**NOVEL HEMODYNAMIC RISK FACTORS FOR NEW - ONSET HEART FAILURE IN THE GENERAL POPULATION**

**J.A. Chirinos**

University of Pennsylvania School of Medicine Philadelphia, PA, USA

A detailed characterization of pulsatile left ventricular afterload can be achieved

non-invasively via analyses of pulsatile pressure-flow relations. Recent data suggest that different components of pulsatile afterload exert selective deleterious effects on left ventricular and myocardial function. In particular the loading sequence appears to be an important determinant of myocardial function. A loading sequence characterized by late systolic load has been associated with subclinical abnormalities in systolic and diastolic longitudinal velocities in the general population. Furthermore, recent data from the multi ethnic study of atherosclerosis identified wave reflections as a strong independent predictor of incident heart failure. The non-invasive methods to assess arterial wave reflections and the left ventricular loading sequence as well as the potential implications of recent epidemiologic findings will be discussed.