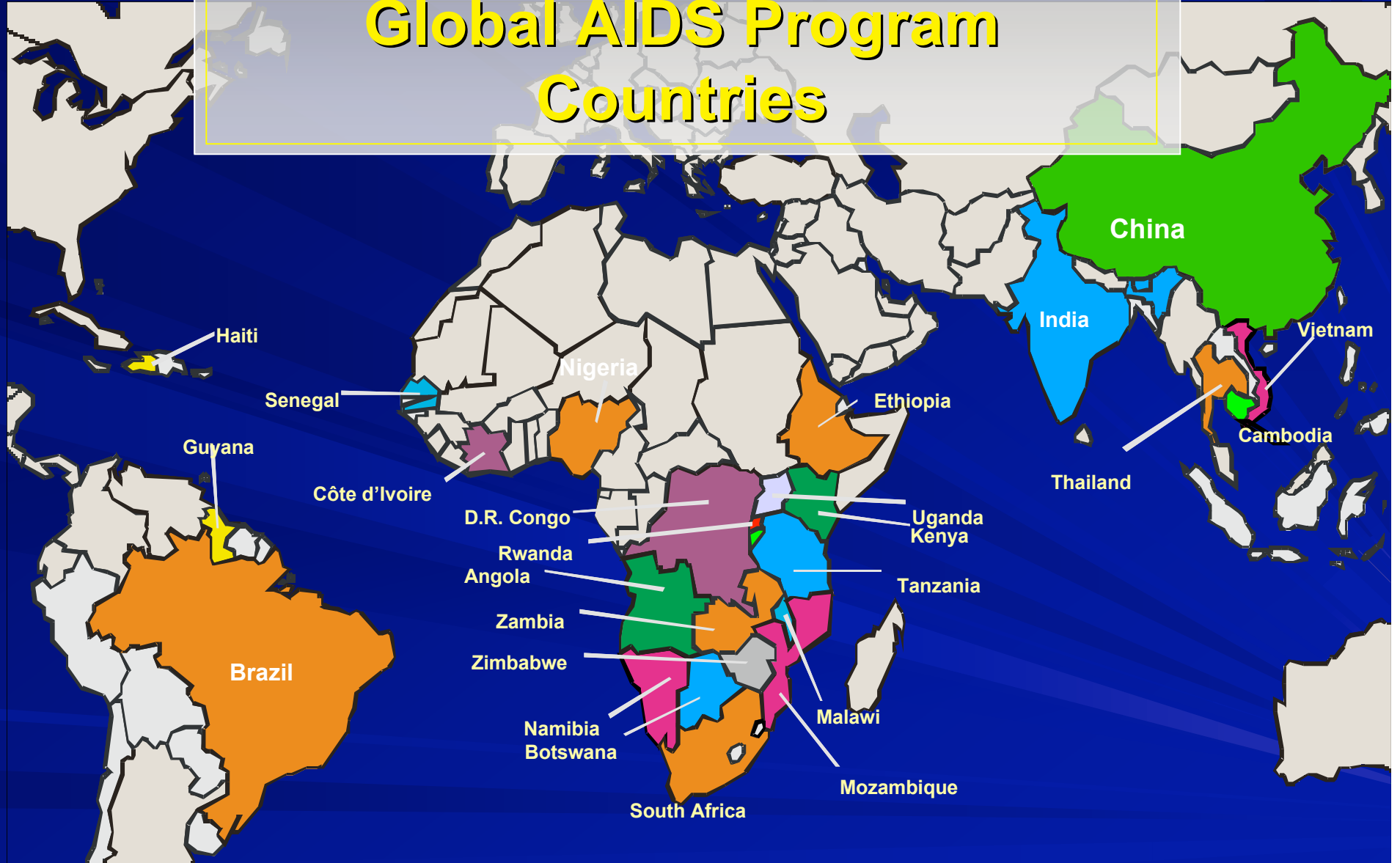


Update on CD4-related Activities

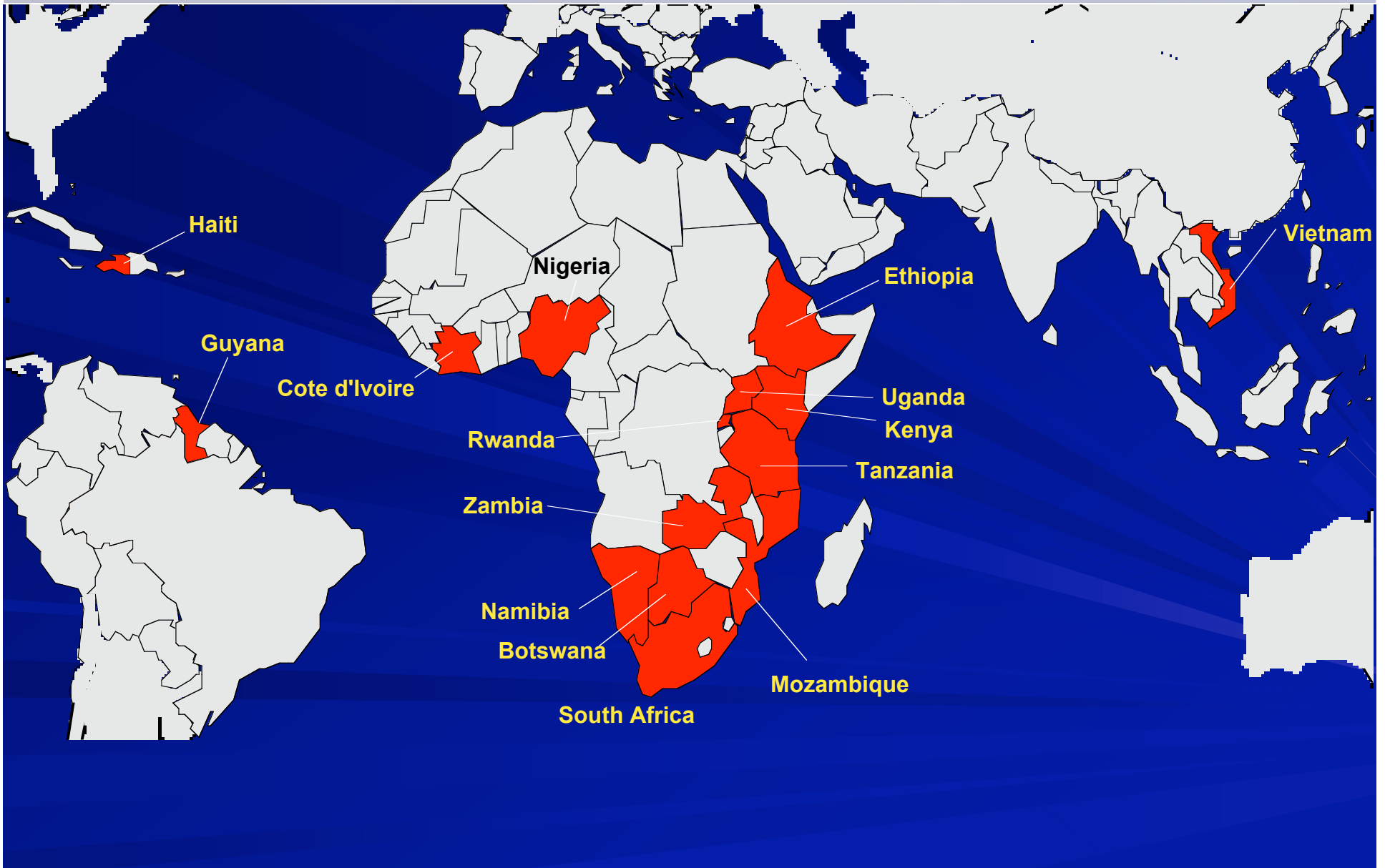
Thomas J. Spira, M.D.
International Laboratory Branch
Global AIDS Program (GAP)
National Center for HIV, STD, & TB Prevention
Centers for Disease Control & Prevention
Atlanta, GA

Global AIDS Program Countries



The President's Emergency Plan for AIDS Relief

15 Focus Countries



CD4 Training

- Working Group formed at meeting in November 2004
 - WHO, CDC, ASCP, PHAC, UKNEQAS, UMDNJ
- PowerPoint presentations created with some supporting materials
- Draft modules field tested in Ethiopia, Tanzania, and Malawi in 2005
- Meeting to discuss finalization of materials held at CDC in December 2005

CD4 Training Modules

- 1. CD4 Levels as a Clinical Marker for Monitoring HIV Infection
- 2. Immunophenotyping
- 3. Basic Principles of Flow Cytometry and CD4 Determinations
- 4. Specimen Collection
- 5. CD4 Counting Maintenance and Calibration for Instrumentation and Pipettes

CD4 Training Modules

- 6. Flow Cytometry Quality Assurance
- 7. Laboratory Safety Issues
- 8. Procurement of Appropriate CD4 Technologies
- 9. CD4 Laboratory Set-up and Design
- 10. Flow Cytometry Instrumentation Troubleshooting
- 11. Recording and Communication of Results to Clinical Staff

To Be Done

- Indicate target audience of modules/slides
- Provide more hands-on exercises
- Provide more complete facilitators materials
- Provide job aids
- Provide training evaluation materials
- Evaluate short-term and long-term effectiveness of training
- Adapt packages for use in schools training medical technologists

WHO/CDC Meeting on CD4 Technology Validation December 2005

- Plan WHO validation studies of new CD4 technologies
- Obtain cooperation of manufacturers
- Write study protocol
- Choose sites in resource-poor countries
 - Include sites other than national reference labs
 - Include sites in a variety of WHO regions
- Study cost/benefits of various technologies

Evaluation of New CD4 Technologies

- Participated in US/Canada validation studies
 - Guava EasyCD4
 - Panleukogating (PLG)
- Evaluate new technologies
 - Sysmex system with Dynal Dynabeads
 - LabNow

Set Up EQA for CD4 Testing for GAP/PEPFAR Countries

- Pilot the establishment of EQA for 8 PEPFAR countries
- Use existing international EQA programs for larger sites
- Set up in-country program of EQA for peripheral sites
- Monitor effectiveness of EQA program
- Assess other aspects of quality systems management