



JOHNS HOPKINS
BLOOMBERG
SCHOOL of PUBLIC HEALTH

Department of Biostatistics

BIostatISTICS SEMINAR

Data-driven Approaches to Antibiotic Resistance Policy

FACULTY CANDIDATE

Scott Olesen, Ph.D., Scientific Director, OpenBiome

Abstract:

Antibiotic resistance is a key threat to public health. Reducing antibiotic use in the community is a central strategy for controlling and reversing resistance. However, the quantitative relationships between population-level antibiotic use and antibiotic resistance --the amount by which use must be reduced to achieve a targeted reduction in resistance-- remain challenging to detect, measure, and interpret. I show that large antibiotic use and resistance datasets can address fundamental questions about the relationships between antibiotic use and resistance, such as how the distribution --not just the aggregate amount-- of antibiotic use in a population affects resistance. In other cases, however, refined statistical methodology and targeted data collection will be required to develop rational policy for antibiotic resistance.

Johns Hopkins Bloomberg School of Public Health, Department of Biostatistics
Wednesday, January 22, 2020, 12:15-1:15pm, Room 3008 (Refreshments 12:00pm)

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Department of Biostatistics, 615 N. Wolfe Street, Suite E3527 Baltimore, MD 21205