



# Classification of Hyperspectral Images for Disease Detection

The Laboratory of:

**Baowei Fei, Ph.D., Eng.D.**

Associate Professor of Radiology

Georgia Cancer Coalition Distinguished Scholar

Director, Quantitative BiImaging Laboratory

Presented by:

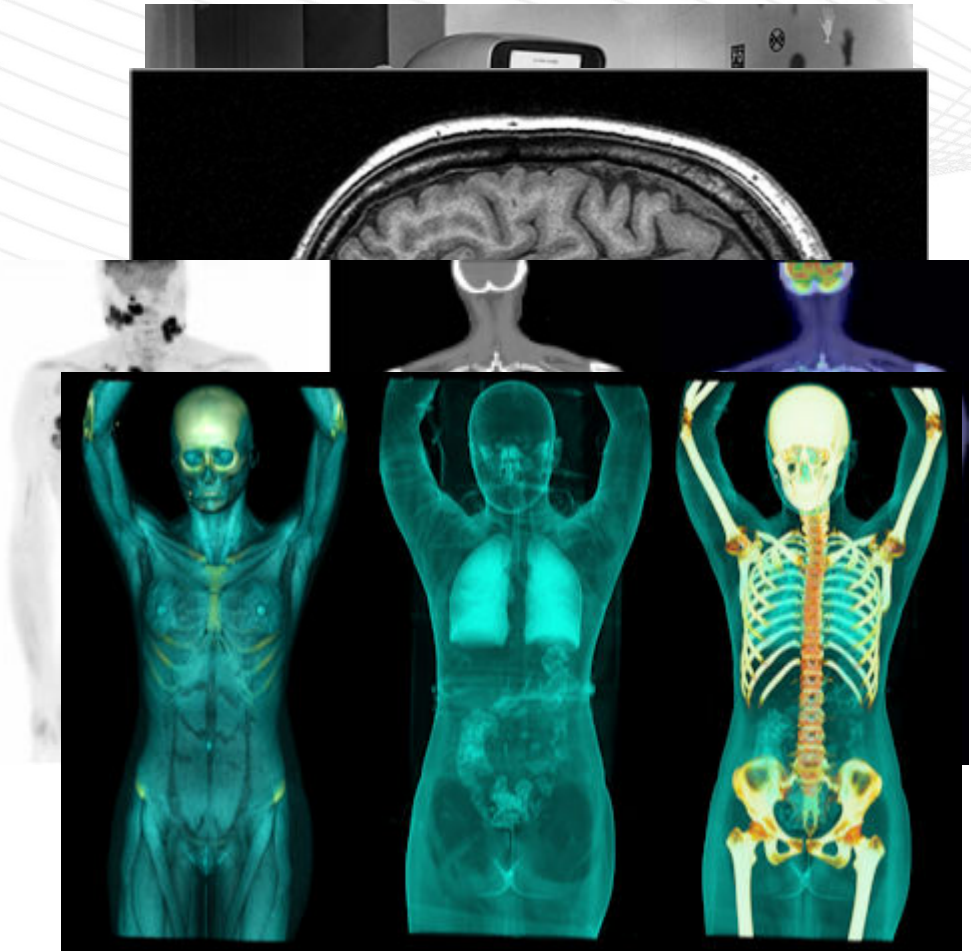
Philip Semprevio, II

Licensing Associate



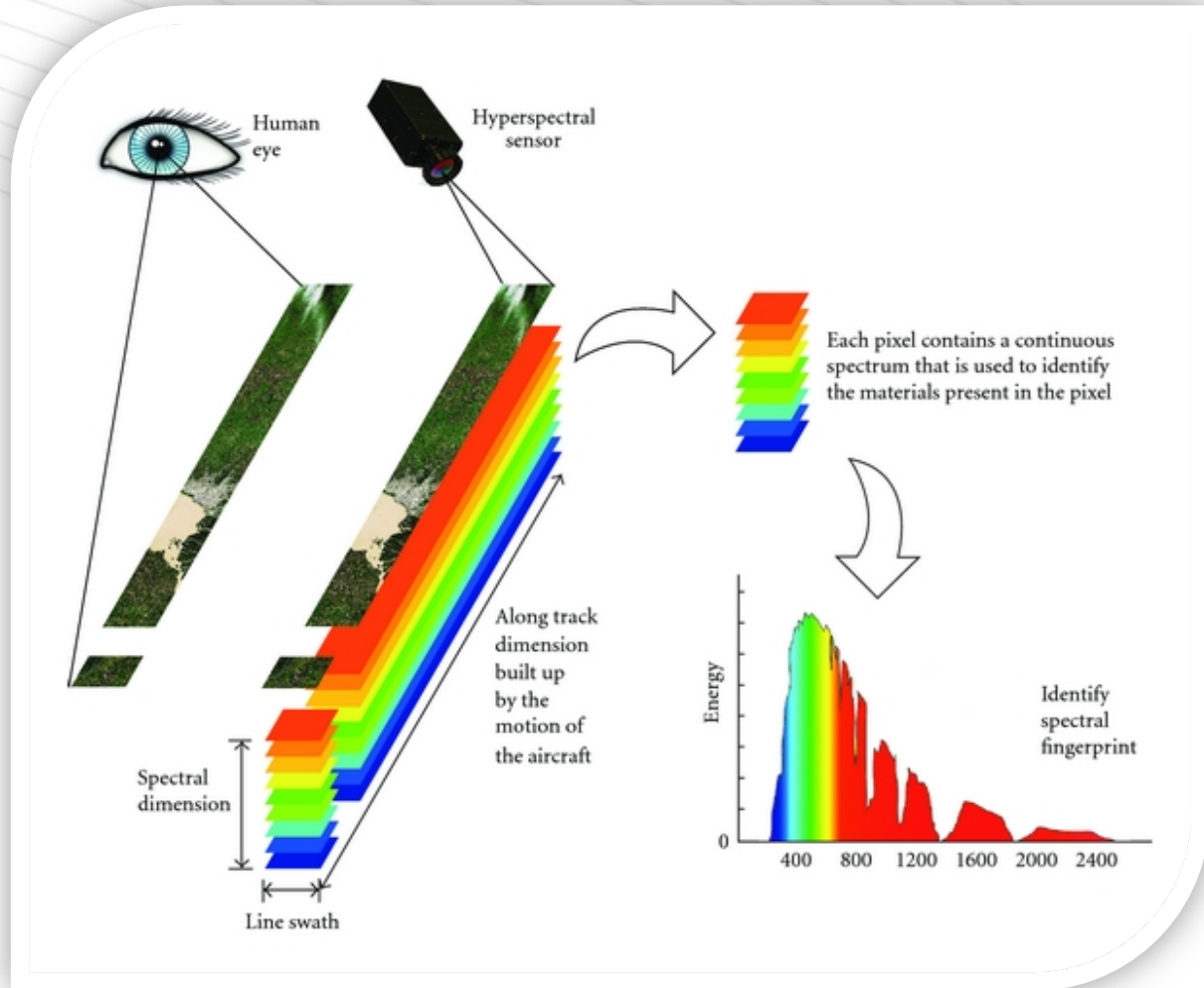
# Unique Opportunity

- Classic Imaging
- Modern Imaging
- Next generation...



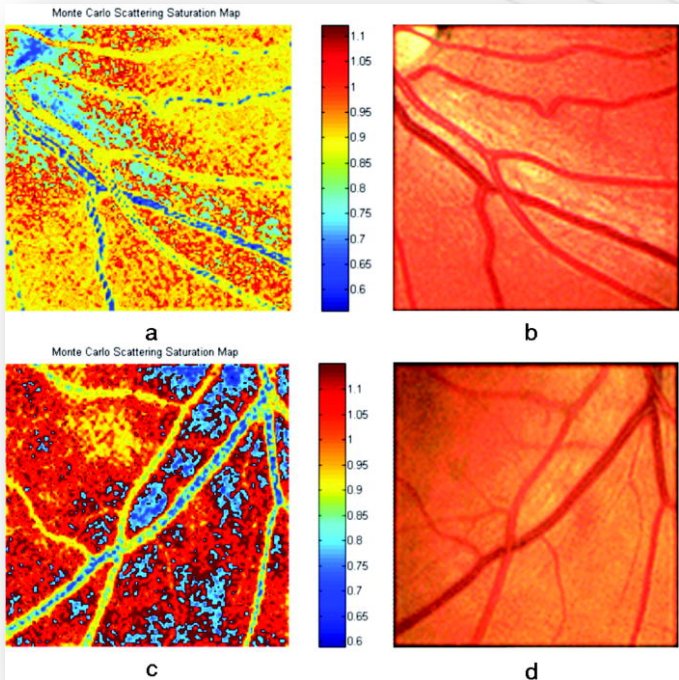
# Hyper Spectral Imaging

- Hybrid
- Spectral Pixels
- 3D Data



# Emory Image Analysis

HSI Image of the Retina



## Software Solutions

- 1. Automatic Segmentation
- 2. Tissue Signature Database
- 3. Pixel Cross-Talk
- 4. Similar Signatures
- 5. Automatic Diagnosis

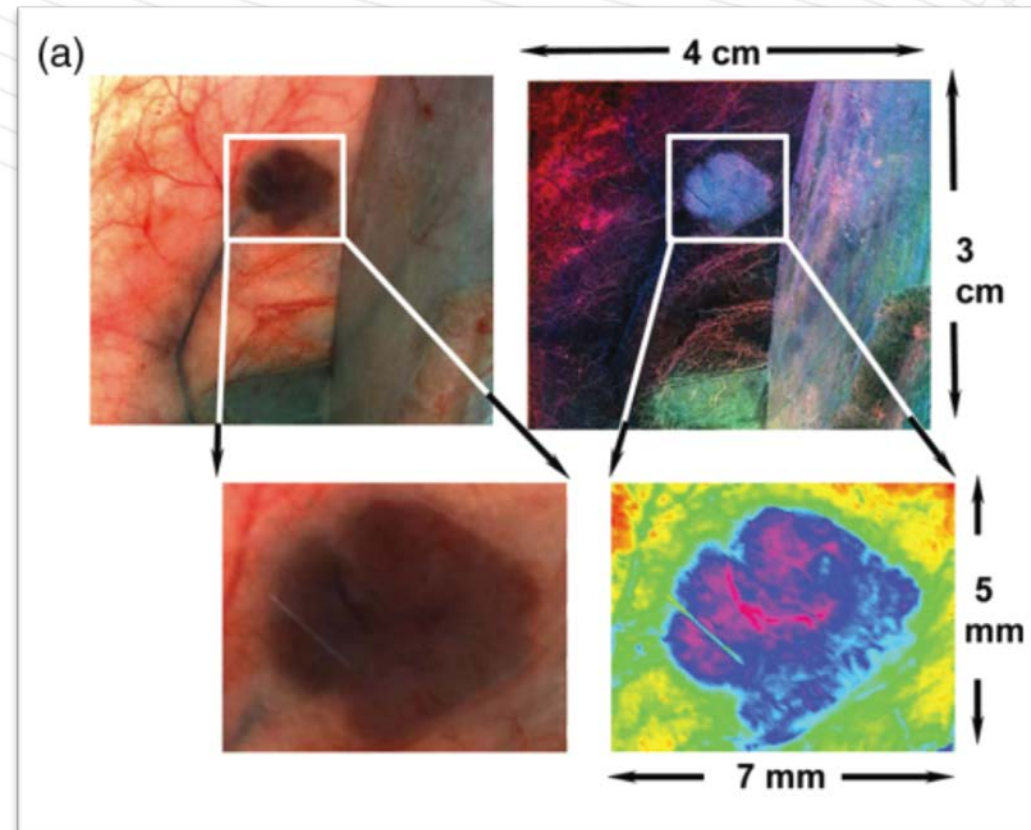


# Medical HSI

## HSI Benefits

1. Non invasive, non ionizing
2. No contrast agents
3. Real time observations
4. Small, Low Cost
5. Optical Biopsy

HSI Image of Skin Lesion





# Summary

