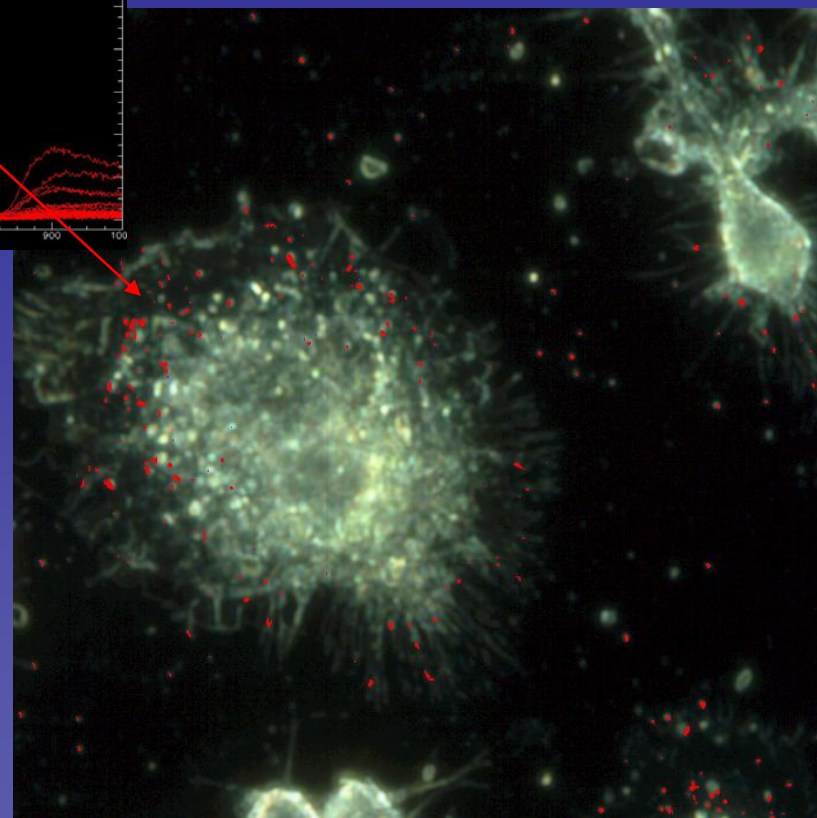
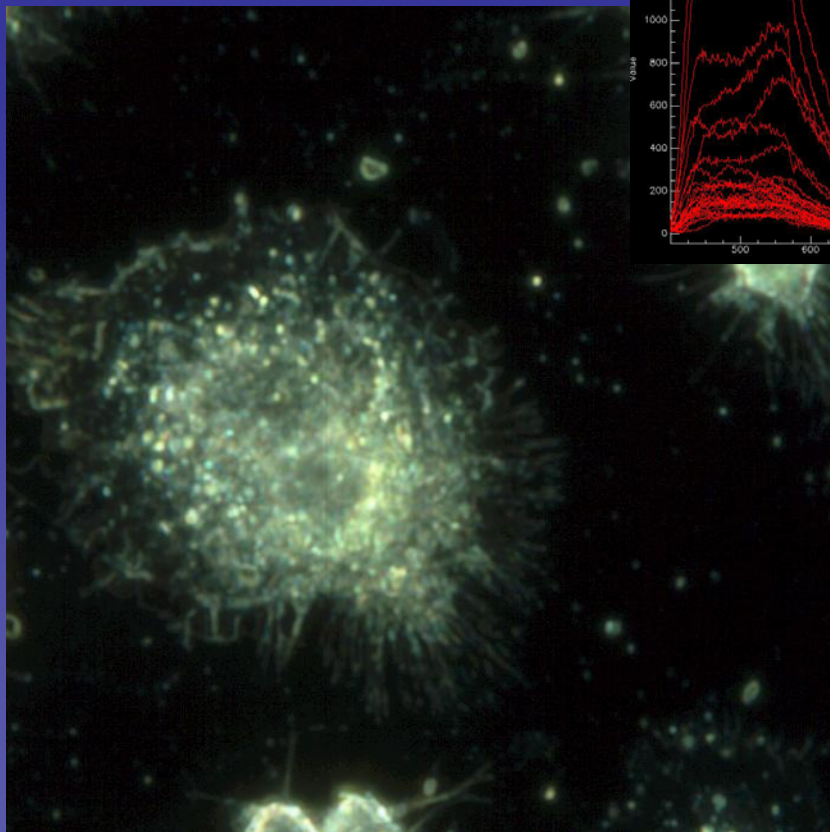
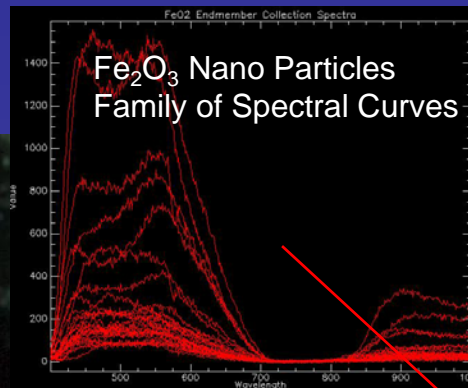


# Fe<sub>2</sub>O<sub>3</sub> Nano Particles

-Magnetic Imaging-

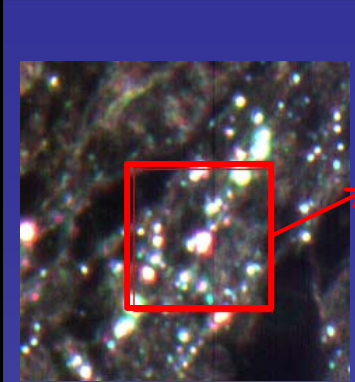


Macrophage cells incubated with Fe<sub>2</sub>O<sub>3</sub> NP  
Hyperspectral Scanned Image:  
40x objective

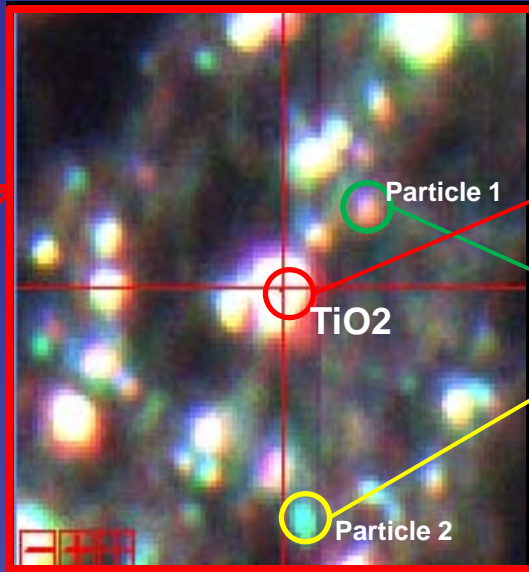
Mapping overlay of Macrophage cells  
incubated with Fe<sub>2</sub>O<sub>3</sub> NP: **Red** maps each pixel  
matching the spectra of Fe<sub>2</sub>O<sub>3</sub> NP

# Nanotox Investigations: TiO<sub>2</sub> & Nanoparticles in tissue

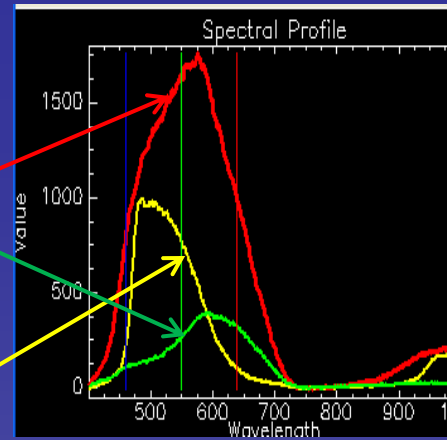
## Nano-scale Hyperspectral Imaging



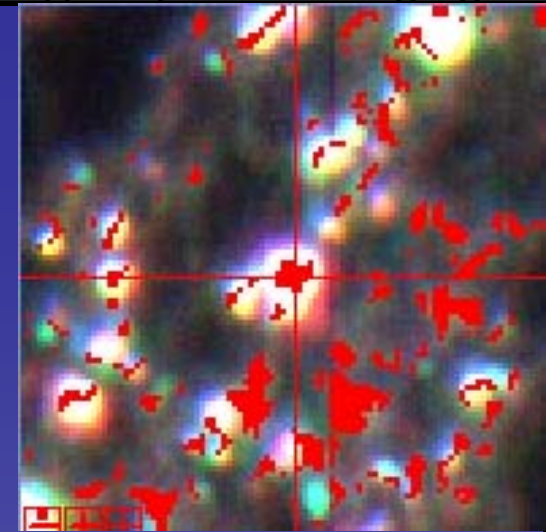
TiO<sub>2</sub> in Tissue  
-Original Image-



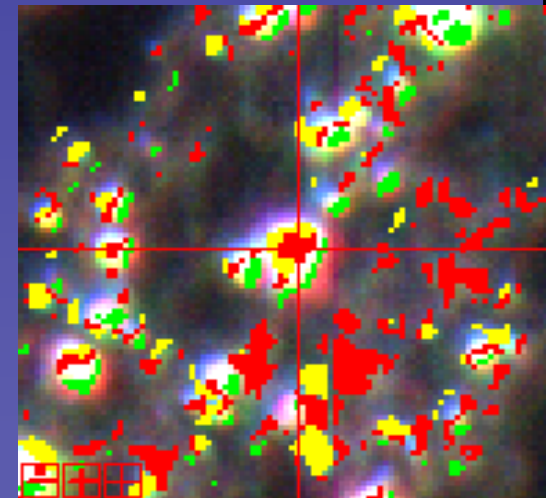
TiO<sub>2</sub> & 2 Nanoparticles  
-Zoom Window-



Spectral curves of TiO<sub>2</sub> and  
Nanoparticles



TiO<sub>2</sub> Only Mapped in RED



TiO<sub>2</sub> &  
2 Nanoparticles Mapped  
(RED, YELLOW & GREEN)

TiO<sub>2</sub> and unknown Nanoparticles spectrally scanned. Stored spectra mapped in each 30 nm pixel on the Original Image to confirm location and concentration.