School of Public Health & Family Medicine University of Cape Town

Noon Meeting: 10 July 2014

Hosted by the Division of Epidemiology & Biostatistics

<u>Presentation by:</u> Shrikant I. Bangdiwala, PhD Professor, Department of Biostatistics University of North Carolina at Chapel Hill, USA



<u>Title:</u> Can we combine apples and oranges? Evaluating multi-component community-based quasi-experimental interventions

Randomized controlled trials (RCT) are considered **the** gold standard for establishing evidence for the effect of interventions. Zealots of the gold standard disregard evidence from other experimental, quasi-experimental and observational studies. However, not all interventions can be subjected to an RCT, especially community-based interventions dealing with improving the safety of citizens with policy or environmental infrastructure interventions. Such interventions tend also to be complex and multi-component and thus harder to evaluate their effectiveness. The various components are implemented at different times in different communities with different intensities; thus, combining the data from multiple communities is challenging. We present a novel use of 'meta regression' techniques drawn from the 'evidence-based medicine' movement to create 'practice-based evidence' of the effectiveness of such multi-component interventions, thus essentially combining apples with oranges.

Where: Seminar Room 2, Falmouth Building Entrance 5, Health Sciences Campus

When: 12-1pm, 10 July 2014