#### Medical Physics 710 / BME 710

Journal Discussion 7, Quiz #5: **Venkatesh et al., JMRI 2013, Magnetic Resonance Elastography of Liver: Technique, Analysis, and Clinical Applications** 

Due: Nov. 1st, 2018

Name:

**Due:** Nov 1<sup>st</sup> at the beginning of class. Please turn in by hand, email, or submission to Learn@UW.

### Question 1 (2.5 points)

1. How does MRE compare to transient ultrasound-based techniques in the liver?

### Question 2 (2.5 points)

2. What are the three essential steps in generating stiffness maps with MRI?

# **Question 3 (2.5 points)**

3. How does the local wavelength in a patient with liver cirrhosis compare to the local wavelength in the liver of a normal subject?

# Question 4 (2.5 points)

Name at least 2 algorithms that can be used to generate the elastogram from the wave images.