Academy: Unlocking the Secrets of Student<br>Engagement in Undergraduate Medical Education<br>Rahat Longsomboon (Thailand), Danai Wangsaturaka<br>(Thailand), Azlina binti Abdul Salam (Malaysia),<br>Vishna Devi Nadarajah (Malaysia)<br>Chairperson: Khoo Suan Phaik, Moderator: Siti Suriani  | Mei Ling<br>Young<br>Auditorium 1,<br>Level 4    |
| 1135-1235 | Closing Plenary<br>Title: The Changing Role of Students in Health Professions<br>Education<br>Speakers: Ronald Harden (United Kingdom),<br>Jeni Harden (United Kingdom)<br>Chairperson: Vishna Devi Nadarajah, Moderator: Sow Chew Fei   | Mei Ling<br>Young<br>Auditorium 2,<br>Level 4    |

| Time      | Programme  | Venue  |
|-----------|--|--|
| 1235-1300 | Presentation of Awards for Oral, E-Poster & IMU-Ron<br>Harden Innovation in Medical Education (IMU-RHIME)<br>Closing Remark by Nilesh Kumar Mitra (Organising Chair)   | Mei Ling<br>Young<br>Auditorium 2,<br>Level 4    |
| 1300-1400 | Lunch and Networking   | Dewan<br>Chancellor<br>and Open<br>Area, Level 4 |
|           | APA-PHS (Problem-Based Learning) Symposium<br>Theme: Digital Problem-Based Learning: Empowering<br>Students and Facilitators   |  |
| 1400-1500 | APA-PHS (PBL) Symposium 1<br>Title: Digital Problem-Based Learning: Empowering<br>Students and Facilitators<br>Hermanto Tri Joewono (Indonesia) - Using Technology to Aid<br>Student-centered and Brain-Friendly<br>Goon Jo Aan (Malaysia) - The Benefits and Challenges of Digital<br>Problem-based Learning for Students and Facilitators<br>Helen Octavia Djoenaydy (Indonesia) - Digital PBL for Digital<br>Generation: The Good, The Bad, and The Lesson Learned<br>Chairperson: Florence Pribadi         | Online   |
| 1500-1600 | APA-PHS (PBL) Symposium 2<br>Title: Effective Facilitation and Assessment of Students in<br>Problem-Based Learning<br>Noor Akmal Shareela (Malaysia) - Unlocking Potential with<br>Digital Problem-based Learning: Empowering Students and<br>Facilitators to Succeed<br>Diantha Soemantri (Indonesia) - The Power of Feedback for<br>Effective Facilitation and Assessment During Problem-based<br>Learning<br>Sanabil Ahsan (Malaysia) - Navigating PBLs as a Medical<br>Student<br>Chairperson: Rafidah Hod |  |
| 1600-1700 | Symposium 3: Oral Presentation<br>PBL in Digital Era: Empowering Students<br>Chairperson: Nur Lisa   | Online   |

# **PLENARIES**

## **PLENARY 1**

## Institutional Culture of Engaging Stakeholders' Voices

Date: 14 October 2023 Time: 0910 - 1000 Venue: Mei Ling Young Auditorium 2, Level 4, IMU

#### Sypnosis

A positive institutional culture promotes communication platforms to ensure that diverse students and community voices are heard and respected. Through nurturing a culture that prioritises student and community partnership, institutions have meaningful relationships that improve learning experiences, address community needs, and facilitate social change. This talk offers perspectives from students and educators on the role of institutional culture in promoting students and community voices.



Raja Nur Shahkeerah International Medical University, Malaysia

#### Cultivating an Institutional Culture that Values Students' Voices.

In higher education, institutional culture demonstrates the values and collective understandings that shape the students' patterns and values. There is growing attention to advancing student voice in the institution, especially in shaping their academic or extracurricular learning. Authorising students' voices is crucial in strengthening their sense of belonging and building a stronger connection with the institution. In this plenary, I will discuss the roles of different stakeholders, particularly the mentors and lecturers, in shaping an institutional culture that values students' voices.



**Trudie Roberts** Leeds Institute of Medical Education (LIME), United Kingdom

### Health Professions Education: Which Stakeholder Shoulder Have Primacy?

Using the medical course at the University of Leeds as an example, in this talk, I will explore who are the different stakeholders in the education of Health Professionals and ask the question: Who should have the final say on what future doctors should be taught?

# **PLENARIES**

## **PLENARY 2**

# Systems of Assessment: Meeting the Needs of Students and the Community

Date: 14 October 2023 Time: 1645 - 1730 Venue: Mei Ling Young Auditorium 2, Level 4, IMU

#### Sypnosis

To fulfil the various roles of assessment in the educational enterprise, multiple examinations are used and historically they have been high stakes summative examinations. This use of assessment has aimed to serve the needs of the community by ensuring that graduating students are competent to take care of patients. However, over the past few decades there has been growing awareness of the powerful role assessment can play in supporting and creating learning. This talk will offer a description of the roles assessment plays in the educational enterprise and well as some of the research speaking to the power of feedback and formative assessment. It will identify the elements of a well-functioning system of assessment and how it might serve the needs of both the community and students.



John Norcini Foundation for Advancement of International Medical Education and Research (FAIMER), United States

## **PLENARY 3**

## It Takes a Community (village) to Raise a Doctor (child)

Date: 15 October 2023 Time: 0815 - 0900 Venue: Mei Ling Young Auditorium 2, Level 4, IMU

#### Sypnosis

In traditional clinical placements, students observe/participate in/learn from exposure/ experiences to episodes of health care for patients who are in a particular part of the healthcare system. They usually will not see the patient again and so their learning is limited to periods of peak activity in individual clinical pathways. The focus of attention is often a single problem, often acute and/or severe, primarily in hospital settings, where patients are vulnerable captives. In a longitudinal integrated clerkship (LIC) students have opportunities to observe/participate in/learn from exposure/experiences of what happened before and after the acute episodes. They also are able to follow patient journeys into, through, and out of healthcare pathways, participating at several points in the journey, and interacting with a wider range of participants. The patients are more independent for most of the journey, and the context of their lives is evident and able to be considered when healthcare decisions are made. Patients' families and neighbours become learning resources, as do all the health professionals and social services in the community. This is more holistic learning, qualitatively and quantitatively different from traditional placements. In this presentation, the evidence base for these assertions is discussed.



**Richard Hays** James Cook University, Australia

# **PLENARIES**

## **CLOSING PLENARY**

# The Changing Roles of Student in Health Professions Education

Date: 15 October 2023 Time: 1135 - 1235 Venue: Mei Ling Young Auditorium 2, Level 4, IMU

#### Sypnosis

Attention has been paid in health professions education to curriculum planning and education strategies such as PBL, to teaching and learning methods including the use of new technologies, and to assessment including developments relating to performance and programmatic approaches.

The changing role of students is a key development in health professions education. Students are no longer considered simply as customers or clients but, working alongside the teacher, as partners in the learning programme. This will be perhaps the most important development in health professions education in the next decade (Harden & Harden, 2023).

In a conscious shift, schools need to decide where they wish to sit on the student/ teacher partnership ladder, from little or minimal involvement of the student to a full partnership and strategic collaboration. How to best involve students and the extent of the collaboration in the education programme is a challenge.

In this presentation I will look at the roles of the student as a professional and scholar, as a curriculum collaborator and assessor, as an information processor and facilitator of learning and as a teacher. I will describe the ladder of increasing student/teacher participation in the education programme.

Reference:

Harden, J. and Harden, R.M. The Changing Role of Medical Students. (2023) Edinburgh: Elsevier



#### Ronald M Harden

OBE MD FRCP(Glas) FRCS(Ed) FRCPC Editor-in-Chief Medical Teacher Emeritus Professor of Medical Education, University of Dundee, UK



#### Jeni Harden

Director of Education, Usher Institute Co-Chair of BeSST (Behavioural and Social Sciences Teaching in Medicine) Co-Director of the Centre for Research on Families and Relationships

# SYMPOSIUM

## **SYMPOSIUM 1A**

### Preparedness as Junior Doctors: Perspectives of Learners of the Alpha Generation

Date: 14 October 2023 Time: 1020 - 1120 Venue: Mei Ling Young Auditorium 2, Level 4, IMU

#### Speakers:

#### Amanda Albert

#### University Malaysia Sarawak, Malaysia.

Amanda is a psychiatrist and medical lecturer. She teaches fourth-year medical students in Kuching, Sarawak what they need to know about psychiatry and mental health as junior doctors in future, and that extends to how to take care of themselves. Her areas of interest range widely from how digital technology impacts mental health, the role of exercise in mental healthcare, and mental health awareness among religious groups. She believes that animals have a special role to play in the promotion of mental health, and has more dogs than your average person.

#### Joash Tan-Loh

#### Hospital Sultanah Bahiyah, Malaysia

Joash Tan Loh is a physician and educator at Hospital Sultanah Bahiyah. He is a distinguished member of the Royal College of Physicians (UK), as well as a life member of the Malaysian Medical Association and the Malaysian Society of Gastroenterology and Hepatology. Joash's commitment to medical education is a hallmark of his career. He relishes working with house officers, providing them with the knowledge and skills to succeed in their careers. His love for teaching is exceeded only by his passion for music, which he enjoys playing in his spare time.

#### Kuhanesh Janardaran

#### Ministry of Health, Singapore

Kuhanesh is a senior resident in public health with a keen interest in the confluence of health promotion, equitable healthcare solutions and tech. He can typically be found traversing Singapore looking for good places to have coffee.
### **Overall synopsis**

The symposium 'Preparedness as Junior Doctors: Perspectives of Learners of the Alpha Generation' will explore the changes and differences in medical education over the past 15 years. The three speakers from Malaysia and Singapore, alumni of IMU Malaysia, will share their perspectives on various topics related to medical education and the changes that have occurred over the years.

### **Synopsis**

### **Ripple 1: Taking Care of Mental Health** Amanda Albert (Malaysia)

The presenter, a psychiatrist and medical educator believes strongly in the importance of mental healthcare in medical education. She highlights that medical students from Gen Z face a unique set of challenges, different from their predecessors. They are exposed to a rapidly changing world, with digital technology permeating almost every aspect of their lives, and unprecedented amounts of information. On top of that, the advent of virtual teaching and learning during the COVID-19 pandemic has transformed how students can experience or choose to experience university life.

In her presentation, she will emphasize the need to teach student doctors to be aware of and take care of their mental health. She highlights that the young people of Gen Z report unprecedented levels of stress, anxiety and depression, and it is vital for educators to consider this aspect in the equipping of medical students, and even young people across the board. She advocates incorporating interventions that increase mental health awareness and the ability for self-care into the medical curriculum

Having heard and shared the difficulties faced by medical educators, she will also discuss the issue of the generation gap, and how it impacts medical education today. She proposes methods in which educators from different generations can adapt to Gen Z to remain relevant and supportive, and perhaps even learn from them.

## Ripple 2: Preparedness for Junior Doctors: Part and Parcel of Medical Education

### Joash Tan Loh (Malaysia)

The presenter, a physician based in a government hospital teaching junior doctors in Malaysia, will expand on the challenges of balancing instant gratification and duty in medical education. He will discuss the impact of the current generation's reliance on

technology and instant gratification, and how this can lead to a lack of patience and perseverance when learning and practising medicine.

He will explore strategies for educators to help students develop patience and perseverance, such as providing feedback and constructive criticism, encouraging reflection and self-awareness, and promoting a growth mindset.

In addition, the speaker will discuss the role of leadership in promoting a culture of patient-centered care and emphasising the importance of duty and responsibility in medical education. He will also touch on the impact of technology on patient care and the importance of balancing the benefits of technology with the need for human connection and empathy.

Overall, the presentation will provide attendees with a deeper understanding of the challenges faced by educators in balancing instant gratification and duty in medical education and strategies for promoting patient-centered care and professionalism.

### **Ripple 3: The Road Less Taken** Kuhanesh Janardanan (Singapore)

The presenter, who's currently a senior resident in public health in Singapore, will explore some of the reasons behind physicians choosing non-clinical or even non-medical fields of work. Most graduates prefer to practice clinical medicine and non-clinical and public health are less commonly chosen.

The presenter will expound on his own experiences in developing a broader understanding of healthcare systems, policy, and exploring alternative career paths. He will also touch on the challenges of transitioning from clinical to non-clinical work, such as mismatched expectations due to diverse career backgrounds.

Overall, the presentation will provide attendees with a deeper understanding of the drivers behind the rise of non-clinical work in medical education and the presenters own experiences and reasons for seeking non-clinical careers.

### **SYMPOSIUM 1B**

### Students as Catalysts: Leadership and Collaboration

Date: 14 October 2023 Time: 1020 - 1120 Venue: Mei Ling Young Auditorium 1, Level 4, IMU

### Speakers:

### Woon Shi Shien

University Malaya, Malaysia

Shi Sien is a fourth-year medical student at the Faculty of Medicine, University of Malaya. He is currently serving as the Regional Director for Asia-Pacific of the International Federation for Medical Students' Associations (IFMSA), one of the world's oldest and largest student-led organizations representing 1.5 million medical students from around the globe. He was also the Chairperson of the Society of Malaysian Medical Association Medical Students (SMMAMS). He strongly believes in meaningful youth engagement and strives to amplify the voice of the youth to be effective changemakers.

### Quek Joo Wei Ethan

### National University of Singapore

Ethan is a fourth-year medical student at the Yong Loo Lin School of Medicine. As Honorary General Secretary of the 74th NUS Medical Society, his role revolves around holistic development and the mental well-being of medical students. He strongly believes in the importance of work-life balance and exploring one's interests outside medicine. Ethan is actively involved in medical education, having been a core member of the academic affairs directorate and head of the Senior-Teach-Junior committee. Having previously served in multiple student-led community projects, Ethan is also passionate about community service, believing students should strive to develop sustainable ways to give back to the community.

### Jigyasa Sharma

### International Medical University, Malaysia

Jigyasa Sharma is a passionate and determined individual. She is currently a secondyear medical student. Beyond her academic pursuits, she also holds the position of Social Concerns Representative in the Student Representative Council of IMU. Jigyasa's unwavering commitment stems from her deep-rooted desire to assist others and create a positive impact in people's lives. With her empathic nature and genuine concern for the well-being of those around her, she continuously strives to address various social issues and lend a helping hand wherever possible.

### **Overall synopsis**

The symposium 'Preparedness as Junior Doctors: Perspectives of Learners of the Alpha Generation' will explore the changes and differences in medical education over the past 15 years. The three speakers from Malaysia and Singapore, alumni of IMU Malaysia, will share their perspectives on various topics related to medical education and the changes that have occurred over the years.

### **Synopsis**

### Students as Effective Change-Makers Woon Shi Shien

As one of the largest demographics in the world, the youth is poised to be effective agents of change, given the proper platform and opportunities. This presentation will cover the work that has been done in the Asia-Pacific region to empower and capacitate medical students. The presenter will discuss the role of medical students in leadership and collaboration to face the health challenges of tomorrow.

### **Peer Tutoring as a Catalyst for Student Engagement** Jigyasa Sharma

Peer tutoring has gained attention as an educational intervention aimed at improving student learning outcomes. It involves students helping each other in academic subjects, creating a collaborative learning environment. Research suggests that peer tutoring enhances comprehension, and memory recall, and fosters camaraderie among students. It also develops interpersonal and social skills for both tutors and tutees. However, the effectiveness of peer tutoring can vary based on factors such as subject, session length,

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and student personalities. Interviews with IMU students involved in the peer tutoring program revealed positive experiences, indicating personalized support, increased motivation, and improved interpersonal skills, they helped to determine its impact on academic performance and learning outcomes.

### A Student-Led Approach to Medical Education Quek Joo Wei Ethan

Even as we are slowly easing measures, the COVID-19 pandemic has undoubtedly changed the landscape of medical education, accelerating the development of technology-enabled education. The online learning environment has its benefits, allowing for improved flexibility in the curriculum and allowing our students to explore their interests outside of medicine. Yet, navigating this environment brings about a different kind of academic challenge as students may fall through the cracks in light of reduced peer-to-peer interaction.

Hence, we would like to take this time to review the student-led initiatives that have supported our medical students in their academic pursuits. These initiatives revolve around three pillars: Empowering learning, Encouraging mentorship, and Engendering change. We also highlight the close collaboration between students and faculty via the NUS Medical Society, the students' representative organisation, to equip our students with the relevant skills to address the academic needs of our students.

### **SYMPOSIUM 2A**

# Engaging, Enabling and Empowering the Students' Voice in Teaching and Learning

Date: 14 October 2023 Time: 1130-1230 Venue: Mei Ling Young Auditorium 2, Level 4, IMU

### Speakers:

### Weeming Lau

Monash University, Malaysia.

Weeming Lau, an "Ancora Amparo" practitioner, is a senior lecturer and deputy head of the medical education unit at Monash University Malaysia (MUM). She is clinically trained in Internal and Respiratory Medicine. She is the Early years lead coordinator in Clinical Skills (teaching, learning and assessment), and a facilitator/tutor in Bioethics in the BMedSc and MD programme.

### Wei-Han Hong

### Universiti Malaya, Malaysia

Hong Wei-Han is a Senior Lecturer in the Medical Education and Research Development Unit (MERDU), Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia. Her first degree and Master's degree was in Science Education. Hong holds a PhD in Medical Education from Universiti Malaya. She has been attached to the Medical Education unit since 2013 and is the Curriculum team lead for the undergraduate medical program. She also has special interests in research pertaining to students' admission, curriculum development, metacognition, and students' motivation.

### Er Hui Meng

### International Medical University, Malaysia

Er Hui Meng is the Pro Vice-Chancellor, Education and Director of the Centre for Education at the International Medical University, Malaysia. She obtained her PhD in Science from the University of Sydney, and Postgraduate Certificate in Medical Education from the University of Dundee. She has vast experience in education management as well as curriculum design, development, and implementation of health professions programmes. She teaches in undergraduate and postgraduate health professions programmes, and mentors students in health professions education research. She contributes significantly to the faculty development activities at the university and regularly shares her knowledge and experience at health professions education conferences.

### **Synopsis**

We are living in an information-rich era. Information related to health professions education and practice increases geometrically every minute. Students can access this vast quantity of information at the click of a mouse. However, they also need to know how to segregate the voluminous information of varying quality.

### **The Importance of Seeking Early Feedback from Students** Weeming Lau (Malaysia)

Feedback is integral to learning. It has been repeated often enough that effective feedback needs to be constructive, timely and non-judgmental. The feedback also needs to be acted upon. The presenter will share the importance of early feedback that not only helps the students but also the teachers and the institution to take adequate steps to implement changes.

### **Enhancing Communication Skills in Year 1 Medical Students** Wei-Han Hong (Malaysia)

Role-playing with constructive feedback encourages medical students to reflect upon their practices. This is evident in small group teaching where the platform provides a conducive and safe environment that allows student learning to occur in an enriching and positive manner. The presenter will be discussing an example of a workshop session on engaging students in role-playing, reflecting, and providing constructive feedback as part of their learning process; and how these practices can be scaffolded throughout their medical education journey.

### Students as Partners in Quality Assurance (QA) of Health Professions Education

### Er Hui Meng (Malaysia)

Students' voices are crucial to enhance the collective student learning experience. To empower students in the decision-making process of education delivery, students should not only be engaged in the course and learning environment evaluation, but also in structures and processes at the subject, faculty, and institutional level. This shifts the role of "students as consumers" to "students as partners" in education. In this presentation, the personal and professional development of health professions students through their roles in Quality Assurance (QA) of education are discussed.

### **SYMPOSIUM 2B**

# Student and Community Engagement with Technology Enhanced Learning (TEL)

Date: 14 October 2023 Time: 1130-1230 Venue: Mei Ling Young Auditorium 1, Level 4, IMU

### Speakers:

### Sow Chew Fei

International Medical University, Malaysia

Sow Chew Fei has been a clinical and communication skills lecturer at the International Medical University in Malaysia for the past thirteen years. She was the department's

Head in 2014, involved in curriculum planning and assessment of clinical and communication skills. She was the Director of the Clinical Skills and Simulation Centre (CSSC) in 2016 and was responsible for the centre's strategic planning. The CSSC serves as the centre for simulation learning for all of the University's programs. As the Associate Dean of Clinical and Experiential Learning since 2018, she chairs a committee that includes all school representatives and responsible for developing numerous teaching and learning policies and guidelines for the University. She is a general practitioner and holds a Diploma in Dermatology from the Royal College of Surgeons and Physicians, Glasglow. She also holds a Master's in Medical Education from the University of Dundee. She is currently pursuing her PhD in Education at the University of Maastricht.

### **Chase Sherwell**

Research Fellow University of Queensland Institute of Learning Sciences / Queensland Brain Institute, Australia

Chase holds a PHD in Cognitive Neuroscientist from the University of Queensland and is a research fellow at the University of Queensland Institute of Learning Sciences and Queensland Brain Institute. Chase has a significant research background in the use of Biometric devices to measure physiological responses that can give insight into psychological states. He is applying his research to Education settings to help Educators understand learner states and to help learners self-regulate their responses.

### **Rohan Bates**

Mater Healthcare and Education / Monash University, Australia

Rohan is the Head of Education at Mater Healthcare and Education where he is involved in the design and development of curriculum and Educator practice across different courses and learning environments including simulation. Part of his role involves developing Education delivery practices amongst clinical facilitators. He was previously a Head of Teaching and Learning at Monash University where he trained Academics in Education practice and learning design. He has also worked to conduct Educator Training across international Tertiary environments through partnerships with AusAid. He holds degrees in Science and Education from the University of Queensland and a Masters majoring in Cognitive Science from Monash University. He is involved in research measuring the impact of learning practices and in building Education approaches that enhance self-regulated learning.

### Synopsis

Digital technology has become a central aspect of higher education. By leveraging technology, students gain access to a wide range of interactive tools, resources, and platforms that enhance their learning experiences. Engaging the community in technology-enhanced learning nurtures collaboration and facilitates knowledge sharing. These initiatives create an inclusive and dynamic learning environment that prepares students for the challenges and opportunities of the evolving landscape of technology and connectivity.

## Bridging Boundaries: Interprofessional Collaboration in the Development of Technology-Enhanced Learning

### Sow Chew Fei (Malaysia)

Virtual reality (VR) has rapidly emerged as a complementary teaching tool in medical education over the last few years. The realistic simulation of VR allows medical students to engage in immersive simulations of medical scenarios. Reproducibility, flexibility in terms of time and venue and practising in a controlled and safe environment are essential to promoting patient safety and helping students in developing critical skills and gaining confidence in their learning. Active participation in such experiential learning improves learning transfer and retention. VR offers collaboration opportunities a platform for research and innovation and has the potential to revolutionise medical training. This symposium will share some VR initiatives collaborated with students and

interprofessional partnerships as well as challenges encountered during implementation into the medical curriculum.

### **Exploring the Potential of Simulation Learning Dashboard**

### Rohan Bates (Australia)

We can measure procedural skill development, but how do we know we are developing non-procedural skills in our learners? The journey to answer this question has led to the development of a Medical Simulation Learning Dashboard, which uses algorithms to process information from short experience sampling surveys and biometric data (particularly EDA electrodermal activity and physiological synchrony), with the aim to help educators and learners to self-regulate.

We can measure procedural skill development, but how do we know we are developing non-procedural skills in our learners? The journey to answer this question has led to the development of a Medical Simulation Learning Dashboard, which uses algorithms to process information from short experience sampling surveys and biometric data (particularly EDA electrodermal activity and physiological synchrony), with the aim to help educators and learners to self-regulate.

## Biometrics in Education: Leveraging Physiological Data to Enhance Learning

### Chase Sherwell (Australia)

Using biometric devices to measure changes in learner arousal is a valuable approach to understanding and improving stress response in educational settings. These devices, such as heart rate monitors or electrodermal activity sensors, provide objective data on physiological indicators of arousal, allowing educators to assess students' stress levels during learning activities. Analyzing this data helps educators adapt strategies, create supportive environments, and prioritize learning outcomes and well-being.

## **SYMPOSIUM 3A**

# Authentic Experiences and Mentoring to increase Student's Motivation and Engagement

Date: 14 October 2023 Time: 1435 - 1535 Venue: Mei Ling Young Auditorium 2, Level 4, IMU

### Speakers:

### Peter GM de Jong

### Leiden University Medical Center, United States

Peter de Jong is a strategic advisor and senior researcher in the field of Technology Enhanced Learning at Leiden University Medical Center in The Netherlands, where he leads a team for the development, implementation and support of learning materials and where he provides strategic advice in the field of technology enhanced learning. His research interest is in the field of Online and Blended Learning in medical education, and the use of Mixed and Virtual Reality applications. Peter has a Master degree in Medical Technology from Eindhoven University and a PhD in Biophysics/Physiology from Maastricht University. Since 2007 Peter is involved in the International Association of Medical Science Educators (IAMSE). He has served the organization as Board member and Vice President, and in 2009 as Program Chair and Site Host for the first IAMSE Annual Meeting outside North America. Currently he holds the position of Editor-in-Chief of Medical Science Educator, the online journal of IAMSE published by Springer. For the period of 2022-2023 Peter serves as the President-Elect of the organization.

### Vishna Devi Nadarajah

### Newcastle University Medicine, Malaysia

Vishna Devi Nadarajah is currently the Chief Executive Officer, Vice Provost and Professor of Medical Education at Newcastle University Medicine Malaysia. She graduated with a First-Class Honours degree in Biochemistry from the University of Malaya, obtained her PhD at the University of Cambridge and is a graduate of the MHPE from Maastricht University. She has published and presented research papers in both biomedical sciences and medical education, supervises research students and reviews for indexed and international journals. Her areas of research for health professions education include Faculty development, Assessment and Innovative Teaching Learning methods.

### Rina Masadah

Hasanuddin University, Indonesia

Rina Masadah is a teacher at the Faculty of Medicine Hasanuddin University, Indonesia, since 1996. She teaches Pathology Anatomy for undergraduate students, residents of Pathology Anatomy, as well as Master degree and PhD degrees students. Additionally she works as a pathologist at the Hasanuddin University Hospital. Masadah graduated from the Faculty of Medicine Hasanuddin University in 1991, and became a specialist (attending) in Pathology Anatomy in 2003. She did a Master of Philosophy at the University of Queensland in 2006 and a PhD in the Hasanuddin University sandwich program with Radboud University in The Netherlands in 2013.

### Synopsis

Increasing students' motivation and engagement can be a major challenge in healthcare education. Not only intrinsic and extrinsic factors have an impact on the motivation and engagement of students, also the teachers' communication behaviors and guidance have an influence. Research has shown that an engaged learning environment using meaningful learning experiences increases students' attention and focus on the topic. Motivation and engagement can be increased by a proper curriculum design. Active learning and self-regulated learning strategies and offering electives and exchange programs increase the students' feeling of autonomy, relatedness and control. Not only does it have a positive effect on students' academic motivation, performance and educational outcomes, but it also motivates students to practice higher-level critical thinking skills. It is therefore our responsibility to offer opportunities and support to engage students to prepare themselves as future healthcare leaders to meet the growing and evolving demands of modern health and healthcare. In the symposium, we will address the topic from a few different perspectives. Offering authentic learning experiences is important, which can be done with traditional teaching modes as well as the use of modern computer technologies. And while guiding and mentoring students is essential for them to become more engaged and to grow their professional identity as future healthcare professionals, the educator might need professional development support to perform this new role.

# The Use of Virtual and Augmented Reality to Create Authentic Learning Experience

### Peter GM de Jong (Netherlands)

Technology can make education more accessible and customised to the needs of the individual student. Students can study place and time independently and technology provides them with an opportunity to connect synchronously as well as asynchronously with their teachers and their peers. Some of the recent technologies offer new ways to teach topics in a way that was simply not possible in the past. Such technologies can also be used to offer students a simulated yet authentic learning experience to prepare them for future situations without the need to being present in the actual environment. At the University of Amsterdam, virtual and augmented reality applications have been developed to teach students basic sciences and clinical skills while still being outside of the actual clinical workplace. It offers intensive training opportunities, and it lowers the level of stress when entering the real clinical environment. Virtual training increases students' motivation and engagement in the field. However, these modern techniques require different skills and competencies from the educator.

### How Traditional Dissection Room Teaching Impacts the Identity Formation of Students

### Vishna Devi Nadarajah (Malaysia)

Over the last two decades, a radical change took place in medical education from traditional methods towards innovative developments using digital technology such as virtual simulations, online lecturing, practicals and tutorials. The Covid-19 pandemic era developed momentum for teaching methods to be online, and this new method has been continued afterward. We conducted an interview and focus group study among 1st-year pre-clinical medical students who attended anatomy lessons and practicals online between October 2020 and March 2021, and their teachers. We found that the progression towards the development of a professional identity was linked to two overriding themes: competence and dedication. Students and teachers revealed that they need new digital literacy skills to access and evaluate the accuracy of online information. Students and teachers indicated that online learning allows them to be more flexible and is conducive to learning. However, students also felt that without direct contact with a cadaver, they can only rely on their imagination to explore anatomic structures viewed on the screen and cannot depict the entire organ. Students were concerned that online anatomy learning will be difficult to recall in the long term because it uses only the senses of sight and hearing and not the senses of touch and smell. They were also concerned that by only learning online, they won't be able to

develop their human side as a doctor. Empathy for patients was an aspect of humanism, including interprofessional issues when students interact directly with teachers and other students. It is obvious that online dissection room teaching has many advantages, but it also had a negative impact on student identity formation. Our study found that students still want to have the old hands-on anatomy learning because it is important for their identity as medical doctor.

### The Professional Development of the Educator to Engage and Mentor Students Rina Masadah (Indonesia)

Student engagement and mentorship are crucial for positive graduate outcomes. Graduate outcomes include personal and professional competencies that allow a successful transition into healthcare with opportunities for future growth and wellbeing. Educators play a significant role in determining these outcomes by providing an engaging and safe learning environment. They also act as mentors and role models, representing both institutional and their own professional values. This presentation will cover the why, how, and what of professional development of educators for their roles in student engagement and mentoring. This includes: Why this is a top priority for institutions? How can educators be supported for these roles? What are the key success factors for the professional development of educators when it comes to engagement and mentorship?

### **SYMPOSIUM 3B**

# New Approaches to Education Delivery and Assessment in the Era of AI

Date: 14 October 2023 Time: 1435 - 1535 Venue: Mei Ling Young Auditorium 1, Level 4, IMU

### Speakers:

### Nilesh Kumar Mitra

International Medical University, Malaysia

Nilesh Kumar Mitra has been teaching anatomy to medical and health science students since last 28 years and topics of Health Professions Education to post graduate students since last 11 years. He has received his MBBS degree from R G Kar Medical College, Calcutta University and Master of Surgery from Nagpur University, India. Mitra has completed Masters in Education in 2010. Mitra has worked as curriculum coordinator of pre-clinical phase of IMU MBBS program for many years and played significant role in development of curriculum map and initiation of online Moodle-based assessment in IMU. He has been associated with coordination of integrated systembased courses for many years and worked as member of curriculum review committee of IMU. Presently he is the Dean, Teaching and Learning of IMU. He has worked as Associate Dean, Technology Enhanced Learning in IMU during 2020-2022 and helped significantly in development of virtual learning tools and online learning capability in IMU.

### Maude E Phipps

### Monash University, Malaysia

Maude Phipps, PhD (CanTab) is Professor of Human Molecular Genetics at Jeffrey Cheah School of Medicine and Health Sciences, Monash University, Malaysia (MUM). She studied at the University of Malaya before completing doctoral studies at the University of Cambridge, UK. She is an internationally recognised Asia Pacific biomedical and higher education expert with links to global education, research networks and industry. She is an academic with 30 years of teaching experience in undergraduate, postgraduate and specialist courses. An evolving educator and faculty trainer who embraces change, she recognises transdisciplinary knowledge, innovates and adapts to new challenges in the shifting education and healthcare landscape. Maude is MUM Womens' Empowerment Network founder and advisor.

### **Ong JiaXian**

International Medical University, Malaysia

As an academic vice-president for the School of Health Sciences, he oversees the wellbeing and concerns of students in courses under the school (Biomedical Science, Medical Biotechnology, Nursing, Nutrition, and Dietetics with Nutrition). He received the Aflame Student Award IMU in 2022. Ong believes that helping the communities in need enriches his life.

### Synopsis

To cope with the COVID-19 pandemic, educational institutions across the world embraced online learning. Despite health concerns during the pandemic situation, strong student preferences towards returning to face-to-face or hybrid mode brought challenges to the effectiveness of online learning. A significant one-third of the students who participated in feedback studies opined about poor organization of remote learning at the institutes and about problems in consulting the teacher when they had problems understanding the material. Lack of personalised learning, low motivation, and poor time management issues will also be discussed. Artificial intelligence (AI) can use computer vision, feedback and speech recognition, and principles of machine learning to create an advanced teaching assistant in an intelligent tutoring system (ITS). The ITS can be a mentor for millions of students. The online learning experience also brought about gaps in formative assessment and a lack of personalised feedback. AI-based tools are increasingly being used to create assessment tools for formative and adaptive assessments.

This symposium will discuss the new approaches to teaching-learning and assessment brought about by the advent of AI. The advantages and disadvantages brought about by AI as perceived by the students will also be discussed.

### **Online Learning and Al-based Intelligent Tutoring System** Nilesh Kumar Mitra (Malaysia)

Artificial intelligence (AI) can use computer vision, feedback and speech recognition and principles of machine learning and thus can create an advanced teaching assistant in an intelligent tutoring system (ITS). Online learning for the last few years has shown that inefficient use of technology leads to a lack of motivation and dissatisfaction among students. The teaching material produced by the faculty as a part of asynchronous learning often cannot facilitate personalized learning among students with different learning styles. Several research studies have found that the use of video games

and principles of gamification can help students solve puzzles, build structures using spatial reasoning ability and can help them conceptualize theories in subjects such as mathematics, physics, engineering, and technology. Traditional ITS contains domain model, teaching model, students' model and learning environment or user interface. As the progress in AI and machine learning has evolved, apart from inclusion of domain knowledge and pedagogical practices, the user interface has embraced the student model giving students an experience of apprenticeship. By applying principles of gamification, the motivation of students in carrying out the activities in the ITS system has been promoted. ITS systems have also evolved to adapt pedagogical activities to individual student's needs and capabilities.

### **The Rise of AI -Rethinking Assessment in Education** Maude E Phipps (Malaysia)

The past three years have brought tremendous advances in Artificial Intelligence which have impacted societies worldwide. The latest AI programmes such as Bard, Chat GPT, etc are revolutionary. Most are freely available, easy to use, and gaining popularity quickly. As educators, we are now facing an unprecedented situation in terms of learning and assessment. Given these tremendous developments, we are challenged to evolve. We must explore & find new ways to evaluate teaching & learning if we are to stay true to the ethos of developing thinkers.

### Advantages and Disadvantages of Using Al Among Students Ong JiaXian (Malaysia)

Due to the advances in the use of AI and natural language processing, new kinds of writing tools have emerged. These AI-powered tools can be used by the students for text translation, improving spelling, rewriting or paraphrasing and improving their summarising skills. On the other hand, the tool can also produce inconsistencies and errors that students may not be aware of. How to deal with this type of tool is a difficult question. The presentation by the Student Council representative will explore this question.

## **SYMPOSIUM 4A**

### **Community Participation in Health Professions Education**

Date: 15 October 2023 Time: 1030- 1130 Venue: Mei Ling Young Auditorium 2, Level 4, IMU

### Speakers:

### Ong Kok Hai

### Malaysia

Ong Kok Hai is a microbiologist recognized for his work as an educationist, a scientist, an entrepreneur and a very humble humanitarian. Some of his achievements include the co-invention of the rapid laboratory test to diagnose Typhoid Fever in 1992 and being awarded as the 'Notable Malaysian Inventor' in 2013. As a dedicated humanitarian, he started Rainbow Bridge Malaysia in 2019, a charitable non-governmental organization with its own Food Bank for a sustainable food source for more than 30 welfare homes in Peninsular Malaysia. The NGO also has mobile health teams that promote good oral health and quality vision among less privileged children.

### Sunthara Moorthy Subramaniam

### Malaysia

Sunthara Moorthy is a Chartered Accountant with over 30 years of experience, mainly in corporate management and strategic business development. Sunthara is semi-retired and has dedicated latter part of his career to use his experience to serve as a Simulated Patient since 2019. Currently, he also sits as a Board member in a public listed company.

### Chin Kin Fah

### University Tunku Abdul Rahman, Malaysia

Chin Kin Fah is a Consultant General Surgeon and an academician with Professorship at Universiti Tunku Abdul Rahman. Being the Founding Chairman and Executive Director of the Academy for Silent Mentor, he is recognised for pioneering 'Silent Mentor' programme in Malaysia, a humanity programme that encourages people to come forward and donate their bodies after their demise for medical education and research.

### Synopsis

To cope with the COVID-19 pandemic, educational institutions across the world embraced online learning. Despite health concerns during the pandemic situation, strong student preferences towards returning to face-to-face or hybrid mode brought challenges to the effectiveness of online learning. A significant one-third of the students who participated in feedback studies opined about poor organization of remote learning at the institutes and about problems in consulting the teacher when they had problems understanding the material. Lack of personalised learning, low motivation, and poor time management issues will also be discussed. Artificial intelligence (AI) can use computer vision, feedback and speech recognition, and principles of machine learning to create an advanced teaching assistant in an intelligent tutoring system (ITS). The ITS can be a mentor for millions of students. The online learning experience also brought about gaps in formative assessment and a lack of personalised feedback. Al-based tools are increasingly being used to create assessment tools for formative and adaptive assessments.

This symposium will discuss the new approaches to teaching-learning and assessment brought about by the advent of AI. The advantages and disadvantages brought about by AI as perceived by the students will also be discussed.

### **Bridging Communities, Creating Opportunities** Ong Kok Hai (Malaysia)

Wide gaps exist between the many and varied needs of underprivileged communities and the communities that are able to satisfactorily meet these needs. Rainbow Bridge Malaysia (RB) was founded in an attempt to bridge the gaps of both these communities. In doing so, RB has to seek out caring individuals, each with his/her own skills as well their network of communities that will add value and impact to the outcome of their collective contributions. Such efforts, not only require innovative thinking and tireless efforts but also leads to the creation of opportunities for experiential learning and research as well as nurturing and strengthening the spirit of humanitarianism among all involved. We will share our experiences.

### **My Enchanting Journey as a Simulated Patient** Sunthara Moorthy Subramaniam (Malaysia)

The challenges of stepping into the role of a patient is very emotional. As simulated patients (SPs), we have to visualise the patients' struggles, fear, distress and triumphs.

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In my inspiring journey, I had the incredible opportunity to do just that and be trained to portray various medical conditions. I will take you through a captivating journey of the role of a SP, as I share the immersive and transformative experiences I have encountered. You will also hear about the unique challenges and rewards of this role and the impact we have on improving patient care. We portray various emotions and personalities, thus offering the opportunity for trainees to engage and practice effective patient-centred care with active listening and empathy. SPs complete the cycle by providing valuable feedback on communication effectiveness, professionalism and suggestions for improvement.

### The contribution of "i · Silent Mentor" program in medical education-A liberal art approach Chin Kin Fah (Malaysia)

The Academy For Silent Mentor, an independent education institute for body donation in Malaysia, provides care and support to body donors regardless of race and religion, for the advancement of medical education, research and training, and producing medical and related professionals with the touch of humanism and liberal arts and for the betterment of healthcare provision in Malaysia and beyond. Their vision is to make a difference to the provision of healthcare with the touch of humanism and liberal arts through the altruistic teaching of our Silent Mentors.

Empathy has been shown to decrease as medical students progress through medical school. We investigate the effect of the Silent Mentor program on students' empathy levels. We hypothesized that the integration of empathy intervention strategies into medical education would increase the students' empathy levels.

## **SYMPOSIUM 4B**

### ASPIRE Academy: Unlocking the Secrets of Student Engagement in Undergraduate Medical Education

Date: 15 October 2023 Time: 1030 - 1130 Venue: Mei Ling Young Auditorium 1, Level 4, IMU

### Speakers:

### Rahat Longsomboon

Chulalongkorn University, Thailand

Rahat Longsomboon is a final year medical student who has been actively involved in various educational development initiatives at his institution and has worked as part of a student working group in educational development called the "Student Engagement Team" since his first year of study. As a member of the Student Engagement team, he has contributed to course evaluation, curriculum development, and promoting student engagement within the faculty. He also makes a positive impact on his fellow students through student engagement workshops, seminars, and medical education talks. In the past year, he has also taken on a leadership role as the president of the student union, where he has worked to advance extracurricular activities, student welfare, and student engagement in educational development. His involvement in the Student Engagement Team, as well as his efforts to organize and lead the student union, demonstrate his passion for creating a culture of learning and growth in the medical community and his commitment to making a positive impact both within his institution and the wider medical education community.

### Danai Wangsaturaka

### Chulalongkorn University, Thailand

After obtaining his MD degree, Wangsaturaka pursued further education and earned a Master's and doctoral degree at the Centre for Medical Education, University of Dundee in Scotland. He has played a key role in curriculum development, student assessment, and promoting student engagement at his institution. Wangsaturaka's longstanding dedication to student engagement has contributed to the Faculty of Medicine at Chulalongkorn University receiving the ASPIRE-to-Excellence Award in Student Engagement in 2015. Subsequently, Wangsaturaka was honored with the National Role Model Teacher Award for Student Engagement in 2017.

In addition to his work at Chulalongkorn University, Wangsaturaka has provided educational consultancy and conducted faculty development workshops not only for schools of medicine but also for health professions schools and other disciplines at various universities. He currently serves as the Assistant Dean for Academic Affairs at his institution and as the Assistant General Secretary of Consortium of Thai Medical Schools.

### Azlina binti Abdul Salam

### International Medical University, Malaysia

Passionate, driven, and hungry for leadership, Azlina Abdul Salam is an exceptional individual who embodies the true essence of what it means to be a leader. From an early age, their innate desire to influence and inspire others has set them on a path of continuous growth and development. While Azlina Abdul Salam excels in leadership and advocacy, she is equally committed to academic excellence. Her thirst for knowledge is matched only by her unwavering discipline and dedication to learning. As she explores various fields of study, Azlina seeks to broaden her horizons, challenge conventional thinking, and foster a deep understanding of the world. She holds a degree in BSc (Hons) Biomedical science and pursuing her first year MBBS at IMU currently. Throughout her educational journey, she embraced opportunities to lead, seizing positions of influence to create a meaningful impact. Whether as the president of student council, or the organizer of school-wide events, Azlina led with integrity, vision, and a genuine desire to empower their peers. With a burning desire to make a positive impact among school community, she dedicated herself to bringing about change and serving as a voice for fellow students. She has consistently strived to create an environment where every student feels valued and heard. Through effective communication and teamwork, she has successfully brought together diverse groups of individuals to work towards a common goal.

Azlina Abdul Salam actively seek out challenges and embrace new experiences, understanding that leadership is not merely a title but a lifelong journey of learning and growth. Her passion for leadership goes beyond personal development. She recognizes the transformative power of effective leadership and its potential to create positive change in their school, and beyond. She harnesses her passion to uplift and inspire those around them, always seeking ways to make a meaningful impact and leave a lasting legacy. As a student leader, she is dedicated to creating a better world for future generations through her dedication, resilience and unwavering commitment.

### Vishna Devi Nadarajah

Newcastle University Medicine Malaysia, Malaysia

Vishna Devi Nadarajah is currently the Chief Executive Officer, Vice Provost and Professor of Medical Education at Newcastle University Medicine Malaysia. She graduated with a First-Class Honours degree in Biochemistry from the University of Malaya, obtained her PhD at the University of Cambridge and is a graduate of the MHPE from Maastricht University. She has published and presented research papers in both biomedical sciences and medical education, supervises research students and reviews for indexed and international journals. Her areas of research for health professions education include Faculty development, Assessment and Innovative Teaching Learning methods. Vishna has shared her experience and expertise in health professions education via invitations to speak at conferences, conducting faculty development workshop and consultancies, appreciating that she has also learnt very much from these collaborative sessions with other educators.

Her current international affiliations include being Deputy Editor of the Medical Education, Advisory Panel of the Clinical Teacher, Board Member of AMEE ASPIRE and Leadership Core of Mentors Across Borders.

### Synopsis

Student engagement encompasses a wide range of activities wherein students actively participate in management, education, research, and community activities. Recognized as a pivotal component, student engagement significantly contributes to improving academic outcomes and fostering personal and professional development. Despite the unique personal qualities displayed by Southeast Asian medical students, such as humility, respectfulness, and deference to authority figures, fostering their engagement within undergraduate medical education is indeed feasible.

The International Medical University and Chulalongkorn University were recipients of the ASPIRE-to-Excellence awards in 2013 and 2015, respectively, acknowledging their exemplary student engagement practices. This symposium aims to showcase their best practices in student engagement, shedding light on effective strategies to enable and empower students in actively engaging in educational development within the medical schools' milieu.

## WORKSHOP 01A (Online)

Date: 13 October 2023 Time: 0900 - 1200 Venue: Online

### Scenario Design in Simulation-based Education

### Facilitators:

### Sow Chew Fei

### International Medical University, Malaysia.

Sow Chew Fei has been a clinical and communication skills lecturer at the International Medical University in Malaysia for the past thirteen years. She was the department's Head in 2014, involved in curriculum planning and assessment of clinical and communication skills. She was the Director of the Clinical Skills and Simulation Centre (CSSC) in 2016 and was responsible for the centre's strategic planning. The CSSC serves as the clinical assessment centre utilising OSCE and the centre for simulation learning for all the University's programs.

### Chong Pek Sam

#### International Medical University, Malaysia.

She holds a nursing degree has more than 20 years of experience and specialised in Oncology. She has been involved in medical education for more than 10 years and holds a Master in Medical Education. Besides teaching, she is involved in simulated patient program development and training. She coordinated the simulation-based education training for all students and faculty. Chong also holds the administrative position as a Coordinator of the Clinical Skill and Simulation Centre where she assists the Assistant Director in overseeing the operation of the centre.

### Synopsis

Simulation-based education aims at developing a range of core skills by reproducing practice, exposing learners to a range of medical experiences for critical reflection and developing capability in real-time critical reasoning, ultimately improving patient safety and care. Evidence in the literature supports the effectiveness of simulation-based education as a teaching tool to promote technical and non-technical skills. Simulation can be adapted to fit the student's needs at various phases of their studies, overcome teaching challenges for rare scenarios, provide possibilities for students to be exposed to culturally sensitive scenarios, and overcome difficulties securing clinical placements. The best scenarios were created by collaboration between the teachers and the learners. However, simulation-based education is rather daunting for both new educators and experienced clinicians. This workshop aims to help educators who are new to simulation-based education to understand the principle, and the workshop goal is to create a scenario as the first step in planning a simulation session.

Target audience: Students or staff from any Health Professions Education disciplines/sectors The conference theme addressed is partnerships with the community.

### Learning Outcomes

At the end of the workshop participants will be able to:

• Create a scenario in simulation-based education for their teaching-learning needs.

## WORKSHOP O1B (Online)

Date: 13 October 2023 Time: 0900 - 1200 Venue: Online

### **Promotion of Self-Regulated Learners**

### Facilitators:

### Wong Pei Se

International Medical University, Malaysia.

Wong Pei Se is an Associate Professor from the Department of Pharmacy Practice at the School of Pharmacy, International Medical University. She is also the Dean of Teaching and Learning at International Medical University.

### Norul Hidayah binti Mamat @ Muhammad

International Medical University, Malaysia.

Norul Hidayah is trained in educational psychology and teaches in the Health Professions Education Programme at International Medical University.

### Ebenezer Chitra

International Medical University, Malaysia.

Ebenezer Chitra specialises in immunology, molecular biology and education. She is currently the Associate Dean of Technology Enhanced Learning in IMU.

### Synopsis

Self-Regulated has a long history in psychology, education and medicine. Self-Regulated Learning (SRL) is a determining factor for academic achievement. Although challenging, faculty needs to promote SRL practice among the students in order to support students' academic as well as personal development, both in online and face-to-face learning environments.

This introductory workshop will discuss what self-regulated learning is, how it enhances learning and useful strategies to promote self-regulated learning. This workshop will also consider if popular educational strategies such as flipped classrooms and instructional technology effectively promote self-regulation of learning.

### Learning Outcomes

At the end of the workshop participants will be able to:

Develop instructional strategies to emphasise self-regulated learning in health professions
education.

## WORKSHOP O2A (Online)

Date: 13 October 2023 Time: 1400 - 1700 Venue: Online

## Overcoming the Challenges in Teaching Incoming Learners during Clinical Practice

### **Facilitators:**

### Ahmed Al Hammadi

#### Sidra Medicine, Doha, Qatar.

Alhammadi areas of interest: medical education, faculty, and professional development and cultural competency. He is involved and has led several medical education workshops locally, nationally, and internationally.

### Magda Wagdy

Sidra Medicine, Doha, Qatar.

Magda received her medical training at Cairo University -Egypt; areas of practice: inpatient medicine, patient safety and detection of adverse events; and she was appointed to chair the paediatrics quality and patient safety Committee. She is an instructor and in charge of different workshops including communication, APLS, quality, and professionalism.

#### Marcellina Mian

### Weill Cornell Medicine - Qatar, Doha, Qatar.

Marcellina has been a member of the International Society for Prevention of Child Abuse (ISPCAN) since 1984 and its president from 2002 to 2004. Mian was and continues to be active in conducting research on child maltreatment and medical education, particularly in enhancing the performance of international students in an American-based medical education system. She has written a number of articles and been a presenter on these subjects at numerous conferences in different countries.

### Amal Khidir

Weill Cornell Medicine - Qatar, Doha, Qatar.

Amal is an Associate Professor of Pediatrics, Vice Chair of IRB, and Pediatric Clerkship Director. She is an American Board certified pediatrician, fellow of American Academy of Pediatrics an co-founder of Professionalism IPE program at HMC. She led > 30 peer-reviewed regional/ international workshops. She received COMSEP 2021 Research and Scholarship Award. She is interested in professionalism, remediation, professional development, assessment, and cultural competency.

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### Synopsis

Teaching in clinical settings can be challenging, especially with incoming learners of different cultural and medical education backgrounds. Clinical educators are faced with the challenge of balancing patient care and learner teaching. Effective team and interdisciplinary communication skills are needed for clinical supervisors and educators to address learners' backgrounds, cultural differences and factors that may underlie any problematic behaviors as they transition to their new institutional culture, and medical education system. Supervisors need better understanding, support, appropriate skill sets, and resources to assess and give culturally sensitive constructive feedback with the goal of achieving the changes needed. This interactions in healthcare. It focuses on professional development and skill building to recognize gaps in system and practice-based competencies of incoming trainees and give mindful constructive feedback.

#### Learning Outcomes

At the end of the workshop participants will be able to:

- Identify challenging problematic learner behaviours that might be related to cultural, system or practice-based background.
- Explain approaches to address these challenges or problems.
- Demonstrate mindful effective feedback to help learners improve their behaviours.

## WORKSHOP O2B (Online)

Date: 13 October 2023 Time: 1400 - 1700 Venue: Online

### **Making Effective Educational Videos**

### Facilitators:

### Fabian Davamani Amalraj

International Medical University, Malaysia.

Worked on Infections related to the cornea from Regional Ophthalmic Hospital, Chennai India and Aravind Ophthalmic Hospital, Madurai India. Worked as Project Associate at the National Institute in Immunology and Post-doctoral researcher in Molecular Medicine and structural Biology under National Science Council, Taiwan. Awarded national level scholarship from Lady Tata Memorial Trust (LTMT) Bombay, India and Council of Scientific and Industrial Research, New Delhi, India.

Completed Microsoft certificate course and a fair knowledge in computing, music, and photography. Have personally developed videos for educational purpose especially microlearning videos and Produced 3D immersive learning for Microbiology for skills training (patenting in progress) and won silver medal in Malaysian Technology Expo (MET) 2023 and Petronas Univ. Teaching and Learning Innovation Festival (TLIF) 2022. E-Learning champion for School of Health Sciences (6 programs). Published several National and International Publications and serve as an editor and reviewer for reputed Journals

### Vasudeva Rao Avupati

### International Medical University, Malaysia.

He is a registered pharmacist, an expert in the field of design and synthesis of bioactive hybrid molecules, computational drug discovery, with a focus pioneering on "hit-to-lead" optimisations associated with the development of novel bioactive ligands to fight against multifactorial diseases. Vasu also is an innovator of Technology-Enhanced Learning (TEL) strategies. Vasu and his teams won gold medals for three consecutive years (2020, 2021 and 2022) in International Innovation Competition for his E-Learning innovation projects. He is the recipient of International Medical University (IMU) Achievement Awards, recently in 2022 for E-Learning Innovation and 2021 for the Teaching Excellence. Vasu and team secured prestigious FRGS Grant awarded by the Ministry of Education (MoE), Malaysia.

### Muhammad 'Azizi

### International Medical University, Malaysia.

Over the past 11 years, 'Azizi has worked with a diverse range of industries, including e-Learning, publishing, assistive technology, newspapers, and government agencies. His expertise in multimedia design has allowed him to create captivating and innovative content that has left a lasting impact on these sectors. Currently, 'Azizi serves as a Senior Multimedia Learning Technologist at International Medical University. In this role, he harnesses his skills to develop engaging and interactive learning materials that enhance the educational experience for students. His work has been instrumental in shaping the future of multimedia learning, making him the perfect facilitator for a workshop on producing interactive educational videos.

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As a facilitator, 'Azizi brings a unique blend of technical expertise, artistic vision, and a deep understanding of the educational landscape. His ability to break down complex concepts and guide workshop participants through the process of creating interactive educational videos is truly unparalleled.

Muhammad 'Azizi's passion for multimedia design and technology is contagious, inspiring others to push the boundaries of what is possible in the realm of interactive learning. His dedication to his craft, combined with his extensive experience across various industries, makes him the ideal facilitator for a workshop that aims to revolutionize the way we create and consume educational content.

#### Muhammad Aswandi

### International Medical University, Malaysia.

Muhammad Aswandi is a digital media specialist with over 18 years of experience in visual communication for 3D/video design and e-learning development. As a Senior Digital Media Specialist at the International Medical University, he oversees the development of interactive e-learning experiences for students.

Muhammad Aswandi is known for his versatility and creativity in his field, as well as his dedication to staying up to date with the latest technology and industry trends. His expertise in 3D immersive technology and video production has enabled him to create innovative and effective content that engages and educates learners of all ages and backgrounds.

In addition to his extensive experience in the digital media industry, Muhammad Aswandi has also worked abroad in the National eLearning Center for the Kingdom of Saudi Arabia for over five years. This experience has allowed him to gain a broader perspective on the industry and adapt to different cultures and languages. His unique skillset and ability to wear multiple hats have enabled him to take on different roles in managing teams and as a crew developer to ensure the successful delivery of projects.

As a facilitator for a workshop focused on producing interactive education videos, Muhammad Aswandi brings his wealth of knowledge and experience to the table. He is passionate about sharing his expertise with others and helping them develop the skills they need to create engaging and effective e-learning content. His workshops are always interactive and informative, providing participants with the tools they need to succeed in this rapidly evolving field.

Muhammad Aswandi's commitment to excellence and his passion for creating high-quality e-learning experiences have made him a valuable asset to the digital media industry. His experience working abroad, combined with his unique skillset and dedication to staying up to date with the latest technology and industry trends, makes him an exceptional facilitator for any workshop focused on producing interactive education videos. He is an invaluable resource for anyone seeking to enhance their knowledge and skills in this dynamic field.

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### Synopsis

Video is an important component of flipped, blended, and online classes but ensuring that videos are helping students involves taking a deeper look at video design and production. Interactive elements incorporated within the video enhance its quality and appeal. Designing the teaching activity based on educational principles results in effective delivery and impact.

ADDIE Analyze, Design, Develop, Implement and Evaluate is a commonly used instructional design framework for technology-based teaching to create effective and engaging learning experiences. When designing visual learning experiences using ADDIE, it's important to keep learners at the center of the process. Using visual aids that align with their learning preferences and needs and evaluating the effectiveness of visual aids is critical to continuously improving learners' learning experience. This workshop aims to discuss the use of ADDIE framework to support the development of educational videos.

By attending this workshop, you can enhance your educational content and provide a visually appealing setting for your student viewers. By following these steps and adding your personal touch, you can create engaging and informative educational videos in our hands-on workshop environment.

#### Learning Outcomes

At the end of the workshop participants will be able to:

 Design and create engaging and informative tailor-made videos based on the principles of instructional design.

## WORKSHOP P1A (Onsite)

Date: 13 October 2023 Time: 0900 - 1200 Venue: 1.12.09, Level 1, IMU

### Using Cinema to Explore Student Empowerment and Community Partnership in Health Professions Education

### Facilitators:

### Anuradha Joshi

### University of Medical Sciences and Research, India.

Anuradha Joshi is the Head of the Department of Medical Education, Medical Education Coordinator & Professor in Department of Pharmacology. She has conducted more than 50 workshops and sessions at schools and colleges at the state & national level on various types of Creative teaching-learning strategies for faculty as well as active & effective learning strategies to be adopted by students in their professional life.

### Juhi Kalra

### Swami Rama Himalayan University, India.

Juhi Kalra works at Himalayan Institute of Medical Sciences, Swami Rama Himalayan University, Dehradun, Uttarakhand, India. She is a FAIMER teaching Faculty at CMCL FRI, Ludhiana, India, and a faculty for ACME (The Advance Course in Medical Education by National Medical Commission, India). She is the Convener of MCI Regional Centre in Medical Education Technologies at HIMS and is involved in training faculty at 17 Medical Colleges across India in Medical Education Technologies..

### Pathiyil Ravi Shankar

### International Medical University, Malaysia.

Pathiyil Ravi Shankar is a faculty member at the IMU Centre for Education, IMU. He was among the top 2% of scientists globally for 2019, 2020, and 2021. He has been an invited speaker at several fora and has facilitated workshops on the humanities. He has written articles on cinemeducation and has facilitated a workshop on the topic. He is also a member of the ORCID Research Advisory Council (ORAC). He is a World Association of Medical Editors (WAME) member.

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#### PG 67

### Synopsis

Movies can play a vital role in the education of future healthcare professionals. The term cinemeducation has been coined to describe the use of cinema in medical education. Movies and movie clips have been used for various purposes including exploring the history of medicine, understanding the patient's perspective, exploring important social issues, and helping the holistic development of healthcare professionals. The authors have been using cinema in the education of students for over a decade. Movie and movie clips have been used to explore 'soft skills' and other areas. Movies effectively engage learners with the affective dimensions of health, sickness, and disability.

The areas of student empowerment and community engagement in education can be explored effectively using movies. In addition to the cognitive domain, the affective one will be significantly strengthened. In this interactive and engaging workshop, the facilitators will introduce the participants to cinemeducation, explore strategies to enhance student empowerment and community engagement and use movie clips to engage with these at a deeper, affective level. A guide on using cinema will also be worked on and developed collaboratively.

Target audience: Health professional educators (and student participants) The conference themes addressed are student empowerment and community engagement.

### Learning Outcomes

At the end of the workshop participants will be able to:

- Explain concepts related to cine-learning in the field of Health Professions Education (HPE).
- Explore the affective dimensions of being a health professions student and a community member requiring medical care through cinema.
- Express the role of cinema in empowering students and promoting community partnerships in HPE.
- Enumerate guidelines for the use of cinema in HPE.

## WORKSHOP P1B (Onsite)

Date: 13 October 2023 Time: 0900 - 1200 Venue: 1.12.02, Level 1, IMU

### Effective Mentoring Conversations: Ask More, Tell Less!

### Facilitators:

### Benjamin Yen Seow Goh

National University of Singapore.

Benjamin Goh enjoys a successful clinical practice as a fellowship-trained Urologist with a special interest in robotic kidney surgery and a Kidney Transplant Surgeon.

In the realm of medical education, Benjamin is passionate about people and their growth in the journey of life. Benjamin is a PCC level credentialed coach with the International Coach Federation, certified Health Coach, Team Coach and an Organisational Design and Development practitioner. Blending in skillset, toolset and mindset from ontological coaching, organizational development with educational pedagogies, Benjamin strives towards a holistic medical education.

### Marion Aw

### NUS Medicine, Singapore.

Aw is an Associate Professor in the Department of Paediatrics, Yong Loo Lin School of Medicine, National University of Singapore (NUS Medicine) and a Senior Consultant in the Department of Paediatrics, National University Hospital (NUH). Her area of clinical expertise is in paediatric gastrointestinal disease, hepatology and liver transplantation.

### Zhi Xiong Chen

### NUS Medicine, Singapore.

Zhi Xiong is Assistant Dean (Education) of NUS Medicine and a Centre for Medical Education (CenMED) Associate. Deeply interested in international professional development, he is Chairperson of the Asia-Pacific Biomedical Science Educators Association (APBSEA) and a Board Member of the International Association of Medical Science Educators (IAMSE). In pediatric cancer research, Zhi Xiong is seeking new therapies and new ways of monitoring disease as Principal Investigator of the Neurodevelopment and Cancer Laboratory at NUS Centre for Cancer Research (N2CR).

He is also an Affiliate Member of the National University Cancer Institute, Singapore (NCIS) and a Joint Scientist at KK Women's and Children's Hospital (KKH). Involved in the education of medical, dental, pharmacy and life sciences students, Zhi Xiong is exploring ways to broaden health professions education and promote transdisciplinary learning with specific interests in the role of medical sciences in health professions practice, faculty development, and medical education technology. As Master of NUS LightHouse and ex-NUS Assistant Dean of Students, Zhi Xiong firmly believes that education goes hand in hand with holistic student development and champions innovative ways to foster academic and non-academic learning.

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### Synopsis

Mentorship plays a pivotal role in the training and career development of both medical students and practicing physicians. The term 'mentor' is derived from the name of a teacher, Mentor, whom Odysseus trusted more than his own family to raise his son when he was away at war. In other words, it describes a selfless relationship guided by someone who imparts wisdom and knowledge to a less-experienced individual. Within medicine, mentorship has long been a commitment for many senior physicians. A central component of medical training, it is instrumental in reinforcing ethics and professionalism, personal and career development, as well as the formation of professional identity.

A lasting and effective mentor-mentee relationship builds upon key characteristics such as mutual trust and respect, role-modelling of values, appreciative and non-judgmental inquiry, learning together about what gives meaning in different aspects of life, and fostering professional and personal growth for both the mentor and the mentee. Communication skills and relational competence are thus crucial in the longitudinal development of this mentor-mentee relationship. Thoughtful intent in creating an atmosphere during conversations that prioritize trust over hierarchy and bidirectional exchange over mentor monologue is important. Active listening is an imperative skill; to listen purely to understand, without judgment or the need to provide solutions. This allows mentees to feel comfortable and safe to share as well as to seek help and guidance whenever needed.

This workshop aims to empower medical educators with skills to engage in impactful conversations with learners and mentees.

Target audience: Health professional educators (and student participants). The conference theme addressed is faculty development.

### Learning Outcomes

At the end of the workshop participants will be able to:

- Understand the role and importance of mentoring in medical education.
- Gain awareness of different mentoring styles and why some may work better than others.
- Appreciate the human systems in healthcare education/mentoring and be intentional about maintaining the human system.
- Learn how to phrase questions to foster impactful conversations.
- Develop insight and awareness regarding one's own mentoring styles through experiential learning with real-time feedback.

# WORKSHOP P1C (Onsite)

Date: 13 October 2023 Time: 0900 - 1200 Venue: 1.12.13, Level 1, IMU

### Engaging Students and Faculty in Academic Publishing: Strategies to Make Manuscript Submission and Dissemination of Your Published Work More Successful and Enjoyable

### Facilitators:

### Peter GM de Jong

#### Leiden University Medical Center, Netherlands.

Peter de Jong is a strategic advisor and senior researcher in the field of Technology Enhanced Learning at Leiden University Medical Center in The Netherlands, where he leads a team for the development, implementation and support of learning materials and provides strategic advice in the field of technology enhanced learning. His research interest is in the field of Online and Blended Learning in medical education, especially the integration of Massive Open Online Courses into regular classroom teaching, and the use of Mixed and Virtual Reality applications. He authored several articles on the topic of the use of computers in education and online learning, and presented numeral oral, poster and workshop presentations.

### Julie K Hewett

#### IAMSE Association Manager.

Julie Hewett is a graduate of Rochester Institute of Technology with a Bachelor Degree in Entrepreneurial Management. She has over 25 years of office management experience working with small organizations in the services and manufacturing industries. This broad work experience allowed Julie to develop JulNet Solutions, offering management support services to small businesses, entrepreneurs, and eventually professional non-profit associations.

### Synopsis

Scholarly work is of great importance in health professions education for developing new teaching methods, program evaluation, accreditation, and promotion and tenure. Scholarship results in products that are subject to feedback from peers and are being shared with others around the world. While doing research itself is often very engaging, many scholars might be less than enthusiastic about the process of writing and submitting a manuscript to a journal. This is unfortunate, as the process of writing articles and disseminating your achievements after publication can be a very satisfying and pleasant activity.

Having appropriate background knowledge about the process can help make authors become more engaged and passionate. Beyond good academic writing skills, attention needs to be paid to the intended audience, appropriate article type, educational rigor, journal selection and common practices in different parts of the world. Knowledge of typical procedures within Editorial Boards and Editorial offices might also help to optimally prepare the manuscript and significantly increase the chances for acceptance of the manuscript. And once the article has been accepted and published, the authors can proactively promote their achievements instead of relying on passive
dissemination of the article through library systems. Many online platforms like Twitter, Facebook, Instagram, LinkedIn, and ResearchGate make sharing results easy and enjoyable. Social media and social networks offer a wealth of opportunities to actively increase the visibility of the article, indirectly leading to more academic usage and more citations to the work.

The workshop will give the attendees practical strategies to improve the quality of their submissions and more insight into the editorial processes of a journal, to increase the chances of acceptance of their work. Suggestions to handle reviewer bias and avoid rejection caused by regional and cultural differences will be provided. During the session, the participants will get small group assignments to help clarify the several steps in submitting a manuscript. Secondly, the participants will learn how to formulate effective social media expressions for a specific sample article. Based on the brainstorming exercises and actual experiences from the audience, the presenters will provide further tips and recommendations.

Target audience: Health professional educators (and student participants). The conference theme addressed is faculty development.

#### Learning Outcomes

At the end of the workshop participants will be able to:

Feel much more familiar with the entire process of publishing and will have a better understanding
of the way in which a manuscript should be submitted. Participants will know more about how to
actively promote their own article(s) and themselves as a researcher/author by using social media
and social networks.

# **PRE-CONFERENCE WORKSHOP**

### WORKSHOP P1D (Onsite)

Date: 13 October 2023 Time: 0900 - 1200 Venue: 1.12.06, Level 1, IMU

### Designing a Community-Based Patient-Centred "reverse" Interprofessional Education (IPE) Learning Activity

#### Facilitators:

#### Weeming Lau

#### Monash University Malaysia, Sunway, Malaysia.

Weeming Lau, an "Ancora Amparo" practitioner, is a senior lecturer and deputy head of the medical education unit at Monash University Malaysia (MUM). She is clinically trained in Internal and Respiratory Medicine. She is the Early years lead coordinator in Clinical Skills (teaching, learning and assessment), and a facilitator/tutor in Bioethics in the BMedSc and MD programme.

#### Pacifico Eric Eusebio Calderon

#### St. Luke's Medical Center College of Medicine, Philippines.

Pacifico Eric Eusebio Calderon is Associate Professor and Chair of the Department of Professionalism, Medical Ethics and Humanities within St. Luke's Medical Center College of Medicine-William H. Quasha Memorial, Philippines. He also leads the Clinical Ethics Services of St. Luke's Medical Center. Relevant to this workshop, Pacifico has worked to encourage meaningful patient participation in bioethics discourse and teaching in the Philippines. As a physician and medical scholar, he is interested in topics related to medical ethics and professionalism, health professions education, and quality management.

#### Wai-Tat Wong

#### The Chinese University of Hong Kong, China.

Wai-Tat Wong is a specialist in internal medicine and critical care medicine. He is now working in the Department of Anaesthesia and Intensive Care, and the Centre for Bioethics at the Chinese University of Hong Kong (CUHK). He provides clinical service as a consultant in the intensive care unit (ICU) of the Prince of Wales Hospital. He is responsible for undergraduate teaching in acute medicine, anaesthesia, communication skills, professionalism and medical ethics in the Faculty of Medicine at CUHK. He has been working on research projects related to medical education, clinical ethics, end-of-life care in ICU, mechanical ventilation and infectious diseases.

#### Vivian WY Lee

#### The Chinese University of Hong Kong, China.

Vivian Lee is currently Associate Professor of the Center for Learning Enhancement And Research (CLEAR) at the Chinese University of Hong Kong. Lee received her Bachelor of Sciences degree in Biochemistry at the University of California, Los Angeles (UCLA) and her Doctor of Pharmacy degree in the School of Pharmacy, University of Southern California (USC). Her specialty is in clinical pharmacy on cardiovascular medicine. She is also a certified Specialist by the Board of Pharmaceutical Specialties (US) in Pharmacotherapy and added qualification in cardiology pharmacotherapy. She is also the fellow of the Hong Kong College of Pharmacy Practice and the senior fellow of the United Kingdom Higher Education Academy.

Synopsis

IPE involves engagement of heterogeneous groups of learners from different discipline and creation of experiential diverse learning opportunities in various healthcare settings for a patient suffering from a given disease for example "multidisciplinary management of a diabetic patient in the hospital, day care centre and the community".

Traditionally we encouraged students or trainees from different healthcare disciplines to evaluate patients' needs in different stages of their diseases to achieve holistic care for patients in the healthcare facility or in the community. The contemporary IPE pedagogy should reverse the direction of care planning from the healthcare workers' perspective to the patients' lenses. Patients suffering from chronic illnesses including diabetes, stroke, heart failure, and chronic obstructive pulmonary disease require support from different perspectives, which may involve one or more healthcare disciplines. A patient-centered reverse IPE potentially enhances learners' engagement and opportunities for experiential learning.

The current workshop aims to employ the patients' voice in IPE, as we look from the lenses of the patients on the treating team, rather than just among the different members of the treating team. If we achieve the reverse care planning direction for the healthy community in the longer term, the individual member of the treating team will appreciate the multidisciplinary management of the patient more effectively than the combined effect of care provided by individual healthcare discipline – the synergistic effect of interprofessional care.

Target audience: Students or staff from any Health Professions Education disciplines/sectors. The conference theme addressed is partnerships with community.

#### Learning Outcomes

At the end of the workshop participants will be able to:

- Explore how the voice of community patients can be engaged, enabled, and empowered to increase the effectiveness in the learning and practice of IPE.
- Learn from and collaborate with each other on using patients' stories to enhance students' engagement in different IPE contexts.
- Apply lessons learned from the workshop to produce reverse IPE teaching in the participant's workplace or institution of affiliation.

# **PRE-CONFERENCE WORKSHOP**

### WORKSHOP P2A (Onsite)

Date: 13 October 2023 Time: 1400 - 1700 Venue: 1.12.09, Level 1, IMU

### Disruptive Behaviour – Impact on Well-Being, and How We Can Empower Individuals to Address it Effectively

#### Facilitators:

#### Inthrani Raja Indran

Yong Loo Lin School of Medicine, National University of Singapore, Singapore.

Inthrani Raja Indran has been leading a study focused on disruptive behaviour (DB) in our healthcare system, which study has now raised greater awareness at the national level on the need for effective measures to mitigate the causes and impact of DB and paved the way for constructive conversations in this challenging area. Inthrani is committed to supporting students develop their self-awareness, self-mastery, and resilience to make their best walk-through Medical School. Aside from her roles in education, Inthrani spearheads efforts to enhance the personal and professional development of learners.

#### Marion Aw

Yong Loo Lin School of Medicine, National University of Singapore, Singapore.

Aw is passionate about medical education and people development. Within the institution's Graduate Medical Education Committee, she has served in various capacities in the Curriculum Subcommittee, Evaluation Subcommittee, and Remediation Subcommittee. She is currently Chair of the Physician Health and Resilience Subcommittee, as well as the Education Director overseeing all pre-employment clinical training (medical, nursing, pharmacy, allied health) in NUH.

#### Benjamin Yen Seow Goh

The Chinese University of Hong Kong, China.

In the realm of medical education, Benjamin is passionate about people and their growth in the journey of life. Benjamin is a PCC-level credentialed coach with the International Coach Federation, certified Health Coach, Team Coach and an Organisational Design and Development practitioner. Blending in skillset, toolset and mindset from ontological coaching, organizational development with educational pedagogies, Benjamin strives towards holistic medical education.

#### Kristy Xinghan Fu

#### Yong Loo Lin School of Medicine, National University Singapore.

Kristy is a passionate medical educator, teaching healthcare professionals regularly, and is involved in the planning of medical education curriculum as an assistant professor at Yong Loo Lin School of Medicine, National University Singapore. She strongly believes that in empowering and supporting our students to grow into their full potential as skilled, competent, and compassionate healthcare professionals whilst ensuring a balanced student life and maintaining well-being, it is also important to build in our students a strong sense of self-awareness, relational competence, and resilience. Synopsis

Disruptive Behaviour (DB), in healthcare, can be defined as any form of inappropriate conduct which can interfere with quality healthcare delivery. They include both verbal and nonverbal behaviours including yelling, demeaning remarks, harassment, and bullying.

Studies have demonstrated that DB can contribute to a hostile working and learning environment, and negatively influence patient safety. Overall, these factors can affect the perspectives, attitude, and emotional responses of healthcare professionals in various situations. Moreover, many studies have also shown that cultural barriers such as hierarchy and power distance that are widely embedded in the health care system further impede the resolution of these problems.

This may facilitate the culmination of high-tension encounters into disruptive behaviours in healthcare. The inability to seek recourse and support can be experienced as trauma and negative self-assessment by individuals. While research on DB has gained much traction over the years, issues surrounding a lack of policies and guidelines to address DB, reporting systems, internal organisational dynamics, leadership, and confidentiality, have largely hampered progress, and it remains an ongoing problem. In this workshop, we will explore these issues, which have raised the need to review workplace practices and introduce agents of change to systematically improve the working environment of healthcare workers and address the root factors underpinning DB.

Through our discussions, and the resources provided we hope that the participant would be able to return to their respective organisations and initiate an action plan that could eventually help to curb DB and improve the lives of the healthcare professionals and the patients we care for. Join us for a workshop in exploration and learning.

#### Learning Outcomes

At the end of the workshop participants will be able to:

- Recognise DB, the underlying factors contributing to DB and its impact on the healthcare system.
- Recognize the levels of systems in an organization, and power in systems via an experiential learning model.
- Demonstrate greater intra-personal awareness in daily encounters in healthcare.
- Identify the barriers to effectively reporting or addressing DB in their health systems.
- Discuss and explore strategies individuals can adopt to tackle disruptive behaviour at the individual and organizational level.

# **PRE-CONFERENCE WORKSHOP**

### WORKSHOP P2B (Onsite)

Date: 13 October 2023 Time: 1400 - 1700 Venue: 1.12.02, Level 1, IMU

# A Practical Guide for Implementing Social Accountability Values in Day-to-Day Curriculum Activities

#### Facilitators:

#### Mohamed Hassan Taha

College of Medicine and Medical Education Center, University of Sharjah, United Arab Emirates. Mohamed Hassan Taha had more than 15 years of experience in Medical Education in United Arab Emirates, , Saudi Arabia and Sudan, and. Mohamed works as a consultant in Medical Education for Several Medical Schools in the region, and globally with AMEE and other global organisations, he worked as a consultant in developing competency frameworks at undergraduate and postgraduate levels nationally and regionally. His research interest is curriculum development and social accountability, Teaching and learning, online learning and engagement, and learning environment.

#### Mohamed Elhassan Abdalla

#### School of Medicine-University of Limerick, Ireland.

Mohamed Elhassan has a quarter century of experience in medical/health professions education and educational research. He has experience in Medical Education in different parts of the world and owns membership in international bodies related to Medical Education. His work, leadership and contributions on Social Accountability extends back to nearly 20 years, he is one of the participants in the development of the Global Consensus for Social Accountability of Medical Schools besides some other innovations in social accountability and its implementation at medical schools. He has many publications in the areas of social accountability, Accreditation, Assessment, and Cost and Value.

#### Synopsis

The mission of medical schools is to contribute to the satisfaction of the societies health needs by all its activities including training of competent doctors who will work as change agents in addressing health status of their communities. Medical schools should adjust their educational, research, and service programs to respond to priority health issues of individuals as well as society as a whole.

In 1995, The WHO emphasized the concept of social obligation of medical schools towards their communities by setting the definition of social accountability (SA) as the "obligation of medical schools to direct their education, research and service activities towards addressing the priority health concerns of the community, region, and/or nation they have the mandate to serve". This workshop aimed at introducing the participants to social accountability in day-to-day curriculum activities.

#### Learning Outcomes

At the end of the workshop participants will be able to:

- Explain the concept of social accountability and outline the developmental milestones.
- Discuss what makes medical school socially accountable.
- Explore the challenges that face the transformation of medical schools into socially accountable schools.
- Plan to integrate the values and concept of SA into undergraduate curriculum into day-to-day practice.

# **PRE-CONFERENCE WORKSHOP**

# WORKSHOP P2C (Onsite)

Date: 13 October 2023 Time: 1400 - 1700 Venue: 1.12.06, Level 1, IMU

### The Simulated Patient Program: From Theory to Reality

#### Facilitators:

#### Chong Pek Sam

#### International Medical University, Malaysia.

Chong Pek Sam has been working as a lecturer for the past 15 years at IMU. She has more than 20 years of nursing experience and specializes in Oncology. She has been involved in health professions education for more than 10 years and holds a Master's in Health Professions Education. Besides teaching, she is involved in simulated patient program development and training. She coordinated the simulation-based education training for students and faculty.

#### Sow Chew Fei

#### International Medical University, Malaysia.

Sow Chew Fei has been a clinical and communication skills lecturer at the International Medical University in Malaysia for the past thirteen years. She was the department's Head in 2014, involved in curriculum planning and clinical and communication skills assessment. She was the Director of the Clinical Skills and Simulation Centre (CSSC) from 2016-2022 and was responsible for the centre's strategic planning, including the management of the IMU Simulated Patient Program. The CSSC serves as the clinical assessment centre utilising OSCE and the centre for simulation learning for all of the University's programs. As the Associate Dean of Clinical and Experiential Learning since 2018, she chairs a committee that includes all school representatives. She is responsible for developing numerous policies and guidelines for the University regarding teaching, learning, and assessment in clinical practice. She is a general practitioner with a medical degree and holds a Diploma in Dermatology from the Royal College of Surgeons and Physicians, Glasglow. She also holds a Master's in Medical Education from the University of Dundee. She is currently pursuing her PhD in Education at the University of Maastricht. Her research interest is focused on medical education.

#### Juliet Mathew

#### International Medical University, Malaysia.

Juliet Mathew has been a clinical skills lecturer and counselling lecturer at the International Medical University(IMU) in Malaysia for the past three years. She started the first cohort of Grief & Bereavement module within the master's in counselling program in September 2021. She is currently the Director of the Clinical Skills and Simulation Centre (CSSC) and has been responsible for the centre's strategic planning, including the management of the IMU Simulated Patient Program. She is a general practitioner with a medical degree from Kasturba Medical College, India and holds a master's degree in counselling from the University of Malaya, Malaysia. She is currently passionate about moulding compassionate and ethical doctors and future grief counsellors to serve the needs of the multicultural patients in the community.

#### Jacintha Anita

International Medical University, Malaysia.

Jacintha Anita is a nurse tutor with over a decade of experience working with simulated patients in a simulation-based education in Clinical skills & Simulation Centre (CSSC), IMU. Currently, she is the coordinator of the Simulated Patient Program. She is an experienced surgical nurse, managing within the operating theater for 6 years before embarking to health professions education.

#### Synopsis

Simulated Patient (SP) is a recognised methodology that involves human role players interacting with learners in a wide range of experiential learning and assessment contexts. SPs have extended their roles in giving feedback to students and evaluating students' performances. To ensure the growth, integrity, and safe application of SP in education, there should be clear and practical guides in providing a safe work environment for SP training. This role of SP encompasses role portraying, giving feedback, being assessors, program managers and professional development. This workshop introduces basic concepts in SP methodology, covering key terms, the scopes of practices, advantages and challenges. It considers this unique teaching-learning method of who, what, why and how.Throughout the session, participants are encouraged to contextualise this training methodology for their own settings.



# ORAL PRESENTATION ABSTRACTS

### Teaching And Learning ABSTRACT ID: ORO-TAL05

Hybridizing Video-Based Learning with Simulation to Engage and Enable Learners in The Process of Clinical Skills Learning and Clinical Reasoning at A University Hospital in Pakistan

Sana Saeed, Maryam Hameed Khan, Muhammad Muneebullah, Anny Dhanwani, Marib Malik, Areeba Hussain, Maisam Ali. The Aga Khan University, Pakistan.

#### Background:

While learning and practicing on actual patients is a major mode of teaching clinical skills, concerns about patient safety, unavailability, and lack of standardization have led to the development of simulation for medical education. The hybridized format of simulation with videobased learning changes the traditional clinical skills teaching into the flipped classroom. This study aims to measure the effectiveness of hybridizing video-based learning with simulation for flipping the clinical skills teaching of fourth-year medical students at Aga Khan University, Pakistan (AKU).

#### Methods:

The study employed a mixed-methods design. The quantitative component focuses on identifying the effect of the intervention on perceived self-efficacy. The performance of this batch of 2020-21 on the end of clerkship objective structured clinical exam (OSCE) was compared with the previous batch of 2019-20, taught using simulation alone. Focused group discussions were used to explore the experiences of medical students from the intervention. Quantitative data underwent descriptive and inferential analysis using Stata v16 while qualitative data underwent content analysis using NVivo software. This study is approved by AKU-ERC.

#### **Results:**

All medical students from the academic batch of 2020-21 (n=100) volunteered to be part of this study. Hybridization of video-based learning with simulation significantly improved self-efficacy scores for all examinations (cardiovascular, respiratory, neurological, and abdomen) with p-value <0.05. OSCE scores of the intervention group were significantly higher on the neurological and abdominal stations as compared to the previous batch (p-value < 0.05). In addition. the overall structure of the intervention was appreciated by all the students, who stated it allowed reinforcement of basic concepts, retention, and further insight into clinical applications.

#### Conclusion:

The hybridization of video-based learning with simulation facilitated in creation of better opportunities for medical students to revive their prior knowledge, apply core concepts to the problem and engage in clinical reasoning.

#### Take-Away Message:

The hybridization of video-based learning with simulation enabled the learners to be engaged in the process of deeper learning thereby empowering them with greater self-confidence to exhibit clinical reasoning.

### ABSTRACT ID: ORO-TAL07

### Clinical Skills Peer Tutors: A Training Program for Formative, Peer Assessment of Clinical Skills

Sahar Mohammed, Moune Jabre. Weill Cornell Medicine-Qatar, Qatar.

#### Background:

Peer-assisted learning (PAL) has been recognized as an effective approach to promoting a safe and inclusive learning environment that enhances students' confidence and supports success in parallel to faculty-based teaching and assessment. In this study, we implemented a pilot program to prepare senior medical students (MS) to utilize PAL for formative assessment of learners' clinical skills using a multi-stage training. At our institution, junior MS learn physical exam skills through didactics and deliberate practice with formative assessment facilitated by standardized patients (SPs) who have undergone advanced training on the physical exam technique and assessment.

#### Methods:

We invited 52 senior MS to serve as formative assessors, 14 (27%) expressed interest, and 8 (15%) have completed the training program to date. Through this program, senior MS learned and demonstrated the necessary skills to serve as peer facilitators for formative assessment, including adult learning theories. professionalism, and communication skills, which we validated to ensure their skill competence and understanding of the assessment process. Initially, senior MS observed faculty assessing learners prior to themselves serving as the assessors under faculty supervision. The MS were evaluated on their professionalism, aptitude, and ability to motivate learners through iterative performance feedback until deemed competent to function independently.

#### **Results:**

Our preliminary evaluation data indicates this program was well-received as 95% of the senior MS expressed confidence to function independently. On average, the training required 6 hours of dedicated faculty and MS time with variability depending on the amount of iterative practice and feedback sessions needed to achieve independence. Faculty were satisfied with the provision of consistent quality formative assessment to learners.

#### Conclusion:

This training provides high-quality PAL for assessment of clinical skills in a positive and standardized environment. The success warrants an opportunity for future research on utilizing PAL for clinical skills and MS as assessors.

#### Take-Away Message:

Empowering and training medical students as medical educators using a multi-stage training program provides high-quality peer-assisted learning for clinical skills in a positive, safe, and standardized learning environment.

### ABSTRACT ID: ORO-TAL08

### What Do Medical Students in Faculty of Medicine, UiTM Think of Their Educational Environment?

#### Siti Norashikin Mohd Tambeh<sup>1</sup>, Mohamad Nurman Yaman<sup>2</sup>

<sup>1</sup>Faculty of Medicine, Universiti Teknologi MARA, Malaysia. <sup>2</sup>Faculty of Medicine, Universiti Kebangsaan Malaysia, Malaysia

#### Background:

The optimal educational environment in medical school influences and shapes medical students' outlook and

aspiration to become holistic and competent doctors. To provide this environment, the faculty needs input from various stakeholders including the medical students. The objectives of this study are to ascertain the current educational environment and to identify the areas of concern that need to be addressed for the betterment of the students.

#### Methods:

A cross-sectional study using Dundee Ready Education Environment Measure (DREEM) questionnaire was conducted among medical students in UiTM to measure their perception of educational environment. DREEM consisted of five subscales: students' perception of learning (SPoL), teachers (SPoT), atmosphere (SPoA), academic self-perception (SASP) and social self-perception (SSSP).

#### **Results:**

A total of 894 students completed the questionnaire. The overall mean score of DREEM was 131.81/200. described as more positive than negative. The mean score for SPoL was 33.06/48. SPoT was 30.11/44. SASP was 20.75/32, SPoA was 30.72/48 and SSSP was 17.17/28. These mean scores showed that the students perceived their education environment positively for each subscale. However, some items in each subscale scored poorly and could be improved. Students perceived that there was an over emphasis on factual learning, and they were unable to memorise. They also perceived teachers as strict and authoritarian and showed their anger in class. Students were also tired and stressed and had no enjoyment in studying medicine.

#### Conclusion:

Overall, medical students in UiTM perceived their educational environment in all subscales positively, with some items needing more attention. The faculty must address these items to increase students' positive perception of their educational environment.

#### Take-Away Message:

Faculty has a big responsibility to prepare the optimal environment for effective teaching and learning. The findings from this study may direct the faculty on the areas that need to be improved to inculcate life-long learning in students.

### ABSTRACT ID: ORF-TAL10

### Ensuring Student Competence in Essential Dental Consultation Communication Skills for Patient Care: Developing, Validating and Piloting a Comprehensive Checklist

#### Sunila Sangappa.

JSS Dental College and Hospital JSSAHER, India.

#### Background:

Ability to communicate effectively as a core competency for dental practitioners is deemed important for a patient-centred practice. This study aims to pilot the process of developing and using a comprehensive checklist for ensuring student competence in essential dental consultation communication for patient care.

#### Methods:

A total of 87 third-year dental undergraduate students' videotaped patient interviews were independently rated by six raters to evaluate the psychometric properties of the developed Dental Consultation Communication Assessment Checklist (DCCAC). Students were given training in basic consultation communication skills and patient interview techniques according to the developed DCCAC. Improvement in communication was assessed in pre-intervention and postintervention using the checklist for giving feedback on performance of real patient examination.

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#### **Results:**

The majority of faculty (84%) and patients (93%) gave positive feedback (satisfaction) on the process and 87% of the students' feedback indicated they would use their learning regarding communication skills in the future (transfer to practice). This comprehensive tool was found to be highly reliable with internal consistency reliability (Cronbach's alpha) of 0.987. Construct validity of the tool was examined through principal components analysis with varimax rotation. Based on the principal component analysis, new extracted domains demonstrated very high internal consistency (Cronbach's alpha range = 0.975–1.00).

#### Conclusion:

The product arising from the development and psychometric testing of DCCAC for undergraduate dental students has the potential to be used as a valid tool to assess clinical competence during a patient interview and provide specific and formative feedback/self-reflection for consciously improving performance during the next patient encounters. Self-reflection during formative years will also make them reflective practitioners engaging in continuing professional development (CPD) in the future.

#### Take-Away Message:

The DCCAC developed by us would ensure that dental graduates will be competent in dental consultation communication and use the habit of selfreflection to engage in CPD to improve the quality of patient-centred care.

### ABSTRACT ID: ORF-TAL14

Evaluation of Integrated Care Practice in Tuberculosis and Stunting Management as An Integrated Clinical Learning Approach for Community based Clerkships

#### Dwi Tyastuti

Universitas Islam Negeri Syarif Hidayatullah, Indonesia.

#### Background:

Primary health care (PHC) is the foundation of Indonesia's health care system. Therefore, the objective of medical education in Indonesia is to produce community-ready physicians. This study aimed to assess the implementation of integrated service practice in tuberculosis and malnutrition management as an integrated clinical learning strategy for community-based medical student clerkships.

#### Methods:

The Faculty of Medicine at Svarif Hidavatullah State Islamic University gave permission for this investigation to use a mixed-methods design. From January to April of 2023, 67 students in their final year participated in the community medicine clinic placement in Tangerang District, Banten Province, as part of the research. The Community medical placements are conducted for five weeks at the rural sub-district health center. Students are required to conduct integrated health management for patients and families with tuberculosis and stunting disorders, working in small groups under the supervision of professionals from a variety of professions. This research's paradigm for integrated health services combines the existing health service procedures at PHC with the principles of family medicine services and interprofessional care. The evaluation of students includes.

observations of field activities, group discussions, a portfolio, case presentation, and oral cases examination. The quantitative analysis utilizes data from previous clerkship students (n=82) who completed their community clerkship without utilizing the interprofessional care concept.

#### **Results:**

By comparing the results of the assessment of students who participated in this study with the scores of students who had previous clerkships, the independent t-test revealed that students who participated in integrated practice had significantly higher scores (t =-2.17, df =147, p=0.03). The qualitative data indicated that students responded positively to the concept of integrated services involving multiple professions.

#### Conclusion:

The implementation of integrated service practices in the management of tuberculosis and malnutrition could serve as a template for community clinical clerkship which can provide opportunities for medical students to apply the principles of family medicine services and the principles of public health.

#### Take-Away Message:

In medical and health professions education, the issue of integrated clinical learning is extremely widespread. The application model cannot be separated from the country's health system and its expected graduate product. This study explores the ability of students are at implementing integrated clinical practise with patients, including in primary and community health care.

### ABSTRACT ID: ORO-TAL15

### Effect of A Case-Based Workshop on Attitude Towards Professionalism in Pathology Residents

#### Javeria Rehman<sup>1</sup>, Kauser Jabeen<sup>1</sup>, Sonia Ijaz Haider<sup>2</sup>

<sup>1</sup>The Aga Khan University, Pakistan. <sup>2</sup>Dow University of Health Sciences, Pakistan

#### Background:

Professionalism is the most fundamental yet challenging competency for its teaching learning and assessment in undergraduate and post graduate education. The objective of this study was to determine the effectiveness of a case-based workshop on professionalism for pathology residents by assessing any change in their perception and attitude towards professionalism through pre and post-test.

#### Methods:

It was a guasi-experimental study with a universal sample of all pathology residents from year 1-5 at AKU Karachi, included through convenience sampling. Data was collected with their informed consent, using a validated and reliable tool of Penn State College of Medicine (PSCOM)professionalism questionnaire for residents, as a pre and posttest before and after the case-based workshop respectively. PSCOM is used to assess attitudes and perception regarding the American Board of Internal Medicine's six elements of professionalism including Accountability, Altruism, Duty, Excellence, Honesty and Integrity and Respect in residents. The participants were required to mark their responses according to level of importance on a five-point Likert scale (1=never, 2=little, 3=some, 4=much, 5=great deal).Data was analyzed on SPSS using paired T test to compare the pre-post assessment scores of the participants.

Ethical approval as exemption was granted for the study.

#### **Results:**

A total of 30 residents were included in the study while those with incomplete responses were excluded. The mean score of PSCOM questionnaire as pre-test was  $148.53 \pm 18.11$  SD while as post-test was  $155.10 \pm 17.72$ . The comparison of the mean pre-test and post-test scores revealed a statistically significance difference with a p value of <0.05.

#### Conclusion:

The case-based workshop with interactive discussion significantly improved perception and attitude of residents towards professionalism, hence, was found to be effective for teaching professionalism in pathology residents.

#### Take-Away Message:

Use of real-life, authentic and contextual case scenarios in a highly interactive casebased workshop can significantly improve perception and attitude of residents towards professionalism, hence, can be effective for teaching professionalism in pathology residents.

### ABSTRACT ID: ORO-TAL16

Virtual Patient in Problem Based Learning (VP-PBL): An Instructional Strategy to Enhance Clinical Reasoning of Undergraduate Medical Students.

#### Ayesha Azhar, Erum Khan.

College of Medicine, Ajman University, UAE.

#### Background:

Body Interact (BI) is an interactive virtual patient simulator that mimics an actual clinical encounter on a screen. BI allows students to engage and interact with the virtual patient (VP) to gather relevant clinical information and enhances systematic Clinical Reasoning Skills (CRS) by ruling out the differentials and establishing a probable diagnosis in an error forgiving, no-real-risk setting.

#### Methods:

A pilot study was done on fourth-year medical students. Aiman University College of Medicine, divided into five small groups of 8-9 students. Pre-session: Problem-Based Learning (PBL) case was mapped with BI scenario with a similar Learning Objectives (LO). A mock conducted with PBL facilitators to dry run the scenario to standardize and identify any possible challenges. Pilot VP-PBL: A structured pre-briefing to participants regarding the nature of VP-PBL and the use of BI and its features given. In the beginning of session, patient history was gathered by asking questions, vitals were monitored, an "ABCDE approach" was used for examination. Investigations ordered and patient was treated accordingly. LO formulated and divided among all group members for three-day self-study. During second session, students presented and refined their acquired knowledge related to the VP-PBL case LO. Each student CRS was assessed using a previously validated tool "Assessment of Reasoning Tool" that included a three-point scale assessing; hypothesis-directed data gathering, problem representation, prioritized differential diagnosis, diagnostic testing, metacognition and an overall assessment of learner's performance.

#### Result:

Student found VP-PBL more realistic and engaging than the traditional PBL method. High level of in-session motivation and excitement kept the students engaged and interactive throughout the session.

#### Conclusion:

VP-PBL reflected a better engagement and active discussion of the students. Restriction of time on BI scenario prevented students to inquire about irrelevant patient data and kept them focused on clinical reasoning using an active and systematic approach.

#### Take-Away Message:

VP-PBL enables learning through experience or "how to think" and "how to perform" in realworld scenarios and patient-centric challenges. Future studies should investigate the impact of VP-PBL training on clinical reasoning, decisionmaking and non-technical skill acquisition in undergraduate medical students.

### ABSTRACT ID: ORO-TAL17

### Clerkship Students' Perceptions in Acquiring Obstetric Skills While Attending Normal Delivery and Delivery with High Fidelity Birthing Simulator Within The UAE Cultural Context

#### Farhia Hirsi, Erum Khan.

College of Medicine, Ajman University, UAE.

#### Background:

Medical students' acquisition of obstetric skills in the UAE is influenced by cultural factors that shape their perceptions and experiences. This thematic analysis aims to explore medical students' perceptions of acquiring obstetric skills through highfidelity simulation training and managing labor and delivery during clinical training in the UAE cultural context.

#### Objective:

This research aims to explore the perceptions of undergrad students in acquiring obstetric skills during clinical training versus simulationbased training when managing normal delivery.

#### Methods:

This study was conducted qualitatively using the focus group method to explore students' perceptions of attending normal deliveries and delivery with highfidelity birthing simulator. Four focus group discussions were conducted (n = 8 + /-10) to determine the common challenges of obstetric learning with the UAE cultural context in mind and its potential solutions. Data will be analyzed using thematic analysis.

#### Result:

The thematic analysis emphasizes the perspectives of medical students in the UAE in acquiring obstetric skills. While simulation-based training of obstetric skills offers advantages in overcoming cultural sensitivities and providing a controlled learning environment, attending normal deliveries allows for direct exposure to cultural challenges and the development of cultural competency. Recognizing and addressing the cultural challenges specific to the UAE, and obtaining valuable feedback to improve their clinical environment, are crucial in designing effective obstetric training programs.

#### Conclusion:

Medical students in the UAE perceive highfidelity simulator training and attending normal deliveries as valuable in acquiring obstetric skills, despite the cultural challenges they face during clerkship. Integrating cultural sensitivity and adaptability into obstetric training can better prepare students to navigate these challenges and provide culturally competent care.

#### Take-Away Message:

Medical students in the UAE recognize the value of both highfidelity simulator training and attending normal deliveries for acquiring obstetric skills, even in the face of cultural challenges during their clerkship. By integrating cultural sensitivity and adaptability into obstetric training programs, educators can better equip students to navigate these challenges and provide culturally competent care. This approach ensures that future healthcare professionals are prepared to meet the diverse needs of pregnant women and their families in the UAE, ultimately enhancing the quality of obstetric care in the region.

### ABSTRACT ID: ORF-TAL18

# Role of Corrective Feedback as a Learning Tool in Dental Education.

#### Shilpa Gunjal<sup>1</sup>, Deepak Gowda Sadashivappa Pateel<sup>2</sup>

<sup>1</sup>International Medical University, Malaysia <sup>2</sup>Faculty of Dentistry, MAHSA University, Malaysia.

#### Background:

Feedback plays an essential role in medical and dental education. Feedback is an integral part of formative assessment and to some extent supports and helps to close the gaps between expected and actual performance and thus determines the success and purpose of the formative assessment. The present study is carried out to assess the role of corrective feedback in dental education.

#### Method:

The Randomised controlled, single blinded. cross-over quasi experimental study was conducted on all year three dental students of MAHSA University. The students were randomly divided into two groups with 52 in each group. After the conduct of case based formative assessment for all the students, the study group received corrective feedback and the control group did self-study for the same period. A postlearning assessment was conducted for both the groups and results were compared between the study and control group. The data was analysed using GraphPad Prism version 9.2.0 for Windows, GraphPad Software, San Diego, California USA, Normality of data was checked using D'Agostino & Pearson test with p>0.05 indicating fulfilment of normality assumption. The p <0.05 was considered as statistical significance.

#### **Results:**

The mean  $\pm$  SD age for study and control group was found to be 21.63  $\pm$  0.88 years and 21.94  $\pm$  1.06 years respectively. Two-way repeated measure ANOVA revealed that there was no statistically significant difference between corrective feedback and self-study groups in the post-learning assessment (F = 0.3604, P = 0.5509).

#### Conclusion:

The results of the present study indicate that the corrective feedback seems to have no effect especially given during initial stages of learning process.

#### Take-Away Message:

The role of feedback to the student gets during their learning process is an essential aspect of education process. At the same time, formative assessment is considered an important path that can achieve learning. The present study throws light on the role of corrective feedback after formative assessment.

### ABSTRACT ID: ORO-TAL23

Student Learning Strategies in Online Learning at The Faculty of Medicine Universitas Islam Indonesia During The Covid-19 Pandemic: A Phenomenological Study

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#### Background:

Online learning is considered to be an alternative learning system during the COVID-19 pandemic. Online learning has a negative impact that can be felt from the difficulties and challenges in that learning. The challenges and difficulties of online learning have a negative impact on the student learning process. With these conditions, students are going to form learning strategies so there will not be any negative effect on their learning process. Therefore, researchers are interested in exploring more about student learning strategies to overcome challenges and difficulties in online learning at the Faculty of Medicine, Universitas Islam Indonesia during the COVID-19 pandemic.

#### Method:

This research was qualitative research and the data was collected using indepth interviews. The respondents were pre-clinical students at the Faculty of Medicine, Universitas Islam Indonesia batch 2019, 2020, and 2021 that were determined through maximum variation method. The total respondents were 24 and were divided into 4 groups based on Grade Point Average (GPA) of > 3,50; GPA 3,00-3,50; GPA 2,50-3,00; and GPA < 2,50. The data was then analysed using thematic analysis methods.

#### **Results:**

The research results are divided into three major themes of learning strategies which consist of implementing various learning methods, managing learning activities, and managing enthusiasm for learning. Implementing various learning methods includes re-learning, recording material, interacting, and looking for various learning resources. While managing learning activities carried out includes self-preparation and learning evaluation. Students can also manage enthusiasm for learning by using ideals, selfachievement, and affective components.

#### Conclusion:

According to student perceptions, there are three kinds of learning strategies that are used during online learning. These strategies are considered to be able to overcome the challenges and difficulties of online learning so there will not be any negative impact on the student learning process.

#### Take-Away Message:

The challenges and difficulties of online learning have a negative impact on the student learning process. With these conditions, students are going to form learning strategies so there will not be any negative effect on their learning process. It is hoped that this learning strategy can be used by other medical faculty students to support their academic performance in the future

### ABSTRACT ID: ORO-TAL24

"Residents-as-Teachers": Survey on Perception and Experience of Surgical and Orthopaedic Residents in Undergraduate Medical Education

Marvin Man Ting Chung, Billy Ho Hung Cheung, Michael Tiong Hong Co. University of Hong Kong, Hong Kong.

#### Background:

Surgical and orthopaedic residents are tasked with teaching undergraduate medical students, which can be difficult given their clinical workloads and lack of training. While student feedback is shown to be positive in literature, there is a lack of understanding about how residents view their teaching duties. This study aims to investigate the perceptions and experiences of surgical and orthopaedic residents regarding undergraduate medical teaching.

#### Method:

A cross-sectional online survey was conducted among resident and resident specialist grade doctors in the surgical and orthopaedic department of a single university teaching hospital. Subjects were asked to fill in an online survey after obtaining informed consent. Doctors without medical student teaching experience were excluded from the study. Background characteristics (including sex, training grade, primary medical qualification, experience in medical student teaching and teaching hours) and their opinion towards various statements regarding medical student teaching (experience, perception and belief) on Likert scale of 1 to 5 were recorded.

#### **Results:**

22 residents across all training grades were included in this study. All of them have been taught by residents during medical school and 68.2% rated their previous learning experience as good or very good. Majority of them enjoyed medical student teaching (77%) and none of them disagreed to become more involved in teaching. Most agreed that they gained more knowledge and improved their own learning as they taught (81.8%). However, only 31.8% received formal training in teaching and 18.2% had protected time off from clinical duty for teaching. They also did not receive adequate feedback about quality of teaching (27.3%), nor sense of being valued by the hospital or university for their engagement in teaching (18.2%).

#### Conclusion:

Surgical and orthopaedic residents reported positive feedback from their experience in undergraduate clinical teaching but received inadequate support and training.

#### Take-Away Message:

Surgical and orthopaedic residents reported positive feedback from their experience in undergraduate clinical teaching but received inadequate support and training. Residentsas-teachers is effective for both students and residents themselves, but more recognition, support and training should be provided to residents.

### ABSTRACT ID: ORO-TAL25

### Transforming Education: Unleashing the Power of AI for Positive Student Outcomes in Online Learning Environments

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#### Background:

In today's digital era, online learning has become increasingly prevalent, and the potential of artificial intelligence (AI) to revolutionize education is undeniable. This review aimed to explore the ways in which AI can influence online learning environments to enhance student outcomes and foster a positive and engaging educational experience.

#### Methods:

A scoping review was conducted using modified Arksey and O'Malley's framework as a methodological design and TELEMEd framework as a conceptual framework.

#### **Results:**

Based on thematic analysis, artificial intelligence can influence the nine components of online learning environments, i.e. Cognitive enhancement, content curation, learner characteristics, cybergogical practices, digital capability, platform utility, learning facilitation, social representation and institutional support.

#### Conclusion:

Artificial intelligence promises a positive influence on the online learning environment in its different domains.

#### Take-Away Message:

The integration of AI in online learning environments presents a transformative opportunity to enhance student outcomes and create a positive and engaging educational experience. By leveraging AI algorithms, personalized support, and adaptive learning, educators can tailor instruction to meet individual learner needs, improve engagement, and foster a deeper understanding of the subject matter. As AI technologies continue to evolve, their potential impact on online learning is vast, paving the way for an exciting future where education is personalized, accessible, and impactful for all learners.

### ABSTRACT ID: ORF-TAL26

### How Residents Respond to Positive and Negative Feedback: Reflection or Reaction?

#### Maryam Alizadeh<sup>1</sup>, Fatemeh Rahimi<sup>1</sup>, Mahboubeh Sadat Miri<sup>1</sup>, Reihaneh Pirjani<sup>1</sup>, Roghayeh Gandomkar<sup>1</sup>, Sahar Karami<sup>1</sup>, Elizabeth Peyton<sup>2</sup>, John Sandars<sup>3</sup>.

<sup>1</sup>Tehran University of Medical Sciences, Iran. <sup>2</sup>Wright State University, Dayton, Ohio, USA. <sup>3</sup>Edge Hill University Medical School, United Kingdom.

#### Introduction:

One of the biggest challenges in providing feedback to residents is their reactions. Do they reflect after receiving feedback? Or do they react emotionally? This study was conducted to examine this challenge by evaluating the reflection of the residents after receiving positive and negative feedback from clinician-educator and the patient based on Atkins and Murphy's model of reflection.

#### Method:

This qualitative and quantitative content analysis of data was conducted at Mazandaran University of Medical Sciences and Tehran Medical Sciences from 2020 to 2022. The research population included surgical, internal medicine, gynaecology and emergency medicine residents at Imam Khomeini Hospital in Sari and Arash Hospital in Tehran. A combination of situational interviewing and in-depth interviewing using four types of scenarios in four situations of receiving feedback was used. Sixty-seven interviews were categorized into the 3-stages of the Atkins and Murphy model (awareness, analysis, and plan) as well as open coded for the emotional reactions to feedback. Finally, quantitative analysis was performed using SPSS 22.

#### **Results:**

The results showed that clinician-educator's negative feedback led to awareness (62; 92.53%), analysis stage (53: 79.10%), and the stage of change (58; 86.56 %) more often than other types of feedback. The chi-square test did not show a significant difference among any of the reflection stages based on the source and type of feedback (p <0.05) "Internal and external emotional active reaction", "functional active reaction" and "passivity" reactions emerged after positive feedback both from the clinician-educator and the patient. Moreover, "immature defensive reactions", "mature reactions" and "mental rumination" emerged after receiving negative feedback from clinicianeducator. Finally, residents formed "immature defensive reactions". "mature reactions" and "unprofessional reactions" after receiving negative feedback from patients.

#### Conclusion:

This study provides a better understanding of what happens to residents after feedback.

#### Take-Away Message:

Our findings show that most residents enter and progress through the Atkins and Murphy reflection cycle after receiving positive and negative feedback from clinician-educators and patients. Some of them react differently to feedback, ranging from active to passive, depending on the nature of the situation.

### ABSTRACT ID: ORF-TAL32

Online Medical Undergraduates' Engagement and Its Correlation with Faculty Online Instructional Methods in Two Universities from The United Arab Emirates During The COVID-19 Pandemic: A Survey-Based Descriptive Study

#### Jhancy Malay Tarig Hakim Merghani, Imran Rashid Rangraze.

RAK Medical and Health Sciences University, UAE.

#### Introduction:

The online transition of medical education changed the milieu of medical education. The faculty instructional approach is essential for online students' engagement. The present study aimed to understand the degree of students' online engagement and its relation to the faculty's online instructional methods.

#### Methods:

The present study was an online survey-based descriptive study on medical undergraduates from two universities in the United Arab Emirates. Google forms containing consent statements, teaching styles inventory in higher education (TSIHE), and online student engagement questionnaires were emailed to all medical students requesting to participate in the study. Completed survey questionnaires were analysed descriptively for the degree of student online engagement, and a chi-square test was used to correlate the relation between faculty online instructional methods and students' engagement.

#### **Results:**

423 of 927 students participated in the survey. 64, 67,70 percent of students from the first university and 67, 73, and 78 percent from the second university perceived that their faculty were emotionally attached, flexible in teaching structure, compromised with decision-making, and strict with behavioural control, respectively. 67% of students at first university and 59% of second university students showed disengagement during online classes. There was a positive correlation between students' cognitive and behavioural engagement and flexible teaching structure, compromised decision-making, and emotional attachment in teacher-student interactive instructional methods. Interestingly there was no correlation between online instructional methods and students' psychological engagement.

#### Conclusion:

Online student engagement is a multidimensional construct influenced by many factors. The interactive, flexible instructional methods facilitate students' cognitive and behavioural engagement. The influencing factors responsible for psychological engagement during online learning were beyond the instructional methods, hence require more research.

#### Take home message:

The present study establishes the relationship between students' cognitive and behavioural engagement and teaching instructional practices. However, there is a need to develop robust evidence on students' psychological engagement and the influencing factors during online and blended contexts.

### ABSTRACT ID: ORO-TAL35

### Widening Participation of Medical Students in Academia: Improving Students' Research Skills Through a National Research Talk Series

## Jun Jie Lim<sup>1</sup>, Shareen Nisha Jauhar Ali<sup>1</sup>, Chelsea Walton<sup>2</sup>.

<sup>1</sup>Newcastle University Medicine Malaysia, Malaysia <sup>2</sup>Newcastle University, United Kingdom.

#### Background:

Medical research plays a crucial role in advancing healthcare and improving patient outcomes. However, medical students often face significant barriers to getting involved in research. Newcastle University Medicine Malaysia Medical Education Society (NUMed MedEd) developed a series of talks designed to provide medical students across Malaysia with the guidance and support to get involved in research. This innovative approach aims to inspire the next generation of medical researchers and empower them with the skills and knowledge to drive research innovation.

#### Methods:

Five talks were organised, with early career researchers active in research across the UK as speakers and were live streamed to Malaysia with Zoom from September 2022 to February 2023. Invitation to participate is sent to all medical students in Malaysia. In total, 127 students participated in the talk. A 5-point Likert scale questionnaire was distributed to gauge students' research interest, level of perceived research skills and prior research participation. A post-talk questionnaire was distributed to evaluate the effectiveness of the talk.

#### **Results:**

The post-talk questionnaire revealed that 95% of the students realise research is

more critical than before. Furthermore, 98% reported increased research interest and are more likely to participate in research. The level of confidence in research demonstrated a statistically significant increase (p=0.001) from little confidence – 2 to confident – 4 after the session. Thematic analysis of open responses revealed that students described the session as informative and the speaker as passionate, genuine and helpful. They find student researchers relatable due to their similar backgrounds and advice provided based on personal research experiences.

#### Conclusion:

The research teaching series had a profound impact on students' perception of research, increasing their interest and confidence significantly. The talks also demonstrate the importance of providing guidance to medical students and empowering them to actively participate in advancing healthcare through research endeavours."

#### Take-Home Message:

The research teaching series organized by Newcastle University Medicine Malaysia Medical Education Society (NUMed MedEd) had a profound impact on medical students in Malaysia, significantly increasing their research interest, confidence, and understanding of the importance of research in advancing healthcare. By providing guidance and support, the series inspired the next generation of medical researchers and empowered them to actively participate in research endeavours, ultimately contributing to the improvement of patient outcomes.

### ABSTRACT ID: ORF-TAL38

### Lecturers' Perception of Problem-Based Learning Implementation in a Private School of Pharmacy in Yogyakarta, Indonesia

Nurul Maziyyah, Putri Maharani Pramuji. Faculty of Medical and Health Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia

#### Background:

Problem-based learning (PBL) is one of the chosen learning methods in health profession education, which is well known for stimulating students to learn actively and think critically, as well as learning to solve problems. A private school of pharmacy in Yogyakarta, Indonesia, has implemented PBL since it was first established, with tutorial as the main PBL session. This study aims to analyse the perception of pharmacy lecturers towards the PBL implementation in the School of Pharmacy.

#### Method:

This study was conducted with a mixedmethod design. Twenty-two lecturers who have participated in PBL tutorial sessions were recruited from a private School of Pharmacy in Yogyakarta, Indonesia. Quantitative data was collected through a perception questionnaire to all lecturers, while qualitative data was collected through indepth interviews with five representatives from each department. Data analysis was conducted descriptively for quantitative data and thematic analysis for qualitative data.

#### **Results:**

The result of the study revealed that the mean level of perception toward PBL was  $88.07\% \pm 7.99$ . Lecturers strongly agreed on several aspects, such as PBL's effect on critical thinking skills (77.30%), students' considerable

effort in preparing each session (72.70%), and communication skill development (90.90%). Based on the qualitative data, lecturers acknowledge the strength of PBL as a suitable learning method and effective in improving students' critical thinking, communication, and collaborative skills. Limitations and challenges faced by lecturers included inflexible time, difficulty constructing scenarios, and unequal distribution of students in each group.

#### Conclusion:

Lecturers of the School of Pharmacy positively perceive PBL implementation in The School of Pharmacy. Several limitations and challenges should be taken into consideration to improve the method.

### ABSTRACT ID: ORF-TAL39

### Self-Directed Observation of Procedural Skills (S-DOPS): A Pedagogical Tool to Foster Students' Simulation Skills via Cumulative Learning

#### Vasudeva Rao Avupati.

School of Pharmacy, International Medical University, Malaysia

#### Background:

Pedagogical innovation is a process that reinvents teaching practises, it drives the curriculum design and delivery in an educational programme. Designing an innovative pedagogy integrated with conceptual mapping provides an opportunity to foster students' competencies and skills. Pharmacy students need to be equipped with Computer-Aided Drug Design (CADD) simulation skills as a future-proof attribute.

#### Methods:

We as a team designed S-DOPS as a pedagogical tool for CADD simulation skills self-assessment, it's a structured checklist prepared with a set of CADD simulation skills-based CAL practical activities with predefined criteria for the fulfilment of activity completion. Students were trained hands-on with CADD simulation software at e-labs in a face-to-face setting in a series of five CAL workshops (15 hrs), divided into three phases, Phase 1: CAL1 (3 hrs) & CAL2 (3 hrs), Phase 2: CAL3 (3 hrs) and CAL4 (3 hrs), and Phase 3: CAL 5 (3 hrs) respectively. Students selfassessed their procedural skills using S-DOPS1 first after Phase 1 training and S-DOPS2 after Phase 2 training sessions, respectively. We aimed to study the impact of S-DOPS on the students' learning effectiveness.

#### **Results:**

More than 80% of the students expressed positive perception for all 10 domains that includes perceived ease of use, perceived usefulness, perceived engagement, perceived credibility, perceived learning effectiveness, perceived satisfaction, perceived self-efficacy, perceived enjoyment, perceived beliefs, and behavioral intention.

#### Discussion:

In a series of CAL workshops, the students' learning occurs in alignment with the cumulative learning educational theory defined by Gagne. Gagne stated that "there is a specifiable minimal prerequisite for each new learning task," and if the learner has no recall capability, learning a new task is not possible.

#### Conclusion:

Study outcomes revealed that the students' performance was enhanced in demonstrating CADD simulation skills and procedural recall through a cumulative learning approach using the S-DOPS self-assessment tool.

#### Take-Away Message:

Gagne stated that "there is a specifiable minimal prerequisite for each new learning task," and that if the learner cannot recall this capability, learning a new task is not possible.

### ABSTRACT ID: ORF-TAL40

### Simulation-based Nursing Education: Bridging Theory and Practice

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#### Background:

Nursing students often have difficulty transferring knowledge into clinical practices. In traditional skills sessions, students practice and perform procedures on mannequins and peers. However, these cannot substitute the realism of a human experience. Simulation innovation provides a bridge between theory and practice.

#### Method:

A very first high-fidelity simulation-based learning (HFSBL) session was employed for Year 2 Nursing students. Emergency cases scenario were created and integrated into the Endocrine and Neurology modules, which are hypoglycaemic attack and stroke cases. The HFSBL aims to assist the students to develop knowledge, practical skills as well as soft skills, such as communication skills, problem-solving, and critical thinking.

#### Results:

Out of 18 students involved in the HFSBL, 12 students responded to the feedback via an online survey to evaluate the quality of HFSBL sessions. Students perceived debriefing sessions to be helpful for them to critically reflect upon their performance. They can also improve their communication skills. The students intend to use what they learned in their clinical practice. The experience was useful as it allows them to apply theory to practice. The clinical simulation was perceived to be a valuable tool that enables them to be safe nurse.

#### Discussion:

The HFSBL sessions create realism on the need to act or make quick decisions in an emergency environment in the clinical area. Additionally, HFSBL sessions were able to enforce patient safety issues when mistakes occurred in a controlled environment. Simulation-based learning has huge advantages for nursing education, especially in enhancing students' experience which will not be able to do through lectures, tutorials, or practical classes.

#### Take-Away Message:

Simulation-based learning has vast benefits for nursing education, especially in creating an immersive student learning experience that is not achievable through lectures, tutorials, or practical classes.

### ABSTRACT ID: ORF-TAL41

### Engaging Students Learning Through Virtual Nursing Case: The Impact

May Goh Lay Khim, Siti Hajar Ali, Khairunniza Gharib, Lim Swee Geok, Azaria A Rahaman, Piriyadharshini A/P Maniam. International Medical University, Malaysia

#### Background:

The real clinical setting and timing may not be enough for students to learn the many intricate tasks demanded as course outcomes and expected competencies. The Virtual Nursing Case (VNC): Anaemia and blood transfusion was created because of the lack of blood transfusion procedures encountered during clinical attachments.

#### Methods:

VNC provides a virtual learning platform to nursing, medical, and pharmacy students who involve in patient care. This platform uses multimedia case study courseware in facilitating learning among students, in a safe learning environment. The Anaemia and blood transfusion virtual case was created under Haematology Module for Year 2 Nursing students. It aims to enhance students' basic knowledge which includes history taking, signs and symptoms of the disease or condition, interpretation of investigations, medications, formulation of nursing diagnoses, and formulation of nursing care plans.

#### **Results:**

A total of 18 students responded to the online feedback and 16 respondents (87.5%) of them rated this innovation as excellent. The students reported that VNC is very comprehensive which includes the explanation of diseases or conditions from the assessment up to the management phase. In addition, the students found the VNC was fun and interesting which can attract their interest and attention in learning. It relates theory to real-life situations which enhances the student's understanding and critical thinking skills.

#### Discussion:

Virtual case studies improved students' skills in clinical reasoning, data collection, and development of nursing care plans. In addition, students feel more confident and reduced their anxiety. Students can use VNC for selfdirected learning as it is accessible anywhere and anytime. Simple and concise information and quizzes were provided with immediate feedback once the students had attempted all the activities. VNC also can be used by lecturers as an alternative for tutorial activities.

#### Take-Away Message:

VNC can be used by lecturers as an alternative for tutorial activities.

# Student Empowerment

# ORO-SEM02

Effectiveness of Student-led Virtual Peer Role-playing in Improving Medical Student Communication Skills

#### Roxanne Zhi Xin Gan<sup>1</sup>, Yi Xin Kwan<sup>1</sup>, Dawn Celine Poh<sup>1</sup>, Paul Hubbard<sup>2</sup>.

<sup>1</sup>Faculty of Medical Sciences, Newcastle University Medicine Malaysia, Malaysia <sup>2</sup>Faculty of Medical Sciences, Newcastle University, United Kingdom

#### Background:

Fourth-year medical students from NUMed Malaysia are assessed through Modified Objective Structured Long Examination Review (MOSLER), which includes communication skills as an assessment domain. Due to the COVID-19 pandemic, opportunities to develop communication skills through patient contact were disrupted. A student-led initiative to improve communication skills among fourth-year students through virtual peer role-play was therefore developed. The objective of this study was to evaluate the effectiveness of the intervention in improving communication skills and explore student perceptions of the intervention.

#### Method:

73 fourth-year students were voluntarily recruited to attend 14 weekly peer roleplay sessions through the videoconferencing platform Zoom. Students worked in groups of three to work through three clinical cases, written by their peers and reviewed by a member of faculty. Each participant rotated between the roles of peer doctor, examiner, and patient. Participants were required to complete a 28-item (yes-no) questionnaire before, and upon completion of, the intervention, which contained ideal communication skill steps for MOSLER candidates. Focus group interviews took place upon completion of the study, led by a trained interviewer. Quantitative data from pre- and postintervention was analysed using SPSS statistical software. Qualitative data from focus groups (n = 10) underwent inductive thematic analysis.

#### **Results:**

Quantitative analysis showed 20 of 28 items demonstrated statistically significant improvement post-intervention (p<0.05). Students also reported a significant improvement in the total number of communication skill steps routinely performed postintervention compared to pre-intervention (p<0.001). Qualitative analysis of student perception yielded six themes: 'peer-topeer collaborative learning', 'motivation in learning', 'convenience and limitations of online platforms', 'clinical skill development', 'regular practice and confidence', and 'exam-oriented practice'.

#### Conclusion:

Virtual peer role-playing is effective in developing communication skills among medical students. The additional benefits and limitations pertain to its virtual nature and its role in shaping an independent and proactive clinician.

#### Take-home Message:

A student-led peer role-playing programme empowers students to take a proactive approach towards their own education. Although this study focused on the development of medical student communication skills through a virtual platform, the peer-to-peer collaborative approach can potentially be tailored to various assessment formats and logistical resources available to different cohorts of students.

### ABSTRACT ID: ORO-SEM03

### Expectations and Perceptions of Medical Students from a Four-week Research Module: A Longitudinal Cohort Survey

#### Shamaila Manzoor<sup>1</sup>, Rafia Minhas<sup>2</sup>, Zain Gulzar<sup>3</sup>, Bushra Sherwani<sup>1</sup>

<sup>1</sup>Azad Jammu & Kashmir Medical College, Pakistan.

<sup>2</sup>Central Park Medical College, Pakistan. <sup>3</sup>Watim Medical College, Pakistan.

#### Background:

Clinical decision-making revolves around evidence-based medicine. Evidence based medicine entails research problems, their evaluation against available scientific literature and implementing the results into practice. Medical undergraduates lack experience in the research process. This study was aimed to analyze the difference between the pre-course expectations and post-course perception of students after an interventive, mandatory research module.

#### Methods:

This longitudinal cohort survey was conducted at Azad Jammu Kashmir Medical College, Muzaffarabad. Fourth-year medical students were included in this study. After ethical review board approval, online survey questionnaires were circulated at two data points: before starting the research module and after it ended. Data was analysed and nonparametric Mann- Whitney-U test and Wilcoxon tests were applied to compare the difference in responses, regarding expectation and perception of the research module.

#### **Results:**

Total number of participants was 104; the response rate was 100% for the expectation questionnaire, whereas it dropped to 77% for the perception questionnaire. Female

students had a higher response rate. In a comparison of the two questionnaires, a statistically significant difference was observed in the student's ability to conduct a literature search and critical literature appraisal (p-value 0.000 and 0.00 respectively). There was also a perceived improvement in scientific writing, problem-solving abilities, and communication skills. Overall, a significant difference was found between the expectations and perceptions of students.

#### Conclusion:

Students had high expectations from the research module. After the course, their perception of their own communication skills, research abilities, scientific writing and research aptitude have significantly improved.

#### Take-home Message:

Students had high expectations of the research module. Their communication skills, research abilities, scientific writing and research aptitude have significantly improved after the course. However, the core curriculum must ensure that all graduates attain relevant and appropriate research expertise, which refines their critical thinking skills as well as higherorder skills (analysis & differential diagnosis). Engaging undergraduates in research activities would augment their research abilities and improve educational scholarship. Students' expectations and perspectives have provided an innovative dimension to the existing curriculum. Subsequently, the intended, implemented, and learned curricula could be integrated smartly for efficient learning.

### ABSTRACT ID: ORO-SEM04

Promoting Student Empowerment in Health Professions Education through Peer Mentorship Programme: A Qualitative Study on the Benefits for Mentors and Mentees

#### Jun Jie Lim, Vivian Andaya Verbo, Nadine Hayudini Nograles, Gunjan Khandelwal.

Newcastle University Medicine Malaysia, Malaysia

#### Background:

Background: Health professions education is a critical aspect of training future healthcare professionals, and student empowerment is essential in ensuring successful outcomes. One way to promote student empowerment is through implementing peer mentorship programs. Newcastle University Medicine Malaysia has implemented a peer mentorship program since 2017, with Year 2 students volunteering as a mentor for Year 1 student for one academic year. This study aims to explore the benefits of a peer mentorship program for both mentors and mentees within the context of health professions education.

#### Methods:

The study employed a qualitative approach, using semi-structured focus group discussions to collect data from mentors and mentees who participated in the peer mentorship program for the past three years, from 2021 to 2023. Interviews were analysed using thematic analysis with Nvivo.

#### **Results:**

Five focus groups were conducted with a total of 23 students, with 9 mentees and 14 mentors. Mentees emphasises the importance of a mentor in providing them with academic and non-academic support, including

assistance with assignments and exam preparation, easing the transition to university life, and overcoming struggles in personal and social life. Mentors reported that the programme was a rewarding experience, and the main benefit gained was the development of transferrable skills such as time management, leadership, problem-solving, and responsibility. The study also identified some areas for improvement, including the need for more structure and accountability in the mentoring process.

#### Conclusion:

This study highlights the benefits of implementing peer mentorship programs within the context of health professions education. The program promotes student empowerment, as mentees receive academic and non-academic support and mentors develop valuable skills. The findings of this study also emphasizes the importance of creating a supportive community for students in health professions education, ultimately promoting student empowerment and improving outcomes in this critical field.

#### Take-home Message:

Peer mentorship programs can provide valuable academic and non-academic support for mentees and foster the development of skills for mentors, ultimately promoting student empowerment and creating a supportive community in health professions education.

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### ABSTRACT ID: ORF-SEM07

# Current Trends in Peer-tutoring: a Literature Review

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#### Background:

The ASPIRE criteria in student engagement emphasize that students are not just learners but can also serve as academic helpers for their peers through "peertutoring". Peer tutoring has proven to be effective in assisting students in overcoming academic challenges. However, Recent findings discovered that 3 out of 23 Thai medical schools mentioned having a peer-tutoring program. This suggests that peer tutoring is not well-established and may be an area for improvement in medical education. Therefore, this study aims to explore the key elements of successful peertutoring programs worldwide and identify important factors to consider in designing program frameworks.

#### Method:

A narrative review was undertaken to examine the topic of peer tutoring. The review included papers published after 2000 in PUBMED with keywords of "peer tutoring" and "peer teaching" and their MESH. The review focused on identifying key features of peer tutoring that were considered to contribute to successful outcomes. These features were carefully collected and analyzed to identify common themes, which could be used to develop recommendations for constructing program frameworks when implementing peer-tutoring initiatives.

#### **Results:**

The review included 11 literature pieces on peer-tutoring, categorized into organizers, formats, and evaluations. Both student-led and institution-centralized programs were identified, with near-peer tutoring (NPT) and reciprocal-peer tutoring (RPT) showing their respective benefits. Evaluation measures like observation, interviews, and self-reporting were recommended to assess peer-tutoring effectiveness.

#### Conclusion:

When designing peer-tutoring programs, the decision of whether they should be student-led or institutional-led depends on comparing the various advantages and contextual factors specific to each institution. Both near peer-tutoring (NPT) and reciprocal peer-tutoring (RPT) have distinct benefits for the tutees, although NPT tends to provide more valuable feedback and boost tutees' confidence. Additionally, careful consideration should be given to the selection of appropriate evaluation methods for ongoing improvements in peer-tutoring programs.

#### Take-home Message:

Peer-tutoring programs in medical education have shown effectiveness in overcoming academic challenges, although further establishment is needed. To maximize their impact, organizers should consider key factors and program frameworks that best suit their context. Implementing evidence-based peertutoring programs can potentially enhance student empowerment and promote academic success.

### ABSTRACT ID: ORF-SEM08

### Case Report of Student Collaboration in Medical Education by National Medical Student Society

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#### Background:

Background: During the COVID-19 disruptions, medical schools in Thailand require modifications to the changing landscape of medical education. Acknowledging this need, the Society of Medical Students of Thailand (SMST) has taken a role in supporting student engagement in medical education development, collaborating with student representatives from all medical schools. Given these circumstances, we propose conducting an analysis of the SMST contribution to the development efforts of medical education.

#### Method:

We conducted a case study on the SMST model, aimed to enhance student engagement in the development of medical education. Our study involved a comprehensive review of the available data resources provided by the SMST. We assessed the level of support offered to student representatives from each medical school in terms of curriculum development. To achieve this, we analysed the questionnaires utilized and categorized the questions based on their specific features. Additionally, we sought clarification from reliable sources associated with the SMST from the Vice President of Quality Development.

#### **Results:**

Throughout the year, the SMST conducted a comprehensive survey across all 25 medical

schools to collect valuable information on curriculum, unique features, and initiatives in medical education. Additionally, the SMST organized academic network conferences and exchange camps to foster idea-sharing and student engagement in medical education. Furthermore, SMST representatives attended national conferences held by the Consortium of Thai Medical Schools and The Medical Council of Thailand. All collected data were distributed equally among student representatives from each school.

#### Conclusion:

The SMST plays a role in collecting insights from every school, contributing to the advancement of medical education across the country. The society also facilitates interfaculty exchange and participation in national conferences. The gathered information provides valuable perspectives for faculty members to better understand students' experiences in medical education. This study confirms the significant contributions that the national medical student society can make to medical education.

#### Take-home Message:

The Society of Medical Students of Thailand (SMST) has taken a proactive role in supporting student engagement and development of medical education during the COVID-19 disruptions. Through comprehensive surveys, academic conferences, and exchange camps, the SMST has facilitated idea-sharing and collaboration among student representatives from all 25 medical schools in Thailand. The collected insights and data have provided valuable perspectives for faculty members, contributing to the advancement of medical education across the country. This study highlights the significant contributions that national medical student societies can make in enhancing medical education and promoting student engagement.

### ABSTRACT ID: ORF-SEM09

### Phenomenology of Student's Public Hearing on Developing New Curriculum

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#### Background:

The Faculty of Medicine, Chulalongkorn University is developing a new curriculum for 2024. To engage and empower students in the process, the Student Union of the Faculty of Medicine, Chulalongkorn University (SMCU) initiate a public hearing conference with the faculty authorities. The objective is to actively involve students in sharing their perspectives and insights regarding the current curriculum, ensuring their valuable input in designing our new curriculum.

#### Methods:

SMCU's Education Affairs along with faculties co-construct the new curriculum draft which allows every current student to cooperate. During the conference, SMCU representatives and faculty authorities moderated discussions and provided students with a platform to seek clarification and propose improvements. The 12 items questionnaire was distributed after the conference to evaluate demographic data, satisfaction, key features, and recommendations. An analysis was conducted to assess the level of student empowerment achieved through this process.

#### **Results:**

Students enjoyed the session and appreciated the faculty's commitment to maintaining an up-to-date curriculum that aligns with evolving knowledge. A total of eighteen responses were gathered, mostly reflecting the students' enthusiasm and satisfaction with their participation in the curriculum development and conference along with the faculty's recognition and value placed on their opinions. Overcrowded curriculum was thought to be solved by twelve students, the common case-based learning will be applied in fourteen students' opinions and semester break time is proper in sixteen students' thoughts.

#### Conclusion:

Conducting public hearings, student empowerment and engagement can effectively capture valuable insights from the youth's perspective for curriculum development. Given the positive evaluations regarding student empowerment, it is crucial to create additional opportunities for students as it ensures a curriculum that caters to the needs of both students and teachers. Most importantly, students should be encouraged to provide constructive feedback freely, enabling their valuable input to shape the curriculum.

#### Take-home Message:

Students should be encouraged to provide constructive feedback freely, enabling their valuable insights from the youth's perspective to shape the curriculum, and providing opportunities to ensure a curriculum that caters to the needs of both students and teachers.

### ABSTRACT ID: ORF-SEM10

### Career Navigation, the Essential Tools for Student Guidance

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#### Background:

Thailand requires six years of medical school,

with the final year as an externship. The externship is divided into three rotations, each with specific benefits in terms of residency applications. Our objective is to conduct a career navigation session for fifth-year students in selecting the externship rotation. Pre- and post-activity surveys will be collected to assess the effectiveness of the activity in providing students with insights into their career paths.

#### Methods:

We organized a 3.5-hour session, moderated by KL and UT, where 1 resident from major wards and 7 from minor wards discussed the pros and cons of various rotations for residency program applications in Thailand. Before the session, we conducted a survey to gauge fifth-year students' knowledge of residency programs and their connection to externship rotations. After the session, the students completed a self-assessment questionnaire to assess their post-activity perspectives and satisfaction. Descriptive statistics, including mean and standard deviations, were used to analyze the data.

#### **Results:**

A total of 86 students out of 196 (43.9%) responded to our pre-activity questionnaire. For the post-activity questionnaire, 18 students responded. The statement "How well do you know your career path", scoring from 0 to 4 on the preactivity questionnaire received a mean score of 1.31±1.01 (mean±SD). On the postactivity questionnaire, it received 2.72±0.89 (mean±SD). The mean satisfaction score is 8.27 out of 10.

#### Conclusion:

The knowledge of fifth-year students regarding their career path is relatively low. Implementing student-initiated career navigation can greatly benefit these students, providing them with valuable guidance for selecting rotations. We highly recommended students continue organizing similar activities in the future in every institution. However, our limitation is the survey response rate was low, indicating the need for encouraging students to respond to questionnaires for valuable insights.

#### Take-Home Message:

The guidance for further education as a resident is crucial for the future of medical students. Activities that provide guidance on continuing education for residents can greatly enhance the students' understanding of their own career paths. Every institution can adopt and adapt Career navigation session for their own use.

### ABSTRACT ID: ORF-SEM11

### Exploring Undergraduate Dental Students' Experience, Perception, and Attitude Towards Mentoring -A Qualitative Study

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#### **Background:**

Learners in Dentistry are faced with many challenges and stressors throughout their course. Hence, it is important to provide guidance and support, to help students navigate these challenges. Mentoring programmes are one such support system. Hence, the present study was conducted to explore the perceptions, experience, and attitude of dental undergraduate students towards mentoring.

#### Methods:

A qualitative research design utilizing a descriptive phenomenological methodology was selected for this study. The participants included 10 final year undergraduate dental students selected via purposive sampling. Interviews were conducted using a semi-structured interview guide. The audio-

recorded interviews were transcribed into written data. Data analysis was conducted by reading and re-reading interview transcripts and coding the data. Braun and Clarke's thematic analysis was used to analyze the data (Braun and Clarke 2006).

#### **Results:**

analysis revealed seven themes identified within the context of an overarching theme of mentoring experience which included (a) changing perceptions; b) relationships and connections; (c) benefits in teaching and learning; (d) impact on personal and professional life; (e) Influence of personal attributes: (f) negative aspects of mentoring: (g) expectations and recommendations. The overall experience with mentoring was in the range of "good" to "no use". In most of the cases, the perception of students changed as they progressed from year 1 to year 4. The participants discussed various benefits of mentoring like advice pertaining to studies and exams, improvement in communication skills and professionalism. Nonetheless, certain negative aspects were also discussed, and certain recommendations were also provided.

#### Conclusion:

The present study revealed that students had a positive perception and good experience with mentoring. Though there are some shortcomings of mentoring, it can be made better with practical solutions.

#### Take-Home Message:

It is worth investing time and effort in developing support programmes like mentoring for students in healthcare professions.

### ABSTRACT ID: ORF-SEM12

### Student Engagement in Curriculum Development: Integrating Student Voices into Curriculum Changes

Teeradon Tanpipat, Chanya Mittrakulkij, Kantawich Piyanirun, Nattacha Srithawatpong, Rahat Longsomboon, Thananop Pothikamjorn, Siwat Techavoranant, Danai Wangsaturaka Faculty of Medicine, Chulalongkorn university, Thailand.

#### Background:

Student engagement is a fundamental educational strategy at Chulalongkorn Medical School. During the development of the 2024 undergraduate curriculum, 26 students actively participated in curriculum committees and working groups. Given the importance of student input in the curriculum development process, surveys were co-designed and conducted by students to identify their current concerns and gather their perspectives.

#### Method:

The modified Delphi method was employed. The findings of the open-ended survey conducted in the first round led to the creation of the 51-item closed-ended questionnaires. The items were subsequently tailored to capture the distinct viewpoints of students in different educational phases.

#### **Results:**

1,280 respondents participated in the study. Four significant curriculum changes were directly implemented in response to student feedback. Firstly, among the 13 basic science disciplines, biochemistry, cell biology, and embryology were consistently regarded by clinical students as the top three disciplines deemed clinically irrelevant and/or overcrowded. Consequently, credit reduction

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and integration of their content into body system courses were implemented. Secondly, the respondents expressed a mean preference of 3.5 weeks for intersemester breaks and 9.6 weeks for inter-academic year breaks in the pre-clerkship phase. Therefore, the revised curriculum includes 4 weeks of inter-semester breaks and 10 weeks of interacademic vear breaks. Thirdly, 87% of clinical students supported increased integration of symptomatology in pre-clerkship years. To address this, the new curriculum incorporates "approaches to core clinical presentations"" in all body system courses. Lastly, 84% of respondents advocated for clinical rotations outside the main teaching hospital for Year 4-5 students to expose them to patients with common diseases. The new curriculum designates eight weeks in Year 5 for this purpose.

#### Conclusion:

This study highlights the value of incorporating student voices in designing the new curriculum and demonstrates the ongoing efforts to foster student engagement in medical education.

#### Take-Home Message:

Students' foremost concern is to ensure that the medical curriculum effectively prepares them for clinical practice. Sharing their insights with faculty, students offer valuable perspectives on areas for improvement, some of which may align with teachers' awareness while others may not. This emphasises the significance of valuing student voices in the curriculum development.

### ABSTRACT ID: ORO-SEM17

### Engaging Students in The Program Evaluation

Zarrin Seema Siddiqui Vin University, Vietnam

#### Background:

Generally, course/program evaluations are conducted through surveys and focus groups. There are several issues faced by the educators. They are resource intensive, usually work best for summative evaluations when the semester/term ends and it takes time to prepare reports. Students are engaged actively in the evaluation from day one in a structured process. A multiprong approach is used. Each cohort is represented by two class representatives who are full members of the year Committee and present a report on monthly basis. As part of the Professionalism theme, students are introduced to casebased learning. One session is dedicated to the program evaluation where issues and challenges around evaluation are discussed.

#### Method:

Following the case discussion, students are required to provided mid-semester feedback on teaching in each course as a group. The data thus generated is qualitative and with narrative to understand the student viewpoint.

#### **Results of Evaluation:**

100% response rate with meaningful data is received with minimal efforts across all years. This helps the faculty to bring changes into the course organization and delivery as and when required.

#### Conclusion:

Using the Peer observation of Teaching model, learners can be engaged in evaluation as an active participant.
#### Take-Home Message:

Students can be effective evaluators with little training.

## **Curriculum Design**

## ABSTRACT ID: ORF-CUD02

Evaluation of a Portfolio-Based Course on Self-Development for Pre-Medical Students in Korea

### A Ra Cho, Dong Mi Yoo, Sun Kim

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#### Background:

We have developed and operated a portfoliobased course aimed at strengthening pre-medical students' capabilities for selfmanagement and selfimprovement. In order to determine the effectiveness of the course and to establish future operational strategies, we evaluated the course and the students' learning experience.

#### Method:

The subjects of this study were 97 students of a pre-medical course "Selfdevelopment and portfolio I". Their learning experience was evaluated through the professor's assessment of portfolios they had submitted, and the program was evaluated based on the responses of 68 students who completed a survey. The survey questionnaire included 32 items. Descriptive statistics were reported for quantitative data, including the mean and standard deviation. Opinions collected from the openended question were grouped into categories.

#### **Results:**

The evaluation of students' portfolios showed that only 6.2% of the students' portfolios were well-organized, with specific goals, strategies, processes, and selfreflections, while most lacked the basic components of a portfolio (46.4%) or contained insufficient content (47.4%). Students' responses to the survey showed that regular portfolio personality assessments (72.1%), team (64.7%), and individual (60.3%) activities were felt to be more appropriate as educational methods for this course, rather than lectures. Turning to the portfolio creation experience, the forms and components of the portfolios (68.2%) and the materials provided (62.2%) were felt to be appropriate. However, students felt that individual autonomy needed to be reflected more (66.7%) and that this course interfered with other studies (42.5%).

#### Conclusion:

The findings of this study suggest that standardized samples, guidelines, and sufficient time for autonomous portfolio creation should be provided. In addition, education on portfolio utilization should be conducted in small groups in the future.

#### Take-Home Message:

Developed and operated a portfolio-based course to improve premedical students' selfmanagement and self-improvement ability. Their portfolio creation experience helped them to reflect on and plan the rest of their university life and even their subsequent life as a doctor, confirming its educational value.

## ABSTRACT ID: ORF-CUD05

#### Current Trends in Curriculum Features: National View amongst Thai Medical Schools

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#### Background:

Medical students in Thailand collaborate in curriculum development through a national student society, the Society of Medical Students of Thailand (SMST). This study seeks to systematically identify and analyze the prevalence of specific features within the medical curricula of all medical schools in Thailand and explore the current trends shaping the field.

#### Methods:

This study was conducted on behalf of SMST. Student delegates who are key informants from all 25 medical schools in Thailand were given a 9 items open-ended questionnaire surveying key strengths, features, and student involvement within their curriculum development process.

#### **Results:**

Twenty-three out of twenty-five (92%) student delegates responded to the questionnaire. Among the 23 medical curricula, 39.1% identified the use of course evaluation surveys, allowing students to provide feedback and recommendations. Regarding student engagement, 39.1% encouraged student participation in curriculum design meetings. Additionally, 17.4% organized research conferences or had research incubation programs for students. Early clinical exposure for pre-clinical students was adopted by 13.0%. Two institutions (8.7.%) incorporated supplementary components on emerging medical technologies and 4.3% offered assistance for USMLE preparation.

#### Conclusion:

The prevalence of common educational features among medical schools in Thailand is relatively low, with common features being shared among clusters of the top five to seven oldest schools. These findings suggest the need for further investigationinto the root causes, exploring the roles and impact of low inter-institutional collaboration and knowledge sharing on curriculum design in Thailand or concerns about the effectiveness of these features that deter some institutions from adopting them. There are limitations and recalled biases in the data collection process. In-depth approaches to the curriculum are necessary to holistically gain a full view of the features and a deeper understanding of the causal factors.

#### Take-Home Message:

The prevalence of common educational features among medical schools in Thailand is relatively low, there is a need for further investigation into the root causes, exploring the roles and impact of low inter-institutional collaboration and knowledge sharing on curriculum design in Thailand or concerns about the effectiveness of these features that deter some institutions from adopting them.

## ABSTRACT ID: ORF-CUD06

The Variety of Undergraduate Medical Education Curricula: An Environmental Scan of Diverse Medical School Characteristics Within Indonesia

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#### Background:

Indonesia is the largest archipelago country in the world and has numerous medical schools with diverse characteristics, such as demographic location, accreditation level, ownership status, student body, and length of existence. Characteristic variations often influence educational activities, including curriculum development. Consequently, the undergraduate medical education (UME) curricula vary between these schools. This study aimed to explore the variety of curricula used in UME programs in Indonesia.

#### Methods:

A cross-sectional survey from December 2020 to May 2022 with cluster sampling was used. Overall, 74 medical schools were invited to participate in the study, with 30 agreeing. The medical education unit, centre, or department of each medical school received the survey following ethical clearance. Data were collected on the curriculum approach, teaching-learning strategy, assessment system, and curriculum evaluation and analysed using descriptive statistics in frequency and percentage parameter.

#### **Results:**

Most of the medical schools had established an outcome-based UME while employing diverse curricular approaches within the SPICES (student-centred, problembased, integrated, community-based, elective, and systemic) strategy. In particular, variations were seen in the teaching-learning processes and assessment systems used. The teaching-learning methods used were case-based discussions, lecture-based classes, skills laboratories, laboratory practice. and interprofessional learning. Regarding assessments, written/computer-based tests. objective structured clinical examinations. and other assessments were used to measure student competency. In their policy networks, medical schools involved numerous stakeholders and performed periodical curriculum evaluations using multiple wellestablished tools to assure the quality of medical training and medical graduates.

#### Conclusion:

As various strategies of curriculum implementation were reported, it remains critical to establish productive UME curricula. Collaboration between medical schools to maintain best-practice medical training is required.

#### Take-Home Message:

This study has identified the variations in educational curriculum of pre-clinical stage in UME programs and emphasized the need for comprehensive efforts to actualize the best practice of educational activities and maintain the productivity of UME curriculum, owing to the fact that curricular variations are often associated with impacts on the quality of medical education programs and the profiles of medical graduates. According to our country's experiences, such efforts were embodied through a massive and periodically quality assurance activity, which included the implementation of at least MLE and accreditation process. We argue that the above experiences could be a lesson learned and applicable for medical schools in the global context, as well as conveying a recognition that variety in the educational curriculum of medicine is a necessity and unavoidable, despite various efforts to standardize it through multiple regulations and recommendations both at the local and international levels. Therefore, optimizing various potentials, resources, and opportunities in medical education is critical to ensuring that the educational programs are aligned with the dynamic transformation of medicine, resulting in medical graduates who are competent and capable of providing adequate health services to society in a healthcare context.

## Student Assessment

## ABSTRACT ID: ORF-SAS03

Development and Validation of a Portfolio Assessment System for Medical Schools in Korea

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#### Background:

Consistent evaluation procedures based on objective and rational standards are essential for the sustainability of portfolio-based education, which has been widely introduced in medical education. We aimed to develop and implement a portfolio assessment system, and to assess its validity and reliability.

#### Method:

We developed a portfolio assessment system and confirmed its content validity through expert assessment by an expert group comprising 2 medical education specialists, 2 professors involved in education at medical school, and a professor of basic medical science. Six trained assessors conducted 2 rounds of evaluation of 7 randomly selected portfolios for the "Self-Development and Portfolio II" course. These data are used interrater reliability was evaluated using intra-class correlation coefficients (ICCs).

#### **Results:**

The portfolio assessment system is based on the following process; assessor selection, training, analytical/ comprehensive evaluation, and consensus. Appropriately trained assessors evaluated portfolios based on specific assessment criteria using a rubric for assigning points. In the analysis of inter-rater reliability, the first round of evaluation grades was submitted, and all assessment areas except "goal-setting" showed a high ICC of 0.81 or higher. After the first round of assessment, we attempted to standardize objective assessment procedures. As a result, all components of the assessments showed close correlations, with ICCs of 0.81 or higher.

#### Conclusion:

We suggested a framework portfolio assessment system that can be used in practice. Through this study, we also confirmed that when assessors with an appropriate training conduct portfolio assessment based on specified standards through a systematic procedure, the results are reliable. The outcomes of this study are significant, as they suggest the applicability of portfolio assessment in medical education based on methods of ensuring the reliability and validity of portfolio assessment procedures.

#### Take-Home Message:

Developed a portfolio assessment system that consisted of assessor selection, training, evaluation, and consensus. When assessors with an appropriate training conduct portfolio assessment based on specified standards through a systematic procedure, the results are reliable.

## ABSTRACT ID: ORO-SAS05

#### Do Medical Students' Personality Types Differ According to Gender, Age, and Academic level?

#### Yera Hur<sup>1</sup>, Sanghee Yeo<sup>2</sup>

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#### Introduction:

Understanding the recent medical student generation is important to medical educators. This study aimed to identify the personality type of medical school students. The specific research questions are as follows; 1) How is the distribution of psychological personality types among medical students? 2) Are there differences in preference types according to gender, age, and academic level?

#### Methods:

The 40-items Korean Geometric Psychological Assessment tool (GEOPIA) was administered to 1,173 students from 5 medical schools in Korea. Frequency analysis and  $\chi 2$  test were conducted to answer the research questions. GEOPIA can be classified into four simple geometrical types: the characteristics of the "Round" type is sociable and relationshiporiented, the "Triangle" is challenging and task-oriented, the "Box" is prudent and stability-seeking, and the "Curve" is the creative and sensitive type.

#### **Results:**

Out of 1,016 respondents (response rate 86.61%), 981 were included in the final analysis. 1) As for the distribution of personality types, the majority of medical students' primary preference type was the "Round (40.3%)" type, followed by "Triangle (15.2%)", "Box (31.7%)", and "Curve (12.8%)" types. Among the 12 combination types which include secondary preferences, the most common type was the Round-Box (21.85%), followed by the Box-Round (18.97%), the Round-Triangle (9.74%), Round- Curve (8.92%), and Box-Triangle (7.90%) type. 2) No statistical differences were found in preference type according to gender ( $\chi$ 2=6.360, p=.095), age ( $\chi$ 2=8.314, p=.091), or academic levels ( $\chi$ 2=18.044, p=.260).

#### **Conclusion:**

The results of this study can be used in the areas of instructional design tailored to the characteristics of learners, such as in forming group activities or giving assignments or projects. Also, it can be useful, particularly in supporting medical students' school life through individual counselling.

#### Take Home Message:

- Information on the characteristics of medical students can be used in various scenes of medical education.
- The GEOPIA tool is very quick and simple to take, and the interpretation is readymade for the teachers which gives great advantage and easy access for the busy medical educators.
- The immediate understanding of the characteristics of students is very useful for student counselling.
- Medical students do various group activities such as PBL, TBL, and other team projects. The GEOPIA results can be practically used in forming groups with various characteristics which will enhance the group dynamics.

## ABSTRACT ID: ORF-SAS06

Relationship Between Study Habits with Grade Point Average Among Preclinical Medical Student: A Cross-Sectional Study

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#### Background:

Grade point average (GPA) is one of the main indicators used as a benchmark for academic achievement in college. One of the things that is considered to affect GPA is study habits. However, the role of study habits on the GPA of active medical preclinical students at the Faculty of Medicine, Universitas Islam Indonesia, is still unknown; hence the relationship between the two needs to be studied.

#### Methods:

This study is an analytic observational study with a cross-sectional method. The number of participants was 178 people who were active first and second-vear medical students at the Faculty of Medicine, Universitas Islam Indonesia. Study habits were measured using the Palsane and Sharma Study Habits Inventory (PSSHI) guestionnaire. PSSHI assesses the study habits of students, which are divided into good categories and bad categories. A higher total PSSHI score indicates better study habits. Students' academic performance in the form of GPA is obtained through secondary data stored by the academic department of the Faculty of Medicine, Universitas Islam Indonesia. GPA categories were divided into 3 groups, namely Cumlaude (>3,50), very good (3,01-3,50), and good (<3,00). Data analysis was performed

using the IBM-SPSS version 23 software.

#### **Result:**

The relationship between good study habits and GPA showed a significance of p<0,05.

#### Conclusions:

Study habits significantly affect the GPA of preclinical students at the Faculty of Medicine, Universitas Islam Indonesia. The first year study period is crucial to adapt to finding study habits. With adaptability and effective study habits, medical students' academic performance can be optimized.

#### Take-Home Message:

The complexity of medical course material makes us need to look at good and effective study habits to support learning activities for achieving a maximum GPA. In addition, the results of this study can also be an evaluation material for the next batch so that they can apply good study habits to support their academic performance in the future.

## ABSTRACT ID: ORF-SAS07

Virtual Patient in Problem Based Student Role in Examination System Development: The Evaluation of Student Perceptions and Concerns Across The iPad-Based Examination Period.

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Thailand

#### Background:

Background: Chulalongkorn Medical School introduced the first remote iPad-based examination in the 2019 academic year in response to COVID-19. However, it was implemented for only three academic years due to the improved pandemic situation. This study aims to assess student perceptions of the initial launch of iPad-based examinations and compare evaluations between the 2019 and 2021 academic years.

#### Method:

Data collection was conducted with Year 1 students in both the 2019 and 2021 academic years. In 2019, a questionnaire was developed based on student focus groups and open-ended questions. It was administered before and after 'the first remote iPad-based examination with student engagement intervention'. In 2021, a similar methodology was used to develop the questionnaire, resulting in different items.

#### **Results:**

The results of the 2019 evaluation indicate an improvement in the agreement of students regarding the appropriateness of regulations, from 41% to 70%. Furthermore, there was a significant increase in students' trust in the effectiveness of these regulations in preventing cheating, from a mean score of 3.67 to 3.92 out of 5 (p = .0003). These positive outcomes are attributed to the student engagement intervention, which involved students in co-developing examination regulations and fostered extensive communication between students. and teachers. A comparison of items between the 2019 and 2021 questionnaires highlighted a shift in student concerns. In 2019. students primarily expressed concerns about examination regulations, while these concerns were not mentioned in 2021. Instead, Year 1/2021 students focused more on minor technological features. This shift suggests that the issues that emerged in 2019 have been successfully resolved, and the examination system has become well-established.

#### Conclusion:

Student engagement positively influences student perceptions of remote iPad-based examination, leading to a solid foundation and promoting continuous improvement in this assessment method.

#### Take-Home Message:

Student engagement is a key driver for the effectiveness and practicality of remote iPadbased examinations.

## ABSTRACT ID: ORF-SAS08

#### Making the Most oOf Workplace-Based Assessments in an Undergraduate Medicine Program

Stephen Tobin, Carl Parsons, Caroline Joyce Western Sydney University, Australia

#### Background:

Western Sydney University has a 5-year MD program with the mission to graduate well-prepared doctors to work in Greater Western Sydney, rural areas and beyond. Since 2020, much greater use of formative WBAs, with training in feedback and employing programmatic assessment principle has been used. Final-year students have worked as 'assistants-in-medicine'.

#### Methods:

Working with the platform provider and WSU IT team, we now have dynamic visual analytics re student engagement and performance. We have discovered what is feasible and normal performance. In final year we have adjusted summative clinical examinations to allow for this. We have triangulated with those and other major summative assessments, across 2021-22. Results are presented for the final (5th) year: Entrustable professional activities (EPAs) are used. EPA data shows similar numbers and distribution. Sampling showed similar feedback/actions/supervision levels. Major online examinations showed similar distributions of exam. results, but the major clinical case-based examinations and prescribing skills assessments differed.

#### Conclusion:

With suitable design and monitoring, there are systems that can demonstrate progressive performance and readiness for practice in final-year medical students. Where students are involved with patient care on clinical teams, then smartphone apps can be used to record all this information efficiently. The EPAs become aides to driving feedback as a dialogue. Formal examinations to meet standards are still required, but OSCEs are no longer required. We support assessment of-, for- and as- learning. The relationship between better performed students being more engaged in the workplace is notable. Those less engaged with the EPA system do less well. providing stimulus for intervention."

#### Take-Home Message:

Examinations may test much on a day or session, but welldesigned EPAs can provide complementary data, and potentially predict performance. Smart authentic EPA design helps all using the system. Feedback literacy teaching is important. Analytics for such WBA systems are most useful for working out what is normal and for finding those less engaged, so as to put coaching or more formal remediation strategies in place.

## Student Selection

Embedding Accessibility for Neurodiverse Applicants in Online Recruitment to Health Professions Through a Co-Designed Online Asynchronous Multiple Mini Interview (MMI)

#### Alison Callwood, Lee Gillam University of Surrey, United Kingdom

#### Background:

Neurodiversity describes the idea that people experience and interact with the world around them in many ways; there is no one "right" way of thinking, learning, and behaving, and the differences are not viewed as deficits. The word neurodiversity also refers to the diversity of all people, but it is often used in the context of autism spectrum disorder (ASD), as well as other neurological or developmental conditions such as ADHD or learning disabilities. Neurodiverse people comprise 15-20% of the population yet their optimisation needs are not fully understood in an online selection context. Working with students and listening to their diverse voices is at the heart of equitable recruitment. We designed and implemented the first co-designed online asynchronous Multiple Mini-Interview (MMI) with principles for fairness built-in.

#### Methods:

We aimed to explore what barriers neurodiverse people face in online recruitment and the features that would optimise their performance through a theoretically driven co-design approach using interviews and focus groups.

#### **Results:**

The iterative process resulted in a suite of options and personalisation features that

people across the neurodiverse spectrum felt put them in control and facilitated access. Examples include the ability to practice, change background, font, language, and modality.

#### Conclusion:

The co-design process was a necessary and vital approach to ensure that applicants were able to showcase their full potential. Our generically applicable results provide novel insights important to informing selection processes as we inevitably move towards a technology-augmented future.

#### Take-Home Message:

Co-designing approaches to achieve optimisation in accessibility in health professions selection is feasible and low cost yet high impact.

## ABSTRACT ID: ORO-SEL02

Embedding Student Voices in Recruitment Through a Co-Designed Online Asynchronous Multiple Mini Interview (MMI): Findings from a Cross- Sectional Evaluation Study.

#### Alison Callwood<sup>1</sup>, Vishna Devi A/P V Nadarajah<sup>2</sup>, Yap Chen Leong<sup>2</sup>

<sup>1</sup>University of Surrey, United Kingdom <sup>2</sup>International Medical University, Malaysia

#### Background:

Our responsibility to ensure the healthcare workforce represents the society it serves is critical. Working with students and listening to their diverse voices is at the heart of equitable recruitment. We evaluated the first co-designed online asynchronous Multiple Mini-Interview (MMI) with principles for fairness built-in.

#### Methods:

We aimed to explore acceptability, usability, reliability for all users and fairness for a subsample (age, gender, nationality, disability) in a cross-discipline multimethod study with applicants to Medicine and Dentistry programmes at one Malavsian University in 2023. The system was co-designed and configured in a seven question four-minute MMI circuit. Applicants video-recorded their answers to MMIs guestions which were later assessed by interviewers. Applicants and interviewers completed online evaluation questionnaires which were analysed using descriptive statistics and content analysis. Reliability (Cronbach's  $\alpha$ ) was assessed, and fairness evaluated for the sub-sample.

#### **Results:**

The iterative co-design process resulted in a three-stage implementation including initial piloting, online focus group feedback, refinements, and subsequent pilot testing. The students identified both positives and areas for improvement necessary to optimise their accessibility, familiarisation, and performance. The novel MMI was launched in March 2023 with 10 principles for fairness built-in including:

- Incorporate language that supports the affirmation of values.
- Use encouraging words/phrases.
- Soften language instructions.
- Minimise verbal load of interview content.
- Provide opportunities for candidates to familiarise themselves with the online format.
- Recommend generic, blank backgrounds for video-based interviews.
- Accommodate access and accessibility for neurodiverse applicants.
- · Ensure diversity of interviewers.
- Avoid culturally sensitive subjects in interview content.

• Ensure the use of gender-neutral language and pronouns.

#### Conclusion:

The co-design process was a necessary and vital approach to ensure that applicants were able to showcase their full potential. Our generically applicable results provide novel insights important to informing selection processes as we inevitably move towards a technology-augmented future.

#### Take-Home Message:

Co-design and building in student voices to optimise the online MMI to ensure usability and acceptability were relatively low cost but simple and impactful to implement.

## Partnership With Community

ABSTRACT ID: ORF-PAC03

Disaster Preparedness Towards Community Resilience – The Curriculum Development of The Flood Disaster Preparedness Training Module for Community

Wan Farizatul Shima W.A.F<sup>1</sup>., Adlina Suleiman<sup>2</sup>, Wan Nor Aziemah W.Z.<sup>3</sup>

<sup>1</sup>National Defence University of Malaysia, Malaysia

<sup>2</sup>International Medical University, Malaysia <sup>3</sup>University Science Malaysia, Malaysia

#### Background:

Background: Rapid human population growth and the development of modern civilizations have significantly contributed to climate change, further exacerbating natural disasters. Authorities have implemented numerous safety measures to mitigate the impact of disasters on human lives. The primary challenge in disaster preparedness today is effectively delivering information to the target population. In response to a resilience study that highlighted the inadequate preparedness among the at-risk population in Kelantan, a curriculum for the Flood Disaster Preparedness Training Module was developed to mitigate the impact of flood disasters.

#### Method:

Two brainstorming workshops were conducted with the participation of volunteers from various NGOs and governmental organizations to develop relevant curriculum content for the module. The six crucial clusters comprised Health, Food Safety, WASH, Shelter, Communication, and Logistics. The initial group of participants consisted of 20 volunteers from multiple NGOs actively engaged in flood relief activities. Training assessment and evaluation were conducted after the workshop to gather insights into the content of the overall program.

#### **Results:**

100% of the participants strongly agreed or agreed that the module is very useful, increases their knowledge, fulfils the objectives, and meets their expectations. They also stated that they would recommend this training to others and were willing to disseminate the knowledge to the community whenever possible. The curriculum in the module was found to be adequate for community use as an introduction to community preparedness, and it should be extended to intermediate and advanced levels in the future.

#### Conclusion:

The Flood Disaster Preparedness Training Module proved to be a crucial tool in raising awareness and preparedness among communities affected by floods. It is recommended to conduct additional training sessions using this module to enhance preparedness and foster community resilience in the face of flood disasters.

## Leadership

## ABSTRACT ID: ORF-LED01

#### Medical Students Learning About Leadership Within the Joint Program in Medicine - Western Sydney and Charles Sturt Universities

**Stephen Tobin, Caroline Joyce** Western Sydney University, Australia

#### Background:

There are many themes in curricula at medical schools. One cannot keep adding to the curriculum; there are tensions between the fascination with clinical medical content and curricular outcomes which often include the essential professional skills for high-quality patient care. Within our formal quality-andsafety curriculum, there are eight lecture sessions, now delivered online. Quality and safety are defined for patient-centred care. Quality improvement, working in teams and clinical leadership are all developed across the sessions. A senior clinician who has had several leadership roles presents her career.

#### Method:

using formal surveys, the relevant years were sampled. There was opportunity for narrative feedback as well. We sought information related to meaning, given the learning was situated in the first half of the 5-year MD program.

#### **Result:**

Results are mixed. Students want to learn about patient care, which they experience from early weeks of the program. Some find concepts of leadership, working in teams and definitions of quality and associated processes, somewhat abstract.

#### **Conclusion:**

Leadership principles are suitably embedded in quality and safety teaching. Priming students for their role in busy hospital and community practices has many aspects. Introduction of the positive aspects of practice, suitably contrasted at times with the culture, enables students to ask questions, speak up if they are concerned and develop an active role on the clinical team.

#### Take Home Message:

We recommend early exposure to concepts of leadership within healthcare (teams). Leadership can be taught within personal and professional development and similar themes. However, making explicit the concepts around patient care, culture, interprofessional teams and quality assurance are demonstrably useful for early-stage medical students.



# E-POSTER PRESENTATION ABSTRACTS

## **Teaching And Learning**

## ABSTRACT ID: EPO-TAL02

What Did the Instructors Gain from the Focused Discussions During the Inter-Professional Practice Training Meeting?

Ya-Fan Tsai, Li-Chen Chang, Yu-Hsuan Hou, Chia-Hung Chen, Chao-Yu Hsu

Ditmanson Medical Foundation, Chia-Yi Christian Hospital, Taiwan

#### Background:

In order to improve the quality of patients' care, inter-professional practice (IPP) is needed. However, IPP training is not easy. Here, we present qualitative findings from the instructors who attended the IPP training meeting using a focused discussion. Methods: A case was selected before the IPP training meeting. Four questions were made during the pre-course meeting including two biomedical, one psychological and one social problems. All medical staff were welcomed to attend the meeting. The reports of each medical profession will be structured by "problem", "assessment", "management", and "suggestion" for each guestion. After the focused discussion, a focus group interview was conducted by a researcher. Qualitative analysis was performed using the verbatim transcripts of the interview.

#### **Results:**

IPP training meeting was held on July 6, 2022. A total of 39 medical staff attended, 4 instructors agreed to be interviewed. The qualitative study found that the IPP meeting using focused discussion can (1) improve the ability of individuals to integrate inter-professional knowledge through the participants' empowerment in their expertise; and (2) deepen understanding between teams, which helps improve clinical collaboration. Moreover, the instructors considered that a better relationship with the patient can be developed due to a better understanding of the patient's and family's history and problems.

#### Conclusion & Take-Home Message:

The focused discussion with structured reports, we can make it easier to understand the different specialties. To improve the quality of holistic care, a focused discussion can be used.

## ABSTRACT ID: EPO-TAL03

What Are the Prerequisites for Effective Feedback? - From the Viewpoints of the Respiratory Therapy Interns After a Situated Simulation Exam

Yu-Shan Su, Chia-Hung Chen, Yung-Chi Cheng, Li-Chen Chang, Yu-Hsuan Hou, Chao-Yu Hsu Ditmanson Medical Foundation Chia-Yi Christian Hospital, Taiwan

#### Background:

Effective feedback increases the learning outcomes. Here, we investigated the prerequisites for effective feedback from the perspective of the respiratory therapy interns after a situated simulation exam (SSE).

#### Methods:

Debriefing training with feedback for instructors was conducted few days before SSE. Selection and training of a standardized patient was also done before SSE. SSE was held on July 12, 2022. SSE served as a pre-test for all interns who training in the department of respiratory therapy. All the process included a 10-minute exam and a 5-minute debriefing. The interns were asked to be interviewed after they finished the process. The interview was made and recorded by a researcher. The verbatim transcripts of the interview were analyzed for qualitative study.

#### **Results:**

There were 5 interns participating in the SSE. All the interns agreed to be interviewed after the exam. The interview last for 43 minutes. The qualitative study revealed that the effective feedback should be (1) guiding students to reflect (reflective learning can enhance the students' ability of self-awareness and self-correction); and (2) replacing negation with positive encouragement (replacing negation with encouragement reduces the students' frustration on learning). In addition, the interns considered that the students can restore their self-worth if the teachers give positive affirmation to their strengths.

#### Conclusion & Take-Home Message:

The effective feedback should include reflection and encouragement. Moreover, the students' self-worth can be regained through positive affirmation.

## ABSTRACT ID: EPO-TAL04

Medical Students' Preferences About Educational Materials to Facilitate Their Learning. From Patient Participation in In-Person Lectures to Social Media.

Luis Corral-Gudino, Clarisa Simon-Perez, Jose Pablo Miramontes-González School of Medicine, Universidad de Valladolid, Spain.

#### Background:

Lectures remain a widespread teaching method. However, in recent years their

predominance as the main tool in the learning process has been challenged by the increasing use of technology. They have changed from the transmission of information to large passive audiences to modified lectures with the inclusion of the active participation of the students or to flipped classrooms. The aim of our study is to assess students' perception of the most effective tools to support lectures.

#### Method:

During the 2022-2023 regular course of medical-surgical pathology of the locomotor system (MSPLS) -fifth-year medical school- we complemented regular lectures with different educational tools including face-to-face tools and online tools. At the end of the course, we asked the students which tools they prefer to increase their engagement and learning with the subject. The association of students' qualifications and the degree of use of online teaching materials were tested using an ANOVA test.

#### **Results:**

Eighty percent of the student of MSPLS participate in our survey (130 from 163). The students scored the following five educational tools out of 5: Patients coming to the classroom as a part of a lecture  $4.7 \pm$ 0.6 (mean ± standard deviation); Infographic clinical vignettes  $4.5 \pm 0.7$ ; Lectures  $4.4 \pm 0.8$ ; Live pools and quizzes during lectures  $4.3 \pm$ 0.9 and Twitter threads  $3.7 \pm 1.2$ . Greater use of infographics was associated with a better performance in the final exam of the subject (p=0.030). Follow the Twitter threads was not associated with changes in exam qualifications (p=0.528).

#### Conclusion:

Our study shows that the most valued teaching resource by our students was active listening to real patient testimonials. Also, visual illness scripts were highly valued. On the opposite side, Twitter threads were the less valued tool.

#### Take-Home Message:

Students prefer in-person lectures versus online interaction on social media. Include real patients during some of your lectures to improve students' engagement with the subject.

## ABSTRACT ID: EPO-TAL06

#### What Do Postgraduate Year Trainees Gain from Interprofessional Practice Training?

#### Chia-Hung Chen<sup>1</sup>, Li-Chen Chang<sup>2</sup>, Yu-Hsuan Hou<sup>1</sup>, Yung-Chi Cheng<sup>1</sup>, Chao-Yu Hsu<sup>1</sup>

<sup>1</sup>Department of Medical Education, Ditmanson Medical Foundation, Chia-Yi Christian Hospital, Chia-Yi, Taiwan <sup>2</sup>Clinical Medicine Research Center, Ditmanson Medical Foundation, Chia-Yi Christian Hospital, Chia-Yi, Taiwan.

#### Background:

Interprofessional practice (IPP) plays a crucial role in patient care. Here, we explore the benefits that postgraduate year (PGY) trainees gain from interprofessional practice training.

#### Methods:

IPP training is conducted every six months and all staff members are encouraged to participate. After completing the IPP training, PGY trainees should have a discussion with their clinical instructors and submit a report detailing their learning experiences and impressions. We review reports that were submitted within the past year and conduct qualitative analysis based on these reports.

#### **Results:**

Nine PGY trainees participated in IPP training within the past year. The qualitative study revealed that the PGY trainees who underwent IPP training were able to (1) gain a better understanding of the relevant professional knowledge and roles of other professions; and (2) understand the importance of interdisciplinary team collaboration in the process of patient care. In addition, the PGY trainees demonstrated an understanding that effective communication between professions serves as the cornerstone for enhancing collaborative relationships among various professions and achieving consensus in patient care.

#### Conclusion & Take-Home Message:

Training in IPP enables PGY trainees to gain a better understanding of the roles of other professions and emphasizes the importance of teamwork in delivering optimal patient care. In addition, they understand that effective communication is essential to achieve consensus on patient care.

## ABSTRACT ID: EPO-TAL13

#### Exploring Residents Perceptions Of Blended (Virtual + Face To Face) Learning in ACGME-I Accredited Residency Program in Qatar

#### Eman Almaslamani, Manasik Hassan, Salha Abdelkhair Sidra Medicine, Qatar

#### Background:

In light of the COVID-19 pandemic, educational activities were suspended due to the heightened risk of disease transmission. As the situation stabilized, it was deemed appropriate to resume our residency and fellowship programs. To achieve this, virtual learning platforms such as Microsoft Teams and other programs were utilized, which have become integral to our educational endeavours. We seek to investigate how paediatric residents and fellows perceive the use of virtual learning methods in the context of the COVID-19 pandemic. Our goal is to identify the benefits and drawbacks associated with these modalities.

#### Summary of work:

Between November and December 2022, we conducted a crosssectional study using an online survey to gather data from participants, which comprised paediatric residents and fellows affiliated with an ACGME-accredited center. The survey aimed to assess the participants' prior experience with virtual learning, their perspectives on the benefits and drawbacks of this approach, and any obstacles they faced while engaging in virtual learning.

#### Summary of results:

The study included 60 participants, with a male to female ratio of 0.76:1, comprising 27% resident level 1, 18% resident level 2, 25% resident level 3, 20% resident level 4. and 10% as fellows. Overall, 60 respondents were surveyed to rate the benefits of online learning. The results show that the most highly valued benefit was easy access to online materials, with 91.7% of respondents rating this benefit positively. Other benefits that were rated positively include added flexibility and self-paced learning (78.3%), comfortable environment for teaching and learning (50%), better time management. (58.3%), broader global networking (40%), improved virtual communication and collaboration (35%), and gaining new technical skills (26.7%).

#### Discussion and Conclusions:

Based on the findings of this study, it can be concluded that paediatric trainees prefer virtual learning modalities.

#### Take-Home Message:

Virtual learning has emerged as a promising teaching modality, especially during Pandemics.

### ABSTRACT ID: EPF-TAL19

The Effectiveness of Zoomassisted Clinical Teaching for The Undergraduate Medical Students During the COVID-19 Pandemic: A Scoping Review

#### Yan Naing Htun<sup>1</sup>, Saw Aung<sup>1</sup>,

Khin Hla Hla Thein<sup>1</sup>, Wint Wah Myint Oo<sup>2</sup> <sup>1</sup>International Medical School, Management and Science University, Malaysia. <sup>2</sup>Khoo Teck Puat Hospital, Singapore

#### Background:

The Covid-19 pandemic has caused unprecedented worst-ever disruption to medical education, forcing healthcare institutions to adopt virtual learning, including clinical teaching, urgently. Zoom platform is the most popular video conferencing app for virtual learning.

#### **Objectives:**

To map the type and extent of the available evidence in the literature regarding the effectiveness of Zoom-assisted clinical teaching for undergraduate medical students during the COVID-19 pandemic and to explore how this newly gained knowledge would inform the future teaching of undergraduate medical education beyond the pandemic.

#### Methodology:

The literature search was performed in October 2022 in PubMed, Science Direct Scholar, and Google Scholar, obtaining 835 papers. This was screened against inclusion and exclusion criteria, resulting in 29 articles that met the PCC mnemonics. In this study, the Population is undergraduate medical students; the Concept is Zoomassisted clinical teaching, and the Context is the COVID-19 pandemic era. Effectiveness was determined using the Kirkpatrick hierarchy model for quantitative data, and thematic analysis was performed on the quantitative data.

#### Findings & Discussion:

Nineteen out of twenty-two papers showed students have positive perceptions of Zoom-assisted clinical learning, which is Kirkpatrick level 1 evidence. Twelve articles showed level 2 b evidence of a change in students' attitudes. Fifteen articles showed students gained knowledge and skills, a level 2b evidence. There were three reports on behaviour change, and none reported level four. Qualitative data from seven anecdotal papers revealed positive perceptions and student feedback. Students felt engaged and interactive. Their interest in the specialties grew, and learning objectives were obtained. Eighteen papers reported virtual learning to continue, be refined, and be included in the future

#### Conclusion:

Preliminary results showed that Zoom-assisted teaching is effective in terms of students' perceptions, engagement, learning, and change in behaviour. Most of the literature viewed virtual online learning should be the way forward beyond the pandemic

#### Take-Home Message:

Zoom-assisted clinical teaching during the pandemic was effective. Students perceive well, feel engaged, change their attitude and obtain new knowledge and skills. The literature also suggested that virtual learning will continue as a part of teaching and learning in the future, with or without pandemics.

## ABSTRACT ID: EPF-TAL20

#### Effectiveness of Teaching Basic Suturing Methods On Zoom To Final Year Medical Students Of Management And Science University Surgery Posting Students in the COVID-19 Pandemic Period

#### Yan Naing Htun, Saw Aung, Khin Hla Hla Thein

International Medical School, Management and Science University, Malaysia.

#### Background:

After the complete lockdown from 18th March 2020 for the COVID-19 pandemic, face-toface teaching at the Clinical Skill Lab of MSU was able to conduct during a partial relaxation of social distancing rules. Forty-four students attended a simple suturing skill training, of whom only ten could attend in person due to COVID regulations and the rest, thirty-four students attended via Zoom.

#### **Objectives:**

To study the acceptance of Zoom-assisted clinical skill teaching as effective clinical teaching by final year MBBS Surgery posting students of IMS/MSU. Specific :1. To determine the students' perception, 2. To determine the students' view on gaining intended knowledge and skill.

#### Method:

The validated questionnaire "SPOM" was used to measure students' perception, which consisted of 23 items with five Likert scales ranging from strongly disagree to strongly agree. Feedback from the students is recorded in free form. Descriptive statistics analysis was used to analyse the data.

#### Findings & discussions:

All 34 students responded to the Student

Perception of Module (SPOM) questionnaire form. 34% of students disagreed with gaining intended knowledge from Zoom-assisted clinical skill teaching. 31.8% of the students thought there was a lack of interactive learning, and 34% said the module was not intellectually stimulating, 45,4% to 47,7% of respondents do not recommend Zoomassisted clinical skill teaching in Surgery and other disciplines. Regarding COVID-19 transmission, 63.63% of students strongly agree they are safe in Zoom-assisted clinical skill teaching. Students are not comfortable and easy to use Zoom-assisted clinical skill teaching, and they will not recommend use in surgery and other disciplines.

#### Conclusion:

The study showed the students poorly accepted Zoom-assisted surgical skill teaching. They expressed poor perception and a lack of learning achievement. The only positive finding for virtual surgical skill training is students feel safe from COVID-19 transmission.

#### Take-Home Message:

Our IMS students perceive virtual surgical skill training negatively, which is the opposite of their counterparts from developed countries but in line with views from developing countries.Virtual Learning and telemedicine are the future of health care and medical education. Future research is required for the abovementioned discrepancies.

## ABSTRACT ID: EPF-TAL12

### The Trend of Cervical Cancer in Cambodia: Risk Factors And Management Strategies

Sokhoeun Eat, Virak Sorn, Bunnarith Ay, Lykeang Muk, Techly San University of Puthisastra, Cambodia

#### Introduction:

Cervical cancer has been identified as a serious disease globally. In Southeast Asia, nearly 5.93 million women aged 15 years and older have been impacted the most by cervical cancer. Cambodia also has high-risk infectious cervical cancer, with an estimated 1,135 incidences and 634 deaths in 2020, and they are expected to increase by 40% in 2040 if cervical cancer prevention makes no progress. Therefore, this review aims to demonstrate the risk factors and management strategies of cervical cancer in Cambodia and provide suggestions to prevent this disease effectively.

#### Methods:

Review and interpretation of existing data from peer-reviewed publications. Existing data from different studies were analyzed and compared to determine the overall risk factors and management strategies of cervical cancer disease in Cambodia.

#### **Results:**

It was found that the prevalence of cervical cancer (HPV-DNA) was detected up to 41.1% of women who engaged in sex work in Phnom Penh. There were 22.4% of patients tested positive for high-risk HPV at Sihanouk Center of Hope in Phnom Penh, Cambodia. However, cervical cancer cases account for an estimated 11.4% and 10.4% of women's cancer and deaths in 2020, respectively. These results demonstrated that there is limited information regarding knowledge and practice concerning cervical cancer among women in Cambodia.

#### Conclusion:

The findings suggest that risk factors such as low levels of reproductive health education, cultural norms, and limitations of health systems lead to high rates of cervical cancer remaining in Cambodia. Overall, to improve the prevention and detection of cervical cancer in Cambodia, we suggest (1) implementing a nationwide screening program for cervical cancer in health facilities, (2) disseminating knowledge to promote cervical cancer prevention by providing the right knowledge through the local healthcare providers, and (3) integrating such information into school curriculums to promote cancer awareness and healthy lifestyles.

## ABSTRACT ID: EPO-TAL21

#### Using Virtual Escape Rooms and Crossword Puzzles as Technology enhanced Game-based Learning Tools to Boost Pathology Teaching and Learning

#### Fatma Alzahraa A Elkhamisy<sup>1</sup>, Asmaa F Sharif<sup>2</sup>

<sup>1</sup>Faculty of Medicine, Helwan University, Egypt <sup>2</sup>Faculty of Medicine, Tanta University, Egypt

#### Background:

Although Pathology is the science of diseases, the majority of its curriculum is educated in the preclinical phase of undergraduate medical programs. This results in a curriculum with many theoretical concepts perceived by students as boring and difficult. We aimed to design interactive engaging instruction by using technologybased learning tools, and explore students' perceptions of it.

#### Method:

This qualitative study investigates two digital game-based learning tools selected for Foundations of Pathology learning. The Virtual Escape Room (VER), and Digital crossword puzzles (CWP) were used in lectures in a blended learning context for 300 first-year medical students at King Salman International University, Egypt, Academic year 2021/2022. The VER was designed by the instructor using Google Slides. The room scene was a clinic. Some room objects were hyperlinked to online questions formatively assessing students' knowledge. Students searched for the hyperlinks "hidden" in the room's objects and answered the questions. With each correct answer, they got a piece of a password to open the room door. The instructor created the CWPs using "The Teacher Corner" website. Students filled in the crosswords with the pathological terms corresponding to the game clues. Thirty students' perceptions were collected through interviews and qualitatively analysed.

#### **Results:**

The majority of students described the learning as more fun, and engaging, compared to traditional pathology learning. Most students enjoyed the games and were challenged by them. Some students faced difficulty knowing the "spelling" of the terms needed to answer the CWPs and opened books to answer them. Most reported that these games made them assess their learning, discover gaps, and relearn them. The majority of students recommended including the tools in other courses and found them suitable to the nature of the discipline.

#### Conclusion:

The VERs & CWPs are applicable Technologyenhanced Game-based Learning tools that create engaging interactive pathology learning.

#### Take-Home Message:

Using Technology-enhanced Game-based Learning tools as virtual escape rooms & digital crossword puzzles create an engaging interactive learning environment for students.

## ABSTRACT ID: EPO-TAL22

## Embracing Immersive Reality in Medical Education

#### Farah Azhar<sup>1</sup>, Nooreen Adnan<sup>2</sup>

<sup>1</sup>Gulf Medical University, UAE <sup>2</sup>Dow University of Health Sciences, Pakistan.

#### Background:

Virtual reality (VR) open interesting ways of teaching and assessment in medical education. Research seeks to answer following questions: What are the pros and cons of VR based teaching against traditional teaching? What are the instances in which VR is utilised successfully in the undergraduate medical curriculum?

#### Methodology:

The selection of studies was guided by PICOS (Population, Intervention, Comparison, Outcome, Study design) framework.

- · Population: Undergraduate medical students
- Intervention: Use of a VR interface.
- Comparison: Traditional teaching strategies
- Outcome: Effectiveness of VR through concrete learning outcomes or/and students' motivation
- Studies: Interventional, in English, from 2014 to 2023.

Out of 90 studies, 14 were included amounting to 1,102 participants. Included papers were quality assessed by Medical Education Research Study Quality Instrument (MERSQI) with average score being 15.7.

#### **Results:**

Results were synthesised by thematic analysis. Following four themes appeared:

 VR provides cost effective, controllable and safe learning with feedback, without consequences to real or simulated patients. VR is preferred by the students.

- 55% of the included studies showed improvement in concrete learning outcome while 45% showed no difference in learning outcome. 90% of the studies showed improved learning outcome while 10% showed no difference in motivation towards learning. However,
- In following educational settings, VR has been effectively used against traditional methods:
  - a. Assessment of laparoscopic surgical skills.
  - b. Training of communication skills.
  - c. Learning and assessment of anatomy
  - d. Recognition of respiratory failure.
  - e. Understanding ethical issues.
  - f. Emergency triage training.
- 14% of the studies have shown adverse effects like eye strain, difficulty in concentrating, isolation and distraction from learning.

#### Conclusion:

VR can be effectively utilised in undergraduate students' curriculum, integrated with traditional strategies. However, more studies are required to investigate its effects on students' health in long terms.

#### Take-Home Message:

VR can be utilised effectively in undergraduates' curriculum in similar instances identified above. It must be integrated well with traditional methods of teaching and assessment. However, before widespread application, more evidence is required in view of the safety of student's health and adverse effects outlined above.

## ABSTRACT ID: EPF-TAL27

#### Comparing learning and satisfaction of pharmacy students in gamebased flipped classroom and case-based flipped classroom

#### Mahtab Amini, Maryam Alizadeh, Shahideh Amini.

Tehran University of Medical Sciences, Iran.

#### Background:

Game-based learning (GBL) and case-based learning (CBL) could be used as active learning methods in the in-class phase of the flipped classroom. This study aimed to design and implement a board game to teach pharmacy students about hypertension medication and compare its outcomes with a similar CBL program.

#### Methods:

This study was a randomized controlled trial in which 56 fourth-year pharmacy students were divided into two groups; One participated in a CBL session, and the other took part in a GBL class. Both sessions were implemented as flipped classrooms, and the students were provided with the educational materials beforehand. A standardized test was developed to assess students' knowledge in a pretest-posttest design at three points. Also, a questionnaire was designed and validated (on a five-point Likert scale) to evaluate their satisfaction. A digital board game was designed and implemented for the gamebased part.

#### **Results:**

The questionnaire results showed significant improvement in grades between the second and third tests (1.59; p = 0.002, t = 3.307), and the first and last tests (3.48; p = 0.000, t = 4.899). However, there was no significant difference between the progress results in the case-based and game-based tests in the 2nd to 3rd test (1 and 2.22, respectively; p = 0.155, t = 2.236). The satisfaction levels of the CBL and GBL groups were not significantly different (3.61 and 3.8, respectively; p = 0.200, t = 0.104).

#### Conclusion:

Game and case-based learning are equally effective in the flipped classroom and improve student's learning outcomes and satisfaction. Further studies are needed to investigate the long-term effects of the game.

#### Take-Home Message:

Although drug information as a part of PharmD students' internship is a very detailed subject, active learning methods could be useful in boosting the long-term memory of students in this field. Game-based learning and case-based learning could be implemented as the in-class part of the flipped classroom. By playing the designed board game, many key points and complicated event scenarios has reviewed. The designed board game was as helpful as CBL to improve students' satisfaction and learning outcomes.

## ABSTRACT ID: EPF-TAL28

#### Factors Leading to Burnout Among House Officers at A Tertiary Hospital in Malaysia

Tan Guo Jeng, Lam Chee Loong, Terence Ong Ing Wei, Lee Yew Kong, Sahira Jabeen, Kirthana Krisnamurthi, Tai May Hun. Universiti Malaya, Malaysia

#### Aims:

To explore factors leading to burnout among house officers at a tertiary hospital in Malaysia

#### Methods:

In order to fulfil our aim we performed qualitative, semi-structured interviews with n=15 house officers. It was performed privately with full confidentiality and anonymization by a research assistant using a topic guide to explore the factors and reasons for burnout. Interviews were audiorecorded, transcribed verbatim, and analysed thematically.

#### **Results:**

A total of 15 house officers participated (female=12, age range 24-26 years old). The stated causes of burnout can be put into 2 major domains. The domains are organisational challenges and personal responses to those challenges. One of the themes that we were able to extract from qualitative analysis of the transcripts were the feelings of the lack of manpower. This leads to the perception of heavy workload and unfair distribution of workload. The increase in the workload lead to longer working hours, less time for sleep, less time for the upkeep of personal well-being. A second theme is the inadequate preparation for the work expected of them either from the lack of guidance from senior doctors and senior colleagues, and the lack of familiarity of the working environment as well as the systems that are used in the hospital. A third theme is the fear of scolding in a rigidly hierarchical system.

#### Conclusion:

Burnout is a common problem and one in which a solution is urgently needed. By identifying the major themes that is common in our local setting we can set about finding solutions that are compatible with our multiethnic, multilingual, and multicultural country.

#### Take-Home Message:

Burnout has to be taken seriously.

## ABSTRACT ID: EPF-TAL29

#### The Impact of Peer Role Play in Enhancing Clinical Skills Using Virtual Medical Case

Mohammad Arshad Ikram, Aida Lina International Medical University, Malaysia.

#### Background:

The International Medical University, Malaysia (IMU), introduced a virtual platform for clinical teaching to enhance learning. Peer role-play (PRP) is a simulationbased teaching method that involves students actively engaging in a scenario by taking on specific roles. PRP, in conjunction with technology, leads to a powerful educational tool. Virtual clinical cases were prepared using the latest e-Learning tools, such as Articulate Storyline 360. The cases were further augmented by asking students to role-play in clinical scenarios.

#### Methods:

A simulated case of a traumatic hip dislocation was prepared with three (3) fourth-year medical students. Two acted as attending emergency doctors, and one played the role of a patient involved in a motor vehicle accident. A complete interactive virtual clinical case with video-based content and quizzes on the anatomy of the hip is available for students to access via the IMU e-Learning portal for selfdirected learning.

#### **Results:**

An online survey was conducted to acquire students' perception of PRP. A total of 141 students participated in the survey. The questionnaire showed good internal consistency (Cronbach's alpha = 0.921). 99.3% of students perceived PRP as a good tool to enhance clinical learning that helped them prepare for the real clinical environment. 95% of students appreciated the fact that they were able to revisit the case at their convenience.

#### Conclusion:

Student PRP is a novel modality of virtual teaching and can be an effective educational method that provides a positive learning experience, insight into case-based learning, and fosters critical thinking. It empowers students by allowing them to actively participate in the design and development of a virtual clinical case, which further enhances their learning. It helps develop confidence in their ability to handle difficult clinical situations, make decisions, and communicate with patients and their families.

#### Take-Home Message:

Peer-role play is an engaging and effective learning tool that can provide opportunities for reflection and self-evaluation. It enhances communication, collaboration, and problemsolving skills among students.

## ABSTRACT ID: EPF-TAL31

#### Use of Micro-Video To Engage, Enable And Empower Nutrition and Dietetics Students in Developing Anthropometry Skills

Yi Yi Lee<sup>1</sup>, Seok Shin Tan<sup>2</sup>, Kelly Sze Fang Num<sup>1</sup>, Wai Yew Yang<sup>1</sup> <sup>1</sup>International Medical University, Malaysia <sup>2</sup>Monash University Malaysia.

#### Background:

Anthropometry skills are entry-level competency for nutritionists and dietitians, which is necessary to assess healthy and diseased populations. The objective is to use an instructional approach to engage nutrition and dietetics students through demonstrations of correct anthropometry measurements using international standards to enable and empower these students in developing anthropometry skills.

#### Method:

A total of nineteen instructional micro-learning videos on measuring different parts of the human body was developed in small bite-size chunks. These measurements were conducted using calibrated equipment and performed by academics with the International Society for the Advancement of Kinanthropometry (ISAK) Level 1 certification. The videos were available on the university's Moodle platform and self-directed learning unit. A survey using a 4-point Likert scale and openended questions was conducted to collect responses on user experience and impact on learning.

#### **Results:**

Two cohorts of nutrition and dietetics students completed the questionnaire (n=40). On user experience, all students responded they either 'strongly agree' (42.5%) or 'agree' (57.5%) that the videos helped them identify the correct use of equipment and techniques for anthropometry measurements. Similarly, all students (37.5% 'strongly agree', 62.5% 'agree') that the videos and commentaries were sufficient to understand the step-by-step technique for identifying measurement sites, landmarking and measurement. For the impact on students' learning, more than 30% strongly agreed that the videos had increased their overall skills and confidence in undertaking anthropometry measurements. Three themes of improvement were identified, namely enhancement of user experience, refining the video design, and incorporating advanced levels according to Miller's pyramid.

#### Conclusion:

The step-by-step procedural visual guides engaged the students in their learning, enabled them to be independent and peer learners, and enhanced their selfconfidence in developing anthropometry skills. Such approaches strengthen nutrition and dietetics students' competency and empower them with anthropometry skills in the field.

#### Take-Home Message:

The step-by-step procedural instructional micro-learning videos successfully engaged the students in their learning, enabled them to be independent and peer learners, and enhanced their self-confidence in developing anthropometry skills. Such approaches strengthen nutrition and dietetics students' competency and empower them to use anthropometry in the field.

## ABSTRACT ID: EPF-TAL33

#### Use of 3-D Virtual Molecules for Teaching and Learning of Stereochemistry in Undergraduate Programmes

#### Siew Lee Cheong, Pei Sin Keng, Mohd Fadzil bin Zainal Anuar

International Medical University, Malaysia

#### Background:

Stereochemistry involves the study of different spatial arrangements of atoms in organic molecules. To comprehend stereochemistry, students apply visuospatial skills to switch between the 2-D and 3-D chemical structures. The most common method to strengthen the 3-D visuospatial skills is by using physical molecular models to visualize a molecule in 3-D manner. To find out if the alternative 3-D virtual molecules are effective tools for teaching and learning of stereochemistry, this project aims to develop 3-D virtual molecules for such purpose and to explore the perception of students on the use of 3-D virtual molecules.

#### Method:

Upon construction of 3-D virtual molecules, they were uploaded to Organic Chemistry module page (under stereochemistry topics) on IMU e-learn portal. During the online or physical classes, prior guidance was provided on how to use the 3-D virtual models for visualization of spatial arrangement of atoms in the molecules. Pertinent quiz was prepared, which were to be answered by students to gauge their understanding of the topics.

#### **Results:**

A survey had been conducted on Semester 1 undergraduate students who learnt stereochemistry in the Organic Chemistry module. Based on the responses gathered (n = 47), rating scores of 4.6 to 4.8 over 5 were attained on how the virtual 3-D models aid in visualizing atom spatial arrangement in molecules and help relate between 3-D and 2-D representations of molecules. From the feedback collected, majority of them had commented that they enjoyed using the 3-D models, which were helpful in having a clear understanding of the theories learnt during lectures.

#### Conclusion:

Through such initiative, it allows the students to better visualise and comprehend the 3-D atom spatial arrangement in the molecules. Majority of students have indicated that the virtual 3-D models have improved their understanding on stereochemistry and stimulated their interest in the topic.

#### Take-Home Message:

The 3-D virtual molecules can be used as alternative teaching tools to replace demonstration using physical models by the lecturer in delivering the stereochemistry or other relevant chemistry lectures, especially for face-to-face classes with large number of students. Furthermore, they can be used as additional learning tools for students in addition to the online or physical classes.

## ABSTRACT ID: EPF-TAL34

### Do Interactive Videos Enhance Students Learning Experiences for Parasitology And Entomology?

Soi Moi Chye, Siew Tung Wong, Li Li Chan International Medical University, Malaysia

#### Background:

Medical education is moving towards active learning. Technology can play a powerful role in improving the quality and efficiency of education. Studies demonstrated that video could engage the learner and activate cognitive and emotional processes. Increase motivation for learning and improve students' perceptions of learning. This study aims to determine whether the interactive videos we have developed can help to enhance student's learning experiences and prepare them for the Objective Structured Practical Examination (OSPE) in parasitology and entomology.

#### Methodology:

Six interactive videos have been developed and uploaded on the e-Learning portal. Each video is approximately ten to fifteen minutes. The contents of the videos include laboratory identification of entomological specimens; protozoa; nematodes; cestodes. A questionnaire was used to collect feedback from students regarding their experiences while viewing interactive videos using both closed-ended questions and open-ended questions. A statistical analysis of the collected data was then performed using SPSS version 22.

#### **Results:**

27 out of 56 students responded to the questionnaires. The response rate was 48.2%. In the students' perception, videos have been extremely helpful to them in preparing for the OSPE (mean  $\pm$  SD, 4.54 $\pm$ 0.58). There was strong agreement among the students that

the video covered all the learning objectives, 4.58±0.58. The videos provide excellent learning experiences, 4.41±0.50. They enjoyed the videos and interactive activities (4.54±0.58), the activities are extremely helpful in understanding and memorizing the contents of the parasites. In the open-ended questions, students have suggested longer videos, to cover more information; to include subtitles for better understanding; would have preferred if more interactive activities were included in the videos, etc.

#### Conclusion:

The interactive videos were extremely helpful to students in preparing for the Objective Structured Practical Examination. In addition to enjoying the videos and interactive activities, students had an excellent learning experience with the videos.

#### Take-Home Message:

The interactive videos we developed were extremely helpful to students in preparing for the Objective Structured Practical Examination. In addition to enjoying the videos and interactive activities, students had an excellent learning experience with the videos.

## ABSTRACT ID: EPF-TAL36

## Can Early Exposure Increase the Level of Knowledge of Pharmacy Students?

#### Ingenida Hadning, Rian Lupita

School of Pharmacy, Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia.

#### Background:

School of Pharmacy Universitas Muhammadiyah Yogyakarta has implemented The Early Pharmaceutical Exposure (EPhE) as one of the learning methods for undergraduate students. The EPhE is a learning method that exposes students to actual clinical situations. The EPhE concept provides an introduction to the clinical setting for students, educating students on the fundamentals of clinical practice and encouraging critical thinking. The aim of this research is to determine the effect implementing EPhE in hospital inpatient pharmacy has on the level of knowledge of pharmacy students.

#### Method:

This study used an observational descriptive method with a cross-sectional approach. The sampling method used was purposive sampling. The participants in this study are 26 pharmacy students who completed EPhE in hospital inpatient pharmacy. A questionnaire was distributed to pharmacy students in order to assess their implementation and level of knowledge. The collected data were tested with the Wilcoxon test.

#### **Results:**

The results showed that prior to implementing EPhE, student knowledge was 38.5% good and 61.5% sufficient. After implementing EPhE, student knowledge increased to 100% good with a p value of 0.000. It means that there is a significant difference in the knowledge level of students.

#### Conclusion:

The implementation of EPhE can increase the level of knowledge of School of Pharmacy Universitas Muhammadiyah Yogyakarta students.

## ABSTRACT ID: EPF-TAL37

#### Enhancing Patient Understanding of Judicious Antibiotic Use Through Video-Based Education

Muhammad Thesa Ghozali, Bagus Hidayaturrohim, Izdihar Dinah Amalia Islamy.

Department of Pharmacy, Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia

#### Background:

Understanding the judicious use of antibiotics is pivotal in ensuring the effective treatment of infectious diseases and mitigating the emergence of antibiotic resistance. In the contemporary digital milieu, video is a potent tool for patient education among healthcare professionals. This research aimed to elucidate the effectiveness of a videocentric educational strategy in enhancing comprehension related to the judicious use of antibiotics.

#### Method:

Through employing a quasi-experimental design with a pretest-posttest and control group framework, the study encompassed 140 participants. A meticulously structured questionnaire, administered from July to December 2021 in the Special Region of Yogyakarta, Indonesia, facilitated data acquisition. The intervention spanned four weeks, comprising lectures and group dialogues, employing video as the principal educational medium.

#### Result:

Analyses revealed that the educational videos significantly bolstered understanding about judicious antibiotic use, evidenced by an elevation in the mean score of the intervention group by 2.590 (p-value of 0.001) and a discernible discrepancy in the mean posttest

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scores between groups by 1.900 (p-value of 0.001).

#### Conclusion:

Consequently, it is inferred that video is an efficacious medium for patient education, especially concerning antibiotic utilization.

## ABSTRACT ID: EPF-TAL43

#### Collaboration of Pharmacy Summer School Activities Between Universities Within the Scope of the Association of Pharmacy Colleges of Muhammadiyah and Aisyiah in Indonesia

#### Hari Widada, Muhammad Thesa Ghozali

Department of Pharmacy, Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia

#### Introduction:

Summer School has become an interesting activity for students, because it gives them the space to expand social/cultural interactions with students from various universities and countries. UMY Pharmacy Study Programme has been organising International Pharmacy Summer School (IPSS) since 2013. In 2022, UMY Pharmacy Study Program and several PTMs in the western region of Java / Indonesia organised Summer School activities together. The PTMs are members of the Association of

Muhammadiyah and Aisyiah Pharmacy Colleges. This activity aims to increase the involvement of Muhammadiyah Pharmacy Colleges in managing Summer School in increasing international recognition. Materials and method: APTEMA Western Region summer school activities are organised online with alternating hosts. The activity was carried out in collaboration between APTEMA and 7 universities gathered in the western region of APTFMA, namely UHAMKA (https://ffs.uhamka.ac.id/), UMY (https://farmasi.umy.ac.id/), UNIMAR (https:// unimar.ac.id/), UM Bandung (https://pmb. umbandung.ac.id/), Stikes Muh. Cirebon (https://stikesmuhcrb.ac.id/), STFM Cirebon (https://stfmuhammadiyahcirebon. ac.id/), and Stikes Muh Kuningan (https:// stikesmuhammadiyahku. ac.id/). This activity was carried out by combining aspects of material exposure collaborated with aspects of culture, local wisdom and tourism. Exposure of local wisdom and culture is carried out by lifting the treasures of local wisdom that exist in their respective cities/ regions.

#### **Results and Discussion:**

Participants came from within and outside the country with a total number recorded on the YouTube link of 1264 participants and the google form registration link of 574 participants. The Summer School event took place well in accordance with the estimated time, where participants had a high interest in participating in the activity, as evidenced by the number of participants. Participants actively asked questions and gave responses to the stadium general session and benefited from the increased knowledge of the participants after completing the event.

#### Conclusion:

An interesting international activity that combines academic aspects with cultural events. Activities involving 7 institutions under the auspices of APTEMA make this activity potential to be expanded.

## ABSTRACT ID: EPF-TAL44

Student Feedback on Tutor Performance in the Pharmacy Study Program, Faculty of Medicine and Health Sciences, Muhammadiyah University, Yogyakarta

#### Pinasti Utami, Nurul Maziyyah

School of Pharmacy, Faculty of Medical and Health Science, Universitas Muhammadiyah Yogyakarta

#### Background:

Tutorial activities are one of the implementations of Problem-Based Learning (PBL). Improvement of the tutorial quality can be done by receiving student feedback regarding the tutor's performance in facilitating the discussion. Feedback must be objective and fair so participants can provide input according to their roles. This study aimed to conduct an explorative assessment of tutor performance.

#### Methods:

This study uses a non-experimental research design. Data collection on the role of twentythree tutors in the Pharmacy Study Program, Faculty of Medicine and Health Sciences, University of Muhammadiyah Yogyakarta, was conducted from September 2022 to March 2023. The sample for this study were students from the 2020, 2021, and 2022 batches. Data were collected using a questionnaire prepared by the curriculum and quality assurance team and then distributed using a g-form at the end of the second tutorial session. Data was analyzed descriptively for student feedback on tutor performance.

#### **Results:**

531 students rated tutors on a rating scale of 1-5, namely: Tutors understanding the scenario (score 4,63), able to overcome

misunderstanding (score 4,62), able to overcome ineffective or unsystematic discussion (score 4,59), avoid minilecturing (score 4,53), able to stimulate students toward learning outcome (score 4,60), giving objective assessment and feedback (score 4,59), stimulate critical thinking (score 4,61) and coming on time (score 4,57).

#### Conclusion:

The average tutor performance of 4,59 is in the good category. The tutor carried out the task well and received positive student responses.

## ABSTRACT ID: EPO-TAL45

A Model of Clinical Teaching and Learning, Team Objective Structured Bedside Assessment (TOSBA): Perception of Medical Undergraduates.

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#### Background:

The Team Objective Structured Bedside Assessment (TOSBA) is a wardbased formative assessment. In this, students are divided into groups, and each student performs a clinical task within a specific time with an assigned patient. Tasks include history taking, physical examination, differential diagnosis, investigation, and management. The facilitators observe the performance and provide feedback. Fellow students are allowed to give feedback. At the completion, feedback is provided to the whole group. The direct observation of the student's performances and timely feedback help to be actively engaged and facilitate the learning process. TOSBA facilitates communication and teamwork skills. The performances are documented and shared to keep a record of the improvement of skills.

#### **Objective:**

To evaluate the perception of the medical undergraduates about the effectiveness of TOSBA for learning clinical skills as compared to other methodologies.

#### Methods:

This longitudinal study was carried out in the Department of Obstetrics & Gynaecology (OB&GNY), Creek General Hospital, United Medical & Dental College, Karachi. The duration of the study was from March 2018 to March 2020. By convenient sampling, all students in 3rd year (2018) were followed till their 5th year (2020). The number of students varied as they progressed into their senior years: In 3rd year= 90 students (n=90), 4th year=85 students (n=85), and 5th year=72 students (n=72). An online quantitative questionnaire Google form was disseminated to the students at the end of the OB&GNY rotation. It was designed to determine their perception regarding the effectiveness of TOSBA as compared to other formats. Responses were marked on a Likert scale of 0 to 5, where 0 means do not agree and 5 means strongly agree.

#### **Results:**

The participants agreed that TOSBA was beneficial for their learning of clinical

skills. For history-taking skills, it was helpful in 3rd year with a mean score of  $3.72 \pm 0.94$ , in 4th year 4.00  $\pm$  0.86, and in 5th year 4.11  $\pm$ 0.99. For physical examination, TOSBA was helpful for 3rd year with a mean score of 3.82  $\pm$  0.97, for 4th year =4.06  $\pm$  0.82, and for 5th year 4.19  $\pm$  0.99.

#### Conclusion:

TOSBA had a positive impact on students' learning of clinical skills. Its key elements formative nature, and timely feedback are beneficial for medical undergraduates.

#### Take Away Message:

As we know assessment drives learning, TOSBA can be beneficial during regular ward sessions and bedside teaching as it is more structured and objective for learning essential skills The documentation of performance shared with students is beneficial for their progress.

## Student Empowerment

## ABSTRACT ID: EPO-SEM05

#### Medical Entrepreneurship: Impact of Entrepreneurial Passion on Nascent Entrepreneurial Behaviour Among Malaysian Medical students

#### Kavitha Ashok Kumar<sup>1</sup>,

S.M.Ferdous Azam<sup>2</sup>, Ashok Kumar Jeppu<sup>1</sup> <sup>1</sup>International Medical School, Management & Science University, Malaysia <sup>2</sup>Postgraduate Centre, Management & Science University, Malaysia

#### Background:

In recent years, healthcare is on the cusp of modernization and change. The Covid-19 pandemic has brought health, wellness, and medicine into the main focus. To contribute effectively to this changing healthcare scenario, medical students need additional competencies. The entrepreneurial behaviour of Malaysian medical students has not yet been explored. Based on the theory of planned behaviour, intentions lead to behaviour. Hence, this study aimed to assess the perception of medical students on their passion for entrepreneurship, intention to be an entrepreneur and investigate its relationship with their nascent entrepreneurial behaviour.

#### Method:

A cross-sectional study was conducted on medical students at a private Malaysian medical school using an adapted, validated questionnaire. The sample was selected by disproportionate stratified random sampling. Structural equation modelling using Smart PLS 3.0 was performed.

#### **Results:**

318 medical students voluntarily participated in this study. The mean sores revealed moderate level of entrepreneurial passion (mean=3.41±0.54SD), moderate level of entrepreneurial intention (mean=3.39±0.67SD), and moderately low level of nascent entrepreneurial behaviour (mean=2.66±0.91SD) among the study population. Further, entrepreneurial passion had a significant positive impact on entrepreneurial intention ( $\beta$ =0.601, t=9.689, p<0.01) with large effect size (f=0.403). However, its impact on nascent entrepreneurial behaviour was insignificant (β=0.02, t=0.377, p>0.05). Mediation analysis showed a significant mediating role of entrepreneurial intention (specific indirect effect=0.343, t=6.151, p<0.01).

#### Conclusion and Implication:

The study results posit that medical students demonstrate poor nascent entrepreneurial behaviour despite having passion for entrepreneurship emphasizing that passion alone cannot lead to behaviour without prior intention. Entrepreneurial education could tap the entrepreneurial passion among medical students by enhancing their self-efficacy to convert market opportunities into relevant health-oriented products, technologies, and services.

#### Take-Home Message:

Medical entrepreneurship would create "wealth for self" and "health for the community" revolutionising the concept of global wellness.

## ABSTRACT ID: EPO-SEM06

### Platform Supported Coaching-Tutoring Hybrid Program: A Development Story

#### Satria Nur Syaban<sup>1</sup>, Olivia Tee<sup>2</sup>, Meredith Ratliff<sup>3</sup>

<sup>1</sup>Lecturio <sup>2</sup>iGroup <sup>3</sup>University of Central Florida, United States of America

#### Background:

Coaching is an emerging approach in medical education that is rapidly gaining popularity. It seeks to empower students and maximize their individual potentials and foster master adaptive learners in the process. Given the novelty of the concept, we believe many aspects are still left unexplored, including implementation methods and student perception. Through this ePoster, we aim to share our experience in implementing one with a platform-supported approach and share how we developed the process further.

#### Methods:

This is a case study to describe a case where we ran a small initial trial of the hybrid coaching program and performed agile development on the program. We used a modified Instructional Materials Motivation survey to evaluate the students' perception of the approach's impact on their motivation. Following the trial, program evaluation and revision were completed following the AviDesign Instructional Model to make the program more effective and efficient for scalability.

#### **Results:**

The trial was shown to improve students' motivation in four different domains. Attention, Relevance, Confidence, and Satisfaction, with a total mean of 4.33 / 5 (Cronbach's a: 0.961) hence validating our decision to develop the program further. The AviDesign-based development process then allowed us to create: Program Definition. Goals, and Expectations that were set and agreed upon with all involved parties: Forms for student goal setting, student monitoring, and program effectiveness; Targeted training modules for coaching for scalability purposes: Solutions for data alignment concerns between student intake, student goal setting, coaching records, and student evaluations.

#### Conclusion:

Coaching is a promising approach for faculty and students seeking to holistically empower and improve a student's academic potential and capabilities as a master adaptive learner. The platform-supported approach (with Lecturio as the platform) is effective and the development steps we have done can be a model for further development of the approach.

#### Take- Home Message:

We postulate that this approach can be a blueprint for schools seeking to perform a coaching-tutoring hybrid program, that seeks mainly to improve the academic and selfdirected learning capabilities of the student. We hope that the lessons learned can be used to develop similar programs in schools across the world.

## ABSTRACT ID: EPF-SEM16

#### Student Engagement in Curriculum Development for Undergraduate Medical Education: A Scoping Review

Bayu Prasetya Alfandy<sup>1</sup>, Diantha Soemantri<sup>2</sup>, Nadia Greviana<sup>2</sup> <sup>1</sup>Universitas Syiah Kuala, Indonesia <sup>2</sup>Universitas Indonesia, Indonesia

#### Phenomenon:

Medical students as the largest stakeholders in medical schools should play more prominent roles as partners rather than merely as receivers in medical education. Therefore, engaging students in collaborative work in curriculum development is fundamental. This scoping review aimed to explore the extent of research on student engagement in curriculum development (CD). Approach: A literature search was conducted in three electronic databases (PubMed, Scopus, and SpringerLink) using relevant keywords in order to obtain various format, students roles, recruitment system, impact, and recommendation of student engagement in CD. Literature search vielded a total of 2574 articles, which were reduced following duplicate removal, title and abstract screening, and full-text review were performed as a part of the filtering procedure. Finally, 15 articles were included. All 15 articles were subjected to further review where the comprehensiveness of information in each article was categorized using Pollock classification criteria and data was extracted based on the important components of student engagement (role, format, recruitment methods, impacts and recommendations).

#### Findings:

Various students' roles and formats of student engagement in CD were reported, including a formal structure (e.g., curriculum committee membership) and an informal structure (e.g., provision of feedback toward the curriculum). Most student representatives in CD underwent selection processes, while few were directly appointed by medical schools in accordance with certain criteria. Student engagement in CD positively influenced myriad aspects of medical education (i.e.: students' learning, faculty collaboration, institutional culture). Recommendations of student engagement in CD consisted of the urge for medical schools to provide various formalized opportunities of student engagement in CD using different methods, formats, and structures. Insights: identified various formats, roles of students, recruitment. systems, and significant impacts of student engagement in CD. Expanding further studies in different medical education settings is strongly recommended.

#### Take-Home Message:

This study succeeded in demonstrating various institutions' experiences in establishing student engagement frameworks in curriculum development. Student engagement in CD is fundamentally required since nurturing the relationship between stakeholders in medical schools has many critical implications for the advancement of medical educational components, especially with students as a primary stakeholder in medical education. Accordingly, medical schools are expected to be more connected to students, manage such negative ideation of student involvement, and provide opportunities for students to be engaged in curricular activities. Since the scope of student engagement in CD-related research remains limited. further studies from other settings/contexts/countries are needed. We cannot conclude on the best framework of student engagement in CD that promotes the most beneficial impacts. Thus, we urge future studies to further investigate which approach has the most beneficial impact through a systematic review. Our study also did not explore student engagement during the COVID-19 pandemic, an era where the

relationship between medical schools and students emerges as critical owing to the dynamic shifting affecting the educational process. Accordingly, it is essential to better understand the circumstances of how the COVID-19 pandemic can affect the recent and future formats of student engagement in CD. Despite its significance, this study has other limitations, including the possibility that some other relevant articles may not have been included, although we attempted to be as exhaustive as possible during the study selection process..

## **Curriculum Design**

## ABSTRACT ID: EPO-CUD01

Exploring the Experiences of Year 3 Undergraduate Medical Students and Medical College Faculty Regarding the Bench to Bedside Module: Mixed Method Study at Private Medical College in Pakistan.

Amber Sultan, Rahila Ali, Inam Pal, Saira Fatima, Sadaf Khan. The Aga Khan University, Pakistan

#### Background:

Bench to bedside module was first implemented in year 2021 for Year 3 medical students. After completion of the module in 2022 and subsequently in 2023, a need for formal evaluation was identified. Objectives: To explore the experiences of Year 3 undergraduate medical students regarding the newly introduced B2B module they had attended. To explore the experiences of facilitators who had conducted 1-2 sessions.

#### Methods:

Online questionnaire (Goggle form) was circulated via email to all the year 3 students. Faculty members who taught in the module were identified and contacted for their participation in the study. Two, one hour focus group discussion (FGD)sessions were conducted with medical college faculty. Study Design: Mixed method exploratory study Study Context and duration: The Aga khan University. 2022-2023. Sampling: Purposive sampling Study Population: Class of 2024 (Hybrid) and 2025 (physical sessions) students who filled in the questionnaire and consented to take part in the study were included. Two faculty members from each discipline who facilitated at least one-two sessions were invited to participate for one-hour (FGD).

#### **Results:**

Quantitative: A higher proportion of participants (60.4%) taught through hybrid (group 1) agreed that virtual learning environment was conducive for learning versus 45% of the participants taught through physical sessions (group 2), however the difference was not statistically significant at p value of < 0.05. Similarly, 71.70% of the students in group 1 believed that the face-to-face sessions helped in gaining new knowledge versus 60.40% of the students in group 2 (p >0.05). Qualitative: The focus group discussion sessions revealed that the students were engaged during the physical sessions as compared to the online sessions. Different technological tools were used to engage students. Resources such as space allocated for the session should be appropriate to get maximum engagement.

#### Conclusion:

There was no major difference in both the groups taught through hybrid versus in person sessions.

#### Take-Home Message:

We recommend that students can be taught through hybrid as this would save multiple resources required for in person teaching. However, there is a need to identify and incorporate innovative engaging strategies to keep the learners motivated, engaged during online sessions and to provide a conducive learning environment for effective learning.

## ABSTRACT ID: EPF-CUD03

Coping Mechanisms for Work-Related Stress for House Officers Posted to The Internal Medicine Posting at a Tertiary Hospital in Malaysia

#### Tan Guo Jeng, Terence Ong Ing Wei, Lam Chee Loong, Sahira Jabeen, Kirthana Krisnamurthi Universiti Malaya, Malaysia

#### Background:

Traditional medical curricula focuses mostly on basic science and clinical skills. As a result, students may lack skills on how to cope with the transition to a clinical workplace. Therefore this study aimed to explore coping mechanisms for House Officers in dealing with work-related stress in the internal medicine posting.

#### Methods:

Qualitative semi-structured interviews were conducted with n=15 house officers using a topic guide to explore coping mechanisms used to handle work-related stress. Interviews were audio-recorded, transcribed verbatim and analysed thematically.

#### Results:

A total of 15 house officers participated (female=12, age range 24-26 years old). Their coping mechanisms consisted of 1) Seeking professional and interpersonal help (asking specialists; cooperation with colleagues/ peers at work; support from partners, family or friends), 2) Growing, Personal Improvement, and Learning: Learning From Experience, Not bring Problems Home, learning from senior house officers, autodidact (teaching ownself), learning the job requirement, willingness to learn). 3)Positive personal care (day off, exercise/ hobbies, journaling, positive thinking, sleep, gratefulness and gratitude, personal responsibility, positive self-motivation, selfreflection, 4) Escapism (alcohol, avoidance, sing happy songs, just doing the minimum reauired

#### Conclusion:

While most students employed positive coping skills, some had worrying self-destructive strategies. Medical education providers should formally expose students to positive coping strategies in order to help them avoid adoption of self-destructive coping strategies which may retard career progression.

#### Take-Home Message:

We must teach student how to manage stress.

### ABSTRACT ID: EPF-CUD04

#### Understanding Stakeholder Perspectives on a Community Track Curriculum: Implications for Improvement

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Woraprach Supphaphat<sup>1</sup>, Nimmit Wongwaipanich<sup>1</sup>, Thacha Pithayapibulpong<sup>1</sup>, Sirilak Wongchaisuriya<sup>2</sup>, Wasana Hongkan<sup>3</sup>, Danai Wangsaturaka<sup>1</sup> <sup>1</sup>Faculty of Medicine, Chulalongkorn University, Thailand <sup>2</sup>Phrapokklap Hospital Education Center, Thailand

<sup>2</sup>Phrapokklap Hospital Education Center, Thailand <sup>3</sup>Chonburi Hospital Education Center, Thailand.

#### Background:

In 1978, the Faculty of Medicine at Chulalongkorn University initiated the "Medical Education for Students in Rural Area Project (MESRAP)" to promote equity and inclusivity in student selection and to train doctors for rural practice, with a focus on primary health care. This project was later adopted nationwide as the "Collaborative Project to Increase Production of Rural Doctors (CPIRD)" in 1994. As the Faculty of Medicine plans to introduce the new 2024 undergraduate curriculum, a needs analysis was conducted involving key stakeholders in its community track.

#### Method:

A mixed-method study was conducted, employing both a closed-ended questionnaire administered to current clinical students and teachers in the community track, as well as in-depth interviews involving purposively selected teachers and graduates from the community track.

#### **Results:**

In response to the question of whether the curriculum outcomes of the community track should be distinct from those of the regular track, 72% of teachers agreed, whereas student opinions were divided, with 39% in agreement and 39% in disagreement. Likewise, 72% of teachers supported the incorporation of a course aimed at promoting early community exposure during Years 1-3, while only 19% of clinical students expressed agreement with this idea. The in-depth interviews highlighted teachers' concerns regarding student attitudes in the community track, with many students' attitudes not aligning with the program's philosophy. Teachers stressed the significance of cultivating appropriate attitudes from early years, while graduates had varying opinions on the intervention's effectiveness.

#### Conclusion:

Mixed perceptions among teachers, graduates, and students regarding the community track curriculum are understandable after years of implementation. Empathetic communication and effective interventions are crucial for promoting positive mindsets. Continuous evaluation and improvement are recommended, along with informing potential candidates about track expectations.

#### Take-Home Message:

Over the course of several years, it is common for perceptions of a curriculum to evolve and deviate from its original objectives. Therefore, regular and thorough evaluation is of utmost importance to identify and address issues in a timely manner.

## ABSTRACT ID: EPF-CUD07

#### Beyond the Classroom: Empowering Undergraduate Medical Students for Future Success

Ramya Rathan, Farah Azhar Gulf Medical University, UAE

#### Background:

Clinical practitioners should become lifelong learners, to meet the needs of the everchanging landscape of today's health care. Professional bodies such as the ACGME have identified Lifelong learning skills as a core competency in health professions. Despite several recommendations to establish competent Lifelong physicians, there is no universally accepted theory to foster and assess these critical yet neglected skills in junior medical students. The present study will help to fill this gap by sharing an experience of developing, implementing, and assessing Lifelong skills for early medical students.

#### Methodology:

A dedicated 'Medical Education: Lifelong Learning' course was introduced in the curriculum. The course content included seven key themes: communication skills, reflective writing, literature search, appreciative inquiry, time management, self-directed learning, and concept mapping. Sessions were carefully planned based on studentcentred pedagogy.

#### **Results:**

The results highlighted that the Lifelong Learning Course has facilitated the transferability of learned skills from this course to other areas of learning. The percentage of respondents to the questionnaire was around 80%. Overall, the Likert scale results were encouraging. 93.7 %of the students felt that the course was well organized, and 93.5% felt that the course learning outcomes
were achievable. When analyzing the openended responses, students appreciated its real-life applications and how this course has implications for other courses and aspects of learning.

## Conclusion:

This study will form a starting point in developing global standards for the practical implementation of Lifelong skills in junior medical students. Only when equipped with lifelong learning skills medical students will be able to adapt to the changing face of health care. Ingrained with these skills, future doctors will learn to adapt to evidence-based changes in knowledge and practice. This will ultimately translate to better patient care.

#### Take-Home Message:

This study will form a starting point in developing global standards for practical implementation of Lifelong skills in junior medical students. Medical students, only when equipped with lifelong learning skills, will adapt to the changing face of health care. Ingrained with these skills, future doctors will learn to adapt themselves to evidence based changes in knowledge and practice. This will ultimately translate to better patient care.

## Student Assessment

## ABSTRACT ID: EPO-SAS02

Improving Learning Effect of Remedial Education by One-To-One Instruction With Watching Video of Trainees Themselves.

Yu-Shan Su, Chia-Hung Chen, Li-Chen Chang, Yu-Hsuan Hou, Yung-Chi Cheng, Chao- Yu Hsu Ditmanson Medical Foundation Chia-Yi Christian Hospital, Taiwan.

## Background:

Remedial education is used to improve student outcomes by reteaching previously taught knowledge or skill. We conducted an investigation into how remedial education improves the learning effect.

#### Methods:

Objective Structured Clinical Examinations (OSCEs) were conducted for junior staff members in the division of respiratory therapy. Video was recorded during OSCE from beginning to end. In the station pertaining to "communication and health education," two participants did not pass. Following the OSCE, remedial teaching took place a few days later, consisting of one-on-one instruction where trainees reviewed videos of themselves. The junior staff who underwent remedial education were given the option to participate in an interview with the researcher and were only interviewed if they agreed. Qualitative analysis was conducted on the interviews' content.

#### **Results:**

The two junior staff agreed to be interviewed after remedial education. The interviewer spent 15 minutes with each person during the interview. The qualitative analysis revealed that the learning effect of remedial education can be improved through one-to-one instruction combined with video feedback that allows students to better understand the learning objectives. Furthermore, this approach facilitates twoway communication between teacher and student, enabling them to identify and prioritize the student's personal learning goals for future learning.

## Conclusion:

The learning outcomes of remedial education can be enhanced by incorporating one-to-one instruction and video analysis, as this approach allows trainees to better comprehend and internalize the learning objectives. Moreover, this method can also aid in identifying the student's individual learning goals for future learning. We should actively promote this method.

#### Take-Home Message:

The learning outcomes of remedial education can be enhanced by incorporating one-to-one instruction and video analysis, as this approach allows trainees to better comprehend and internalize the learning objectives. This method can also aid in identifying the student's individual learning goals for future learning.

## ABSTRACT ID: EPO-SAS04

## Exploring Medical Students' Perceptions and Effectiveness of Two Modalities for Readiness Assurance Test in Team-Based Learning

Nisha Shantakumari, Lisha Jenny John Ajman University, College of Medicine, UAE

#### Background:

TBL has evolved as both a learning and student assessment tool. Validity, students'

preferred learning method, and student satisfaction are the three pillars of an effective evaluation tool. At our medical school, Audience Response Solutions (ARS) and computer-based testing (CBT) are used for iRAT (individual readiness assurance test) TBL sessions. To ascertain ideal assessment tool between these two modalities, we explored the students' attitudes towards the use of ARS versus CBT in iRAT and compared the scores for both modalities.

## Methods:

A quantitative study design using questionnaires explored attitudes of medical students at Ajman University about the two methods. The questionnaire included items assessing the effectiveness of the modalities in terms of student learning, feasibility, efficiency and test features. Comparisons were drawn between student's preferred modality and their scores with respective iRAT modality.

## **Results:**

Majority of the students preferred iRAT sessions with ARS. There were no significant differences in terms of efficiency, student learning, and test features of both modalities of TBL. In terms of feasibility, the majority of students gave slightly higher scores for CBT (5.16±2.02) than ARS (3.87±2.09) for iRAT sessions. It was observed that the Year 3 students had significantly better scores than year 2 students when using ARS (H (2) = 47.81, p<.001). CBT was preferred over ARS by a greater proportion of high achievers (47%) than low achievers (25%). The most frequently cited advantage of CBT over ARS was its ability to avoid cheating.

## Conclusion:

The findings indicate students' preferred modality and satisfaction were comparable with both ARS and CBT. CBT was however perceived to be more valid tool of assessment as it was more equitable and effective in preventing cheating instances. This implication is informative for standards in pedagogy and assessment.

#### Take-Home Message:

Validity, students' preferred learning method, and student satisfaction are the three pillars of an effective evaluation tool. ARS and CBT are effective assessment tools in TBL sessions aligning with assessment pillars of student preferred learning modality and satisfaction. CBT is better in terms of validity and reliability as it was perceived to be more equitable and measures the true knowledge of the students by reducing instances of cheating.

## ABSTRACT ID: EPF-SAS09

## Undergraduate Medical Students' Perspectives About the Educational Impact of The Objective Structured Clinical Examination

## Mahboobeh Khabaz Mafinezhad<sup>1</sup>, Ehsan Bastan Hagh<sup>1</sup>, Ali Azemati<sup>1</sup>, Ali Norouzi<sup>2</sup>

<sup>1</sup>Tehran University of Medical Sciences, Tehran, Iran <sup>2</sup>Zanjan University of Medical Sciences, Tehran, Iran

## Background:

The impact of assessment on students' learning can be examined in terms of their approach to learning, the depth of learning, and even their time. This study was designed to investigate students' perspectives on the educational impact of the Objective structured clinical examination (OSCE) using a valid and reliable questionnaire.

## Method:

A cross-sectional survey was conducted using a valid 21-item questionnaire. The questionnaire consisted of two parts, including demographic data and influencing factors affecting students' attitudes towards the educational impact of the OSCE using a 5-point Likert scale. A literature review and two focus group sessions were employed to generate items. Nine medical students conducted face validity of the questionnaire, and ten experts in the field of medical education and clinical sciences examined the content validity. The reliability was calculated by Cronbach's alpha coefficient (0.91). Finally, the questionnaire was distributed among final-year medical students after participating in the OSCE.

#### **Results:**

Overall, 102 responses were gathered, 48% of them from females. 68.1% of students mentioned that receiving written feedback from examiners at the end of each station helps them learn, 75,5% believed that receiving oral feedback from examiners while attending the OSCE stations helps them learn more. 60.2% of students admitted that reflection on their performance after the OSCE helps them. Only 44.9% of students considered receiving Simulated Patient (SP) feedback effective in their learning. Sixtyseven percent found the experience of being exposed to a SP in the OSCE test to be more effective. Sixty-six percent said that observing patients with similar OSCE scenarios in clinical rotations could effectively remember key test points.

### Conclusion:

Receiving written and oral feedback from examiners helps students learn more from the test; the assessors can consider its form depending on the type and high stakes level of the test.

## Take-Home Message:

Considering the educational impact of the OSCE can help assessors design and implement effective tests.

# Partnership With Community

ABSTRACT ID: EPO-PAC01

## A Phenomenological Study On Identity Challenges Of Medical Students With Physical Disabilities

## Mikio Hayashi

Kansai Medical University, Japan.

## Background:

In recent years, medical universities have recognised the need to accommodate medical students with physical disabilities. However, they are experiencing difficulties in providing for the students' individual needs. While 'professional identities' has received significant attention, this study explored the identity challenges faced by medical students with physical disabilities using the figured worlds theory. Figured worlds are 'socially and culturally constructed realms of interpretation in which particular characters and actors are recognised'. The following research question was formulated for this study: How do medical students with physical disabilities construct their own identities through their experiences?

## Method:

Face-to-face, semi-structured phenomenological interviews of six medical students with physical disabilities were conducted at a private medical university in Japan to clarify their perspectives on their identity challenges. Data was analysed using thematic analysis from a social constructivism paradigm.

## **Results:**

The following three themes were found regarding the identity challenges of medical students with physical disabilities: 'difficulty in transition process for clinical clerkship', 'reluctance to disclose their condition', and 'expectations of a student-centred approach'. The participants were concerned that health professionals would be prejudiced towards their physical disabilities during the clinical clerkship, and about personal information spreading to other health professionals and its impact on their future careers. Nevertheless, they felt that their physical disabilities would be useful for future patient care, and they wanted their faculty members to fully understand these characteristics.

## Conclusion:

The findings suggest that medical students with physical disabilities face difficulties through experiences, transitions, and future career plans more than faculty members assume. Therefore, building a good relationship between medical students and faculty members would encourage selfdisclosure through a foundation of trust. Additionally, an environment that allows the faculty members to take advantage of such students' characteristics should be created.

## Take-Home Message:

Medical students with physical disabilities want individualised assistance from faculty members and administrators whenever needed, and an educational environment that makes it easy for them to seek advice should be created.

## ABSTRACT ID: EPF-PAC02

## Community-Informed Cultural Competency for Medical Students In The North-West Of Northern Ireland

## **Clare Puddifoot**

Ulster University, United Kingdom

## Background:

Overwhelming evidence suggests that those from marginalized groups in Northern

Ireland suffer poorer health outcomes and reduced life expectancy (Bunting et al., 2018, Department of Health, 2023, McNeill et al., 2020, Northern Ireland Affairs Committee, 2022). An array of factors contribute to these inequalities, including the attitudes, professional behaviours and discrimination by healthcare staff (Wise, 2022). Educating medical practitioners in cultural differences and health inequity is an established approach to enhancing professional attitudes and behaviours (Kaihlanen,2019). However, this cultural curriculum needs to be responsive to the needs of the local population.

In order to address this differential in the healthcare experience, we needed to establish the health priorities and concerns of marginalized groups in our communities.

### Objective:

In this research project we ask our local community what a culturally competent doctor would look like to them.

#### Method:

This is an observational study using qualitative methods. Snowball sampling was used to recruit community organisations representing marginalized groups to the research study. Representatives from organizations were asked to join semi-structured focus groups. Reflective thematic analysis (Braun and Clark, 2006) was used to analyse focus group data.

#### **Results:**

Increasing cultural education is a priority of the governing bodies in medical education in the UK (GM The General Medical Council, The Medical School Council). However, the design of a sustainable and effective cultural competency programme requires input from key stakeholders and should be tailored to individual and organisational contexts. In this research study we identified themes of equality, diversity and inclusion that are priorities to our local population; including communication, access to healthcare and discrimination. The results from this study provide evidence upon which learning objectives for our a cultural curriculum for our new Medical school in Northern Ireland.

#### Take-Home Message:

In this research project we will ask our local community what a culturally competent doctor would mean to them.

## **Faculty Development**

## ABSTRACT ID: EPO-FDE01

Communication Skill Can Be Improved By Using Balint Group – From The Perspective Of Respiratory Therapist Instructors

Yu-Shan Su, Chia-Hung Chen, Li-Chen Chang, Yu-Hsuan Hou, Yung-Chi Chen, Chao-Yu Hsu. Ditmanson Medical Foundation Chia-Yi Christian Hospital, Taiwan

## Background:

Although the Balint group has been utilized by physicians for a considerable time, it is not a commonly employed approach among other medical personnel. We utilized the Balint group to improve the resilience and communication skills for respiratory therapist instructors.

## Methods:

The Balint group took place on January 4, 2023. This was the first time the Balint group was used in the department of Respiratory Therapy. All respiratory therapist instructors in the department were invited. The meeting was organized and hosted by a senior medical educator. An instructor was selected to present a personal unpleasant healthcare experience during meeting. After the meeting, interviews were conducted with instructors who agreed to participate. The verbatim transcripts of the interviews were used for the qualitative study.

#### **Results:**

Nine instructors attended the Balint group, and all of them agreed to be interviewed. The interview lasted for half an hour. The instructors considered that communication skills could be enhanced through Balint group training, as participants learn to listen actively (avoiding limitations to their own ideas) and practice empathy (thinking from the perspective of each role by standing in their position). In addition, selfdisclosure (the act of expressing one's thoughts and feelings) can be revealed.

## Conclusion:

The respiratory therapist instructors considered that the Balint group can be used to develop effective communication skills through listening, empathy and selfdisclosure. Balint group is valuable not only for developing resilience but also for improving communication skills.

## Take-Home Message:

The respiratory therapist instructors considered that the Balint group can be used to develop effective communication skills through listening, empathy and selfdisclosure. Balint group is valuable not only for developing resilience but also for improving communication skills.

## ABSTRACT ID: EPF-FDE03

## The Perception of Medical Students on the Mentoring Relationship in Faculty of Medicine, Universiti Teknologi MARA (UiTM)

Nurul Alimah Abdul Nasir, Mark Tan Kiak Min, Nasibah Azme, Ahmad Nazrun Shuid Universiti Teknologi MARA, Malaysia.

## Background:

Mentoring programme has been reported to be beneficial by both mentors as well as mentees. Some of the benefits of mentoring described in the literature include improvement in clinical training or knowledge, academic performance, and professional and personal development. In addition, mentees are also able to obtain better career guidance as well as increase their social or career networking by participating in a mentoring programme. Therefore, the aim of this study is to assess the perception of medical students on the mentoring relationship.

#### Method:

A validated Perceptions of Mentoring Relationships Survey (PMRS) questionnaire was distributed among Year 3 to Year 5 undergraduate medical students through an online survey form using Google Forms. The questionnaire contains 16 items which determine level of satisfaction with the mentoring relationship and role of the mentor using Likert scale from 1 (strongly disagree) to 5 (strongly agree).

#### **Results:**

A total of 198 students responded to the questionnaire. The mean score for all the 16-item in the questionnaire was 3.63 + 0.10. Among all the items, the item with highest mean score (3.87 +1.00) was for the item that assess the role of the mentor as a good teacher. Whereas the item with lowest mean score (3.44 +1.06) was for the item that assess whether the mentoring relationship provide psychological support when they needed it.

## Conclusion:

Undergraduate medical students, who are the mentees, have good perception on the mentoring relationship and role of the mentor. Further research is needed to assess the perception from the point-of-view of the mentors. Factors that contribute to effective mentoring relationship should also be explored.

## Take-Home Message:

Medical students have good perception on the mentoring relationship and role of the mentor in Faculty of Medicine UiTM.

## Leadership

## ABSTRACT ID: EPF-LED02

## Designing a CIPP-based Multi-Dimensional Evaluation System for the 24<sup>th</sup> Iranian Conference on Health Professions Education

## Maryam Alizadeh<sup>1</sup>,

Mahboobe Mafi Nezhad<sup>1</sup>, Ali Norouzi<sup>2</sup> <sup>1</sup>Tehran University of Medical Sciences, Iran <sup>2</sup>Zanjan University of Medical Sciences, Iran

## Introduction:

The Iranian Conference on Health Professions Education (ICHPE) is one of the most prestigious scientific events in Iran, which has been held annually by the Ministry of Health and Medical Education since 1994. One of the main concerns of the organizers of this scientific event is to evaluate its impacts. Therefore, the conference organizing team decided to design and implement a credible multi-dimensional evaluation system in the 24th round of the conference.

## Method:

The CIPP model was used to design this evaluation system. In the phase 1 (Context), the implementation method and the results of previous conference evaluations were reviewed. In the phases 2 (input), an executive guideline was developed. In the phase 3 (process), a 21-member team of medical education specialists attended all conference events and provide participants with a link to the conference evaluation. In addition, they conducted qualitative interviews with experts of medical education on the topic of conference evaluation. In the phase 4 (product), the evaluation report was prepared based on the collected data, and the results were published.

#### **Results:**

The active presence of evaluators in all conference events and the on-site collection of quantitative data led to a significant increase in response rates in completing evaluation tools. This also contributed to the validity and reliability of the data. The collection of qualitative data also led to a deeper exploration of the hidden aspects of the conference by stakeholders, and more accurate and detailed information was collected about these aspects. The use of online platforms also accelerated the collection, analysis, and summarization of the final report, which was well-received by the tool completers.

#### Conclusion:

Designing a multi-dimensional evaluation system for large-scale and international conferences can provide credible results on the quality of conference organization for stakeholders and beneficiaries.

#### Take-Home Message:

Designing a multi-dimensional evaluation system for large-scale and international conferences can provide credible results on the quality of conference organization for stakeholders and beneficiaries.



# IMU-RHIME ABSTRACTS

## ABSTRACT ID: RHIME001-TAL

## Students' Voices to Improve the Development of Virtual Medical Nutrition Therapy Clinics

Seong Ting Chen, Charmaine Lavinia A/P Alphonso Augustin Amb, Jamilah Binti Abd Jamil, Winnie Siew Swee Chee International Medical University, Malaysia.

#### Background:

Virtual Medical Nutrition Therapy Clinics (VMNTCs) were first developed in 2021 to support dietetics students' self-directed learning as preparation for clinical training. To date, the IMU Nutrition and Dietetics division has developed five VMNTCs (obesity, cardiovascular disease, neurological issues, chronic kidney disease, pressure ulcer and malnutrition). Each VMNTC was attempted approximately 180 times by 171 students. Initial overall average evaluation score was good at 3.7 over 4.0. The objective of this study is to explore the students' views and engage the students' opinions to improve future VMNTCs development. The rationale of this study is to include students who are the end-users in development of this digital education tool. Moreover, students' views can offer a diverse perspective besides the faculty's, to improve the quality of educational tool and outcomes. Students have control over how they want to learn in the most effective manner.

#### Description of Innovation:

VMNTCs is an innovative method to facilitate experiential learning by allowing a flexible and safe learning environment to enhance students' preparedness to clinical training. Inclusion of students to co-create VMNTCs, an educational tool, is a novel and current approach that enhances capacity building. The implementation of their suggestions can increase upcoming student users' motivation and engagement in using this tool for learning.

## Methods:

We adopted the qualitative approach and purposive sampling method to select 10 final year dietetics students. We conducted structured interviews to obtain students' opinions on layout, design, and userfriendliness of the VMNTCs. Suggestions to improve the technical features were gathered. Students also described their major learning points and the translation of that learning into clinical practice.

## **Results of Evaluation:**

All students revealed that the VMNTCs layouts are wellorganized, the platform is easy to navigate and user-friendly. The case scenarios resembled real-life situations which made them 'involved' in the case management. Students commended that the inclusion of various resources- knowledge self-test, answer commentaries and multiple attempts feature supported their learning. The main feedback for improvement was on the Al generated robotic and monotonous conversation, more details are needed in the pictures showing nutrition assessment, inclusion of a video progress bar for navigation at their own learning pace.

#### Discussion:

Students recorded the major learning points from the VMNTCs are individualized nutrition management, effective dietitian-patient communication, a safe experiential learning approach to prepare students with no prior experience to begin clinical internship. To incorporate students' suggestions, we implemented enhancement features such as using human voice-over for dietitian-patientcaregiver dialogue and video recording to show physical examinations in the new VMNTCs development. Development of VMNTCs is resource and cost efficient, it maximizes current available resources in IMU (the students, faculty, E-learn graphic team) and with no additional cost incurred for special software or expertise.

## Conclusion:

Overall, the VMNTCs are well perceived and useful to support students' learning. It is an impactful project as we adopt students' voices, we engage them in education development emphasizing educators-learners working together to produce quality education tool that benefit learners."

## Take Home Message:

- Virtual Medical Nutrition Therapy Clinics (VMNTCs) is an innovative method to facilitate experiential learning by allowing a flexible and safe learning environment to enhance dietetics students' preparedness to clinical training.
- 2) Inclusion of students to co-create VMNTCs, an educational tool, is a novel and current approach that enhances capacity building. The implementation of their suggestions can increase upcoming student users' motivation and engagement in using this tool for learning.

## ABSTRACT ID: RHIME002-SEM

Technology-Enhanced Peer Role-Play: An Effective Teaching Method Empowering Students for Active Learning

Mohammad Arshad Ikram, Nilesh Kumar Mitra, Aida Lina. International Medical University, Malaysia.

#### Background:

The International Medical University introduced a virtual platform for teaching when access to the clinical environment was limited during the pandemic. Clinical cases were prepared using e-Learning tools like Articulate Storyline 360 or Vyond. Peer role-play (PRP) is a simulation-based teaching method that actively engages students in scenarios by assigning specific roles. When combined with technology, PRP becomes a powerful educational tool that enables students for active clinical learning. The conceptual framework was developed based on Kolb's Experiential Learning Cycle, encompassing the four steps of experiential learning: experience, reflect, think, and act. The objective of this study was to evaluate the effectiveness of the virtual PRP simulationbased teaching method as an adjunct for clinical learning among medical students.

## Description of the Innovation:

Peer role-playing is recognized as an educational method of learning. If included in virtual medical clinic cases, it promotes reflection and insight for students in the patient and clinician roles, as well as for peers observing the recorded video at the IMU e-portal.

## Methodology:

A simulated scenario was created, involving a motor vehicle accident resulting in traumatic dislocation of the hip in a young adult. Fourth-year medical students participated in this simulation, assuming the roles of Emergency Room doctors and a simulated patient. They actively engaged in history taking, physical examination, and the various steps of management. A complete interactive virtual video-based case with quizzes was incorporated into the curriculum through the e-Learning portal. The effectiveness of this teaching method was determined by the feedback from students using a questionnaire.

## **Results of Evaluation:**

A total of 141 fourth-year medical undergraduates participated in the survey. The survey used a 5-point Likert scale to measure the respondents' perception of virtual PRP for innovative clinical learning. The questionnaire showed good internal consistency (Cronbach's alpha = 0.932). The item with the highest mean score was Item 9 (M = 4.81, SD = .472), suggesting that most undergraduates prefer interactive quizzes that deepen their understanding of the case. The modality is considered a useful instrument to improve their learning, according to the secondhighest preference (M = 4.81; SD = .492). The students also expressed a preference for revisiting the case at their convenience to enhance their clinical skills, which was the third most popular response (M = 4.78; SD = .587).

#### Discussion:

Student PRP is a novel modality of virtual teaching that can be an effective educational method providing a positive learning experience. It empowers students and allows them to develop confidence in their ability to handle difficult clinical situations, make decisions, and communicate with patients. It also provides positive learning for peers observing the recorded video at the IMU e-portal.

## Conclusion:

Peer role-play is a novel modality of virtual teaching that engages students and provides them insight into case-based learning. It empowers students by allowing them to actively participate in the learning process, develop confidence in their ability to handle difficult clinical situations, make decisions, and communicate with patients and their families

#### Take Home Message:

Student Peer role-play is an engaging and effective tool for virtual learning that provides opportunities for reflection and self-evaluation. It enhances collaboration and problemsolving skills among students.

## ABSTRACT ID: RHIME003-TAL

Engaging Students as Partners to Designing a New Cardiovascular Physiology Practical - Innovative Repurposing of An Open-Source Simulation

## Enoch Chan

School of Clinical Medicine, Hong Kong University, Hong Kong.

## Background:

Computer simulations of physiological experiments have long been available and are often delivered in computer labs. However, monitoring and sustaining students' engagement in such setting remain challenging. Moreover, some traditional basic science practicals are perceived by students to be irrelevant to clinical practice (Goyal et al., 2017; Lata & Walia, 2010), which is detrimental to their motivation to learn (Kember et al., 2008). As such, it is imperative to ensure that physiology practicals are fit for purpose for health professionals students.

## Description of the Innovation:

This 3-hour practical adopted an open-source simulation of rat cardiovascular system (RatCVS) developed by John Dempster. Department of Physiology and Pharmacology, University of Strathclyde. The simulation was deployed in several 50-inch touchscreen computers, each shared by a group of 10 to 11 students. The practical class started with a briefing and demonstration by the teacher. Then the students' performing pre-set experiments with a step-to-step protocol and questions that guide their data interpretation. Afterwards, the teacher introduced general ways to design pharmacological experiments, and then asked the students investigate how to control blood pressure for a patient with pheochromocytoma. The students designed their own experiments and submitted their

findings online, and the teacher gave feedback accordingly.

## Method:

During summer 2022, I (the teacher) partnered with three first-year medical students to design the practical class. We first identified key concepts to cover and drafted the practical manual, and then recruited additional students for a test run. Feedback were collected from the student testers to refine the design. This practical class was formally taught to first-year medical students in February 2023. It was evaluated using an online survey adapted from validated instruments for evaluating situational motivation (Guay et al., 2000) and perceived usefulness of the learning activity (Herbert et al., 2017).

## **Results of Evaluation:**

A total of 317 surveys was disseminated, and 57 valid responses were received (response rate=17.98%). For situational motivation (7-point Likert scale), the mean scores ( $\pm$ SD) for intrinsic motivation (IM), identified regulation (IR), external regulation (ER) and amotivation (AM) were 5.1 ( $\pm$ 1.1), 5.5 ( $\pm$ 0.9), 4.5 ( $\pm$ 1.1) and 2.8 ( $\pm$ 1.1), respectively.

When asked to self-rate their understanding of the topic before and after the activity in a score out of 10, the mean score ( $\pm$  SD) before the activity was 4.9 ( $\pm$ 1.6), and after the activity was 7.0 ( $\pm$ 1.5). The increment was statistically significant (p < 0.001).

This practical class was observed by an experienced pharmacology teacher, who felt using large touchscreens made it easier for teachers to observe students' progress compared to the traditional computer lab setting.

## Discussion:

The evaluation results shows good selfmotivation amongst the survey respondents, indicated by high mean scores in IM and IR, and low mean score in AM. The activity also improved students' perceived understanding of the topic. Moreover, there was also no additional cost involved in repurposing an open-source simulation package already owned by the Faculty. Therefore, similar student-teacher partnership has great potential for learning enhancement. "

## Take Home Message:

Involving students as partners from the first stage of learning design is helpful for ensuring an activity is fit for purpose. Experience of using old simulation packages can be greatly enhanced by using new hardware.

## ABSTRACT ID: RHIME004-TAL

## A Trial of the Patient Problembased Interprofessional Interaction Model as An Interprofessional Learning Method in the Community

## Dwi Tyastuti, Dianidya Kumandang Sari, Luluk Hermawat, Fitria Mahrunnisa.

Universitas Islam Negeri Syarif Hidayatullah, Indonesia

## Background:

During the implementation of interprofessional learning (IPL), students and facilitators express question upon realising that not all health problems influencing patients and the community are related to the profession's competence. This is occasionally the cause of the emergence of a conflict. The purpose of this study is to evaluate the model of "patient problem-based interprofessional interaction" as an interprofessional learning strategy for situations requiring professionspecific competencies to address patient and community problems.

#### Methods:

This is a mixed-methods investigation into the model's application. In September 2022, 240 students at the Palu Health Polytechnic were divided into four profession-specific small groups: midwifery, nursing, nutrition, and environmental sanitation.

The model of ""patient problem-based interprofessional interaction"" has five types of interaction models where the interaction model results from each group member's reflections on a given case and is then linked to the professional skills possessed by each professional student during the interaction: (1) All group members stated a case was consistent with their professional competence; (2) the case was unrelated to all group members' competence: (3) only one profession stated a case was inconsistent with his or her competence: (4) at least two group members stated a case was related to their profession; and (5) only one member stated a case was related to professional authority.

The detailed steps for implementing the model are as follows: First, each group of students visits a family with health problems. Students conducted home visits to collect data through interviews and direct observation. Data collection uses the form of family folder (we called as "berkas keluarga"). After data collection is deemed sufficient, students conduct self-reflection in groups to assess how far the case is in accordance with the role and authority of their profession. There are five possible interaction models that can be found when a team of students is given a case or topic in an interprofessional activity in the community. Second, when student groups think that their group fits the ""1"" model, the facilitator will direct students to explain the role and authority of their profession in this case. In addition, the facilitator will also ask students how to apply the IPE domain in groups so that group work can run well. Third, referring to the chosen model, student groups will develop problem-solving strategies according to the case and the role and authority of the profession they have. Furthermore lecturers who act as facilitators or tutors also adapt to this model.

## **Results:**

There was a statistically significant difference between the mean scores before and after two weeks of community practise (t = -3.98, df = 237, p =.001) for the 238 students who were able to fully participate in the activities (df = 237, p =.001). This model's qualitative evaluation yielded favourable results.

## Conclusion:

The learning strategy to comprehend interprofessional collaboration by building the model of "patient problem-based interprofessional interaction" is effective, easy to comprehend, and facilitates problemsolving when interacting with individuals from different professions.

## Take Home Message

The development of this model was initiated by the existence of concrete evidence during interprofessional learning activities both in the classroom and in the field (both in the community or hospital). The evidence in question is when various professional groups in solving health problems in patients and the community find that not all health problems found in groups include the authority of a profession. In this condition, questions arise such as what my role in the group is when the patient's problem is not under the authority of my profession. The learning strategy to understand the concept of interprofessional collaboration by developing the model of "patient problem-based interprofessional interaction" shows positive results and there are significant differences before and after practice in the community. Students give a positive response to this model because it is quite easy to understand in interacting when dealing with different professions and makes it easier to solve problems.

# APA-PHS (PBL) ORAL PRESENTATION

## ABSTRACT ID: APA-001

## Online vs Real life, Is There Any Difference?

## Chong Yeong Xing

Monash University Malaysia, Malaysia

With the ongoing digitalisation of our syllabi, many aspects are brought into consideration. Problem-Based Learning (PBL) was introduced to provide a student centred pedagogy, encouraging group discussions and recapitulating previous and upcoming lectures. This synopsis will be highlighting the merits and demerits through the lens of a student.

Difficulty engaging students with the material is most prevalent. The novel method poses challenges to students, expecting them to learn new functionality and effectively translate these into their new pedagogical setting. Furthermore, students find it difficult to gauge when to pose questions without visual cues. The absence of face-to-face conversations further accentuates the disengagement during discussions. Additionally, users may face technical difficulties such as WIFI problems. Attributing to inadequate student contributions as they lack time, interest and motivation, therefore, burdening facilitators with more work in relation to physical sessions.

On the contrary, the reduction of travel time, increases in flexibility and accessibility brings about great convenience of digital PBL. During online sessions, students have the ability to extract relevant information from multiple sources to share without disrupting the flow. Recorded online sessions allow for easier PBL management compared to face-to-face. Facilitators are capable of using learning outcomes to remind students and keep track of their progress. Chairs can facilitate students to talk at appropriate times to avoid disrupting others, aiding in the focus of the Scribes on the discussion.

Conclusively, through comprehensive reviews of opinions by students and facilitators this abstract managed to highlight Digital PBL's significant impact on our syllabus.

## Take Home Message:

After exploring these aspects, technical issues, lack of engagement and proper educational resources were highlighted. The first recommendation is ensuring reliable high speed internet connection. Furthermore, videos and graphics can be used to relate topics and increase students' curiosity. Despite this, it is also important to be adept with digital PBL to prevent further disengagement. Therefore, orientation for both facilitators and students to understand the importance of PBL would be helpful.

## ABSTRACT ID:

## Design and Development of An Interprofessional PPD Module for Preclinical Healthcare Students

## Jegathambigai Rameshwar Naidu, Ciraj Ali Mohammed<sup>2</sup>, M Ganesh Kamath<sup>3</sup>, Soumendra Sahoo<sup>3</sup>.

<sup>1</sup>Management and Science University, Malaysia <sup>2</sup>MAHE FAIMER, Manipal, India <sup>3</sup>Manipal University College Malaysia, Malaysia.

#### Introduction:

The main objective of the present study was to develop a personal and professional development (PPD) module by using Interprofessional educational (IPE) approach for preclinical health care students at a Malaysian tertiary university.

#### Materials and Methods:

The study participants included preclinical

medical and dental students. A needs assessment survey was conducted by the administration of the Readiness for Inter-Professional Learning Scale (RIPLS) questionnaire to the participants. A PPD module based on the IPE approach was developed and validated by an IPE team. The Delphi method was used for the validation of the module. Implementation of the module was done by organizing an introductory IPE training for preclinical medical and dental students. Reflective summaries were also collected from the participants Evaluation of the IPE training module was done by using a pre and post-test questionnaire, reflective summaries.

## **Results:**

The results from the needs assessment survey indicated the readiness for IPE by both medical and dental students with a RIPLS score of 4.56 and 4.35 respectively. Evaluation of the IPE training module indicated a significant difference (p<0.01) in the pretest and post test scores of the participants Thematic analysis of reflective summaries from the participants who attended the IPE training indicated the benefits gained by the students in acquiring the knowledge IPE, teamwork, communication skills, leadership skills, ethics, and professionalism.

## **Conclusions:**

Hence evaluation of the PPD module indicated that the health care students gained knowledge in IPE, teamwork, communication skills, leadership skills, ethics and professionalism after the IPE training.

## ABSTRACT ID: APA-003

## Exploring the Gaps in Online Problem-Based-Learning (PBL) in Students' Learning: A Qualitative Study

Krisada Shen Yang Ooi International Medical University, Malaysia

## Introduction:

Online problem-based learning (PBL) has gained prominence as an approach employed in medical education institutions in recent decades. However, despite its widespread adoption, gaps and limitations that hinder students' learning experiences still exist. This qualitative study aims to explore these gaps in online PBL and their impact on students' learning.

## Methods:

A qualitative study using semi-structured one-on-one interviews will be carried out at a single-centre institution (International Medical University) between January 2023 to July 2023, 10 medical students in the preclinical years (Year 1 and Year 2) with prior experience in learning PBLs - both online and face-to-face - are eligible to participate. The interview questionnaire include themes on i) effectiveness of online PBL, ii) challenges faced in online PBL, iii) gaps in collaboration, discussions, online learning, learning experience, and strategies, if any, to improve. Purposive sampling is used to recruit and interview participants. Qualitative analysis will use a thematic approach using open and axial coding.

## **Expected outcomes:**

The primary outcome of the study is to examine students' perceptions of the effectiveness of online PBL, the challenges they encounter, and the unique gaps that emerge in the online environment. The findings will shed light on the differences between online and face-to-face PBL, the influence of the online environment on collaboration and active participation, and the technological and platform-related issues faced by students.

## Conclusion:

This study will contribute to the existing body of knowledge by providing valuable in-depth, individual insights into a student's perspective on the effectiveness of PBL and ways to improve its delivery.

## Take Home Message:

This study will inform educators and instructional designers of potential enhancements needed to optimise students' learning experiences in this digital learning environment.

## ABSTRACT ID:

## Pilot Study: Efficacy of an Online Frequently Asked Questions (FAQ) Document Constructed to Enhance Clinical Written Skills.

#### Tariq Shafi, Pavitraa Annandan, Nithya Radha Krishnan.

Newcastle University Medicine Malaysia, Malaysia.

## Background:

An online FAQ document was developed by which answers to individual student questions on clinical written skills were made available to all clinical year medical students. On literature review, this is the first document of its kind.

## Aim:

This study aimed to assess whether the document improved the domains of confidence; knowledge; and ability in clinical written tasks. The null hypothesis for each domain was that there was no correlation

between use of the document and proficiency in that domain. A P value of < 0.05 was considered significant.

## Methods:

Clinical year medical students were invited to complete an online questionnaire. Participation was voluntary and written consent obtained. Respondents completed 5-point Likert scales determining level of agreement as to whether the document improved their confidence; knowledge; and ability in clinical written skills.

## **Results:**

46 respondents completed the questionnaire, of which 43 respondents had used the document. Of these, the number who strongly agreed or agreed that the document improved their confidence, knowledge and ability in clinical written skills were 38, 36 and 35 respondents respectively, whilst the number who strongly disagreed or disagreed were one, one and three respondents, respectively. Using chi-square analysis, this corresponded with P-scores of <0.001 for each domain of confidence, knowledge, and ability.

## Conclusion:

The results indicate that the online FAQ document improves confidence, knowledge, and ability in clinical written skills. A large-scale study is feasible. If shown effective, this innovation can be used by other medical schools to enhance clinical written skills teaching.

#### Take Home Message:

The online FAQ document improves clinical written skills of clinical year medical students.

## ABSTRACT ID: APA-005

Implementing Problem-Based Learning in Padlet platform among Year 2 Medical Students in Faculty of Medicine, Universiti Sultan Zainal Abidin (UniSZA)

## Akmal Syazwan, Siti Fadziyah binti Mohamad Asri, Farid Imran bin Ismail

Universiti Sultan Zainal Abidin (UniSZA), Malaysia

Digital Problem-Based Learning (PBL) is an educational approach that leverages digital technologies to facilitate problem-solving and critical-thinking skills among students. It involves presenting learners with real-world problems or scenarios that require them to actively engage in the learning process, collaborate with peers, and find solutions.

We conducted PBL digitally with the Padlet platform in the Faculty of Medicine, Universiti Sultan Zainal Abidin. By actively engaging with practical medical scenarios in a digital environment, students learn to respond promptly and precisely, enhancing their clinical skills. However, we would like to know how the students perceived this digital method, and what challenges and motivation they gained.

A survey using Self-Regulation for Learning Online (SRL-O) questionnaires was conducted among Year 2 medical students to assess the efficacy, motivation, and challenges of the digitally conducted PBL in Padlet. We found that the digitally conducted PBL empowers students' critical thinking and problem-solving skills. By facing real-life situations of medicalrelated issues, students are compelled to think critically and develop effective problemsolving skills. Thus, it encourages active learning among members by taking an active role in identifying, analyzing, and solving problems. As such, leading to a deeper understanding of the topic discussed. While the challenges could still be there, students have the motivation and support.

Overall, digitally conducted Problem-Based Learning is a powerful tool that prepares medical students for real-world challenges by encouraging them to think critically and apply their medical expertise effectively. Through this approach, they become betterequipped healthcare professionals, capable of making informed decisions.

#### Take Home Message:

Through this approach, they become betterequipped healthcare professionals, capable of making informed decisions and providing optimal patient care.

ABSTRACT ID:

## Exploring the Peer Assisted Learning Model in a Clinical Setting: A Literature Review to Explore it Across The Globe.

## Vasantha Subramaniyam<sup>1</sup>, Ramalingam Aruchamy<sup>2</sup>

<sup>1</sup>Newcastle University Medicine Malaysia <sup>2</sup>Perdana University And RCSI School Of Medicine.

## Background:

Peer Assisted Learning (PAL) is an interesting concept of introducing teaching to undergraduate medical students at a very early stage of their medical journey (Dandovino, 2007). To encourage constructive learning, I understand that PAL is now being employed by educators across the world. I had employed this session routinely in my clinical bedside teaching sessions and want to understand indepth about the student experiences in these sessions and its impact on their learning which I believe will pave way for innovations.

## Aim:

To explore the use of Peer Assisted Learning in Clinical teaching sessions. Methodology and Methods: A scoping review was done by searching 5 electronic databases in the recent 10year period including Ovid Medline, Ovid EMBASE, PubMed, SCOPUS, and Google Scholar. Data analysis in this study was a two-stage process. Firstly, after careful review, articles were chosen for the study and included in the data extraction sheet. The second step was critical data synthesis with a narrative quantitative analysis and in-depth Qualitative analysis where the data from all the selected studies were studied through note taking, annotation, grouping and categorization. This helps to understand the experiences of the students in their two different roles as peer learners and peer teachers

#### **Results:**

From the first stage of data extraction, 24 studies which met the criteria were included. From the second stage of data synthesis of these 24 articles qualitatively, the experiences of the students were broadly categorized into: Environment, knowledge & Skills acquisition, Self-confidence & Motivation and Communication among the peer learners and peer tutors.

## Conclusion:

Clinical Peer assisted learning (C-PAL) sessions has imparted positive experiences in the students in terms of motivation, selfconfidence, engagement, and performance. This was experienced by both the tutors and the learners. There were also challenges to these sessions in terms of planning, trust, and satisfaction. To overcome these challenges, tutor training initiatives are employed and has seen improvements.

## Take Home Message:

Innovation in medical education is imperative with the changing student learning behaviours. Problem-based learning has a wider scope and can be considered a big umbrella term as it gives that space for innovation and exploration. PAL is one among this and if found to be very useful in clinical settings to gain engagement, thereby effective learning.

Special Acknowledgement

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