QCB
Quantitative and Chemical Biology
Indiana University

Yamuna Krishnan
University of Chicago

Host: Nikki Pohl

DNA nanodevices for cell specific cargo delivery in live organisms

Due to its nanoscale dimensions and ability to self-assemble via specific base pairing, DNA is rapidly taking on a new aspect where it is finding use as a construction element for architecture on the nanoscale. Structural DNA nanotechnology has yielded architectures of exquisite complexity and functionality in vitro. However, till 2009, the functionality of such synthetic DNA-based devices in living organisms remained elusive. Work from my group the last few years has bridged this gap where, we have chosen architecturally simple, DNA-based molecular devices and shown their functionality in complex living environments. I will describe our recent work describing the design and application of a cell targetable icosahedral DNA nanocapsule to illustrate the potential of DNA based molecular devices as unique tools with which to interrogate living systems.

For further details, contact Mr. Steven Watkins at 5-9749

QCB
Seminar Series

Co-hosted by the Department of Chemistry and the Graduate Program in Biochemistry

FRIDAY

October 21

CHEMISTRY

C033

2:30 p.m.