

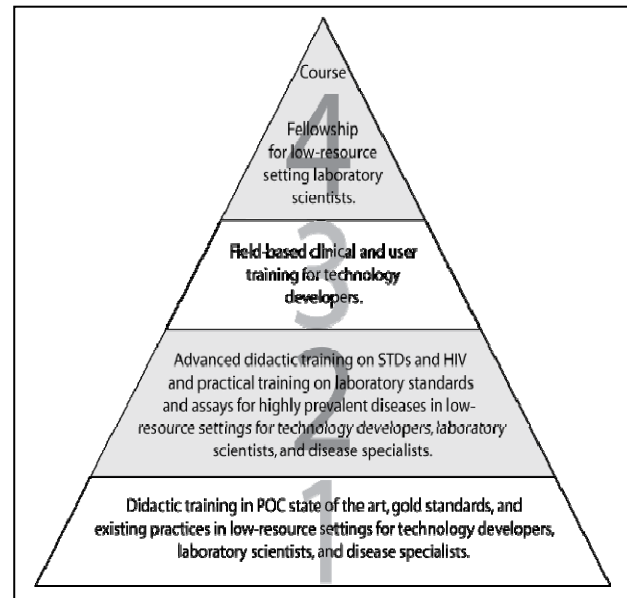
GHDx Course 1
Point-of-Care Diagnostics for Global Health
July 13 - July 17, 2009
University of Washington, Seattle, WA

Outline

- About The Course
- Objectives of the Course
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- Accommodations
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About the course

The Center for Point-of-Care Diagnostic for Global Health (GHDx Center), a collaboration between PATH and the University of Washington, and part of the Point-of-care Technologies Research Network funded by the NIBIB/NIH, offers a new training opportunity.



The Second Annual Course on Point-of-Care (POC) Diagnostics for Global Health will be held July 13 – 17, 2009, with the aim of increasing cross-disciplinary training in the development and implementation of point-of care tests important for enhancing the health needs of low resource settings, particularly those in developing countries.

This course is first in a four-tier progressive training program as outlined above. Course 1 (described below) is a 1-week course focusing on diseases of global significance, the technologies available for diagnosis, realities of testing, and clinical importance of POC diagnostics in low resource settings. Course 2, a three week course offered in Seattle, will provide advanced didactic and laboratory training for research on, and laboratory testing of, diseases of global significance. Course 3 will provide the opportunity for POC test developers to visit low resource settings to assess how new technologies can be integrated into and enhance health care in these environments. Course 4, a nine-month fellowship program, will be offered to participants from low resource settings, allowing them to develop assay development and/or assay evaluation skills under the guidance of mentors at the UW or PATH.

Participants for Courses 2–4 will be selected from individuals who successfully completed Course 1. Further information on Courses 2-4 will be provided during Course 1.



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GHDx Course 1, July 13 - July 17, 2009 Course Information

The focus of this informational packet is Course 1, “Point-of-Care Diagnostics for Global Health” to be offered in Seattle, July 13- 17.

The course will integrate elements of several essential focus areas

- STDs/HIV/Malaria/TB epidemiology clinical diagnostics, and treatment
- Gold standard and POC testing and their impact on clinical management
- Evaluation and implementation of reliable of laboratory testing
- Clinical needs assessment in low resource settings
- Challenges with development and implementation of POC tests
- Assessment of potential impact of POC testing in LRSs

The Objectives of the course are:

1. To introduce course participants to the global significance, clinical manifestations, and treatment of STDs, HIV, tuberculosis, and malaria worldwide.
2. To develop skills necessary for good clinical laboratory practices including the principles of assay development, assay implementation, test interpretation, and quality assurance.
3. To examine techniques available and those under development for POC testing.
4. To expose students to the techniques and quality control procedures necessary for reliable gold standard and POC testing in clinical laboratories, including those specific for infectious diseases.
5. To examine the impact of syndromic management, therapeutic trials, and etiologic agent based treatment schemes.
6. To evaluate the impact of POC testing on implementation and economics of health care in low resource settings.
7. To develop skills for evaluation of novel POC tests in low resource settings.
8. To encourage exchange of the expertise and experience of the participants in the development, implementation, and need for POC testing in low-resource settings (LRSs).

A combination of didactic lectures, pre-assigned reading, and panel discussions and focus groups will be employed to encourage interaction with the speakers and between the course participants. A comprehensive syllabus and references will be provided to the course participants.



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Who Should Attend

- Researchers interested in development and/or implementation of POC devices
- Clinicians involved in health care implementation in low resource settings
- Directors, supervisors, teachers in clinical laboratories
- Public health officials (US and international) overseeing laboratory testing
- Participants from academia and industry interested in the application of POC testing to improve health care in LRS's

Accommodations

University of Washington dormitory accommodations, a 10 minutes walk to the course site, will be provided to course participants. Dormitory housing is an economical and convenient choice for lodging, which includes your room, a shared bathroom, and a meal card for meal purchases at designated University dining locations (\$30/day). Evening meals for two nights will be provided as part of the course. Detailed on-campus lodging information will be included in the course confirmation letter.

For more information, please call
206-744-3785 or E-mail cem3@u.washington.edu.

Participants may choose to pay for housing at local hotels; there is no monetary compensation for participants who choose off campus housing. Please inform us so that we may cancel your reservation in the dormitory.

University of Washington Disability Accommodations: Contact the Disabilities Services Office at least 10 days in advance at (206) 543-6450 (voice); (206) 543-6452 (TTY); (206) 685-3885 (fax), or E-mail access@u.washington.edu.

Recreation

There will be no extended free time during the course, however, if you choose to arrive before or stay after the course, the Seattle area offers a variety of recreational activities. On the University of Washington campus, you can tour the Burke Museum, featuring the natural and cultural heritage of the Pacific Rim, enjoy the golf driving range or rent a canoe or rowboat on scenic Lake Washington. Just off campus you'll find the Museum of History and Industry and the Washington Park Arboretum, with its Japanese Tea Garden. Call the UW Visitor Information Center at (206) 543-9198 for more information. In downtown Seattle, popular attractions include the Pike Place Market, the Space Needle at the Seattle Center, the Seattle Art Museum and the world-class Benaroya Symphony Hall. Baseball fans can watch the Seattle Mariners play at Safeco Field. If you enjoy being on the water, there are harbor tours of the Seattle waterfront and surrounding lakes, as well as all day excursions through the beautiful San Juan Islands. Call the



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**GHDx Course 1, July 13 - July 17, 2009
Course Information**

Seattle Visitors Bureau at (206) 461-5800 for more information. Additional questions can be directed to Christine Makela (contact information below).

Course Directors

Pat Totten, Ph.D.

Karen Stephens, Ph.D.

Travel/Accommodation Information

Christine Makela

Voice: 206-744-3785

Fax: 206-744-3693

Email: cem3@u.washington.edu

Course Location

South Campus Center

Room 348/350

University of Washington Campus

Seattle, Washington



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Course Content

The course will integrate lectures and discussions as grouped under the broad areas below. The disease-specific modules will emphasize the needs and important areas of development for point-of-care diagnostics. Key analytic tools used in research methodology and diagnostic development will be covered as well.

1. POC Testing, devices, challenges, impact on LRS's

- Introduction to POC diagnostics for LRSs Bernhard Weigle, PhD.
- Laboratory testing needs in LRSs Matt Steele, PhD, MPH

2. Principles and evaluation of Laboratory Tests

- Principles of laboratory testing in clinical laboratories, Michael Astion, MD, PhD and Tim Amukele, MD, PhD
- Evaluation, validation, and quality control for infectious disease diagnostics, Pat Totten, PhD
- Statistical design and concepts for assessing of novel laboratory tests, To be named
- Literature review of laboratory tests for STDs, Jane Kuypers, PhD

3. Disease-specific topics focused on global impact, clinical features, diagnostic tests, treatment regimens, POC testing, and challenges in LRSs, as well as examples from experience with POC test development

- Global significance of STDs and AIDs, King Holmes, MD, PhD,
- STD Syndromes, syndromic management, and gold standard testing strategies for STDs, Pat Totten, PhD
- HIV and AIDS, Robert W. Coombs, MD, PhD
- Syphilis. Sheila Lukehart, PhD, Jane Kuypers, PhD
- Herpes Simplex Virus, Rhoda Ashley Morrow, PhD
- Malaria, Gonzalo Domingo, PhD and others to be named
- Tuberculosis, Peter Small, PhD, Jerry Cangelosi, Ph.D., Chris Crudder, BS

4. Diagnostic development and implementation in low resource settings

- Neglected diseases. Syamal Raychaudhuri, PhD
- Clinical Needs Assessment in Low Resource Settings. Tala de los Santos, MBA, MS
- New diagnostic platforms/implementation of testing in LRSs, Bernhard Weigl, PhD
- Case study of needs assessment, development and implementation of a POC devices, Roger Peck BS and Tala de los Santos, MBA, MS



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Course Sponsors

- National Institute of Biomedical Imaging and Engineering (NIBIB)
- The Department of Global Health, University of Washington, Seattle, Washington

Participating Organizations

- University of Washington, Departments of Global Health, Laboratory Medicine, and Medicine (Division of Infectious Diseases), Seattle, Washington
- PATH (Program for Appropriate Technology in Health), Seattle, Washington