



Mahidol University
Faculty of Medical Technology

Participant Handbook

The External Quality Assessment Schemes in Clinical Laboratory
Faculty of Medical Technology, Mahidol University



2025
EQAS MUMT

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[1] Introduction

The External Quality Assessment Schemes in Clinical Laboratory, Faculty of Medical Technology, Mahidol University, was established in 1985 by the late Professor Dr. Vikul Viranuvatti the Founding Dean and a pioneer in Thailand's medical technology profession. This program was the first external assessment initiative for medical laboratories in Thailand and continues to play a vital role in ensuring laboratory standards both nationally and internationally. At present, the program encompasses 13 schemes spanning 5 major areas.



1. Clinical Chemistry

- 1.1 The External Quality Assessment Scheme in Clinical Chemistry (EQAC)
- 1.2 The External Quality Assessment Scheme in Cardiac Markers (EQACM)
- 1.3 The External Quality Assessment Scheme in Hormones (EQAH)
- 1.4 The External Quality Assessment Scheme in Tumor Markers (EQAT)

2. Clinical Microscopy

- 2.1 The External Quality Assessment Scheme in Clinical Microscopy: Complete Blood Count (B-EQAM)
- 2.2 The External Quality Assessment Scheme in Clinical Microscopy: Blood Film Examination (H-EQAM)
- 2.3 The External Quality Assessment Scheme in Clinical Microscopy: Virtual Blood Film Examination (VH-EQAM)
- 2.4 The External Quality Assessment Scheme in Clinical Microscopy: Urine - Cytohematology Proficiency Test (UC-EQAM)

3. Parasitology

- 3.1 The External Quality Assessment Scheme in Parasitology (EQAP)

4. Immunology

- 4.1 The External Quality Assessment Scheme in Clinical Immunology: Syphilis Serology (EQAI: Syphilis)*

- 4.2 The External Quality Assessment Scheme in Clinical Immunology:
Hepatitis B Virus serology (EQAI: HBV)
- 4.3 The External Quality Assessment Scheme in Clinical Immunology:
Hepatitis C Virus Serology (EQAI: HCV)

5. Bacteriology

The External Quality Assessment Scheme in Bacteriology (EQAB)

- Gram stain (EQAB: GRAM)*
- Acid fast bacilli stain (EQAB: AFB)*
- Bacterial identification and susceptibility testing (EQAB: IDEN & AST)*

*The schemes accredited by ISO/IEC 17043:2010.

[2] Objectives

- 2.1 Provide external quality assessment schemes in comply with the requirement of ISO/IEC 17043.
- 2.2 Conduct the service with impartiality and transparency.
- 2.3 Respect and safeguard the customer's rights and privacy.
- 2.4 Maintain and improve the quality of service.

[3] Departments and Responsibilities

Departments	Responsibilities
Center for Standardization and Product Validation	<ul style="list-style-type: none"> ● Customer communication ● Enrollment Management ● EQAS MUMT e-Service and database management ● Coordinate between scheme providers and participants ● EQAC and EQACM provider
Clinical Chemistry	<ul style="list-style-type: none"> ● EQAH and EQAT provider
Community Medical Technology	<ul style="list-style-type: none"> ● EQAP provider
Clinical Microscopy	<ul style="list-style-type: none"> ● B-EQAM, H-EQAM, VH-EQAM and UC-EQAM provider
Clinical Microbiology and Applied Technology	<ul style="list-style-type: none"> ● EQAI: Syphilis, EQAI: HBV, EQAI: HCV and EQAB provider

[4] Fees and General Information

Enrollment: July 1, 2024 – November 1, 2024

Membership period: January 1 – December 31, 2025

No.	Program	Fee (THB)**	Maximum number of Participants	Payment Due Date
1.	EQAC	3,000	Unlimited	November 1, 2024
2.	EQACM	5,000		
3.	EQAH	4,500		
4.	EQAT	4,500		
5.	EQAP*	2,000	200	
6.	B-EQAM	3,500	500	
7.	H-EQAM	3,500	250	
8.	VH-EQAM	3,000	Unlimited	
9.	UC-EQAM	1,500		
10.	EQAI: Syphilis	2,200		
11.	EQAI: HBV	2,200		
12.	EQAI: HCV	2,200		
13.	EQAB: All 1) GRAM 2) AFB 3) IDEN & AST	3,000		
	EQAB: GRAM	1,000		
	EQAB: AFB	1,000		
	EQAB: IDEN & AST	1,200		

* Note: EQAP: enrollment options

- 1) Both examination and digital specimen
- 2) Fecal examination only
- 3) Digital specimen only

***Does not include international logistic fee for international participants.

[5] Requirements for Participation

1. Medical laboratories. Laboratories outside Thailand are accepted but must cover additional logistic and custom clearance expenses.
2. For an oversea applicant, please send a request to eqamtmu@gmail.com.
3. Making payment within the deadline.
4. To comply with the confidentiality policy, all correspondence must be done by the applicants themselves.
5. For any questions or suggestions, please contact:

Center for Standardization and Product Validation
Faculty of Medical Technology, Mahidol University
999 Phutthamonthon Sai 4 Road
Salaya, Puthamonthon
Nakhon Pathom 73170 Thailand

Telephone	+66 2441 4376 ext 2512
Mobile	+66 6 3895 1287
E-mail	eqamtmu@gmail.com
Line Official	@eqasmumt
Line OpenChat	EQAS MUMT CONNECT

[6] Enrollment Process

6.1 Website	https://eqamt.mahidol.ac.th
6.2 Payment Methods	Internation Bank Transfer
Name of beneficiary	Project the External Quality Assessment Schemes in Clinical Laboratory, Faculty of Medical Technology, Mahidol University
Address of beneficiary	999 Phutthamonthon Sai 4 Rd, Salaya, Puthamonthon, Nakhon Pathom 73170 Thailand
Telephone	+66 2 441 4376 ext. 2512
E-mail address	eqamtmu@gmail.com
Beneficiary account no.	016 452491 2
Beneficiary's bank	Siam Commercial Bank Public Company Limited
Bank code (SWIFT code)	SICOTHBK
Branch and address	Siriraj Branch, No. 2 Phran Nok Rd., Siriraj, Bangkok Noi, Bangkok, Thailand

*Note. All beneficiary bank's fee, charges / expenses shall be collected from applicant.

6.3 Proof of payment

After making payment, please upload the proof of payment to EQAS MUMT e-Service via <https://eqamt.mahidol.ac.th> under the "Payment" menu or send it via email to eqamtmu@gmail.com.

6.4 Receipt

The receipt will be sent by E-mail within 30 days after the payment date. If the receipt is missing, please contact eqamtmu@gmail.com

6.5 Cancellation and refund policy

A request for refund may be made under the following circumstances:

1. Overpayment
2. Request for cancellation before November 1, 2022.

If you are an oversea applicant, please send a request for cancellation to eqamtmu@gmail.com.

[7] Request for a copy of Report

7.1 Report

According to our policy, reports are issued in PDF format (Portable Document Format) via the EQAS MUMT e-Service and are available for download for 12 months. After this period, participants must submit a request through the website (<https://eqamt.mahidol.ac.th>) under the “Request” menu by selecting “Document Duplicate Request.”

[8] Certificates

e-Certificates will be awarded to participants who fulfill the requirements of each scheme. These certificates will be issued online by the end of the round. Participants are encouraged to complete the satisfaction survey as part of the process.

[9] Confidentiality

The identity of participants is regarded as strictly confidential and is disclosed solely to individuals directly involved in the administration of the scheme, except in cases where the participant has explicitly waived their right to confidentiality. When necessary, only the unique participant ID assigned by the scheme will be utilized to ensure anonymity.

Any external parties – participant’s sponsors, requesting a copy of the report must first obtain written authorization from the participant and provide a completed verification form. The program coordinator will subsequently contact the participant directly to confirm and validate the authorization.

In instances where a regulatory authority requires access to the participant's assessment results, the scheme will issue an official written notification to the participant in advance.

[10] Complain and Appeals

If a participant disagrees with the evaluation following steps may be taken:

1. Initial Discussion: Contact the scheme to discuss and find an appropriate solution that complies with relevant standards and technical grounds.
2. Formal Appeal: If the initial discussion does not reach a satisfactory conclusion, participant have the right to file a formal appeal within 30 days. The appeal must be submitted in writing and include:

Laboratory name

Address

Detailed assessment results

Results of the initial review

Signature of either the laboratory head or supervising administrator

The formal appeal should be submitted to:

Division of Legal Affairs,

Office of President, Mahidol University

999 Phutthamonthon Sai 4 Road

Salaya, Phuthamonthon, Nakhon Pathom 73170

Thailand

[11] Schemes Information

EQAC I Clinical Chemistry

The External Quality Assessment Scheme in Clinical Chemistry

Provider	Center for Standardization and Product Validation Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Puthamonthon, Nakhon Pathom 73170																								
Sample	Human serum (lyophilized, negative for HBsAg, anti-HCV, anti-HIV, HIV antigen and syphilis antibody)																								
Test(s)	<table border="0"> <tr> <td>1. Albumin</td> <td>9. Chloride</td> <td>17. LDL-Cholesterol</td> </tr> <tr> <td>2. ALP</td> <td>10. Cholesterol</td> <td>18. Magnesium</td> </tr> <tr> <td>3. ALT (SGPT)</td> <td>11. CK, Total</td> <td>19. Phosphorus, Inorganic</td> </tr> <tr> <td>4. Amylase, Total</td> <td>12. Creatinine</td> <td>20. Potassium</td> </tr> <tr> <td>5. AST (SGOT)</td> <td>13. GGT</td> <td>21. Protein, Total</td> </tr> <tr> <td>6. BUN</td> <td>14. Glucose</td> <td>22. Sodium</td> </tr> <tr> <td>7. Bilirubin, Total</td> <td>15. HDL-Cholesterol</td> <td>23. Triglycerides</td> </tr> <tr> <td>8. Calcium, Total</td> <td>16. LDH</td> <td>24. Uric acid</td> </tr> </table>	1. Albumin	9. Chloride	17. LDL-Cholesterol	2. ALP	10. Cholesterol	18. Magnesium	3. ALT (SGPT)	11. CK, Total	19. Phosphorus, Inorganic	4. Amylase, Total	12. Creatinine	20. Potassium	5. AST (SGOT)	13. GGT	21. Protein, Total	6. BUN	14. Glucose	22. Sodium	7. Bilirubin, Total	15. HDL-Cholesterol	23. Triglycerides	8. Calcium, Total	16. LDH	24. Uric acid
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6. BUN	14. Glucose	22. Sodium																							
7. Bilirubin, Total	15. HDL-Cholesterol	23. Triglycerides																							
8. Calcium, Total	16. LDH	24. Uric acid																							
Frequency	12 trials/year (dispatch in every first week of the month)																								
Number of sample(s) / trial	1 sample																								
Performance Evaluation	Z-score calculated from robust mean and robust SD Acceptable criteria: Z-score of less than ± 3.0																								
Subcontractor	Medical Diagnostic Laboratory Unit, Holistic Health and Medical Diagnostic Center, Faculty of Medical Technology 2 Wanglang Road Bangkok-Noi, Bangkok 10700 Activity: Homogeneity and stability tests																								
Contact person	Ms. Prapapon Thanaootarakul, Ms. Chonnipa Pantakrud																								
Phone	+66 2 441 4376 Ext. 2524 and +66 98 216 6571																								
E-mail	eqacmumt@gmail.com																								

EQACM I Cardiac Marker

The External Quality Assessment Scheme in Cardiac Marker

Provider	Center for Standardization and Product Validation Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Puthamonthon, Nakhon Pathom 73170
Sample	Human serum (lyophilized, negative for HBsAg, anti-HCV, anti-HIV, HIV antigen and syphilis antibody)
Test(s)	Test Hormones: 1) hsTroponin I 2) hsTroponin T 3) NT-pro BNP
Frequency	6 trials/year (dispatch on every 15 th day of February, April, June, August, October and December)
Number of sample(s) / trial	2 samples
Performance Evaluation	Z-score calculated from median and normalized IQR Acceptable criteria: Z-score of less than ± 3.0
Subcontractor	International Center for Medical and Radiological Technology, Faculty of Medical Technology, Mahidol University No. 888 Golden Jubilee Medical Center, Moo. 6 Salaya, Phutthamonthon, Nakhon Pathom 73170 Activity: Homogeneity and stability tests
Contact person	Ms. Chonnipa Pantakrud
Phone	+66 2 441 4376 Ext. 2524 and +66 98 216 6571
E-mail	cardiac.eqamumt@gmail.com

EQAH I Thyroid Hormones

The External Quality Assessment Scheme in Hormones

Provider	Department of Clinical Chemistry Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Puthamonthon, Nakhon Pathom 73170
Sample	Human serum (lyophilized, negative for HBsAg, anti-HCV, anti-HIV, HIV antigen and syphilis antibody)
Test(s)	Test Hormones: 1) Total T3 2) Free-T3 (FT3) 3) Total T4 4) Free-T4 (FT4) 5) TSH
Frequency	6 trials/year (dispatch in the second week of February, April, June, August, October and December)
Number of sample(s) / trial	2 samples
Performance Evaluation	Z-score calculated from median and normalized IQR Acceptable criteria: Z-score of less than ± 3.0
Subcontractor	Medical Diagnostic Laboratory Unit, Holistic Health and Medical Diagnostic Center, Faculty of Medical Technology 2 Wanglang Road Bangkok-Noi, Bangkok 10700 Activity: Homogeneity and stability tests
Contact person	Ms. Nongkanok Khanarat
Phone	+66 2 441 4376 Ext. 2521 and +66 82 172 2663
E-mail	eqahmumt@gmail.com

EQAT | Tumor Markers

The External Quality Assessment Scheme in Tumor Markers

Provider	Department of Clinical Chemistry Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Puthamonthon, Nakhon Pathom 73170
Sample	Human serum (lyophilized, negative for HBsAg, anti-HCV, anti-HIV, HIV antigen and syphilis antibody)
Test(s)	1) Alpha-fetoprotein (AFP) 2) Carcinoembryonic antigen (CEA) 3) Prostate specific antigen (PSA) 4) Beta-human chorionic gonadotropin (beta-HCG) 5) CA 125 6) CA 19-9 7) CA 15-3
Frequency	6 trials/year (dispatch in the first week of January, March, May, July, September, and November)
Number of sample(s) / trial	2 samples
Performance Evaluation	Z-score calculated from median and normalized IQR Acceptable criteria: Z-score of less than ± 3.0
Subcontractor	Medical Diagnostic Laboratory Unit, Holistic Health and Medical Diagnostic Center, Faculty of Medical Technology 2 Wanglang Road Bangkok-Noi, Bangkok 10700 Activity: Homogeneity and stability tests
Contact person	Ms. Nongkanok Khanarat
Phone	+66 2 441 4376 Ext. 2521 and +66 82 172 2663
E-mail	eqatmumt@gmail.com

EQAP I Parasitology

The External Quality Assessment Scheme in Parasitology

Provider	Department of Community Medical Technology Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Puthamonthon, Nakhon Pathom 73170
Sample	1) Stool 2) Digital specimen
Test(s)	1) Fecal examination 2) Digital samples
Frequency	4 trials/year (dispatch in the first week of February, May, August, and November)
Number of sample(s) / trial	3 samples (stool 2 samples and digital samples 1 sample) *
Performance Evaluation	Consensus values from referee Acceptable criteria: Exact match
Subcontractor	None
Contact person	Ms. Parichat Wijanphon
Phone	+66 2 441 4376 ext. 2832 and +66 97 079 9379
E-mail	eqap.mahidol@gmail.com

*Note: Participants may submit a request to evaluate a specific test during the enrollment.

B-EQAM I Complete Blood Count

The External Quality Assessment Scheme in Clinical Microscopy

Complete Blood Count

Provider	Department of Clinical Microscopy Faculty of Medical Technology 2 Wanglang Road Bangkoknoi, Bangkok 10700
Sample	Partially stabilized whole blood
Test(s)	Complete Blood Count; CBC 1. WBC 6. MCH 2. RBC 7. MCHC 3. Hb 8. RDW 4. Hct 9. Plt 5. MCV
Frequency	4 Trial/year (dispatch in the second week of February, May, August and November)
Number of sample(s) / trial	1 sample
Performance Evaluation	Standard Deviation Index (SDI) calculated from group mean and group SD Acceptable criteria: SDI of less than ± 2.0
Subcontractor	Medical Diagnostic Laboratory Unit, Holistic Health and Medical Diagnostic Center, Faculty of Medical Technology 2 Wanglang Road Bangkok-Noi, Bangkok 10700 Activity: Homogeneity and stability tests
Contact person	Ms. Sirilak Wiriyaucharadecha
Phone	+66 2 411 2258 Ext. 171
E-mail	eqamtmu@gmail.com

H-EQAM I Blood Film Examination

The External Quality Assessment Scheme in Clinical Microscopy

Blood Film Examination

Provider	Department of Clinical Microscopy Faculty of Medical Technology 2 Wanglang Road Bangkoknoi, Bangkok 10700
Sample	Blood smear (Wright-Giemsa stain)
Test(s)	Blood film examination
Frequency	4 trials/year (dispatch in the second week of February, May, August and November)
Number of sample(s) / trial	1 sample
Performance Evaluation	Consensus from participant and referee Acceptable criterial: Exact match for qualitative parameters and consensus median for semi-quantitative and quantitative parameters
Subcontractor	None
Contact person	Ms. Sirilak Wiriyaucaradecha
Phone	+66 2 411 2258 Ext. 171 and +66 82 212 2557
E-mail	eqammtmu@gmail.com

VH-EQAM | Virtual Blood Film Examination

The External Quality Assessment Scheme in Clinical Microscopy

Virtual Blood Film Examination

Provider	Department of Clinical Microscopy Faculty of Medical Technology 2 Wanglang Road Bangkoknoi, Bangkok 10700
Sample	Digital blood smear (Wright-Giemsa stain)
Test(s)	Virtual blood film examination
Frequency	3 trials/year
Number of sample(s) / trial	2 samples
Performance Evaluation	Consensus from participant and referee Acceptable criteria: Exact match for qualitative parameters and consensus median for semi-quantitative and quantitative parameters
Subcontractor	None
Contact person	Asst. Prof. Dr.Chutipong Sukkanon
Phone	+66 2 411 2258 Ext. 171 and +66 82 212 2557
E-mail	eqamtmu@gmail.com

UC-EQAM I Urine – Cytohematology Proficiency

The External Quality Assessment Scheme in Clinical Microscopy

Urine – Cytohematology Proficiency

Provider	Department of Clinical Microscopy Faculty of Medical Technology 2 Wanglang Road Bangkoknoi, Bangkok 10700
Sample	Urine and blood smear photo
Test(s)	Urine sediment analysis Blood cell analysis
Frequency	4 trials/year (dispatch in the second week of February, May, August and November)
Number of sample(s) / trial	4 samples
Performance Evaluation	Misclassification Index Score (MIS) calculated from assigned values by referee or participants consensus (80%) Acceptable criteria: MIS > 2.5
Subcontractor	None
Contact person	Mr. Noppawat Tankanin
Phone	+66 2 411 2258 Ext. 171 and +66 65 242 2660
E-mail	eqammtmu@gmail.com

EQAI: Syphilis serology

The External Quality Assessment Scheme in Clinical Immunology: Syphilis serology

Provider	Department of Clinical Microbiology and Applied Technology, Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Puthamonthon, Nakhon Pathom 73170
Sample	Human serum (negative for HBsAg, Anti HCV, HIV-Ag, Anti-HIV, NAT (HIV/HCV) and inactivated at 56°C for 30 minutes)
Test(s)	1) Non-Treponemal Test 2) Treponemal Test
Frequency	4 trial/year (dispatch in the first week of February, May, August and November)
Number of sample(s) / trial	4 samples
Performance Evaluation	Misclassification Index Score (MIS) calculated from 80% consensus of participant response Acceptable criteria: MIS > 1
Subcontractor	Medical Diagnostic Laboratory Unit Faculty of Medical Technology 2 Wanglang Road Bangkoknoi, Bangkok 10700 Activity: Sample characterization; Homogeneity and stability tests
Contact person	Mr. Suthee Woranuch
Phone	+66 2 441 4376 Ext. 2528 and +66 80 982 5570
E-mail	eqai.mahidol@gmail.com

EQAI: HBV serology

The External Quality Assessment Scheme in Clinical Immunology: HBV serology

Provider	Department of Clinical Microbiology and Applied Technology, Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Phutthamonthon, Nakhon Pathom 73170
Sample	Human serum (Negative for Treponemal Ab, Anti HCV, HIV-Ag, Anti-HIV and inactivated at 56°C for 30 minutes)
Test(s)	1) Hepatitis B surface antigen (HBsAg) 2) Hepatitis B surface antibody (anti-HBs) 3) Total Hepatitis B core antibody (anti-HBc) 4) Hepatitis B e antigen (HBeAg) 5) Hepatitis B e antibody (anti-HBe)
Frequency	4 trials/year (dispatch in the first week of February, May, August and November)
Number of sample(s) / trial	4 samples
Performance Evaluation	Qualitative: Misidentification index score calculated from participants consensus of at least 80% Acceptable criteria: MIS > 1 Semi-quantitative: Z-score calculated from group median and normalized IQR Acceptable criteria: Z score of less than 2
Subcontractor	Medical Diagnostic Laboratory Unit Faculty of Medical Technology 2 Wanglang Road Bangkoknoi, Bangkok 10700 Activity: Sample characterization; Homogeneity and stability tests
Contact person	Ms. Warisara Pratibaram
Phone	+66 2 441 4376 Ext. 2529
E-mail	eqai.mahidol@gmail.com

EQAI: HCV serology

The External Quality Assessment Scheme in Clinical Immunology: HCV serology

Provider	Department of Clinical Microbiology and Applied Technology, Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Puthamonthon, Nakhon Pathom 73170
Sample	Human serum (Negative for Treponemal Ab, HIV-Ag, Anti-HIV, HBs-Ag and inactivated at 56°C for 30 minutes)
Test(s)	1) Anti-HCV antibody (anti-HCV) 2) HCV antigen (HCV-Ag)
Frequency	4 trials/year (dispatch in the third week of February, May, August and November)
Number of sample(s) / trial	4 samples
Performance Evaluation	Misclassification Index Score (MIS) calculated from 80% consensus of participant response Acceptable criteria: MIS > 1
Subcontractor	Medical Diagnostic Laboratory Unit Faculty of Medical Technology 2 Wanglang Road Bangkoknoi, Bangkok 10700 Activity: Sample characterization; Homogeneity and stability tests
Contact person	Ms. Warisara Pratibaram
Phone	+66 2 441 4376 Ext. 2529
E-mail	eqaihcv.mtmu@gmail.com

EQAB**The External Quality Assessment Scheme in Bacteriology**

Provider	Department of Clinical Microbiology and Applied Technology, Faculty of Medical Technology 999 Phutthamonthon Sai 4 Road Salaya, Phutthamonthon, Nakhon Pathom 73170
Sample	1) Smear for gram stain 2) Sputum smear acid fast bacilli stain 3) Inoculated semi-solid agar for bacterial identification and susceptibility testing
Test(s)	1) Gram stain 2) Acid fast bacilli stain 3) Bacterial identification and susceptibility testing
Frequency	3 trials/year (dispatch in the third week of February, June and October)
Number of sample(s) / trial	2 samples
Performance Evaluation	P-score calculated from the assigned values Acceptable criteria: $P < 1.96$
Subcontractor	Bacteria Laboratory, 3 rd Floor Microbiology Building Siriraj Hospital, 2 Wanglang Road Bangkok, Bangkok 10700 Activity: Homogeneity and stability tests
Contact person	Ms. Peerada Phuechpisut
Phone	+66 61 174 7884
E-mail	eqab.mtmu@gmail.com

List of Contributors

Board of Director

Asst. Prof. Dr. Chotiros Plabplueng	Dean
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	Acting Head of Center for Standardization and Product Validation
Asst. Prof. Dr. Theerawut Chanmee	Head of the Department of Clinical Chemistry
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Assoc. Prof. Dr. Aungkura Supokawej	Head of the Department of Clinical Microscopy
Asst. Prof. Dr. Rungrot Cherdtrakulkiat	Head of the Department of Clinical Microbiology and Applied Technology

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Center for Standardization and Product Validation

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	Deputy Quality Manager
Ms. Chonnipa Pantakrud	Scientist
Mr. Thitiwat Lohaphithak	General Administration Officer

EQAC

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Mr. Jareanpon Julchoo	Technical Manager
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Ms. Chonnipa Pantakrud	Scientist
Ms. Nongkanok Khanarat	Scientist
Assoc. Prof. Dr. Sureerut Porntadavity	Technical Advisor

EQACM

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Mr. Jareanpon Julchoo	Technical Manager
Ms. Chonnipa Pantakrud	Scientist
Assoc. Prof. Dr. Sureerut Porntadavity	Technical Advisor

EQAH

Mr. Jareanpon Julchoo	Coordinator
Asst. Prof. Dr. Napat Songtawee	Technical Manager
Asst. Prof. Dr. Thummaruk Suksrichavalit	Operator
Asst. Prof. Dr. Theerawut Chanmee	Operator
Ms. Nongkanok Khanarat	Scientist
Assoc. Prof. Dr. Sureerut Porntadavity	Technical Advisor

EQAT

Mr. Jareanpon Julchoo	Coordinator
Asst. Prof. Dr. Thitikan Sitiwed	Technical Manager
Asst. Prof. Dr. Theerawut Chanmee	Operator
Ms. Nongkanok Khanarat	Scientist
Assoc. Prof. Dr. Sureerut Porntadavity	Technical Advisor

EQAP

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Asst. Prof. Dr. Rapeeporn Yaicharoen	Technical Manager
Lecturer Dr.Chuleeporn Phanus-umporn	Operator
Ms. Parichat Wijanphon	Medical Technologist
Asst. Prof. Dr. Apilak Worachartcheewan	Operator
Asst. Prof. Dr. Somchai Boonpangrak	Operator
Asst. Prof. Dr. Likit Preeyanon	Operator
Asst. Prof. Dr. Prasong Khaenam	Operator
Asst. Prof. Dr.Pawared Ontong	Operator
Lecturer Dr.Lertyot Treeratanapiboon	Operator
Ms. Suparat Yencham	General Administration Officer
Mr. Akharawat Onsodtaweechai	General Administration Officer
Asst. Prof. Dr.Chumanee Lamom	Technical Advisor

B-EQAM

Asst. Prof. Dr. Moltira Promkan	Coordinator
Asst. Prof. Dr. Sumana Dakeng	Technical Manager
Ms. Sirilak Wiriyaucaradecha	Medical Technologist
Asst. Prof. Dr. Sumana Mas-Oodi	Technical Advisor

H-EQAM

Assoc. Prof. Dr. Dalina Tanyong	Coordinator
Asst. Prof. Dr. Sumana Dakeng	Technical Manager
Ms. Sirilak Wiriyaucaradecha	Medical Technologist
Assoc. Prof. Dr. Aungkura Supokawej	Operator
Asst. Prof. Dr. Moltira Promkan	Operator
Asst. Prof. Dr. Vichanan Yamkamon	Operator
Asst. Prof. Dr. Jitrada Phetfong	Operator
Asst. Prof. Dr. Chutipong Sukkanon	Operator
Lecturer Dr. Podchanart Wanitchakool	Operator
Lecturer Dr. Wasinee Kheansaard	Operator
Lecturer Dr. Piamsiri Jiramornimit	Operator
Ms. Varapon Malison	Operator
Asst. Prof. Dr. Sumana Mas-Oodi	Technical Advisor

VH-EQAM

Asst. Prof. Dr. Jitrada Phetfong	Coordinator
Asst. Prof. Dr. Chutipong Sukkanon	Technical Manager
Assoc. Prof. Dr. Aungkura Supokawej	Operator
Assoc. Prof. Dr. Dalina Tanyong	Operator
Asst. Prof. Dr. Sumana Dakeng	Operator
Asst. Prof. Dr. Vichanan Yamkamon	Operator
Asst. Prof. Dr. Moltira Promkan	Operator
Lecturer Dr. Podchanart Wanitchakool	Operator
Lecturer Dr. Wasinee Kheansaard	Operator
Ms. Wrattya Aroontanee	Medical Technologist
Ms. Varat Laohaunya	Medical Technologist
Asst. Prof. Dr. Sumana Mas-Oodi	Technical Advisor
Asst. Prof. Dr. Prasong Khaenam	Statistical Advisor

UC-EQAM

Asst. Prof. Dr. Vichanan Yamkamon	Coordinator
Asst. Prof. Dr. Moltura Promkan	Technical Manager
Asst. Prof. Dr. Chutipong Sukkanon	Operator
Mr. Noppawat Tankanjin	Medical Scientist
Asst. Prof. Dr. Sumana Mas-Oodi	Technical Advisor

EQAI: Syphilis

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Asst. Prof. Dr. Donporn Riyapa	Technical Manager
Mr. Suthee Woranuch	Medical Technologist
Assoc. Prof. Dr. Chaniya Leepiyasakulchai	Technical Advisor

EQAI: HBV

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Asst. Prof. Dr. Somying Loharungsikul	Technical Manager
Ms. Warisara Pratibaram	Medical Scientist

EQAI: HCV

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Lecturer Dr. Witchayapon Kamprom	Technical Manager
Ms. Warisara Pratibaram	Medical Scientist

EQAB

Asst. Prof. Dr. Rungrot Cherdtrakulkiat	Coordinator
Assoc. Prof. Dr. Theeraphon Piacham	Technical Manager (EQAB: Gram)
Assoc. Prof. Dr. Wijit Wonglumsom	Technical Manager (EQAB: AFB)
Asst. Prof. Dr. Rungrot Cherdtrakulkiat	Technical Manager (EQAB: AFB)
Asst. Prof. Dr. Kanokwan Kittiniyom	Technical Manager (EQAB: Identification)
Assoc. Prof. Dr. Warawan Eiamphungporn	Technical Manager (EQAB: AST)
Assoc. Prof. Dr. Sakda Yainoy	Technical Manager (EQAB: AST)
Ms. Peerada Phuechpisut	Medical Technologist
Ms. Thitaree Sakdachansawat	Scientist