



MALAYSIAN ASSOCIATION OF CLINICAL BIOCHEMISTS

(Persatuan Ahli Biokimia Klinikal Malaysia)

No 17-07, Tingkat 17, Menara ArinaUniti,

No 97, Jalan Raja Muda Abd Aziz, Kampong Baru, 50300 Kuala Lumpur

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**MALAYSIAN ASSOCIATION OF CLINICAL BIOCHEMISTS
ANNUAL REPORT**

2024/2025

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Prepared and Compiled by Chuo Peck Ham

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1.0 COUNCIL REPORT

1.1 MACB Council (2024-2026)

The new MACB Council was elected via e-voting and announced on the 34th MACB Annual General Meeting (AGM) which was held physically on 22nd July 2024. The new Council is as follows:

President	Y.M. Raja Dr. Elina binti Raja Aziddin
Vice President	Mdm Chew Yee Yean
Secretary	Mdm Chuo Peck Ham
Assistant Secretary	Ms Yeoh Ai Chin
Treasurer	Mdm Chen Bee Chin
Council Member	Ms Vani a/p Munusamy
	Dr Nurulamin bin Abu Bakar
	Mr Mohd Hareeff Muhammed
	Mr Abdullah Fahim Ahmad Hamdan

1.2 Council Activities

MACB Council Meetings:

The Council met 5 times in 2024/25 with attendance records as follows:

	Attendance
Y.M. Raja Dr. Elina binti Raja Aziddin	5
Chew Yee Yean	5
Chuo Peck Ham	5
Yeoh Ai Chin	4
Chen Bee Chin	5
Vani a/p Munusamy	5
Dr Nurulamin bin Abu Bakar	4
Mohd Hareeff Muhammed	5
Abdullah Fahim bin Ahmad Hamdan	5
Subcommittee	
Y.M. Tunku Marinah ashraf binti Tunku Abdullah	4
Mohd Firdaus bin Abdul Aziz	3

The meetings were conducted through video conferencing and physical attendance.

1.3 Registrar of Societies (ROS)

Registrar of Societies (ROS) is a regulatory department under the Ministry of Home Affairs that primarily governs the registration, control, supervision and maintenance of records pertaining to registered non-governmental organisations. MACB is currently compiling 2023 documents in order to keep ROS updated on MACB current status.

1.4 MACB Subcommittees

a. Scientific Subcommittee

Appointment of new Scientific Committee members was made on 12th March 2024. Appointment will be for a term of 2 years. The current Committee members are as follows:

<u>Position</u>	<u>Name</u>	<u>Organisation</u>
Chairman	Dr. Raja Elina binti Raja Aziddin	UKM / MACB
Members	Dr. Leslie Charles Lai Chin Loy	Gleneagles Hospital Kuala Lumpur
	Associate Professor Dr. Pavai Sthaneshwar	University Malaya Medical Centre
	Associate Professor Dr. Subashini C. Thambiah	Universiti Putra Malaysia
	Mdm Rozita Abdullah	Hospital Sungai Buloh
	Ms Yeoh Ai Chin	University Malaya Medical Centre
	Mdm Raja Hasyidah Raja Bongsu	National Institute of Health
	Mdm Siti Suhana Abdullah Soheimi	Hospital Kuala Lumpur

The committee will also consider appointing a corporate representative and this appointment will be made at a later date.

Activities of the Scientific Committee are as follows:

- To Identify and plan the scientific activities to be undertaken by the association.
- To identify the necessary Working Groups and Task Force required.
- To determine the scientific program in MACB Conference.
- To approve the scientific content of industry sponsored courses /seminars / workshops.
- To provide guidelines on best practices in Clinical Biochemistry.
- To identify and facilitate transfer of knowledge on scientific and technological advancements in Clinical Biochemistry to laboratory professionals.
- To Identify research areas of relevance to Clinical Chemistry and Laboratory Medicine as well as assist the transfer of research results to the profession.
- To facilitate the development and transfer of technical innovations to clinical laboratory professionals and clinicians.
- To facilitate the development and implementation of diagnostic strategies.
- To establish standardisation for scientific and technical aspects of good laboratory practice.
- To provide networking between laboratories.
- To respond to scientific and technical needs of Ministry of Health, MACB corporate members, APFCB, IFCC and other related external agencies.
- To actively participate in MACB conferences, scientific programmes, seminars and other scientific meetings.
- To organise scientific meetings and discussions between agencies and organisations.

Tasks Force and Working Group under the Scientific Committee include the following:

- CKD Task Force
- Working Group on Measuring Instrument Calibration and Verification Task Force
- MACB is also a member of the Technical Committee on Method Verification in collaboration with MOH.

MACB ANNUAL REPORT 2024/2025

The first meeting of the new committee was held virtually on 11th May, 2024, where committee members agreed that the following new Task Force and working groups will be established in 2024:

- a. Harmonization of micro-prolactin reporting across the country.
- b. New updates and guidelines on newborn screening.
- c. New updates and guidelines on the use of various LDL equations.
- d. New updates and guidelines on the application of medical decision limits, lot to lot verification and measurement of uncertainty.
- e. Harmonization of calibration on pipettes and thermometer verification

b. Education Subcommittee

<u>Position</u>	<u>Name</u>	<u>Organisation</u>
Chairman	Y.M. Tunku Marinah Ashraf binti Tunku Abdullah	MACB
Members	Ts Dr Norlida Harun	Hospital Kuala Lumpur
	Chen Bee Chin	MACB
	Kaladevi Nadarajan	Hospital Pulau Pinang
	Dr. Jokha Yahya	Hospital Sultanah Aminah
	Adam Hathsey Bronson	Innoquest Pathology Sdn Bhd
	Dr. Nada Syazana Zulkifli	Precision Diagnostics
	Rohana Ahmad	HRPZ2
	Low Yoke Lee	Premier Integrated Lab
	Dr Yamunah Raman	DKSH

Activities: To plan and organize training programs for all members and the industry.

c. Communication and Publicity Subcommittee

<u>Position</u>	<u>Name</u>	<u>Organisation</u>
Chairman	ChM Mohd Firdaus bin Abd Aziz	National Cancer Institute
Members	Mr Mohd Hafiz Rahim	National Cancer Institute
	Marina Shah Binti Muhammad Zabri Tan	Hospital Kuala Lumpur
	Dr Nur Aisyah Binti Sharudin	Hospital Tunku Azizah
<u>MACB Newsletter</u>		
Chief editor	Mdm Roziela Abu Bakar	Cheras Rehabilitation Hospital
Assistant editor	Dr. Siti Zuleha Idris	National Blood Centre KL

Activities:

- a) **To promote MACB and Membership Drive:**
To actively promote the association and engage in efforts to increase MACB's membership base.
- b) **To coordinate publication of MACB Newsletters and Publicity Materials:**
To ensure timely release of MACB newsletters and other promotional materials to inform members and the public of MACB's current and upcoming activities and achievements.
- c) **To manage and maintain MACB main website (www.macb.org.my), press and all social**

media platforms.

To oversee the MACB website to keep it up-to-date with the latest information, events, and resources related to clinical biochemistry.

d) To promote MACB Activities:

To spread awareness of MACB activities, including conferences, seminars, webinars, workshops and all educational events.

d. Corporate Affairs Subcommittee

Chairman: Abdullah Fahim bin Ahmad Hamdan

<u>No</u>	<u>Corporate Members</u>	<u>Representatives</u>
1	Becton Dickinson	Ong May Foong / Priscilla Lau
2	Abbott Laboratories (M) Sdn Bhd	Daniel Lee Kian Poh
3	Roche Diagnostics (M) Sdn Bhd	Wua Ming Sheng / Shen Wai San
4	Radiometer Sdn Bhd	Liew Boon Gee, Eunice Wong
5	Medinics (M) Sdn Bhd	Dr Ravindran Raman, Nurul Hanan Binti Mustapha
6	Siemens Healthcare Sdn Bhd	Niew Peh Li / Mohd Fikhri Ahmad Tajuddin
7	Acutest Systems(M) Sdn Bhd (DKSH Malaysia)	Chew Shel Ling
8	Axisbio Diagnostics Sdn Bhd	Farrah Zuall Cobley, Nor Hilal Abu Hanipah
9	Premier Integrated Labs Sdn Bhd (Pantai Premier Pathology Sdn Bhd)	Haslina Yaakub, Siti Zahra Mahat
10	Innoquest Pathology Sdn Bhd (Gribbles Pathology Sdn Bhd)	Sivasooriar Sivaneson, R. Gobhy A/L Ramaloo
11	Chemopharm Sdn Bhd	Wong Yoke Yien / Wei Suh Chan
12	Revvity Singapore Pte. Ltd. (Perkin Elmer Sdn Bhd)	Noorulaini Sulaiman / June Tan Wen Wen
13	Utas Maju Sdn Bhd	Muhammad Aiman Bin Abdul Halim / Ahmad Khusyairi Bin Zubir
14	Merck Sdn Bhd	Marcus Yeong

Activities:

To communicate, plan, collaborate, support and engage with the industry players in supporting MACB activities

e. Journal and Scientific Publication

The editorial team and advisory board members for Malaysian Journal of Clinical Biochemists (MJCB) (<https://journal.macb.org.my/home/about/editorialTeam>) were appointed by Malaysian Association of Clinical Biochemists (MACB) for two years commencing on 1st April, 2024, and will be ending on 31st March, 2026. The MJCB Editorial team members are as follows:

<u>Position</u>	<u>Name</u>	<u>Organisation</u>
Chairman	Dr. Nurulamin Abu Bakar	Universiti Kebangsaan Malaysia, UKM
Editor-in-Chief	Dr. Abdah Md Akim	Universiti Putra Malaysia, UPM
Assistant Editor-in-Chief	Dr. Mohd Izani Othman	Universiti Teknologi MARA, UiTM
Managing Director	Dr. Nurulamin Abu Bakar	Universiti Kebangsaan Malaysia, UKM
Editors	Dr. Hani Ajrina Zulkeflee	Universiti Sains Islam Malaysia, USIM
	Dr. Farah Wahida Ibrahim	Universiti Kebangsaan Malaysia, UKM
	Dr. Chan Mooi Kwai	Penang Hospital
	Dr. Lina Wati Durani	Hospital Tunku Azizah, Kuala Lumpur
Web Manager and Designer	ChM. Mohd Firdaus Bin Abdul Aziz	

The subcommittee will work with the Editor to establish a panel of peer reviewers based on each expertise and will also participate in the review process. Subcommittee may provide advice on other strategic and ongoing issues pertaining to the Journal as requested by the MACB Council.

f. Awards Subcommittee

Newly recruited Awards Committee members will be for a term of 2 years effective 1st April 2024. The current ASC members are as follows:

<u>Position</u>	<u>Name</u>	<u>Organisation</u>
Chairman	Mdm Chuo Peck Ham	Hospital Kuala Lumpur
Members	Mdm Kamisah binti Karim	Allied Health Science (BSKB)
	Mdm Shajaratul Dura bt Mat Ali	Hospital Sultan Idris Shah
	Mdm Rohaznida Baharuddin	Hospital Ampang
	Mdm Lim Kee Kee	Hospital Ampang

Activities:

- To identify suitable awards
- To identify criteria for suitable award candidates
- To establish procedure for nomination and selection of candidates
- To facilitate nomination and selection process for potential candidates

g. Lab Management & Sustainability Subcommittee

The MACB Lab Management and Sustainability Subcommittee was formed in March 2024, aiming to contribute to the advancement of laboratory management practices and sustainability within the Malaysian diagnostics industry. The elected members will serve a 2-year tenure.

<u>Position</u>	<u>Name</u>	<u>Organisation</u>
Chairman	Mr Mohd Hareeff Muhammed	Premier Integrated Labs
Members	Dr. Mohd Jamsani Mat Salleh	Hospital Pulau Pinang
	Mdm Chew Yee Yean	UMMC
	Ms Chan Ru Sin	Thompson Medical Centre
	Ms May Foong Ong	Becton Dickinson

Activities:

- To organise activities such as workshops, training, webinars etc. on specific subjects of laboratory management and environmental issues that has educational value and are relevant to the current concern in clinical biochemistry and laboratory medicine.
- To promote, organise, direct and/or support courses for post-graduate training in laboratory management and environmental impact awareness in the country.
- To coordinate MACB activities in laboratory management and environmental awareness through its working groups and task force.
- To provide guidance on best practices on clinical laboratory management
- To liaise with APFCB, IFCC or other equivalent bodies in relevant organisations on educational activities through nominated representatives.
- To actively participate in MACB conferences, seminars, webinars and other scientific meetings.
- To collect, store and provide access to educational materials generated or received by the Federations to the members.
- To collect and provide materials for MACB Newsletter.

h. MACB Regional Representative

The main objective of the MACB regional representatives' appointment is to update members in respective regions on MACB activities, events and all current affairs.

<u>Name</u>	<u>Region</u>
1. Mdm Nurharniza Zakaria	Northern (Perlis, Kedah, Penang, Perak)
2. Mdm Nor Hafidza Yacob	Southern (Melaka, Johor, Negeri Sembilan)
3. Mdm Rohaiyu binti Ismail	East Coast (Pahang, Kelantan, Terengganu)
4. Mdm Jaleezah binti Idris	East Malaysia (Sabah)
5. Ms Wenna Nallance Lim	East Malaysia (Sarawak)

Activities:

- To serve as MACB Regional Representative
- To share information on MACB surveys, events, and current affairs with members in their respective regions. These shall include organizing, conducting, and participating in local events and obtaining feedbacks from members
- To encourage members' participation in MACB events from respective regions
- To identify the training needs of MACB regional member & assist in organising MACB events
- To determine potential projects within the region and identify volunteers from within the region for MACB committees and project.

i. IFCC and APFCB National Representatives

Y.M. Raja Dr Elina binti Raja Aziddin is the Malaysian representative in the IFCC and APFCB. MACB has also nominated a few of its members to sit in the IFCC and APFCB committee, namely Dr. Mohd Jamsani Mat Salleh to represent MACB in the APFCB Laboratory Management Committee, Dr. Nada Syazana Zulkufli, in the APFCB Education Committee and Dr Pavai Sthnaneshwar was the previous head APFCB-CKD Task Force team. Dr Hanisah Hamid is the corresponding member of the IFCC POCT committee.

1.5 MEMBERSHIP

In 2024/2025, MACB successfully recruited 25 new Ordinary Members, including 2 Associate Members who were upgraded to Ordinary status, resulting in a 3.3% increase in the overall membership. MACB Membership Secretariat is actively driving sustainability of MACB membership and provision of benefits and privileges to its members.

Membership	2022/2023	2023/2024	2024/2025
Fellow	1	1	1
Life	9	9	9
Ordinary	430	459	484
Associate	248	268	268
Corporate	21	23	23
Retired members	5	6	6
Total	714	766	791

*updated as at 4 October 2025

2.0 SCIENTIFIC SUBCOMMITTEE REPORT

(by Y.M. Raja Dr Elina Aziddin, Chairman of Scientific Subcommittee)

2.1 MACB WEBINAR ON SIGMA METRICS

A webinar on the topic “Overview of Six Sigma Metrics for the Clinical Laboratory” was held on 21 March 2025@9 am Malaysia Time in collaboration with QuidelOrtho.

MACB WEBINAR
"OVERVIEW OF SIGMA METRICS FOR THE CLINICAL LABORATORY"

Here are topics to be covered in the webinar:

- What are CLIA standards? What changes were made?
- Background on Six Sigma and how it is calculated?
- How to calculate Sigma metrics in the laboratory?
- Benefits of using Sigma metrics
- How to respond to poor sigma metrics?
- General tips for quality performance

Fri | Mar 21, 2025
 09.00-10.00 Am

Online Platform

Johanna J. Miller
 Speaker

Johanna J. Miller is a Global Product Manager at QuidelOrtho, specialising in laboratory assay quality and data-driven insights. With a background in biomedical engineering and a masters in product development and data science, she has contributed extensively to clinical laboratory analytics through research, publications, and patent work. She has led initiatives in big data analysis, electronic calibration, and product development, using Python and cloud computing to enhance laboratory efficiency. Johanna has presented at major industry conferences and continues to drive advancements in diagnostic technologies.

WhatsApp Us: +60193744778 | Visit Our Website: www.macb.org.my/webinar | Supported by QuidelOrtho

Pic: Sigma Metrics Webinar Flyer

The webinar was delivered by Johanna J. Mille, a Global Product Manager at QuidelOrtho, specialising in laboratory assay quality and data-driven insights. Topics covered in the webinar included CLIA standards and changes made, background on Six Sigma and calculation of Six Sigma metrics, benefits of using Sigma metrics, how to respond to poor sigma metrics and general tips for quality performance.

The webinar was attended by 718 participants with the following breakdown:

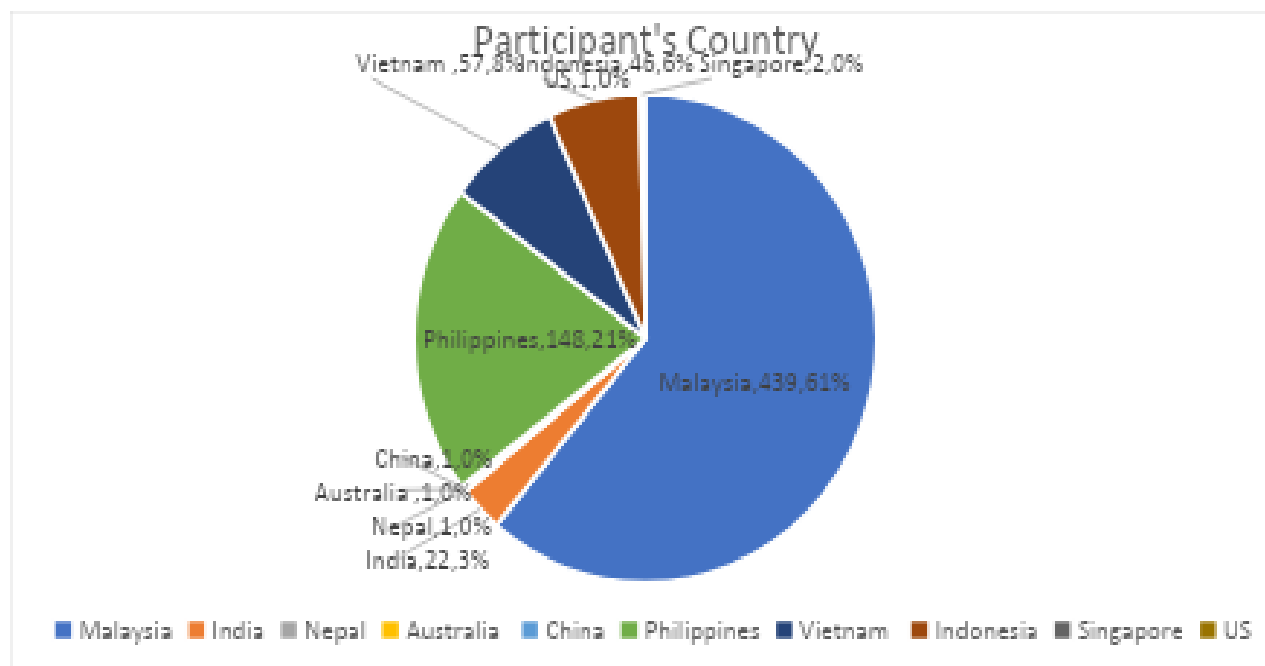


Fig: Participants of the Sigma Metrics Webinar According to Country

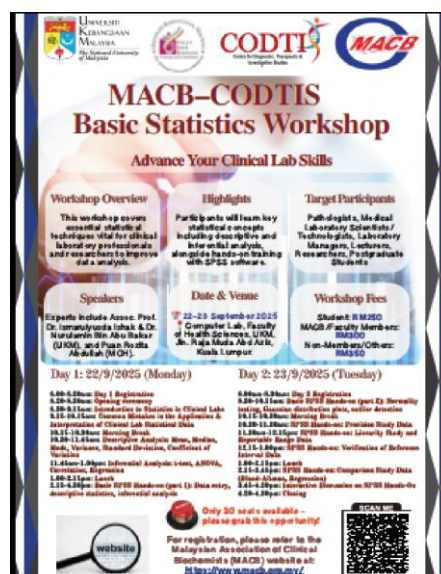
2.2 MACB-CODTIS BASIC STATISTICS WORKSHOP

The MACB–CODTIS Basic Statistics in Clinical Laboratory Workshop 2025 was successfully conducted on 22–23 September 2025 at the Computer Laboratory, Faculty of Health Sciences, Universiti Kebangsaan Malaysia (UKM). This event marked the first joint workshop organized by the Malaysian Association of Clinical Biochemists (MACB) and the Centre for Diagnostic, Therapeutic & Investigative Studies (CODTIS), Faculty of Health Sciences, Universiti Kebangsaan Malaysia (UKM).

The workshop featured three expert speakers: Assoc. Prof. Dr. Ismarulyusda Ishak and Dr. Nurulamin Bin Abu Bakar (UKM), and Puan Rozita Abdullah (Ministry of Health, MOH). A total of 20 participants attended the workshop, representing a diverse group of laboratory managers, medical laboratory scientists (MLS), science officers from both government and private laboratories, and master's students in pathology (medical officers).

The workshop aimed to strengthen the application of basic statistical techniques in clinical laboratories, with a particular focus on method verification data analysis. The program included interactive lectures and hands-on training using SPSS software with real laboratory data. Participants were introduced to key statistical concepts such as descriptive and inferential statistics and engaged in SPSS-based normality testing. A dedicated session on common mistakes in the application and interpretation of clinical laboratory statistical data was also conducted, providing participants with practical insights.

During the final session, participants analysed comparison study data using SPSS to apply both descriptive statistics (e.g., mean) and inferential statistics (t-test, correlation, and regression analysis), alongside normality testing.



Pic: Basic Statistics Workshop Flyer

Feedback from participants and speakers was highly positive, emphasizing the workshop's relevance and practical value. Several suggestions were proposed for future improvements:

- i. To establish this as an annual MACB workshop, given its demand and importance.
- ii. To extend the duration to three days, enabling participants to bring their own laboratory data for extended SPSS hands-on practice.
- iii. To provide SPSS guides or manuals as part of the workshop package for participant reference.
- iv. To develop an advanced statistics workshop, including non-parametric and advanced statistical parameters.

2.3 PROFESSIONAL CERTIFICATE IN CHEMICAL PATHOLOGY LABORATORY DATA ANALYSIS COURSE - MACB COLLABORATION WITH UKM

The Professional Certificate in Chemical Pathology Data Analysis course was approved following a meeting on 7th March 2025 with UKM Shape To discuss the implementation, a meeting between MACB President and representatives from UKM was held on 8th August 2025 in MACB office. The Professional Course in Chemical Pathology Data Analysis was officially launched on 10th September 2025 in FSK UKM, KL.

PROFESSIONAL CERTIFICATE IN CHEMICAL PATHOLOGY LABORATORY DATA ANALYSIS

COURSE SYNOPSIS
This course prepares students to understand pathophysiology and biochemical changes in relation to Chemical Pathology laboratory data that are associated with pathological conditions. It enhances skills in interpreting Chemical Pathology laboratory data, identifying abnormalities in organ function, recognising the need to perform specialized tests as well as emphasizing laboratory management. The course also focuses on managing errors in laboratory data analysis, and reporting as well as correlating biochemical changes with organ function for accurate laboratory data interpretation.

COURSE LEARNING OUTCOME

- ✓ Explain the pathophysiology and biochemical analytical changes in the development and progression of diseases.
- ✓ Correlate the results of Chemical Pathology laboratory test outcomes with the pathophysiology of diseases in a professional and ethical manner.

COURSE BENEFITS

- ✓ Ascertain the competency of medical laboratory professionals in chemical pathology.
- ✓ Ensure accurate diagnosis towards an appropriate management of patients' conditions.
- ✓ Understand the pathophysiological aspect of diseases and interpret chemical pathology laboratory data.

TOPIC COVERAGE

- ✓ Advanced in Chemical Pathology Laboratory Data Analysis focusing on the following major aspects:
Pathophysiology and biochemical analyte changes based on clinical data involved in the development and progression of diseases, organ function abnormalities, routine and specialized tests in Chemical Pathology laboratory management.
- ✓ Case Study in Chemical Pathology Laboratory Data Analysis.

FEES

- Malaysian: RM6,000.00
- International: RM45,000.00

ENTRY REQUIREMENT

A Bachelor's Degree in Biomedical Science / Medical Laboratory Technology / any related field that is recognized OR
A Diploma in Medical Laboratory Technology / any related field with at least five (5) years of working experience in Chemical Pathology related laboratory
AND
Non-UK citizen candidates must achieve a minimum scores of 43 (TOEFL-IBT) or 5.0 in the International English Language Testing System (IELTS) or a score of 5.0 in the Higher Education English Test (HEET)

TYPE OF ASSESSMENT

- ✓ Quizzes
- ✓ Reports
- ✓ Presentations

MORE INFORMATION

APPLY NOW
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Pic: Course flyer



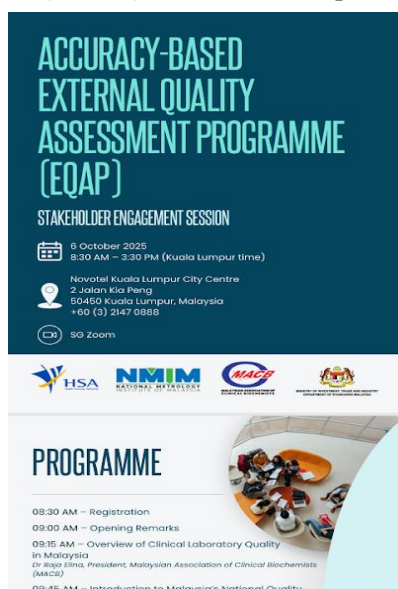
Pic: Meeting of course lecturers

On 30th September 2025, a meeting with course lecturers was held in FSK to finalise the lecture schedule

MACB is offering 2 scholarships to its eligible members to attend the course. Selection will be done by an independent committee comprising of En Rusli Ibrahim, Dr. Nurulamin Abu Bakar, Dr. Nada Syazana Zulkufli, Dr Norlida Harun, Dr. Thuhairah Abdul Rahman who were recently appointed.

2.4 ACCURACY-BASED ASSESSMENT PROGRAMME (EQAP)

A EQAP Stakeholder Engagement Session will be held on 6th October 2025 at Novotel Kuala Lumpur City Centre. This focussed symposium is co-jointly organised by Health Science Authorities Singapore (HSA), National Metrology Institute of Malaysia (NMIM), MACB and Department of Standards Malaysia.



Pic: EQAP Stakeholder Engagement Session Flyer

Topics that will be covered include Overview of Clinical Lab Quality in Malaysia, Introduction to Malaysia's National Quality Infrastructure, Accuracy-Based External Quality Assessment Programme (EQAP) followed by a Stakeholder Interests & Needs Dialogue and Evaluation of Measurement Uncertainty Using EQAP Results. Lectures will be delivered by representatives from MACB, DSM and HSA.

2.5 REPORT FROM CKD TASK FORCE

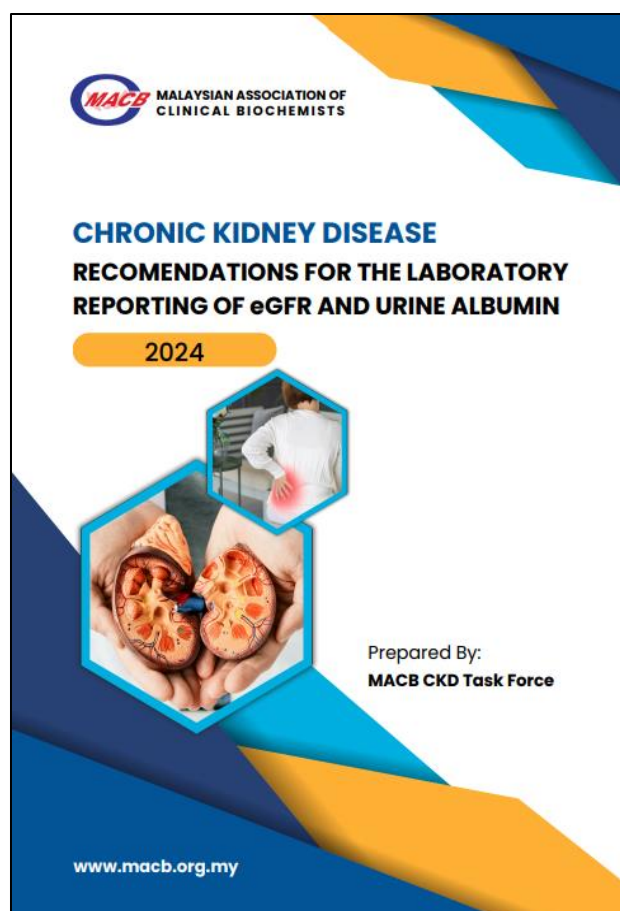
(by Dr Leslie Charles Lai Chin Loy, Chair MACB CKD Task Force)

The previous CKD Task Force was formed in December 2017 and finalised its recommendations in 2019 and uploaded onto the website on 20th November 2019.

The CKD Task Force was reconstituted on 1st March 2024 for a period of two years by the MACB president, YM Dr Raja Elina Raja Aziddin to update the CKD recommendations.

Members of the CKD Task Force are as follows:

Chairman	: Dr. Leslie Charles Lai Chin Loy	Gleneagles Hospital Kuala Lumpur
Vice-Chairman	: Assoc. Prof. Dr. Pavai Sthaneshwar	University of Malaya Medical Centre
Secretary	: Chuo Peck Ham	Hospital Kuala Lumpur
Assistant Secretary	: Nafisah Mohamad Noor	Hospital Kuala Lumpur
Members	: Assoc. Prof. <i>Dr Lim Soo Kun</i>	University of Malaya
	: Dr. Raja Elina Raja Aziddin	MACB President
	: Dr. Siti Sharina Anas	Hospital Putrajaya
	: Associate Professor Dr. Subashini C. Thambiah	University of Putra Malaysia
	: Dr Ahmad Zulkefli	Hospital Kuala Lumpur
	: Low Yoke Lee	Premier Integrated Labs
	: Sazaliah Ishak	Hospital Kuala Lumpur
	: Siti Suhana Abdullah Soheimi	Hospital Kuala Lumpur



Pic: Second edition of the MACB CKD Guidelines

The Task Force successfully revised the first edition of the MACB CKD guidelines to include KFRE equations and the second edition of the MACB CKD Recommendations for the Laboratory Reporting of eGFR and Urine Albumin was uploaded in the MACB website on 6th August 2024.

The first meeting of the MACB-CKD Task Force Committee for the year 2025 was held on 15th February 2025 from 5:00 PM to 5:30 PM via Google Meet. The brief meeting focused on outlining the committee's agenda and key plans for the year. During the discussion, it was agreed that an update on Kidney Failure Risk Equation (KFRE) reporting would be presented at the upcoming MACB Conference. Additionally, a KFRE reporting audit was scheduled to be conducted in 2026 to assess and improve reporting practices. The committee also emphasized the importance of sharing Malaysia's CKD initiatives with member countries of the Asia-Pacific Federation for Clinical Biochemistry (APFCB) to promote regional collaboration and knowledge exchange. Furthermore, updates to the CKD guidelines were proposed, including the incorporation of cystatin-C in eGFR calculations and the development of a standardised reporting template to ensure consistency and facilitate easier implementation across laboratories. The meeting concluded with a commitment to continue refining these plans in subsequent sessions.

A paper authored by Associate Professor Dr. Lim Soo Kun and Associate Professor Dr. Pavai Sthaneshwar has been published on Science Direct, entitled "*Kidney Failure Risk Equation (KFRE): A Risk-Based Triage for Nephrology Referrals – A Mixed-Methods Study at the Pre-Implementation Phase Among Healthcare Providers.*"

At the 2025 MACB Conference, the following presentations on chronic kidney disease (CKD) were delivered:

1. *The Current Scenario of CKD Testing in Malaysia* by Associate Professor Dr. Pavai Sthaneshwar.
2. *Clinical Utility of KFRE* by Associate Professor Dr. Lim Soo Kun.

The publication by Associate Professors Dr. Lim Soo Kun and Dr. Pavai Sthaneshwar, along with their presentations at the 2025 MACB Conference, significantly contribute to advancing the understanding and management of CKD in Malaysia. Their work on the Kidney Failure Risk Equation (KFRE) and CKD testing provides valuable insights that will support improved clinical practices and patient outcomes. The committee acknowledges these efforts and looks forward to continued progress in CKD initiatives.



Pic : Presentations on chronic kidney disease (CKD) by Dr Pavai Sthaneshwar and Dr Lim Soo Khoon

2.6 REPORT FROM MEASURING INSTRUMENT CALIBRATION AND VERIFICATION TASK FORCE REPORT

The Measuring Instrument Calibration and Verification Task Force was established on October 1, 2024. The main task of this committee is to establish standards for the calibration and verification of measuring equipment, including weighing scales, pipettes, pH meters, thermometers, and timers etc. The task force are responsible for harmonizing and revising the current calibration and verification procedures used in hospitals across Malaysia. Contributions from the committee will be instrumental in developing guidelines for these activities, which will serve as a reference point for future standardisation efforts.

This appointment is expected to enhance the MACB's initiatives to educate healthcare providers and to coordinate accurate technical practices, ultimately improving laboratory quality. The first meeting of the new Calibration and Verification Task Force was held on 6th January 2025 at 9am - 2pm in Pathology Department Meeting Room, Hospital Sultan Idris Shah, Serdang.

Members of the Calibration and Verification Task Force are as follows:

- Advisor : Dr Raja Elina Bt Raja Aziddin, MACB-Scientific Committee Chair
- Chairman : Noor Hidayat Hussain, Hospital Sultan Idris Shah
- Secretary : Siti Suhana Abdullah Soheimi, Hospital Kuala Lumpur
- Core Members : Rohaznida Bt Baharudin, Hospital Ampang
- : Nurul Hanisah Dzulfikar, Institut Kanser Negara
- : Nurul Nadirah Mokiran, Hospital Putrajaya
- : Siti Shahirah Che Murat, Institut Kanser Negara
- : Dr Lina Wati Bt Durani, Hospital Tunku Azizah
- : Manisah Bt Abu, Hospital Melaka

Corresponding Members

- : Shajaratul Dura Mat Ali, Hospital Sultan Idris Shah

: Fatin Hasanah Bt A. Rahim, Hospital Raja Perempuan Zainab II
: Wong Tiffany Sheau Mei, Hospital Sultanah Aminah
: Wong Siew Siew, Hospital Umum Sarawak
: Mat AK Akon, Hospital Queen Elizabeth
: Wan Rohana, Binti Wan Ramli Hospital Tuanku Fauziah
: Farahziela Abu, Hospital Kemaman
: Habitah Ishak, Hospital Kuala Lumpur
: Siti Noratikah Halip, Hospital Muadzam Shah
: Ts. Shashi Kumar a/l Vijayakumar, Hospital Raja Permaisuri Bainun
: Raja Saidatul Nadia Bt Raja Kamal Tauphy, Hospital Sungai Siput

The first meeting, held on 6th January 2025, focused on discussion related to the Gantt chart and the delegation of tasks among members. The meeting also addressed the financial allocations required to support the agenda, which will be incorporated into the proposal. The second meeting, held on 26 March 2025, and the third meeting, held on 10th August 2025, both focused on the development of the Guidelines on Calibration and Verification of Measuring Equipment.

During the second meeting, the committee carried out a review of the initial draft of the guideline. Members examined the content to ensure technical accuracy and alignment with established standards. Detailed discussions were held on key topics, including pipette verification, volumetric glassware such as flasks and pipettes, balance and mass, thermometers, pH meters, and timers.

Corrections and clarifications were proposed to improve the reliability and consistency of the document, while suggestions were made to standardize terminology and formatting. The committee also addressed the need to reorganize the chapters of the guideline book to achieve a more logical flow and greater clarity. Members agreed to refine their assigned sections based on the feedback provided, and to prepare updated contributions for the next draft.

The third meeting, held on 10th August 2025, built upon the progress made in the second session. Members reviewed the revised draft, which had incorporated the corrections and refinements discussed earlier. The focus of this meeting was to validate the updated content, ensure the technical details were complete and accurate, and confirm consistency across all sections. Further adjustments were made to enhance clarity and usability, particularly in the sections covering pipette verification, volumetric glassware, balance and mass, thermometer, pH meter, and timer. The committee also emphasized the importance of finalizing the compilation of all contributions into a cohesive guideline book. Structural updates and formatting improvements were agreed upon to ensure the guideline could serve as a practical reference. The outcome of the third meeting was the consolidation of the revised sections into a comprehensive draft, which will be circulated among corresponding members for final review before endorsement.

2.7 ACTIVITIES UNDER MACB AUSPICES

i) MACB AUSPICES: MINDRAY NORTHERN REGION URINALYSIS WORKSHOP 2025

The Mindray Northern Region Urinalysis Workshop 2025 was organized by AMD Solutions Sdn Bhd, with the full support by MACB AUSPICES. The workshop was held on 5th May 2025 at Dewan Nilam, Hospital Kepala Batas, from 9am to 5pm. The primary objectives of the workshop were to introduce and demonstrate the Mindray Urine Total Solutions Product Portfolio, showcase performance evaluations and clinical applications of Mindray's fully automated urine analyzers in renal disease and urinary tract infections (UTI), and discuss the Mindray Urinalysis Workflow to enhance interpretation of urine chemistry and sediment results. Additionally, the event aimed to present the Mindray Dysmorphic RBC Analysis for determining sources of haematuria, educate participants on the Weqas EQA programme from Cardiff, UK, and facilitate discussions on current challenges in urinalysis testing within KKM Hospitals.



Pic : The workshop commenced with opening speeches delivered by Dr. Raja Elina (President of MACB), Dr. Mohd Jamsani Mat Salleh, Head of Unit, Chemical Pathology Department, Hospital Seberang Jaya, and Mr. Andy Yee, Executive Director of AMD Solutions Sdn Bhd.

Key presentations included talks on The Preanalytical Requirements of Urinalysis by Dr. Tey Tu Lip, Mindray Urinalysis Total Solutions and Weqas EQA by Mr. Ong Eu Gink, Sediment Analysis of RBC and Its Subclasses by Mr. Hing Wai Lum, User Experience of Mindray EU-5600 Pro by Mr. Vickneswaran A/L Babu, and Urinalysis in Kidney Disease Diagnosis by Dr. Kong Boon Huei.

Three demonstration sessions were conducted across different stations featuring the Mindray EU-8600 Analyzer, EU-5600Pro Analyzer, and URIT UC-58 Analyzer with Weqas EQA. Participants were divided into three rotating groups, ensuring they had hands-on experience with each analyzer. In the demonstration, the key station PIC showcases the key features of the analysers, steps on running patients' samples and QC, troubleshooting, data management software. Attendees are also given chances to learn hands-on on the instruments themselves, increasing the confidence of the users on urinalysis instruments.



The workshop concluded with targeted group discussions, feedback collection, and a closing speech summarizing the day's activities. The event successfully provided comprehensive exposure to Mindray's urinalysis solutions, facilitated valuable knowledge exchange on clinical applications, and encouraged constructive discussions on improving urinalysis practices within healthcare institutions.

ii) SIEMENS HEALTHINEERS LAB SOLUTION INNOVATION DAY 2025

The Siemens Healthineers Lab Solutions Innovation Day was a professional event held on 1st July 2025, at the M World Hotel, operating under the auspices of the Malaysian Association of Clinical Biochemists (MACB). The event was well-attended, bringing together approximately 150 participants to focus on innovation and sustainability in laboratory diagnostics. The agenda featured a diverse group of international and local experts. The educational objectives centred on building greener and more efficient laboratories.

This year's theme, "*Do Less*", underscored our mission to simplify laboratory complexity through automation, sustainability, and smart innovations. The core of the programme delivered specialized knowledge crucial for advancing patient care and laboratory efficiency. The program featured presentations and demonstrations on building greener and more efficient laboratories, showcasing the transformative potential of the FlexLab™ X automation platform, the latest assay innovations, and the integration of digital solutions to enhance lab performance.

The workshop effectively integrated scientific updates and technology demonstrations to drive the development of smarter and more connected laboratories.



iii) ROCHE INNOVATION DAY 2025

The Roche Innovation Day 2025 was held on 18th June 2025 at the Renaissance Hotel Kuala Lumpur, under the auspices of the Malaysian Association of Clinical Biochemists (MACB). The event, organized by Roche Diagnostics (M) Sdn. Bhd., was attended by 190 healthcare professionals, including Heads of Department and Unit, and Lab Managers from Chemical Pathology and Histopathology Divisions. The primary objective was to serve as an avenue for networking and the exchange of knowledge among professionals in the diagnostics field.

The programme focused on the digital transformation of diagnostics and its impact on healthcare. The key topics included user experience sharing on Hepatocellular Carcinoma (HCC) patient management using specific



biomarkers (PIVKA & GAAD), centralizing decentralized patient care via integrated Point-of-Care (POC) management solutions, and empowering pathology through digital pathology with algorithms.

The event successfully brought together experts and clinicians to highlight how digital tools are driving laboratory efficiency, enabling precision diagnostics, and empowering people with real-time data for better, more confident clinical decisions.

3.0 EDUCATION SUBCOMMITTEE REPORT

(by Y.M. Tunku Marinah, Chairman of Education Subcommittee)

The Education Subcommittee, comprising dedicated professionals from diverse institutions, has continued to focus its efforts on delivering impactful educational initiatives despite the demanding schedules of its members.

The upcoming key event for this year is the symposium on **"Quality, Sustainability, And The Future Of Diagnostics"**, organized in collaboration with the Laboratory Management Subcommittee and held in conjunction with the 35th MACB Annual General Meeting (AGM).

Event details as follow,

Date	: 15 November 2025 (Saturday)
Venue	: Seminar Room, Middle Deck, Kuala Lumpur Bird Park

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Objective : To explore innovative and sustainable practices in clinical laboratory science, encouraging the adoption of environmentally responsible approaches within laboratory operations.

The symposia featured three distinguished speakers who delivered insightful presentations on critical topics:

1. ***Risk-Based QC: Where Quality Meets Sustainability*** by Dr. Nadiah Zainuddin (HKL)
2. ***The Interface of Sustainable Diagnostics in Planetary Health*** by Prof. Dr. Amir Hamzah (Sunway University)
3. ***Environmental Stewardship in Clinical Laboratories*** by Ms Jamie Phares (Beckman-Coulter Dx)

In addition, a webinar is planned for December 2025, further reinforcing our commitment to advancing knowledge sharing and professional development within the laboratory community.

Looking ahead to 2026, the Education Subcommittee is committed to building on this momentum. We plan to explore further initiatives, including webinars and collaborative sessions, to continue serving the educational needs of our members in clinical chemistry.

4.0 CORPORATE AFFAIR SUBCOMMITTEE REPORT

(by Abdullah Fahim Ahmad Hamdan, Chairman of Corporate Affairs Subcommittee)

The Council has formally appointed Mr. Abdullah Fahim Ahmad Hamdan as the new Chair of the Corporate Affairs Subcommittee. His extensive experience in clinical biochemistry, laboratory management, and professional networking is expected to enhance the Subcommittee's ability to engage stakeholders effectively, expand membership, and align corporate initiatives with the Association's long-term vision.

As of this reporting period, the Subcommittee maintains a total of 15 corporate members. This number reflects steady support from key organizations representing diagnostic companies, medical technology providers, and laboratory service partners. Sustaining this membership base is critical for resource mobilization, knowledge sharing, and ensuring that MACB remains at the forefront of professional development in laboratory medicine. Efforts will continue to retain existing members while actively reaching out to potential new partners in the healthcare and life sciences sectors.

Looking ahead, the Subcommittee will prioritize several strategic initiatives:

- a) **Digital Transformation in Laboratories:** Supporting members in adopting automation, artificial intelligence (AI), and laboratory information systems (LIS) for more efficient workflows and improved data accuracy.
- b) **Professional Development and Training:** Introducing workshops, webinars, and corporate-sponsored programs on emerging topics such as biomarker discovery, point-of-care testing, and personalized medicine.
- c) **Expanding Membership and Visibility:** Actively engaging new stakeholders in diagnostics, biotech start-ups, and healthcare IT companies to broaden the corporate member base and elevate MACB's role as a leading voice in laboratory medicine.

5.0 MACB AWARDS SUBCOMMITTEE REPORT

(by Chuo Peck Ham, Chairman of MACB Awards Subcommittee)

The MACB Awards Subcommittee is dedicated to fostering research excellence and career advancement by actively promoting and facilitating various financial and professional opportunities for our members. These initiatives, ranging from annual research awards to travel grants, are designed to recognize outstanding contributions and ensure our young scientists and active professionals remain at the forefront of clinical biochemistry.

The MACB offers several avenues for members to secure financial and professional support:

1. **MACB Young Scientist Awards (MACB-YSA):**
 - a) This prestigious award recognizes outstanding contributions and achievements in research and development (R&D) in Clinical Chemistry and Laboratory Medicine.
 - b) It is typically open to active young scientists (often under 40 years of age) with active involvement in R&D.
 - c) Winners usually receive a certificate, complimentary registration to the MACB Annual Conference, and financial support for travel and accommodation.
2. **MACB Grants (for MACB Annual Conference Attendance):**
 - a) MACB offers several grants, often in partnership with corporate entities (e.g., MACB-SNIBE, MACB-Siemens Healthineers, MACB-ROCHE Diagnostic Grant).
 - b) These grants primarily aim to support wider participation and cover registration fees for MACB Annual Conference.
 - c) These opportunities are typically available to active MACB members who have had their abstracts accepted for presentation.

3. External Travel Grants (e.g., IFCC Travel Scholarship):

- a) MACB members are eligible to apply for international grants, such as the IFCC Travel Scholarship.
- b) MACB's role as the National Society is crucial, as the application for these scholarships requires a letter of support/endorsement from the national society.
- c) This support enables MACB members to attend major international congresses, providing a vital platform to present their research, gain valuable professional experience, and build robust global networks.

4. MACB Travel Grant:

The MACB Travel Grant is awarded to deserving members to help fund travel for presenting papers and posters at conferences or attending training abroad. These general grants are highly competitive and restricted to just two recipients annually.

5. MACB Scholarships:

The MACB Scholarship supports members by funding education, training, research, and professional development opportunities to advance careers and strengthen the field of clinical biochemistry.

The independent selection committee includes independent representatives from the health industry, corporate sector, educators, researchers, and experts with laboratory medicine backgrounds. This structure ensures a fair and comprehensive evaluation of all applications.

Young scientists and active MACB members are strongly encouraged to monitor the official MACB website and conference announcements for open calls and deadlines for these grants and awards, as they represent significant opportunities for professional growth and international collaboration.

Summary of awards granted in 2024 & 2025:

1. MACB-Corporate Grant

A total of 131 grants been awarded to deserving participants to attend the recent 35th MACB Annual Conference from 25th to 27th Aug 2025 held at M World Hotel, Kuala Lumpur.

2. MACB Young Scientist Awards 2025 Recipients



Abstract title:

Molecular Mechanisms of Apoptotic and Cell Cycle Pathways Induced by Triphenyltin (IV) Dithiocarbamate Compounds in Childhood Acute Lymphoblastic Leukemia (ALL) Cell Lines, CCRF-CEM and REH. (ePoster)

35th MACB Annual Conference and the 49th MSBMB Annual Conference (ICBMBLM 2025), M World Hotel, Petaling Jaya, Kuala Lumpur (26–27 Aug 2025)

Recipient: Miss Nabiha Hidayah, Medical Lab Scientist
(Universiti Kebangsaan Malaysia)



Abstract title:

Diphenyltin (IV) N-Methyl-N-Benzylthiocarbamate (Ph₂Sn-MBzDTC) Selectively Induces Cytotoxicity and Mitochondria-mediated Apoptosis in A549 Lung Cancer Cells (ePoster)

35th MACB Annual Conference and the 49th MSBMB Annual Conference (ICBMBLM 2025), M World Hotel, Petaling Jaya, Kuala Lumpur (26 - 27 Aug 2025)

Recipient: Miss Nurul Amalina Abd Aziz
(UKM, Center for Toxicology and Health Risk Studies,
Faculty of Health Sciences, Universiti Kebangsaan Malaysia,
Jalan Raja Muda Abdul Aziz, Kuala Lumpur)



Abstract title:

Decoding Porphyrin in Malaysia: Biochemical and Molecular Characterisation (ePoster)

35th MACB Annual Conference and the 49th MSBMB Annual Conference (ICBMBLM 2025), M World Hotel, Petaling Jaya, Kuala Lumpur (26 - 27 Aug 2025)

Recipient: Dr. Sofwatul Mukhtaroh Nasohah
Institute for Medical Research (IMR),
National Institutes of Health (NIH)



Abstract title:

Toxicomolecular Study of in utero Hydroquinone Exposure in Fetal Hematopoietic Stem Cells Niche: The Future for Biomarker Discovery (ePoster)

35th MACB Annual Conference and the 49th MSBMB Annual Conference (ICBMBLM 2025), M World Hotel, Petaling Jaya, Kuala Lumpur (26 - 27 Aug 2025)

Recipient: Mrs. Nur Afizah Yusoff
(Universiti Kebangsaan Malaysia)

3. MACB Grant Recipient



Abstract title:

From Sample to Result: Fully automated LC-MS/MS for Efficient Antifungal Therapeutic Drug Monitoring (Oral)

35th MACB Annual Conference and the 49th MSBMB Annual Conference (ICBMBLM 2025), M World Hotel, Petaling Jaya, Kuala Lumpur (26 - 27 Aug 2025)

Recipient: Mrs. Nur Nadiah Yusoff (Hospital Kuala Lumpur)

4. MACB Travel Grant Recipients



Abstract title:

Unravelling Persistent Hypocalcaemia in Autoimmune Polyendocrine Syndrome Type 1: Insights from a Case Study (Poster)

XXVI IFCC-EFLM EuroMedLab Congress in Brussels, Belgium (18 - 22 May 2025)

Recipient: Dr Norashidah Rahmat
(Hospital Raja Perempuan Zainab II, Kelantan)



Abstract title:

Morphine Glucuronides Acid Hydrolysis Efficiency Study (ePoster)

17th Asian Forensic Science Network (AFSN) and the 13th Asia Pacific Medico Legal Agencies (APMLA) Conference, Inspire Entertainment Resort, Incheon South Korea (15-19 Sept 2025)

Recipient: Dr Nordiana Rosli (Hospital Kuala Lumpur)

In-line with its objective, the MACB also provided letters of recommendations to its members who applied for grants from APFCB and IFCC to attend international congresses and conferences. The MACB congratulates the following members for successfully obtaining the respective grants:

a) APFCB Young Scientists Award



Abstract title:

The Performance of Unsupervised Machine Learning Methods in the Indirect Reference Interval Estimation of Selected Biochemical Analytes (Poster)

IFCC WorldLab 2024 Conference, Dubai World Trade Centre, United Arab Emirates (26–30 May 2024)

Recipient: Marina Shah Muhammad Zabri Tan
(PhD Candidate, Universiti Malaya under HLP Sponsorship)

b) APFCB-AACB Travelling Scholarship



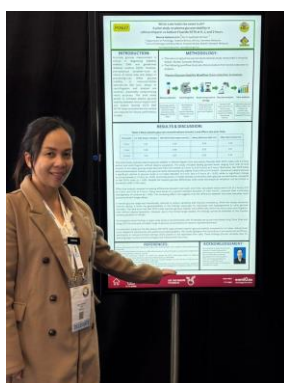
Abstract title:

Beyond Percentiles: Leveraging Minimum and Maximum Values for Enhanced Reference Interval Estimation Using a Clustering-Based Method (Oral)

17th APFCB Congress 2024, International Convention Centre (ICC) Sydney, Australia (31st October to 3rd November 2024)

Recipient: Marina Shah Muhammad Zabri Tan
(PhD Candidate, Universiti Malaya under HLP Sponsorship)

a) IFCC Travel Scholarship Recipient



Abstract title:

Which Tube Holds the Sweet Truth? A Pilot Study on Plasma Glucose Stability in Lithium Heparin vs. Sodium Fluoride EDTA at 0, 1, and 2 Hours.

XXVI IFCC-EFLM EuroMedLab Congress in Brussels, Belgium (18–22 May 2025)

Recipient: Wenna Nallance Lim, Medical Lab Scientist
(Hospital Mukah, Sarawak)

With the initiative plan in place, we hope that it will also serve as an invaluable opportunity to raise the recognition of laboratory medicine scientists globally as well as promote networking among young scientists. The sharing of thoughts and opinions will aid our respective fields to progress as allied healthcare professionals and to recognize the important role of laboratory medicine in healthcare.

6.0 COMMUNICATION AND PUBLICITY (C&P) SUBCOMMITTEE REPORT*(by Mohd Firdaus Abd Aziz, Chairman of Communication and Publicity Subcommittee)*

The Communication and Publicity (C&P) Subcommittee of the Malaysian Association of Clinical Biochemists (MACB) has continued to strengthen visibility and communication channels to support MACB's activities and membership growth. Over the past year, the subcommittee focused on website upgrades, digital engagement, publicity for scientific events, and the introduction of new digital tools to improve member interaction. This report summarises our responsibilities, achievements, and upcoming plans.

Summary of activities in 2024 & 2025:**A. Website and Digital Tools**

- i. Website Revamp & Membership Database: The MACB website was upgraded with a membership database that allows members to update their contact details and receive the latest information about MACB's activities.
- ii. MACB QR Attendance App: A new app was developed to manage check-ins at the MACB Conference. By scanning QR codes on tickets and nametags, the registration process was smoother, quicker, and more organised.

B. MACB Newsletter: No newsletter publication this year.**C. Online Platforms and Outreach**

- i. MACB Main Website: www.macb.org.my
- ii. Malaysian Journal of Clinical Biochemistry: <https://journal.macb.org.my/index.php/home>
- iii. Social Media Accounts:
- iv. Facebook: www.facebook.com/macbpage
- v. Instagram: www.instagram.com/macb_moments
- vi. YouTube Channel: www.youtube.com/channel/UccOj_T_tJfKpWL7FttFImw (Note: URL to be updated after the channel reaches 100 subscribers) Please subscribe now.
- vii. Flickr Account: www.flickr.com/photos/macbphotogallery/albums
- viii. Telegram Info Channel: t.me/macbinfo
- ix. MACB WhatsApp Number: wa.me/60193744779

These platforms have been instrumental in promoting events, sharing scientific updates, and maintaining connections with members and the wider community.

D. Publicity Support

- i. Coordinated and managed digital promotional materials for the upcoming International Conference of Biochemistry, Molecular Biology & Laboratory Medicine 2025 (ICBMBLM 2025), which will be held in conjunction with the 35th MACB & 49th MSBMB Annual Conference.
- ii. Assisted with publicity and awareness for MACB's participation at international and regional congresses.
- iii. Managed publicity efforts for workshops and member announcements through digital platforms.

E. Future Plans

- i. Resume MACB Newsletter publication with new design and digital distribution format.
- ii. Strengthen social media reach by increasing engagement and regular updates.
- iii. Expand digital tools, such as QR-based event engagement features.
- iv. Continue efforts to grow online subscribers and followers, particularly YouTube.
- v. Develop a centralised publicity calendar to coordinate event promotions more effectively.

In conclusion, the C&P Subcommittee remains dedicated to the promotion of MACB and its clinical biochemistry initiatives. Our recent accomplishments and future plans are aligned with our mission to educate and engage the community about the organization's work and attract new volunteers and members.

7.0 JOURNAL SUBCOMMITTEE REPORT

(By Dr. Nurulamin Bin Abu Bakar, Chairman of Journal Subcommittee)

The Malaysian Journal of Clinical Biochemistry (MJCB) (ISSN Online: 2735-0851, ISSN Print: 1394-1011) is the official publication of the Malaysian Association of Clinical Biochemists (MACB). As a fully peer-reviewed journal, MJCB is dedicated to advancing knowledge in the fields of laboratory medicine and clinical biochemistry. The journal continues to welcome contributions from laboratory professionals, academicians, and members of the wider scientific community, both MACB members and non-members. To further support its growth and visibility, all are encouraged to register as readers and reviewers through the official website at <https://journal.macb.org.my/home/index>.

The MJCB Editorial Team has successfully published the first volume in 2024, marking a significant milestone for the journal under MACB. In 2025, the journal continued its progress with the publication of Volume 2, Number 1, which included two articles authored by the recipients of the Young Scientists Award 2024 presented during the 34th MACB Conference. These articles underwent a rigorous peer-review process and fulfilled all publication requirements, reflecting the journal's commitment to academic quality and integrity.

Looking ahead, the MJCB is preparing for the publication of Volume 3, Number 1 in January 2026, which will feature four articles from the Young Scientists Award 2025 recipients of the 35th MACB Conference.

8.0 LAB MANAGEMENT AND SUSTAINABILITY SUBCOMMITTEE REPORT

(By Mohd Hareeff Muhammed, Chairman of Lab Management and Sustainability Subcommittee)

The Laboratory Management and Sustainability Subcommittee is primarily focused on supporting professional development by organizing essential workshops, training, and webinars on both clinical laboratory management best practices and current environmental issues. Its role is also crucial in coordinating MACB's activities through its working groups, and acting as a liaison with international bodies (like APFCB and IFCC) to ensure members receive a steady flow of educational materials and guidance.

Summary of activities in 2024 & 2025 :

1. Conducted webinar on 05/06/2024 in conjunction with World Environmental Day. Co-organised with APFCB, Premier Integrated Labs, Siemens Healthineers. Total of 55 participants dialed-in
2. Conducted webinar on 15/06/2024 on ISO 15189 Lab accreditation analytical quality requirements
3. Co-organised with APFCB, IACC and SNIBE.
4. Support the organisation of MACB Annual Scientific Meeting 2025
5. Planning with APFCB to organise Green Lab Competition across Asia Pacific - details to be advice
6. Planning a symposium on "Quality, Sustainability, And The Future Of Diagnostics" on 15 November 2025 in conjunction with 35th MACB AGM.

9.0 ANNUAL GENERAL MEETING 2024

The 34th MACB AGM was held physically on 22nd July 2024 at Royale Chulan Hotel, Kuala Lumpur. Please refer to the 34th AGM minutes for details.

10.0 MACB ANNUAL CONFERENCE 2024

10.1 34th MACB Annual Conference

The 34th Annual Conference of the Malaysian Association of Clinical Biochemists (MACB), held in collaboration with the 2nd MYBIOMED Symposium, took place from 21st to 23rd July 2024 at The Royale Chulan Kuala Lumpur. Themed “*Towards Holistic, Integration and Sustainability in Medical Laboratories,*” the event brought together professionals and experts to explore advancements and challenges in laboratory medicine.

The conference commenced with a pre-conference session on 21st July titled “*Risk Management in Medical Laboratory*,” which drew 91 participants and was generously supported by Chemopharm Group. This session featured four distinguished speakers, two international and two local who shared insights into risk mitigation strategies within laboratory settings.



Pic: Opening ceremony of the 34th MACB Annual Conference, in collaboration with the 2nd MYBIOMED Symposium

The main conference, held on 22nd and 23rd July, welcomed a total of 344 participants, comprising 255 delegates from MACB and 87 from MYBIOMED. Highlights included an opening ceremony, a keynote address on the Health White Paper and its implications for medical laboratories by the IMR Director, and a series of symposiums covering a wide range of topics such as:

- General Chemical Pathology
- Molecular Diagnostics
- Value-Based Laboratory Medicine
- Vaccinology
- Paediatric Chemical Pathology
- Natural Product Research
- Digital Technology
- Toxicology & Pharmacology

Plenary lectures addressed critical subjects including Bone Markers and Hormones in CKD-MBD, the One-World One-Health initiative, and updates on MACB’s CKD recommendations. Eighteen speakers contributed to the conference—7 international and 11 local speakers—bringing diverse perspectives and expertise. The event was supported by sponsors including Pantai Integrated Lab, DWLab, Siemens, Utas Maju, Waters, and MACB.

The scientific programme also featured industrial talks, 20 poster presentations, and 8 oral presentations. A total of 74 poster and 16 oral submissions were received, with 6 poster and 3 oral presenters recognized with awards. Young Scientist Awards were presented to outstanding contributors from both MACB and MYBIOMED.

Both MACB and MYBIOMED held their Annual General Meetings during the conference. Post-event activities included the distribution of certificates and e-certificates, as well as the collection of participant feedback to inform future initiatives

10.2 35th MACB ANNUAL CONFERENCE

The International Conference of Biochemistry, Molecular Biology & Laboratory Medicine 2025 (ICBMBLM 2025), ICBMBLM 2025, held alongside the 35th MACB Annual Conference and the 49th MSBMB Annual Conference, has just concluded. The event successfully showcased innovations and advances in laboratory sciences under the theme “*Charting New Frontiers: Integrating Sustainable Innovations for Next-Generation Healthcare.*” It facilitated international collaborations with the IUBMB and APFCB, providing opportunities for knowledge exchange and networking among regional and global experts.

A full report on the conference will be prepared and made available in the following year. Following the success of this year’s event, details for the 36th MACB Annual Conference in 2026, including its location and schedule, can be accessed via the MACB website.

11.0 OTHER ACTIVITIES

11.1 IFCC GLOBAL MEDLAB WEEK 2025

The Malaysian Association of Clinical Biochemists (MACB) team participated in Global MedLab Week 2025, an IFCC initiative that celebrates the vital role of laboratory medicine and laboratory professionals in patient care and public health.

As part of the campaign, two submissions were prepared. First, a four-minute podcast titled “Lab Saves Life: Collaboration between Hospital Kuala Lumpur, Hospital Tunku Azizah, and MACB” moderated by Dr. Siti Nor Aishah Saharudin (Medical Lab Scientist from HTA Pathology Department) with panellists Dr. Chan Xin Yi (Toxicologist from HKL Emergency Department) and Miss Yew Jie Min (Pharmacist from HKL Pharmacy Department). The podcast engaged key clinical users of laboratory results, medical and pharmacy teams to demonstrate how timely, accurate laboratory data informs treatment decisions and helps save lives; this form of engagement was insightful and refreshing for all parties.



Second, a short video highlighted the importance of rapid notification of critical results to clinicians, reinforcing that fast action saves lives. This message aligns with widely recognized patient-safety guidance emphasizing timely communication of critical values.

The video can be viewed here:



Overall, MACB’s participation strengthened collaboration with clinical stakeholders and showcased the direct impact of laboratory services on patient outcomes within the Global MedLab Week campaign.

11.2 MACB PARTICIPATION IN INTERNATIONAL CONGRESSES AND CONFERENCES

1) GOLDEN JUBILEE CONFERENCE OF THE ASSOCIATION OF CLINICAL BIOCHEMISTS OF INDIA (ACBICON 2024)

The Association of Clinical Biochemists of India (ACBI) has invited the Malaysian Association of Clinical Biochemists (MACB) to participate in the Golden Jubilee Conference of ACBI (ACBICON 2024), which will be held from 5th to 7th December 2024 at Hotel Mount View, Chandigarh, with pre-conference workshops on 4th December 2024.

Assoc. Prof. Dr. Pavai Sthaneshwar is nominated to represent the Malaysian Association of Clinical Biochemists (MACB) at ACBICON 2024. She presented on the topic “*Kidney Failure Risk Assessment*”, highlighting MACB’s initiative in standardised reporting of eGFR and ACR, and the implementation of the Kidney Failure Risk Equation (KFRE) in Malaysia.

Her presentation aligned with Astra Zeneca’s ongoing efforts to support kidney health awareness and educational initiatives, providing a valuable platform to showcase Malaysia’s progress in harmonising renal function reporting. Her participation is also expected to strengthen professional networking and scientific collaboration between MACB and ACBI in advancing laboratory medicine across the region.

2) MACB PARTICIPATION AT APFCB CONGRESS 2024 IN SYDNEY, AUSTRALIA

At the APFCB Congress 2024 in Sydney, Australia, the MACB hosted Symposium 20, titled “*Advancing Health: Bridging Gaps in Endocrine Test Reporting and Novel Lipid Profiles in Malaysia*”, which was held on 3rd November 2025. The lectures delivered were as follows:

1. “*Standardised laboratory reporting for prediabetes: An initiative of the 'Stand Against Prediabetes national campaign*” by Dr. Leslie Charles Lai
2. “*Screening for Macroprolactinaemia: Malaysian Scenario*” by Assoc. Prof. Dr. Pavai Sthaneshwar
3. “*A Closer Look: Malaysian Insights into Atherogenic Pattern B Lipoprotein Profile*” by Dr. Subashini C. Thambiah



Pic : Dr. Leslie Lai delivering a lecture at the APFCB Congress 2024

The MACB symposium was chaired by Dr. Raja Elina, President of MACB. Dr. Elina also delivered 2 lectures at the congress. On Friday, 1st November 2024 in Educational Workshop 1 on Risk Management in Clinical Laboratory she delivered a lecture on “*Applying Risk Management for Continuous Improvement*”. Another lecture on the topic “*Challenges in the interpretation of drugs of abuse tests*” was delivered on Saturday, 2nd November 2024 in Educational Workshop 4 on Result Interpretation

The MACB was an active participant at the APFCB Congress 2024. In addition to hosting a symposium and bringing a large delegate of more than 20 people to attend the congress in Sydney, the MACB took an exhibition booth at the congress to promote the 18th APFCB Congress 2027 which will be held in Kuala Lumpur, Malaysia.



Pic: The Malaysia team at the APFCB Congress 2024



The handing over of the APFCB Congress from the Australasian Association of Clinical Biochemists (AACB) to the Malaysian Association of Clinical Biochemists (MACB) was a colourful and memorable event, highlighted by vibrant cultural attire and enthusiastic participation. The ceremony began with the rhythmic beats of the kompang (traditional drum) and a compelling video showcasing Malaysia, building anticipation for the upcoming Congress. It was a meaningful celebration of scientific camaraderie and regional collaboration.



Pic : Handing over ceremony of the 24th APFCB Congress to MACB

3) IFCC GENERAL CONFERENCE 2025

The IFCC General Conference 2025, themed “*Connecting Science, Health, and Innovation: The Future Flows Like Water*”, took place from May 16–17, 2025, at the Hotel Crown Plaza in Bruges, Belgium.

Attendance was by invitation and included:

- IFCC Functional Unit Officers (Chairs and Members of Divisions; Chairs of Committees, Task Forces, and Working Groups)
- Presidents or Representatives of National Societies
- Presidents of Regional Federations
- Corporate Member Representatives
- Invited Speakers, Moderators, and Guests

The Malaysian Association of Clinical Biochemists (MACB) was represented by its President, Dr. Raja Elina Raja Aziddin, and Treasurer, Madam Chen Bee Chin. Accommodation arrangements were graciously provided by the IFCC.

Held every three years, this flagship event continues to serve as a vital platform for IFCC member organizations, promoting scientific dialogue, policy harmonization, and professional networking.

Day 1 Highlights

The conference commenced with an opening address by IFCC President, Prof. Tomris Ozben, followed by a series of presentations and discussions on:

- Updates from the IFCC Executive Board
- Current initiatives and future directions of IFCC Regional Federations
- Activities and strategic plans of IFCC Divisions
- Progress and outlook of IFCC Task Forces

- The future of the In Vitro Diagnostic (IVD) industry: Exploring partnership models for the effective integration and adoption of emerging technologies in medical laboratories.

The day concluded with the General Conference Networking Gala Dinner.



Pic: Opening remarks by Prof Tomris Ozben, IFCC President



Pic: Networking at IFCC General Conference Gala Dinner

Day 2 Highlights

The second day featured in-depth sessions on:

- Laboratory errors and strategies for enhancing diagnostic accuracy and patient safety
- Sustainability and innovative payment models: current trends and practical realities
- Strategic Planning: Incorporating feedback into IFCC's future roadmap
- Networking on the IFCC platform

The conference wrapped up with closing remarks titled “*Science: Now More Than Ever*”, delivered by Prof. Tomris Ozben, summarizing key insights, acknowledging participant contributions, and outlining future IFCC initiatives.

The IFCC General Conference 2025 reinforced its role as a pivotal forum for advancing laboratory medicine globally. The MACB's participation contributed to ongoing regional and international collaboration, aligning Malaysia's laboratory standards with global best practices. During the meeting, the MACB President and Dr Leslie Lai, Chair of the 18th APFCB Congress also took the opportunity to network with potential speakers for the 18th APFCB Congress which will be held in Kuala Lumpur in 2027.

4) 26TH IFCC-EFLM EUROMEDLAB CONGRESS 2025

Following the IFCC General conference, delegates convened in Brussels for the 26th IFCC-EFLM EuroMedLab Congress, held from 18th to 22nd May 2025. The congress showcased cutting-edge advancements in laboratory automation, digital health, and mass spectrometry. Sustainability and AI integration were central themes. Exhibitors showcased advanced technologies such as automated mass spectrometry, robotics, and customizable workflow solutions aimed at improving efficiency, reducing costs, and enhancing diagnostic accuracy.



Pic: The IFCC Executive board at the 26th IFCC-EFLM EuroMedLab Congress



Pic: MACB President, MACB Treasurer with Malaysian delegates at the 26th IFCC-EFLM EuroMedLab Congress



Pic : MACB President at the Beckman Exhibition Booth, 26th IFCC-EFLM EuroMedLab Congress

The MACB President and treasurer took the opportunity to network with participants, exhibitors and speakers to lobby for the 18th APFCB Congress 2027. The IFCC General office staff and EuroMedLab 2027 organisers helped in disseminating the 18th APFCB Congress 2027 flyers to congress participants at their respective booths.

5) REGIONAL ASIA PACIFIC THERAPEUTIC DRUG MONITORING CONFERENCE 2025 (RAPTDM 2025)

The Regional Asia Pacific Therapeutic Drug Monitoring Conference 2025 (RAPTDM 2025) was held for the first time at the Eastin Hotel, Penang, from 7th to 8th April 2025, with sponsorship provided by Analytical Scientific and the Royal College of Pathologists of Australasia (RCPA).

This inaugural conference focused on Therapeutic Drug Monitoring (TDM) as a vital component of precision medicine and served as a platform for healthcare professionals to exchange knowledge, discuss best practices, and strengthen regional collaboration. Renowned speakers presented on TDM applications, particularly in antifungal and immunosuppressant monitoring, with emphasis on improving patient outcomes through multidisciplinary practice.

Our MACB members consist of a total of four Chemical Pathologists and two Scientific Officers attended the event. Their participation reflects a multidisciplinary approach in strengthening TDM practices, aligned with the new TDM Antifungal service recently introduced at Hospital Kuala Lumpur (HKL). This collaborative effort reinforces the integration of clinical and laboratory expertise to enhance therapeutic monitoring and patient care.

A poster presentation titled *“Evaluation of Accuracy and Performance of the RECIPE ClinMass Kit for an External Quality Assurance Programme with a Clinical Laboratory Automated Module (CLAM) Liquid Chromatography Tandem Mass Spectrometry System”* was also presented by Dr. Nor’ashikin Othman. The presentation highlighted local validation efforts and quality assurance initiatives supporting the implementation of LC-MS/MS-based TDM services in Malaysia.

6) 23rd Congress of the International Association of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT 2025)

The 23rd International Congress of Therapeutic Drug Monitoring and Clinical Toxicology (IATDMCT 2025) was held from 21st to 24th September 2025 at the Grand Copthorne Waterfront Hotel, Singapore.

With approval from the Ministry of Health (MOH), our MACB member Mdm Chuo Peck Ham presented a poster titled *“Preliminary Study: Correlation of Fully Automated LC-MS/MS in Tacrolimus and Everolimus Quantification.”*. The congress was attended by a Chemical Pathologist and a Senior Scientific Officer, with the attendance supported by Shimadzu Malaysia Sdn Bhd.

In conjunction with the congress, they also attended a practical session titled “From Sample Analysis to Treatment Decision,” organized by Hitachi Hi-Tech at the Academy, Singapore General Hospital.

A valuable discussion and knowledge-sharing session was also held with experts and pharmacists during the event. Dr. Noboru Yamamoto and Ms. Reiko Ando Makihara from the National Cancer Centre Hospital, Japan, expressed interest in learning from Hospital Kuala Lumpur’s (HKL) experience in conducting Mycophenolic Acid (MPA) testing and evaluation using the same Shimadzu LC-MS/MS platform, which has been established at HKL.

This participation provided an opportunity to share local research, gain hands-on experience with LC-MS/MS, and engage with international experts in TDM and clinical toxicology. The congress, themed *“Creative Solutions for Global Challenges,”* coincided with the implementation of new TDM testing for antifungal and immunosuppressant drugs at HKL, strengthening collaboration, technical expertise,

and the advancement of TDM services in Malaysia.

7) Mindray International CLIC-Talk (Chemiluminescence Immunoassay and Chemistry Talk)

The Mindray International CLIC-Talk, sponsored by Chemopharm Sdn Bhd was held from 28th to 31st October 2025 in Shenzhen, China.

A Scientific Officer attended this event to explore its applications in in-vitro diagnostics (IVD), particularly in chemistry and immunoassay.

The program offered an opportunity for knowledge exchange with leading experts from the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) and other prestigious institutions, providing insights that could support the enhancement of diagnostic practices in Malaysia.

11.3 MEMBERSHIP TO THE EFLM ACADEMY

The Malaysian Association of Clinical Biochemists (MACB) provides a valuable benefit to its active members through its affiliation with the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Academy.

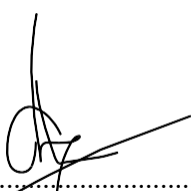
Since 2021, MACB has handled the blocked enrolment for the EFLM Academy, securing a key agreement that grants members free access to vital resources from the Clinical Laboratory Standards Institute (CLSI).

This benefit has been extremely popular, with membership growing significantly from 47 MACB members enrolled in 2021 to 117 members in 2025. Members should note that annual renewals for the EFLM Academy start every October/November, with the new benefits becoming active in January.

For up-to-date enrolment details, please check the MACB website.

Prepared by:

Certified Correct by:



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Chuo Peck Ham
Secretary 2024/2026



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President 2024/2026