

## Medical Physics Seminar Monday, October 30th, 2017 1345 HSLC ~ 4:00 P.M.



Ronald T. Wakai, Ph.D.

Professor Department of Medical Physics School of Medicine and Public Health UW-Madison

## Fetal Magnetocardiography and Optically-Pumped Magnetometers

Lethal electrical rhythms of the heart are the leading cause of unexpected sudden death and can occur at any age. In this talk I will review the importance of electrophysiology and describe recent progress our group has made in using magnetocardiography to diagnose life-threatening cardiac arrhythmias in the fetus. I will also describe a new type of magnetometer, based on atomic physics principles, that has the potential to revolutionize magnetocardiography and other areas of biomagnetism.



1345 Health Sciences Learning Center (HSLC) 4:00 - 5:00 P.M.