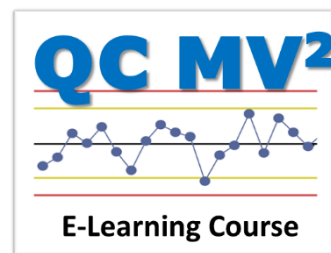# Statistical Quality Control and Method Validation/Verification eLearning

10-week Online + 2-week ECHO sessions

eLearning: **27th February – 3rd May2024**

ECHO Sessions: **Weeks of 6th – 10th May and 13th – 17th May, 2024**

Course Description

The Statistical Quality Control and Method Validation/Verification (QCMV²) course is focused on **quantitative testing**, including CD4 testing, with examples of biochemistry and hematology. This course provides participants with the crucial knowledge and tools to evaluate and monitor their quantitative tests.

With lecture recordings on the Moodle platform and Zoom-based interactive live webinars, participants will learn to:

- Select new methods and instruments with performance specifications that relate to "the intended use" of the procedure (ISO15189:2022, 7.3)
- Introduce new methods and instruments into laboratories by properly evaluating the procedures for "the intended use" (ISO15189:2022, 7.3.1)
- Design a robust internal QC program for all the tests (ISO15189:2022, 7.3.7.2)
- Assess on-going laboratory's accuracy through External Quality Assessment Schemes (EQAS) (ISO15189:2022, 7.3.7.3)

Target Audience

- Laboratory directors. managers, supervisors, or QC officers involved with conducting quantitative QC and method validation/ verification.
- Senior laboratory staff involved in quantitative testing and method validation/ verification.
- Quality managers, project managers and mentors who are implementing QMS in laboratories.
- Auditors and assessors who have a technical background in clinical pathology.

- Those who conduct QMS training including statistical QC and validation/verification or involved in pre-service curriculum.

Course Format

This course contains 10-week online learning followed by 4 ECHO sessions delivered over 2 weeks. The online learning uses a "flipped classroom" model ([definition](#)). Participants engage in self-study, learning from 100+ online lecture videos and completing weekly assignments, before they attend live Zoom-based sessions for debrief, discussion, and Q&A. The ECHO sessions allow the participants to work on their own laboratory's data and get mentoring from the facilitators.

Criteria for the Course Certificate

- Weekly on-time submission of homework and attendance of the live sessions during the 10-week online learning
- Full participation of the ECHO sessions
- Completion of weekly post-webinar evaluations before the deadlines
- A passing grade of 75% on the post-test

Participants who fail to submit the homework or attend the live sessions on time will be dismissed after 3 offences. Do not apply if you are not fully committed to meeting the course requirements.

The 10 weekly webinars are accredited by European Accreditation Council on Continuing Medical Education. Only those who have attended the webinars <u>live</u> and completed the survey can earn Continuing Professional Development (CPD) points. Watching recordings will not fulfill the requirements for the CPD.

Online Application Form

Nominated candidates must submit their applications using this online form ([link](#)).

Course Schedules

Besides attending the Office Hours and live webinars, participants will spend between 3 and 6 hours each week watching the lecture recordings and completing homework assignments.

Week	Office Hour Date 14:00 – 15:00 EAT Tuesday	Homework Due Date 15:00 EAT Wednesday	Webinar Date 14:00 – 16:00 EAT Friday
1	27 February	28 February	1 March
2	5 March	6 March	8 March
3	12 March	13 March	15 March
4	19 March	20 March	22 March
5	26 March	27 March	29 March
6	2 April	3 April	5 April
7	9 April	10 April	12 April
8	16 April	17 April	19 April
9	23 April	24 April	26 April
10	30 April	1 May	3 May
11-12	4 ECHO sessions conducted on Tuesday and Friday: ▪ 6-10 May, 2024 ▪ 13-17 May, 2024		

*EAT= Eastern Africa Time

How To Apply?

Deadline for Applications: 22 January, 2024 (Monday)

Acceptance Notification by 5 February, 2024 (Monday)

For PEPFAR supported countries where a CDC lab advisor is present, candidates must submit their application via the CDC Lab Advisors, who are responsible for screening the applicants with their MOH counterparts.

TO CDC LAB ADVISORS
- Please nominate no more than 3 candidates.
- Rank them in terms of priority (i.e., #1 will be admitted before #2).
- Make sure you provide the rationale for their nominations and rankings using the far-right column of the table below.
- Submit a complete application package, which includes the completed table (below) and support letters.
- Application forms are submitted separately by the candidates using an online form. Please make sure the nominees submit the online application before the deadline.

IMPORTANT!!! DO NOT NOMINATE:
- Those who have attended the QCMV course previously (in-person or virtually).
- Those who work on *qualitative or semi-qualitative* methods only.
- Those who do not have access to Statistical QC and method validation/verification data.
- Those who are not in a position to apply the knowledge to improve a laboratory's QC program.

Order of Priority	Candidate Name	Support Letter from Employer Attached?	Rationale for the nomination and ranking
1		Y / N	
2		Y / N	
3		Y / N	

Do not add more rows. Limit your nomination to 3 candidates.

TO THE CANDIDATES:

- **You must submit your application online by clicking the [link](.).** The application form below is provided for your reference only, so you know what questions are asked on the online application form.
- **Additionally, please provide a letter of support (or email) from your employer**, stating that you will be granted time and support to 1) attend the course and meet all its requirements; and 2) implement improvement projects.

<mark>Do not submit the form below. Use the online form for your application once you have been nominated.</mark>

Surname (Family Name):	
Given Names:	
Dr./Mr./Mrs./Ms.:	
Address:	
Country:	
Work Telephone:	Mobile:
Email:	Alternate Email:
Employer: (Including the laboratory/site where you work)	Job Title:

1. What is your technical qualification? Select all that applies.
☐ Biochemistry/Clinical Chemistry ☐ Hematology ☐ Microbiology ☐ Virology ☐ Serology/Immunology ☐ Blood Banking ☐ Others (specify): _____
2. What is your job description in your organization?
☐ Laboratory Director/Manager ☐ Medical Technologist ☐ Medical Scientist ☐ Medical Technician ☐ Mentor ☐ Others (specify): _____
3. Do you have access to SQC and Method Validation/Verification data in a laboratory?
☐ Yes ☐ No (You are not eligible to apply to this course. Please exit and do not submit an application.)
4. Is this laboratory accredited?
☐ Yes ☐ No
5. What scope of tests does this laboratory provide? Select all that applies.
☐ Biochemistry/Clinical Chemistry ☐ Hematology ☐ CD4

☐ Serology
☐ Viral load
☐ Microbiology
☐ Others (specify): _____

6. Please select your Quality Control and Method Validation/Verification experience and training.
☐ Conduct QC procedures and Method verification studies
☐ Train staff on QC and Method validation/verification
☐ Mentor laboratories in QC and Method validation/verification
☐ <5 years experience in these subjects
☐ >5 years experience in these subjects
☐ Others (specify): _____

7. Please briefly describe how you plan to use the knowledge after this course.
Keep your responses brief, within 100 words or the space allowed.
I certify that I have read and understood the course requirements; and I will work hard to fulfill them.
_____ (*sign or type your name and date*)