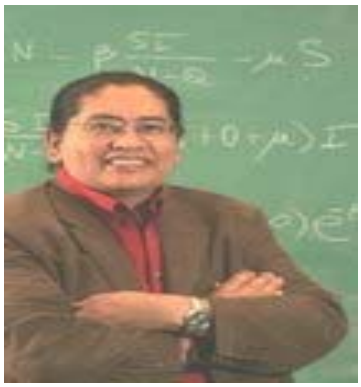

Special One Night Seminar

Sponsored by UBM@UMBC

Carlos Castillo-Chavez, Joaquin Bustoz Jr. Professor and Regent's Professor, Arizona State University

Title: **Dispersal and Recurrence in Disease Dynamics: The Case of Influenza**
Date: **Tuesday, April 5, 2011**
Time: **4:00 pm**
Location: **LH 1**

Abstract:

The role of mathematical models in the study of disease dynamics has a long and distinguished history that goes back to three physicians: Daniel Bernoulli, Sir Ronald Ross, and A. G. MacKendrick. Why were mathematical models introduced? This question will be addressed by revisiting early and recent applications of contagion models. Some of the mechanisms responsible for recurrent epidemic outbreaks (influenza being the underlying disease) or what appear to be periodic outbreaks over short-and long-time scales will be identified. The role of movement (dispersal) on disease dynamics in the context of topics that include for example, the deliberate release of biological agents, will be discussed.

ALL ARE WELCOME