My research aims to develop nanomaterials for diagnostic, imaging, and therapeutic applications. A primary emphasis is on the analysis and modulation of macrophage phenotype and inflammation using targeted nanocarriers.

**Research Interests**
- Macrophage targeted therapies
- Targeted anti-inflammatory agents
- Quantum dot molecular probes
- Single biomolecule counting assays
- Live-cell single biomolecule imaging

**Current Projects**
- Targeted Drug Delivery to Adipose Tissue Macrophages in Obesity
- Nanomedicine-Based Targeting of Inflammatory Macrophages in Diabetic Wound Repair
- Cell Classification in Intact Tissue using Quantum Dots
- Multiplexed Analysis of Circulating Nucleic Acids in Small-Volume Blood

**Keywords**
Nanotechnology, targeted drug delivery, quantitative molecular imaging, single molecule imaging, obesity, type 2 diabetes, cancer, inflammation

**Interest Areas for Collaboration/Future Work**
- Targeted drug delivery in diverse animal models of disease
- Mechanisms of drug delivery
- Single-protein imaging in living cells