



## DNA Mediated Synthesis of Novel Gold Nanoflowers for Diagnostic and Therapeutic Applications

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**Date:** Tuesday, January 24, 2012

**Time:** 12:00 – 12:30 p.m. CST

**Location:** 1000 MNTL

### Abstract:

My research is focused at exploring the applications of a new class of gold nanoflower structure that exhibits interesting cellular uptake properties, tunable size and optical properties, and an exceptionally simple synthesis protocol. These properties make it an ideal platform for cancer diagnosis, imaging, and as a platform for therapy. My work has been focused on optimizing the size of nanoflowers while maintaining the functional DNA aptamer that is responsible for cancer recognition and demonstrating selective uptake in vitro. The goal of the project is a complete cancer theragnostic platform that can be used to image, diagnose, and treat a variety of diseases by choosing the appropriate aptamer and nanoflower size.

### Seminar Presented by:

