Medical Imaging

MEDICAL IMAGING
BIOEN 420, Spring Quarter 2018
(Tuesdays & Thursdays, 8:30-10:20 AM)

Medical imaging has become one of the most important diagnostic tools in medicine. From X-ray computed tomography (CT) to real-time ultrasound (US), these systems are essential to the practice of modern medicine. In addition, they have become important discovery tools for the next generation of molecular diagnostics and therapeutics.

In this course, students will learn about all of the major imaging modalities, focusing on the basic principles of image formation. Modalities will also be compared to understand why different systems are used for specific medical applications.

Topics covered in the course are:

- Week 1: Intro to Imaging
- Week 2: Traditional Optical Imaging
- Week 3: Ultrasound Imaging
- Week 4: Ultrasound Imaging (continued)
- Week 5: Advance Optical Imaging
- Week 6: Magnetic Resonance Imaging
- Week 7: Magnetic Resonance Imaging (continued)
- Week 8: Radiography
- Week 9: X-Ray Computed Tomography
- Week 10: Nuclear Medicine and Positron Emission Tomography

Sign up now! BIOEN 420 (SLN: 11190)

For further information and course descriptions contact Professor Matt O’Donnell (odonnel@uw.edu)