



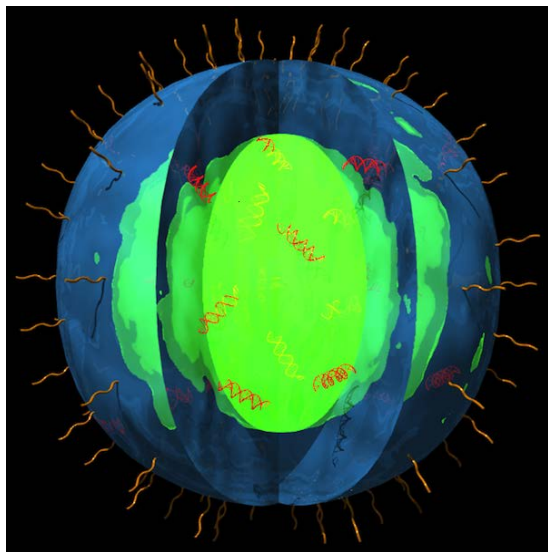
Chemical & Physical Sciences  
UNIVERSITY OF TORONTO  
MISSISSAUGA

## COLLOQUIUM

TUESDAY, APRIL 24<sup>TH</sup>, 2012  
12:00 P.M. (**SHARP**) – 1:00 P.M.  
**CCT 2150**

**Andrew Lyon**  
*Georgia Institute of Technology*  
*School of Chemistry and Biochemistry*

### **“Nanoscale Hydrogels and Carrier Design”**



This presentation will discuss some of the salient issues in the design of hydrogel nanoparticles for controlled encapsulation and release of therapeutics. Two main approaches will be presented. The first will describe methods for synthesizing core/shell nanogels for targeted delivery of siRNA while presenting the various barriers to clinical application of such an approach. Second, fundamental light scattering studies of protein encapsulation will be discussed with the goal of developing new tools for the detailed study of microgel carrier structure/property relationships. Together these studies illustrate both the fundamental and applied sides of nanocarrier design, with the hopes that the gap between the two can be filled, thereby creating more effective approaches to translation from bench to bedside.