



# Research In Progress Seminar

**Tuesday, May 9, 2017  
3:30PM**

**Location: CCBS Conference  
Room, 2622 Biological  
Sciences 3**

## **Speaker:**

Sean Horan,  
Mathematics (John  
Lowengrub and Vasan  
Venugopalan Labs)

## **Talk Title:**

Using Spatial Frequency  
Domain Imaging to Recover  
Optical Properties of  
Layered Tissue

## **Abstract:**

The interrogation of layered tissue is a common problem in medical imaging. The scattering and absorption spectra of each layer can reveal much about their composition, but separating the contribution of these layers can be difficult for non-invasive methods. I use a multistep inversion process to recover data about the scattering and absorption spectra of two layered tissue phantoms taken using spatial frequency domain imaging. Constraints are applied to obtain initial rough ideas as to these spectra, and are relaxed in further stages.

## **Questions:**

Please contact Naomi Carreon at:  
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Blake at: [kerrigab@uci.edu](mailto:kerrigab@uci.edu)