

# CNMS DISCOVERY SEMINAR SERIES

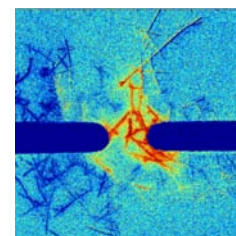
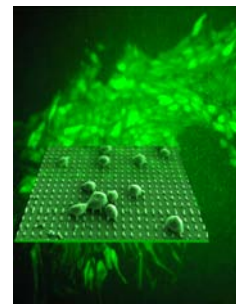
Thursday, October 13, 2011  
4:00 pm  
Iran Thomas Auditorium, 8600

## *Fighting Cancer with Nanoparticle Medicines*

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### **Abstract:**

For centuries, cancer has been one of the most devastating diseases. Papyrus writings from 1600-1500 BC describe cancer and attempts at its treatment. Today, the molecular basis of cancer is being unraveled, and therapeutics are being developed to take advantage of this new knowledge. One class of experimental therapeutics involves the use of nanoparticles. Given the long history of difficulties in developing cancer therapies, why is there excitement about nanoparticle medicine (nanomedicines) for fighting cancer? Is it warranted or is it hype? In this lecture, I will present the current understandings of why these engineered nanoparticle medicines (that are highly multifunctional chemical systems) have the potential to provide “game changing” ways to treat cancer. I will illustrate the various features and potentials of nanoparticle medicines using two different nanoparticles that we have translated from laboratory curiosities to experimental therapeutics in human clinical trials (one contains a small molecule drug that is in Phase II, while the other contains siRNA and is in Phase I).



**Host:** Peter Cummings, [peter.cummings@vanderbilt.edu](mailto:peter.cummings@vanderbilt.edu), 865.241.4779

