



Experiences from the field: American Society for Microbiology

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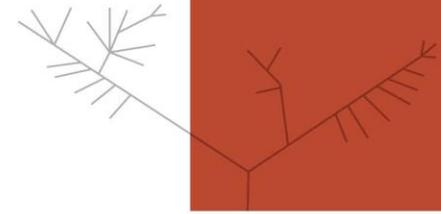
Who We Are

- One of the **largest life science societies**
- founded in 1899
- Headquarters in Washington, DC
- Over 30,000 members, including researchers, educators and health professionals representing 26 disciplines of microbiology
- Deploy resources and expertise around the world
- Advocate for scientific research
- Member driven society



AMERICAN
SOCIETY FOR
MICROBIOLOGY

ASM Presence



> 30 Ambassadors & Young Ambassadors
> 584 Active Members

89 countries with
ASM Country
Ambassadors

80 countries with
ASM Young
Ambassadors of Science

24 countries with
active capacity-
building programs

17 International
Student Chapters



AMERICAS

LAIC Countries
Antigua
Argentina
Aruba
Barbados
Bermuda
Bolivia
Brazil
Cayman Islands
Chile
Colombia
Costa Rica
Cuba
Dominican Republic
Ecuador
El Salvador
Grenada
Guadeloupe
Guyana
Haiti
Jamaica
Mexico
Panama
Paraguay
Peru
Saint Kitts And Nevis
Saint Lucia
Trinidad And Tobago
Uruguay
Venezuela



EUROPE & EURASIA

MENA

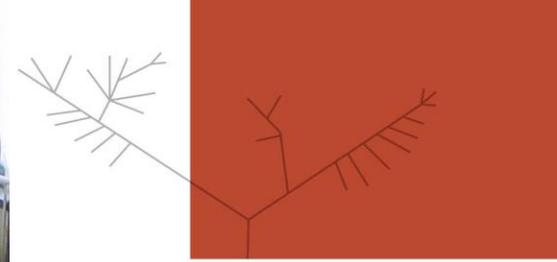
ASIA

AFRICA

OCEANIA



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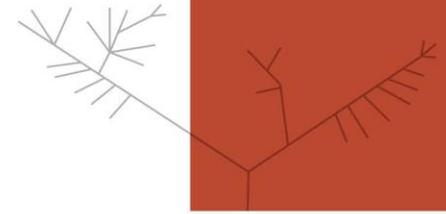
What We Do

- **Advance the Microbial Sciences**
- **Support Microbiology Professionals**
- **Advocacy and Policy Initiatives**
- **Global Health Programs**



**AMERICAN
SOCIETY FOR
MICROBIOLOGY**

Why is *QUALITY* in the Lab Important?



Here's the problem....

- Standardization
- Quality measures
- New technology not used properly

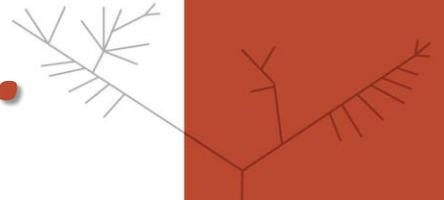


Results in...

- **Different** diagnostic results
 - “Individual laboratories predicted different numbers of AMR-associated genes and different gene variants from the same clinical samples” (*Doyle, R., et al., 2019*)



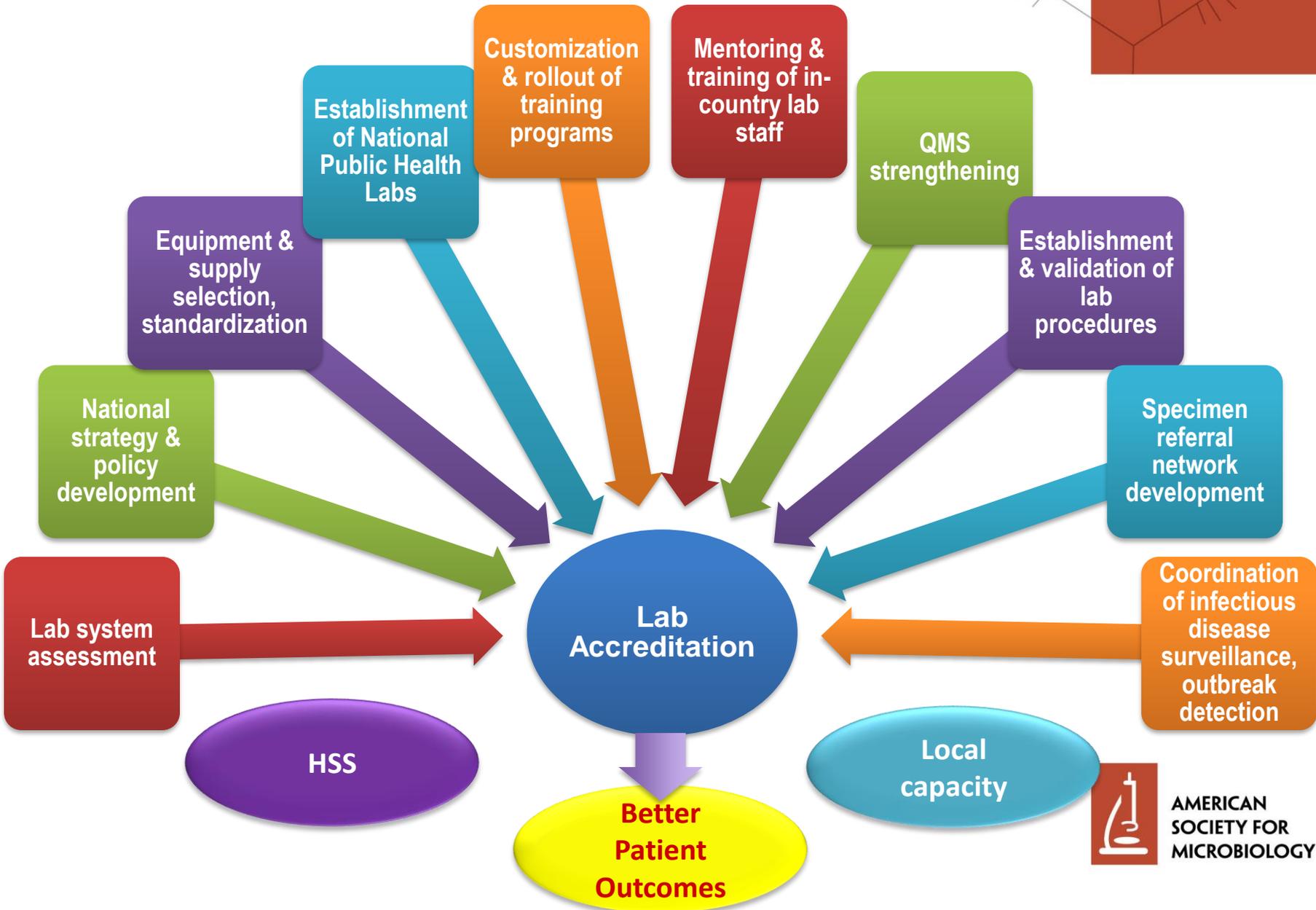
Where does ASM fall in...



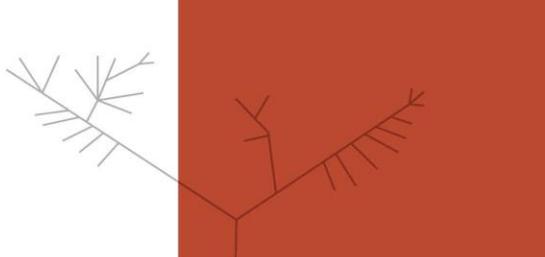
- Improve Global Health
 - Strengthens labs in underserved areas
 - Global network of qualified clinical and veterinary microbiologists and public health experts
 - One Health



Strengthening Lab Systems & Capacity



QUALITY entails...



POLICY



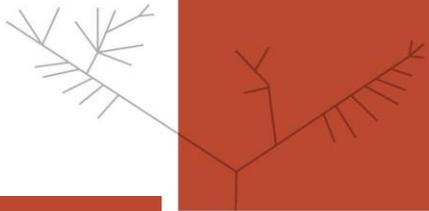
Guidelines & Policies

Laboratory Systems

Facility

Person

Guidelines & Policies



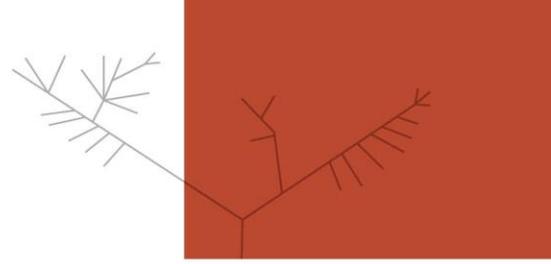
Mozambique:
Customization of national guidelines and training materials for standardization of sample referral and biosafety procedures of clinical laboratories



Democratic Republic of the Congo:
Customization of national guidelines and training materials for standardization of EQA, Viral Load, and HIV EID procedures of clinical laboratories

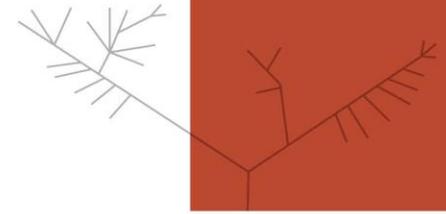


Guidelines & Policies



Ethiopia:
Customization of national AMR surveillance plan, standard operating procedures, and training materials for AMR surveillance implementation

Strengthening Laboratory Systems



Ethiopia

- Strengthening laboratory capacity for AMR surveillance and data handling of priority pathogens, including EQA training and preparing AMR sentinel laboratories for accreditation
- Conducted anthrax and brucellosis training

India

- Conducted several trainings to increase diagnostic capabilities as well as QMS
- Empowered technicians and staff to better serve patients

Bangladesh

- National laboratory system strengthening for detection and reporting of priority diseases, diagnostics for zoonotic diseases

Zambia

- Strengthening the national laboratory network's technical and QMS for improved TB, sexually transmitted infections and opportunistic infections diagnostics



Facility



India:

- BSC certification training – both basic and advanced
- 3 rounds of IATA training
- Establishment of cadre of BSC certifiers

Botswana:

- Procurement of essential HIV/ AID- related equipment and supplies to improve cold supply chain network

Ethiopia:

- Identify the number of stock outs per day for AST testing
- Equipment service and calibration

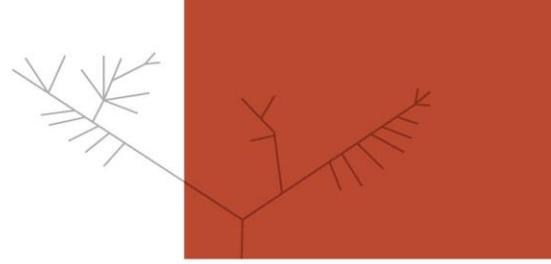
Egypt:

- Differentiate decontamination, disinfection, and sterilization
- Identify appropriate processes for lab waste management
- Steps for removing biological waste from lab environments



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Workforce Development



Training of Trainers

Fellowships

Virtual learning (ECHO)

Human Resources

Behavior Change

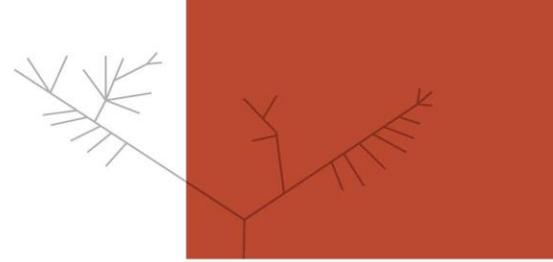
Mentorships



Improve the management of a laboratory

Why is *QUALITY* Important?





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Muito Obrigada!

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