Disclosures

- Consultant/Speaker DePuy Synthes
- Consultant/Speaker/Royalty Agreement Osteomed
Objectives

- Understand thermal imaging
- Be able to utilize thermal imaging in evaluating and assessing your patients
- Be able to use thermal imaging to prevent limb loss and aid in reconstruction
What is Thermal Imaging?

- Visual displays of the amount of infrared energy emitted, transmitted, and reflected by an object.
- The amount of infrared energy emitted by an object increases with temperature.
Thermographic Imaging

- Thermology
- Allows one to see variations in temperature
Moisture Behind Sheetrock

What You See

What We See
Swine Flu Airport Screening
Medical Applications

- Arthritides
- Nerve Damage
- Fibromyalgia
- CRPS
- Vascular Disease
- Breast Screening
- Carpal Tunnel Syndrome
- Herniated Disc Disease
- Inflammatory Pain
- Skin Cancer
- Sprain/Strains
- CVA Screening
- Mesothelioma
- Digestive Disorders
- Allergy Detection
- Veterinary Medicine
Podiatric Applications

- PAD
- Gangrene
- Infection/Cellulitis
- Abscess
- Frost Bite
- Charcot
- Gout
- Trauma
- ????
Digital Infrared Thermal Imaging

- Non-invasive adjunctive diagnostic technique visualizes changes in skin surface temperature and thermal abnormalities
- Shows physiologic change and metabolic processes
Equipment
Cellulitis
Frost Bite
Right Foot
Left
Frost Bite
Deep Frostbite
Radiology: Nuclear Imaging
Crush Injury
Crush Injury
Radiographic evidence of 2\textsuperscript{nd} toe osteomyelitis
Gangrene
“Candy Corn Sign”
Ischemic Limb Pain
Viability of Ulcers
Ischemic Ulcer
Summary

- Adjunctive diagnostic modality
- Guide treatment
- Cost efficient
- More research
- Applications?
Cheers!