This course is meant for individuals interested in pursuing advanced research related to the development and/or use of new MRI techniques. An emphasis will be placed on recent developments that 1) have had high impact on the field and/or show strong promise, 2) involve novel pulse sequence design or image reconstruction methods, and/or 3) enable imaging of anatomy and function in a way that surpasses what is currently possible with any modality.

The format will be similar to that of a journal club. There will be one or two handouts or online lectures assigned each week. Each class meeting will consist of a 30 minute discussion, followed by a problem solving, often involving Matlab programming. Topics will include:

- Compressed Sensing MRI
- Arterial Spin Labeling
- RF Pulse Design
- New Strategies for Motion Encoding
- New Strategies for Angiography
- Starting an MRI Business

what’s so special about these images? take this class to find out!