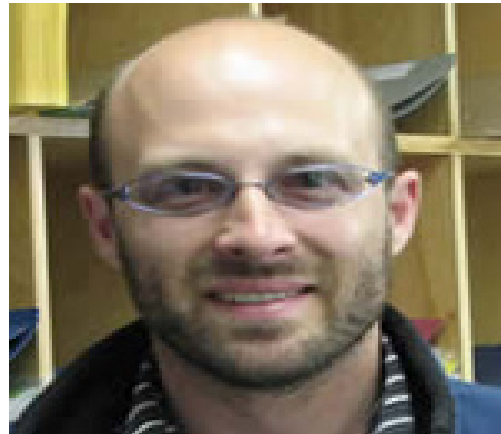


Imaging Diastolic Function with Magnetic Resonance Imaging and ultrasound - how does the heart relax?

An Engineer's Perspective



Date: December 11th, 2007

Time: 5:00 pm (approx. 45 minutes)

Location: University Of Alberta

Room: ETL E2-002 (Engineering Teaching and Learning Centre)

Presented by: Dr. Richard Thompson, Department of Biomedical Engineering,
University of Alberta

Abstract: Traditionally, a healthy heart is synonymous with good systolic function, which is the ability of the heart to contract and pump blood to the organs and tissues throughout the body. Quantification of systolic function is straightforward using standard non-invasive imaging techniques, typically echocardiographic (ultrasound) or magnetic resonance imaging (MRI) approaches. Although, it is increasingly recognized that the ability of the heart to relax and fill with blood, known as diastolic function, is equally important in determining heart health, unlike systolic function, quantification of diastolic function is notoriously difficult. The current standard MRI and Ultrasound diastolic imaging approaches will be introduced and new cutting edge approaches will be described, with an emphasis on imaging physics, signal processing and the underlying physical properties of the heart that determines diastolic function.

Pizza & Pop will be served after the presentation

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