REFRESHER TRAINING COURSE IN LABORATORY DIAGNOSIS OF MALARIA

Introduction

Laboratory confirmation of malaria infection is an essential component of fever case management, and should be provided at all levels of health care to ensure correct patient management, and minimise the use and cost of anti-malarial treatment drugs. The Global Technical Strategy for Malaria 2016–2030 was adopted by the World Health Assembly in May 2015 with the aim of achieving a malaria-free world by 2030. To achieve these goals countries must adopt policies and practices that improve the quality of laboratory confirmation of malaria diagnosis. This will retain the confidence of clinicians in laboratory results, leading to improved case management and appropriate use of antimalarial drugs.

Objectives

i. To improve the quality of malaria microscopy and essential malaria diagnostic procedures, including use of malaria rapid diagnostic tests (RDT)
ii. To ensure malaria diagnostic services are manned by competent and motivated staff.

It is recommended that participants planning to take the WHO AFRO/Amref Health Africa External Competency Assessment of Malaria Microscopists (ECAMM) course first take the Refresher Training Course in Laboratory Diagnosis of Malaria to be adequately prepared for the ECAMM course.

Course administration

This course is conducted by Amref International University and is held at Amref Health Africa's Central Laboratory, Nairobi, Kenya, although alternative locations are considered.

Frequency of the course

The course is held on request, usually before an External Competency Assessment of Malaria Microscopists course.

Entry requirements

Participants should be laboratory technologists, laboratory technicians or pathologists working mainly in the malaria or parasitology sections of medical diagnostic laboratories. A maximum of 15 participants are accepted per course due to its practical nature and need for personal instruction.

Course structure

This one week intensive and interactive course will have a minimum structured time of 35 tutor contact hours, consisting of lectures, presentations and discussions, laboratory practice and slide review, and demonstrations. Daily sessions will be 2.5 theory hours and 4.5 hours for practical sessions in preparing and staining of blood films, reading pre-prepared, well-characterised slides, and preparing and interpreting malaria RDT.

Course content
At the end of this training course the participants will be expected to:

- Demonstrate an understanding of the epidemiology of malaria
- Describe the biology of the malaria vector and parasite
- Prepare thick and thin blood films and stain films to a high standard
- Identify all human malaria species (*P.f, P. v., P.o., P.m*) microscopically.
- Identify all malaria parasite stages microscopically
- Differentiate pseudo-parasites and artifacts from true malaria parasites
- Quantify malaria parasites accurately
- Carry out malaria Rapid Diagnostic Tests (RDTs) correctly
- Identify sources of errors in malaria diagnosis and implement their remedies
- Maintain and store microscopes properly
- Participate in development of national and facility-based plans for QA/QC in malaria diagnosis
- Monitor the performance of malaria Rapid Diagnostic Tests (RDTs)
- Participate in developing national plans for regular support supervision and on-site training and mentoring of staff
- Develop and maintain Standard Operating Procedures (SOPs)
- Perform technical work according to standards of good laboratory practice (GLP)
- Perform an evaluation of malaria diagnostic services in a laboratory

Participants should be prepared to provide information of malaria laboratory diagnostic activities in their countries, and to prepare and present draft workplans for improving malaria microscopy in their places of work.

Course assessment
Throughout the course, participants will be examined to determine the acquisition of knowledge, skills and competence. Participants will be assessed at the beginning and end of the course to measure improved performance and will receive a Certificate of Attendance at the close of the course.

Course fees for Year 2020: USD 1400 per person covering the following:

- **USD 710** for tuition fees which includes: provision and maintenance of slides from WHO Slide Bank, training materials, facilitation and coordination, laboratory supplies, equipment an infrastructure
- **USD 90** for lunch, tea and snacks – this cost is added to the tuition fees for Nairobi-based courses
- **USD 600** for accommodation, dinner, local transport and incidental costs for Nairobi-based residential participants

- The above course fees is applicable to courses conducted at Amref Health Africa in Nairobi, Kenya. Therefore, the course fees would vary and is negotiable depending on the location of the training.
- Ensure you organise for your travel insurance to cover medical related emergencies

Kindly contact Amref International University for further information:
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