

# *American Society for Microbiology*

## *International Affairs*

## Advancing Health Security Globally

Jason Rao, PhD  
Director for International Affairs



AMERICAN  
SOCIETY FOR  
MICROBIOLOGY

International Affairs

LabCap  
Global Laboratory Capacity  
Strengthening Program

# asm2012

**Oldest and largest life science organization**

**40,000** members worldwide

**27** disciplines of biology

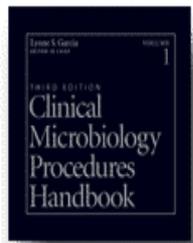
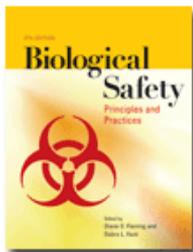
**20,000** attendees at our annual meetings

**12** journals – 42% of all citations in microbiology.

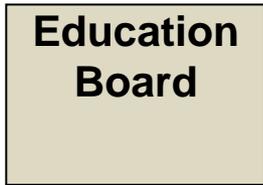
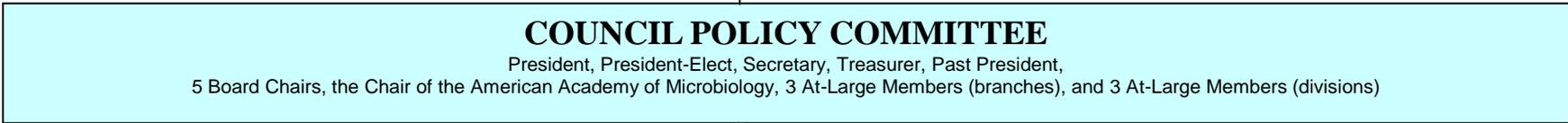
**1,000's** of book titles in multiple languages

Leader in Education

Respected voice in Public Affairs and Science Policy



# ASM Governance Structure



# Global Engagement

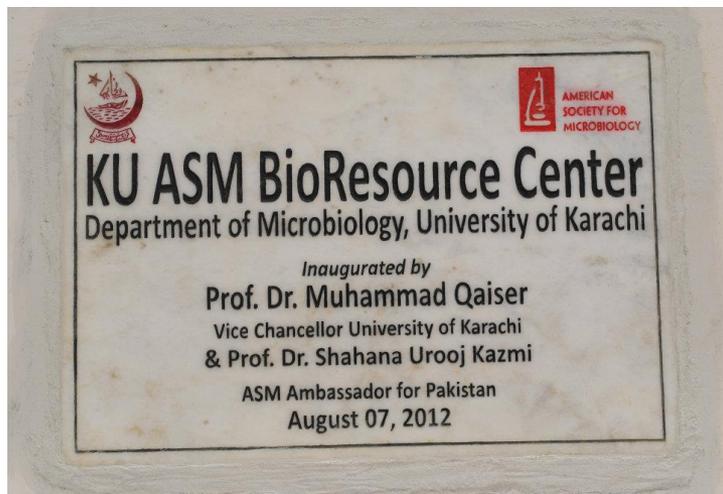
# ASM International Ambassadors



## ~100 in-country representatives

- Senior Scientists from...Libya, China, Pakistan, Venezuela, Myanmar, DRC, Malaysia, India, Russia, Tajikistan, and many more...
- Identify and respond to needs of local scientific community
- Disseminate info on biological sciences
- Coordinated ASM workshops, scientific lectures, etc.
- Manage ASM BioResource Centers

# Bio Resource Centers



## Pakistan

# Bio Resource Centers



Rabat, Morocco



Ica, Peru

# Bio Resource Centers



Lagos, Nigeria



Bangkok, Thailand

# ASM Social Media

## facebook

- **ASM Facebook Page**
  - 19,000+ fans (75% international)
- **10 Regional Facebook Groups**
  - > 2700 members
  - Networking and scientific exchange in multiple languages
- **> 30,000 direct referrals to ASM**
- **LinkedIn and Twitter**
  - 2,882 Twitter followers
  - 2,839 LinkedIn group members



**American Society for Microbiology**  
18,986 likes · 1,187 talking about this · 8 were here

Non-Profit Organization  
The ASM's mission is to gain a better understanding of basic life processes and to promote the application of this knowledge for improved health and economic and

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**American Society for Microbiology**  
2 hours ago

Picture of the Day: Beaded bacteriophage

This sculpture made of purple and clear glass beads depicts bacteriophage Phi174, a virus that infects bacteria. It rests on a surface that portrays an adaptive landscape, a conceptual visualizat... See More

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# Lab Strengthening

# LabCap



- Leverages ASM resources in the delivery of global laboratory capacity strengthening
- Contributes to the long-term viability and quality of health systems (IHR'S)
- Rigorous Monitoring and Evaluation
- Currently operating in 18 countries

***Full Spectrum “Micro-Mentorship”***

# ASM Microbiology Mentoring Program Structure

Follow Up Visits

Introductory meeting with Hospital/ Laboratory Administration, Staff, & Clinicians

Selection of Mentees

Assessment using Microbiology Checklist

Biorisk management as part of broad mentorship agenda



Interim work plan development

Mentee Competency Assessment

Mentee work plan development & implementation



# ASM Mentoring: Technical & QMS Competencies

- Media preparation & QC
  - Specimen collection
  - Specimen processing
  - Gram stain
  - Culture reading & interpretation
  - Bacterial identification
  - Antimicrobial Susceptibility Testing (AST)
  - Mycology & Parasitology
- Safety & Security
  - Equipment Maintenance
  - Purchasing & Inventory
  - Documents, Records, & Information Management
  - Process Control - QC
  - Personnel -Training & Competency Testing
  - Assessment ( External Quality Assessment)
  - Process Improvement – (Quality Indicators)

# COTE D'IVOIRE LABORATORY IMPROVMENT

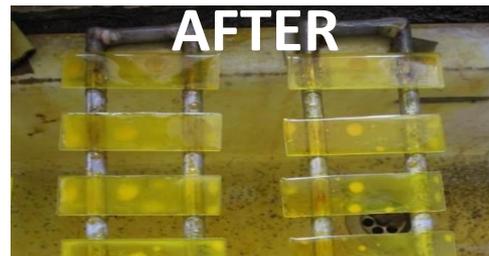
National reference Laboratory BEFORE renovation



National reference Laboratory AFTER renovation



STAINING SMEAR



## Activities implemented

- 13 people in “micro-mentoring”
- 4 key labs under improvement plan

## Results

- 4 sites improved diagnostics, general micro
- Established TB/HIV infection control measures; enhance Biorisk control measures
- Labs now performing drug susceptibility testing and molecular testing
- Moving toward AFRO and ISO accreditation

# KENYA MICROBIOLOGY MENTORING



## Activities

- On-going local mentor training...
- 40 technologists trained (20 prov./20 dist.)
- 4 mentoring sites
- 74 in training

## Results

- 5 reference manuals developed
- Quality assurance program established
- Multiple SOPs, mainly biosafety, have been developed
- 9 technologists from became local mentors

(CMRL, NPGH, MCPH and RVPGH regional labs)

# NIGERIA BIOSAFETY TRAINING

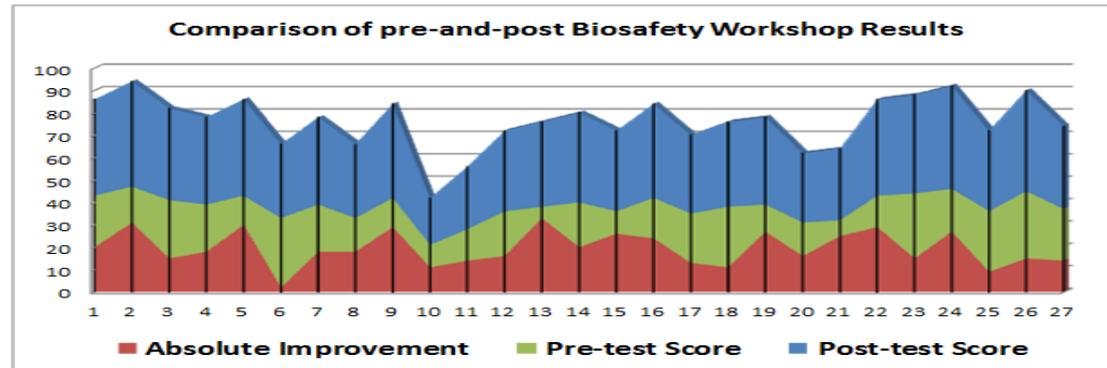


## Activity

27 trained in Biosafety in Lagos, Nigeria  
-Both Clinical & Research Labs

## Results

- Improvement in biosafety practice, on average, 143%
- Three laboratories have sought accreditation
- Nigerian Institute of Medical Research (NIMR) earned 4 star in April 2012



# VIETNAM MYCOLOGY TRAINING



## Activity

### 22 laboratory professionals trained in 2011

- Culture media
- Direct examination and reagents
- Pathogen identification
- General lab management

## Results

- *Labs correctly identified 20 unusual fungal infection cases in 3 months*
- New QC for media, reagents and tests
- Cost savings
- Developed 15 new lab SOPs
- Two Labs (NHDV & BMH) are now technically competent to seek ISO accreditation



# New Opportunities: Burma



“Science Policy and Public Health Capacity  
Building in Myanmar”

## Activities:

- Institutional Mentorship & Advocacy
  - Science Societies, evidence based policy
- Technical Workshops
  - Clinical Lab capacity
- Collaboration ongoing...



## Benefits:

- Institutional Mentorship helps give scientists a voice, aids policy makers
- Helps pave the way for onslaught of foreign AID
- Supports education, peer review, merit based approach



# Yemen



- **ASM Ambassador led Activities:**

- Lab Assessments
- Training Workshop(s)
- ASM Bio-Resource Center

- **Mentorship**

- Biosafety
- Quality Control
- Molecular Diagnostics

- **Partners**

- University of Sana'a
- Central Veterinary Lab, Sana'a
- National Central Public Health Lab, Sana'a
- Yemeni Swedish Hospital, Ta'izz

- **Timeline:**

- Sept '12, Trip 1: Lab Assessments
- Dec '12, Trip 2: Workshop, ASM Resource Center

# ASM Interactions

