



Global
Outreach
Activity Menu



ASCP Global Outreach

ASCP's Department of Global Outreach is a dynamic resource focused on improving global health by exploring, identifying and implementing innovative methods and partnerships that improve laboratory practices. The goal of Global Outreach is to enhance the image of laboratory medicine domestically and internationally.

In August 2005, U.S. Centers for Disease Control and Prevention (CDC) engaged ASCP under a cooperative agreement to support laboratory training and quality improvement for diagnosis and laboratory monitoring of HIV/AIDS patients in resource-limited countries that are part of the President's Emergency Plan for AIDS Relief (PEPFAR). In August 2008, CDC renewed ASCP's cooperative agreement for an additional five years. This important program enhances laboratory testing practices and services—thereby improving care and treatment for individuals with HIV/AIDS.

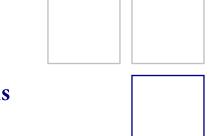
Consultants work with ASCP staff in training laboratorians, providing Technical Assistance and building laboratory infrastructure in countries severely impacted by HIV/AIDS.

ASCP specializes in providing pre-service curriculum development and implementation to enhance medical laboratory programs at the certificate and diploma levels. ASCP also conducts laboratory trainings and technical assistances in basic laboratory operation, CD4, clinical chemistry, hematology, laboratory management and phlebotomy which support the improvement of diagnosis and laboratory monitoring of HIV/AIDS patients in PEPFAR countries. ASCP's training programs can be combined with a "training of trainers" workshop to empower participants to coordinate and facilitate trainings throughout the regions and districts of their countries.

In addition, in partnership with CDC, ASCP conducts the Strengthening Laboratory Management Towards Accreditation program. This series of trainings and mentorship visits to the participating laboratories focuses on improving laboratory management techniques in order to assist the laboratories in achieving accreditation from the World Health Organization (WHO). This accreditation process is unique in that it is a stepwise approach and is based off of a checklist developed by WHO.

In seven years, over 2,000 laboratory professionals have been directly impacted by over 80 of ASCP's training events. Technical assistance has impacted the areas of strategic planning, accreditation, quality systems, and management. In addition, ASCP has played an integral role in developing several countries' laboratory strategic plans. ASCP is expanding its scope of work through participation and leadership in such activities as international policy meetings. ASCP continues to be a world leader in training, technical assistances and curriculum development.





Global Outreach Activity Details

Assessment

ASCP consultants: 2 ASCP Staff: 1

Needs assessment is the first activity conducted by ASCP in country. Consultants and staff will conduct laboratory site-visits and participate in discussions regarding the needs, gaps and strengths within the country lab program. Based on these discussions, ASCP will make recommendations regarding the level of training, length of technical assistance, etc. needed to strengthen laboratory capacity. ASCP will also provide template versions of all training materials. These materials may be modified during the assessment to create country-specific training modules. It is the responsibility of the country to create the itinerary and invite key stakeholders.

Basic Laboratory Operations Training (BLOT)

Participants: 20-25 ASCP consultants: 2

ASCP staff: 1

ASCP will conduct a four day training workshop in Basic Laboratory Operations based on the CDC task-based guidelines for best laboratory practices. The training is highly participatory and experiential. This prescriptive approach serves to empower laboratorians to implement those best practices in their laboratories. The training will provide laboratorians with tools – checklists, job aids, and procedures – to meet personal and professional goals of supportive patient care through laboratory services.

The training is targeted towards level I laboratorians, laboratory assistants and laboratory technicians who manage themselves under the direction of an on-site medical officer. Practice settings may include health stations, health centers, and primary or district hospitals.

Topics covered in the Basic Laboratory Operations Training:

- Productivity Management
- Work Area Management
- Stock Management, Laboratory Logistics and Record Keeping
- Routine and Preventative Maintenance of Equipment
- Specimen Collection and Processing
- Lab Testing and Validation
- Recording and Reporting Test Results
- Documents and Records Management

Strengthening Laboratory Management Towards Accreditation Training (SLMTA) Program

Participants: 15-25 ASCP consultants: 2

ASCP staff: 1

Targeted towards Level II to Level IV labs, SLMTA is a unique and extensive training program made up of three, week-long workshops, a pre-assessment and a final assessment over a twelve to eighteen month period. This training program aims to strengthen laboratory management, achieve immediate laboratory improvement, and accelerate the pace toward laboratory accreditation by WHO-AFO through a unique blend of didactic lectures and hands-on activities.

The foundation of this training program is a framework that defines what a laboratory manager must do (the tasks) in order to achieve quality test results. The training content is closely linked to an assessment checklist which defines what a well-managed laboratory looks like in terms of observable results. The checklist is used for accreditation purposes as well as supervisory visits and planning for laboratory improvement projects.

Laboratory improvement projects are an integral part of this program. All participants are expected to implement projects to improve their laboratories between workshops. Facilitators and supervisors visit participants' laboratories, provide coaching, and assess the progress they have made on the improvement projects. During the workshop, participants present their improvement projects and talk about what they did and the results they have achieved. These presentations offer a great opportunity for participants to learn from each other.

Throughout the SLMTA program, countries will also identify in-country mentors to visit the labs in between each training and provide guidance and mentorship. The mentors will assist the SLMTA participants with trouble-shooting and provide further instruction and guidance on difficult topic areas. The mentor will coach the participants through the implementation of the improvement projects.

Topic covered in the Strengthening Laboratory Management Towards Accreditation trainings:

- Productivity Management
- Work Area Management
- Inventory Management
- Procurement Management
- Routine/Preventive Maintenance of Equipment
- Quality Assurance
- Specimen Collection & Processing
- Laboratory Testing
- Test Result Reporting
- Documents and Records Management

Phlebotomy Training

Participants: 15-20 ASCP consultants: 2

ASCP staff: 1

The three-day training workshop in phlebotomy and specimen collection is designed for lab technologists and will include didactic and hands-on training. Hands-on training includes using venipuncture arms and infant feet, supplied by ASCP, as well as actual participant practice.

Topics covered in the Phlebotomy Training:

- Phlebotomy Equipment
- Safety and Infection Control
- Adult Phlebotomy
- Special Draws
- Special Testing
- Specimen Types, Request Forms, Transport of Blood Specimens to the Lab
- Professionalism

Clinical Chemistry, Hematology and CD4 Training

Participants: 25-30 ASCP consultants: 6

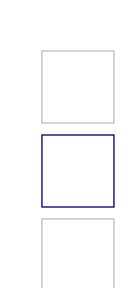
ASCP staff: 1

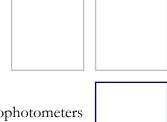
This is a two-week training that covers three subject areas: Clinical Chemistry, Hematology and CD4. The topic areas can be split into separate, shorter trainings if requested. ASCP consultants teach theory in the classroom for part of the training. The consultants then pair with in-country instrument vendors to provide hands-on laboratory training on the appropriate equipment.

The training can be provided as a basic training or as a training of trainers (TOT). ASCP recommends conducting a TOT if Senior Level laboratorians are available. This builds incountry capacity by training in-country personnel to train their colleagues in the future.

Topics covered in the Chemistry, Hematology and CD4 Training:

- Specimen Management
- Standard Operating Procedures
- Quality Assurance and Quality Control
- Communicating Results
- Laboratory Safety Issues
- Pipette Care, Use and Maintenance
- Review of Basic Hematology Theory
- Manual Hematology
- Blood Smear: Performing, Analyzing and Troubleshooting





- Automated Hematology
- HIV/AIDS Case Studies
- Calibration and Maintenance of Laboratory Equipment and Spectrophotometers
- Instrument Set Up and Calibration
- Principles of Chemical Analysis and Chemistry Instrumentation
- Result Verification and Correlation and Abnormal Results
- CD4 Levels as an Immunological Clinical Marker for Monitoring HIV Infection
- Immunophenotyping
- Basic Principles of Flow Cytometry and CD4 Determinations
- Flow Cytometry Instrumentation Troubleshooting
- CD4 Laboratory Set-up and Design

Advanced Hematology Training

Participants: 15-20 ASCP consultants: 2 ASCP Staff: 1

This five day workshop is designed to provide participants with information about normal cellular maturation and morphology, hematologic disease conditions, haemostatic processes and procedures, as well as morphologic changes that occur in cells in various abnormalities. The workshop is considered advanced due to the content of the material presented and because of the hands-on activities provided.

Topics covered in the Advanced Hematology Training:

- Overview of hematopoieses and cellular maturation
- Preparation of peripheral blood smears
- Staining peripheral blood smears
- RBC maturation
- Abnormal RBC morphology
- Anemias
- WBC maturation and function
- Differential cell count
- Manual cell counting procedures
- Introduction to leukemias
- Normal hemostasis
- Quality assurance in hematology
- Hemoglobin synthesis, structure, and measurement
- Automated cell counting
- Preparing, staining and reviewing peripheral blood smears
- Reviewing smears for RBC, WBC, and platelet morphology
- Reviewing smears for selected leukemias
- Setting up and performing a reticulocyte count



A TOT can be added at the end of most trainings in which the participants receive intensive instruction on teaching techniques and coordination strategies. The TOT method is a great way to build laboratory capacity as it trains participants to become in-country trainers for their colleagues. TOT participants are expected to facilitate rollout trainings within their respective regions. The TOT covers topic areas on teaching techniques and requires each participant to "teach-back" to their peers at which time they receive feedback from ASCP consultants and training participants.

Topics covered in the Teach Back Training:

- Training Basics
- Lecture facilitation
- Activities and discussions facilitation
- Lab skills facilitation

Training Roll-out Support

ASCP consultants: 2

ASCP consultants will attend, observe and support training as it is rolled-out into regions and districts (after TOT). ASCP will also provide textbooks and assistance with logistics and training schedules if requested.

Technical Assistance (1 month)

ASCP consultant: 1

One month of Technical Assistance (TA) will include one ASCP consultant remaining in country for 31 days. In-country officials will determine the focused goal and scope of work of the TA (i.e. – Quality Systems, Accreditation, etc.). The length of the TA can be altered based upon in-country need.

Pre-Service Curriculum Development

ASCP consultants and staff work with in-country medical technology schools to review and revise their curricula. Please see the Pre-Service Activities Description document for detailed information.

Note: All training curricula are customized depending on country needs. rev. 9/11