



Pacific Center for
Emerging Infectious Diseases
Research



UNIVERSITY
of HAWAII
MĀNOA

Department of Tropical Medicine, Medical Microbiology
& Pharmacology

JOHN A BURNS SCHOOL OF MEDICINE, UNIVERSITY OF HAWAII AT MANOA

DNA Sequencing to Determine TB Drug Susceptibility

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Molecular detection of drug-resistant tuberculosis has evolved to become more informative, quicker, and more accurate. Real time PCR methods provide rapid and reasonably accurate results, but DNA sequencing has evolved from Sanger, pyrosequencing, and whole genome sequencing to targeted next generation sequencing. An optimized algorithm can eliminate the need for culture-based susceptibility testing in most cases, while still detecting heteroresistance (mixture of susceptible and resistant MTB bacilli). It is also now possible to predict which drug, in a class of drugs such as fluoroquinolones or aminoglycosides may still be effective even when a resistance-associated mutation is present. The presentation will also include a description of a long-term international project (in North Korea).



Wednesday, August 28, 2019 at 12:00 noon
John A. Burns School of Medicine, Kaka'ako Campus
Medical Education Building Auditorium (Room 315)
For further information, contact (808) 692-1654

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