Pacific Center for Emerging Infectious Diseases Research

University of Hawai'i Mānoa

COBRE RESEARCH SEMINAR SERIES

Tick-Borne Disease Risk in High Foot-Traffic-Built Environments

Tick-borne diseases are the most prevalent vector-borne infections in the United States. We are investigating the biological, ecological, geographical and socio-behavioral factors involved in these emerging infections in high foot-traffic-built environments, such as public parks and other spaces, including university campuses in upstate New York. The primary host for *Borrelia burgdorferi*, the Gram-negative spirochete of Lyme disease, is *Peromyscus leucopus*, the white footed mouse. The bacterium is transmitted to humans from mice and other mammals (including squirrels, chipmunks, voles, coyotes, migratory birds and deer) via the deer tick, *Ixodes scapularis*, and requires a variety of intersecting biological, ecological, socio-behavioral and geographical factors to produce disease in humans. *I. scapularis* can also harbor other medically important pathogens, including *Anaplasma phagocytophilum* and *Babesia microti*, the agents for human anaplasmosis and babesiosis. The Binghamton University campus and surrounding community serve as a natural experimental model for this study.

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Wednesday, July 17, 2013 at 12:00 noon
John A. Burns School of Medicine, Kaka'ako
Medical Education Building, Room 304
For further information, contact (808) 692-1654

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