

# Ocular Ultrasound and Oncology Curriculum Roadmap

## PBL Teaching Sessions

- **Applied Ocular Ultrasound**
  - Prework: watch “Ocular Echography for Intraocular Tumors” part 1 and part 2 on Moran CORE, worksheet, Yale Fisher lectures
  - During lecture: review worksheet, case presentations, practice B-scan techniques
- **Ocular Oncology**
  - TBD 2021-2022

## Core Topics (to be discussed on rotation)

*The resident is expected to read about these topics and give a short verbal presentation to the attending in clinic. The first three topics are to be presented during the intern ophthalmology rotation to Dr. Harrie. The last two topics are to be presented to Dr. Harrie if on an ultrasound elective, or to Dr. Hansen on the retina rotation.*

- ☐ **Intern:** Describe a systematic approach to B-scan U/S (including transverse, longitudinal, and axial, including probe marker)
- ☐ **Intern:** Shields’ criteria for distinguishing a choroidal nevus from choroidal melanoma
- ☐ **Intern:** A differential for leukocoria, and distinguishing U/S findings
- ☐ **Elective/Retina:** Basis and utility of the 30-degree test
- ☐ **Elective/Retina:** Treatment options for intraocular tumors
- ☐ **Elective/Retina:** Clinical and ultrasonographic features of uveal melanoma and retinoblastoma

## Required Clinical Skills

- ☐ **Intern:** Identify and differentiate vitreous membranes, retina/RD, and choroidal detachments on U/S
- ☐ **PGY2+:** Demonstrate good technique of B-scan U/S of the posterior segment
- ☐ **PGY2+:** Identify optic nerve drusen on B-scan ultrasound

## Directed Reading and Resources

1. Clinical Ophthalmic Echography: A Case Study Approach (available online through Eccles Health Sciences Library)
2. Basic B scan Examination Techniques Parts 1-3 on Moran CORE
3. Yale Fisher’s short lectures on B-scan techniques:  
<https://www.eyedocs.co.uk/ophthalmology-articles/general/1779-b-scan-ocular-ultrasound>
4. Harrie RP. “Ultrasonographic Imaging in Infants and Children” Section II Chapter 12 in Pediatric Retina by Dr. Hartnett (available online through Eccles Health Sciences Library)