

8th International Conference on
Molecular Diagnostics & Biomarker Discovery
 Redefining Healthcare: Multi-Omics Driven Diagnostics and Therapeutics

19-20 August 2026

Iconic Marjorie Hotel, a Tribute Portfolio by Marriott International

Penang, MALAYSIA

mdbd.usm.my | mdbd@usm.my

Day 1 – 19 August 2026 (Wednesday)

Time	Session
08:00 – 08:30	Registration & Arrival of Participants
08:30 – 08:50	Welcoming Remarks – Assoc. Prof. Dr Aziah (INFORMM Director & MDBD2026 Advisor) Welcoming Remarks – Imelia Wong (Country General Manager, Malaysia, Thermo Fisher Scientific)
08:50 – 09:00	Opening Remarks – Prof. Dato' Seri Ir. Dr. Abdul Rahman Mohamed (Vice-Chancellor, Universiti Sains Malaysia)
09:00 – 09:20	USM-Thermo Fisher Scientific MoU Signing Ceremony
09:20 – 10:00	Keynote Address Translational Biotechnology in Malaysia: Integrating Multi-Omics Innovations into Real World Healthcare Solutions Prof. Datuk Wira Dr Raha Abdul Rahim (CEO, National Institute of Biotechnology Malaysia)
10:00 – 10:20	Break, Poster Viewing & Networking
10:20 – 11:20	Plenary Session 1: Diagnostics Field Effect Transistor (FET)-based biosensor as gold standard for viral infection detection Prof. Dr Azrul Azlan Hamzah (Director, Institute of Microengineering and Nanoelectronics, Universiti Kebangsaan Malaysia)

	The Evolution of TB laboratory Diagnostics: From Conventional Baselines to Decentralized Molecular Networks • Dr Nur Eyuni Mohd Salleh (National Public Health Laboratory Johor Bahru, Malaysia Ministry of Health)
11:20 – 11:40	Technical Talk Enabling Multi-Omics Research: Transforming Complex Biology into Scientific Breakthrough • Tian Sheng Lew, PhD (Technical Sales Manager, Biosciences, Thermo Fisher Scientific, Southeast Asia)
11:40 – 12:40	Plenary Session 2: Biomarker Discovery From Molecular Signatures to Artificial Intelligence-Powered Precision Prevention and Medicine • Assoc. Prof. Surasak Wanram (Ubon Ratchathani University, Thailand) Long Non-coding RNAs as Emerging Biomarkers and Therapeutic Targets in Cancer • Dr Mirna Mourtada-Maarabouni (Keele University, United Kingdom)
12:40 – 13:00	Technical Talk From Discovery to Decision: Enabling Precision Medicine with Ion Torrent™ Sequencing • Osman, Muhammad Afiq (Clinical Technical Sales Specialist, Thermo Fisher Scientific, Southeast Asia)
13:00 – 14:00	Lunch
14:00 – 15:00	Plenary Session 3: Therapeutics Paradigm Shifts in the Understanding and Applications of Mesenchymal Stem Cells: With Insights from Cytopeutics' Pre-clinical and Clinical Research • Prof. Dr Chin Sze Piaw (Cytopeutics Sdn Bhd) From Cells to Vesicles: Multi-Omics Biomarker Signatures of Stem Cell and EV Therapies for Precision Medicine • Prof. Dr Badrul Hisyam Yahya (Pusat Kanser Tun Abdullah Ahmad Badawi, Universiti Sains Malaysia)

15:00 – 15:40	Technical Talks Precise, non-contact picoliter dispensing to enhance preparation of dose-response curves • Mr Chan Randall (Product Manager, Laboratory Plastics Essential, Thermo Fisher Scientific, Southeast Asia) From Blood to Answers: How miRNA has Changed the Cancer Screening Landscape • Dr Mohd Helmi Zakariah (General Manager, MyRNA Diagnostics Sdn. Bhd.)
15:40 – 16:00	Break, Poster Viewing & Networking
16:00 – 17:30	Oral Presentation Sessions 1 (Parallel) Room A – Diagnostics & Biomarker Discovery Room B – Therapeutics
17:30	End

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Day 2 – 20 August 2026 (Thursday)

Time	Session
09:00 – 10:00	Oral Presentation Sessions 2 (Parallel) Room A – Diagnostics & Biomarker Discovery Room B – Therapeutics
10:00 – 10:20	Break, Poster Viewing & Networking
10:20 – 12:20	Plenary Session 4: Roadmap of Diagnostic & Therapeutic Innovations From Data to Device: An AI-Guided EV Biochip for Multi-Cancer Detection - Prof. Dr Shieh Dar-Bin (Senior Vice President, National Yang Ming Chiao Tung University, Taiwan) Preclinical Path Towards Advancement of Pharmaceuticals, Nutraceuticals and Biologics - Assoc. Prof. Dr Tye Gee Jun (Director, Malaysia Institute of Pharmaceutical and Nutraceuticals) Oncology Capability Expanded Through Molecular Diagnostic in Malaysia - Dr Akhmal Yusof (CEO, Clinical Research Malaysia) The Future of Medical Device Innovation in Malaysia - Ts. Dr Muralitharan Paramasua (CEO, Medical Device Authority (MDA), Ministry of Health)

12:20 – 13:00	Technical Talks Advancing Translational Research Through Simplified Spatial Proteomics Workflows - Steven Ta, M.Sc. (Technical Sales Specialist, Cellular Imaging, Thermo Fisher Scientific, Southeast Asia) Precision Mass Spectrometry: Accelerating Biopharma and Multi-Omics Insights with the Orbitrap Exploris 240 - Assoc. Prof. Dr Mohd Nazri Ismail (Analytical Biochemistry Research Centre (ABrC), Universiti Sains Malaysia)
13:00 – 14:00	Lunch
14:00 – 15:40	Oral Presentation Sessions 3 (Parallel) Room A – Diagnostics & Biomarker Discovery Room B – Therapeutics
15:40 – 16:00	Break, Poster Viewing & Networking
16:00 – 16:50	Oral Presentation Sessions 4 (Parallel) Room A – Diagnostics & Biomarker Discovery Room B – Therapeutics
16:50 – 17:10	Break, Poster Viewing & Networking
17:10 – 17:20	Best Presenter Awards Ceremony
17:20 – 17:30	Closing Remarks
17:30	End of Conference

The Molecular Diagnostics & Biomarker Discovery conference is organised by the Institute for Research in Molecular Medicine (INFORMM), Universiti Sains Malaysia and is solely sponsored by Thermo Fisher Scientific. All rights reserved (2026).

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