APHL GLOBAL HEALTH CAPABILITIES

LABORATORY TWINNING

DECEMBER 2023

The APHL Laboratory Twinning Initiative is an innovative approach to strengthening national public health laboratory systems in a sustainable, cost-effective and mutually beneficial manner. The twinning process pairs laboratories from different countries and works to foster bidirectional relationships that benefit both parties by increasing knowledge and building a global network. The purpose of twinning is to create long-term partnerships to build laboratory capacity and quality systems and provide ongoing learning and development opportunities that are valuable to both laboratories. Twinning programs involve the ongoing exchange of expertise, best practices and information using a variety of formats, including email communications, web-based meetings and in-person visits to create a long-lasting peer relationship between laboratories.

Development of a Twinning Relationship

APHL's matchmaking process taps into a wide network of APHL member and partner laboratories to find a state public health laboratory in the US and a national public health reference laboratory in another country who can work together in a peer-to-peer relationship. The twinning relationship is developed using a stepwise and iterative process that includes a review of capabilities, resources, language and other criteria to ensure the relationships thrives. The laboratories enter into a multi-year agreement to conduct activities in pursuit of priorities defined by member laboratory representatives, the national laboratory's leadership and Ministry of Health. Through this process, twinning partnerships seek to create a stable, knowledgeable working team that comprises the technical, managerial and leadership personnel essential to achieve the agreement objectives and strengthen the laboratory system.

New Mexico & Uganda Twinning Partnership Highlights

Scientific Laboratory Division of the New Mexico Department of Health [New Mexico, US] & Uganda National Health Laboratory Services [Kampala, Uganda]

As the Ugandan Central Public Health Laboratories (CPHL) transitioned into the newly established and expanded National Health Laboratory Services, twinning partners from the New Mexico public health laboratory helped Uganda staff prepare for the transformation through:

- **Training:** CPHL leadership received training on laboratory leadership and management, quality systems, facility management and One Health strategy
- **Planning:** The partners worked together to draft a National Health Laboratory Policy, business plan, and strategic and operating plans for the Uganda national public health reference laboratory and its network.
- **ISO 15189 Accreditation:** With mentorship and contributions from the twinning relationship, five laboratories, including CPHL, became accredited based on international standard requirements for quality and competence.

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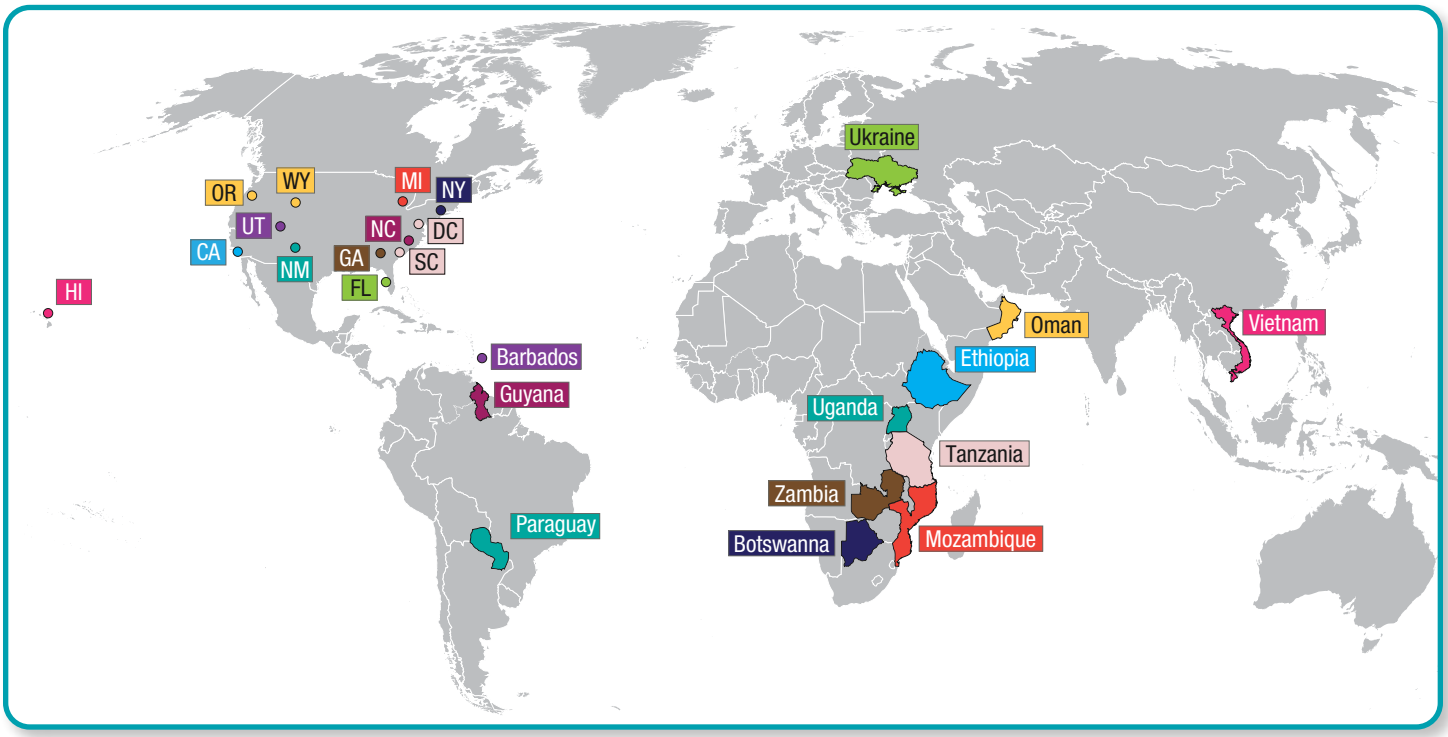
APHL Laboratory Twinning Relationships



Above are APHL's past and present twinning programs. Some particularly successful partnerships include:

Florida & Ukraine
Florida Department of Health (Miami-Dade County Health Department and the Bureau of Public Health Laboratories) [Florida, US] & Ukraine National HIV/AIDS Reference Laboratory, Ukraine Public Health Center of Ukraine [Kyiv, Ukraine]

Michigan & Mozambique
Michigan Department of Health and Human Services Bureau of Laboratories [Michigan, US] & Instituto Nacional de Salud [Maputo, Mozambique]

New Mexico & Paraguay
Scientific Laboratory Division of the New Mexico Department of Health [New Mexico, US] & Laboratorio Central de Salud Publica [Asunción, Paraguay]

New York & Botswana
New York State Department of Health, Wadsworth Center [New York, US] & Botswana National Public Health Laboratory [Gaborone, Botswana]

North Carolina & Guyana
North Carolina Department of Health and Human Services State Laboratory of Public Health [North Carolina, US] & National Public Health Reference Laboratory [Georgetown, Guyana]

Oregon, Wyoming & Oman
Oregon State Public Health Laboratory [Oregon, US], Wyoming Public Health Laboratory [Wyoming, US] & Oman Ministry of Health Central Public Health Laboratories [Muscat, Oman]

Utah & Barbados Twinning Partnership Highlights

Unified State Laboratories: Public Health [Utah, US] & Winston Scott Public Health Laboratory [Bridgetown, Barbados]

- **Laboratory Training:** Bench level training in Utah for Barbados staff on serotyping, identification and culturing, core epidemiology and disease surveillance.
- **ISO 15189 Accreditation:** Extensive training for Barbados staff on standard operating procedures, leadership and quality assurance.
- **Laboratory Information Management Systems:** Implementation support.
- **Laboratory Improvement:** Design and cost estimates for new Barbados BSL-3 laboratory.

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This project was 92% funded with federal funds, from federal programs of $25,826,915, $1,365,000, $2,939,235, $370,000, $1,377,833, $750,000 and $800,000. This publication was supported by Cooperative Agreements NU2HGH000080, NU2GGH002200, NU2HGH000032, NU2GGH002365, NU3HCK000003 and Subawards 1 NU2GGH002485-01-00 and #102652 all funded by the US Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC, HHS or the US Government.

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