



'Tools for Discoveries of Life'

Webinar: Jan. 15th, 2013
from 12:30—1:30pm

Webinar Info:

<https://connect.fiu.edu/januarywebinar/>

RSVP by 1.14.13 to Jenesis Ramirez
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• **SCIENCE**

Mastering science based skills to create a prosperous and engaging future

• **COMMUNITY**

Utilizing knowledge and skills gained to revitalize and enrich the community

• **ENGAGEMENT**

Expanding your knowledge of the latest breakthroughs in science and technology

• **FUTURE**

Enriching the South Florida community through science based student engagement

Novel Techniques for Structure Elucidation of Blockbuster Drugs: A Close Look at Biologics and Chirality

The top billion-dollar drugs such as Herceptin, Lipitor, Plavix, Epogen and Procrit are unique in that their active pharmaceutical ingredient (API) is either a chiral small molecule or is composed of a biologic such as protein. Both types of pharmaceuticals are the fastest growing in research & development and require additional characterization that is not needed for traditional small molecule API. The presentation will feature a discussion of new techniques that are sensitive, fast and easy, and are making a significant impact in the industry.

Rina Dukor is the President and co-founder of BioTools, a company that provides solutions for critical molecular structure characterization, from basic research to finished products, for biopharmaceutical and chiral drug research. While in industry, Dr. Dukor pioneered the introduction of aqueous infrared spectroscopy to the biopharmaceutical industry through the development of instrumentation, sampling techniques and software for protein secondary structure determination. Her methodology, commercialized as PROTA, is now used by over 60 of the leading biopharmaceutical companies. She has pioneered the development of reflection infrared micro-spectroscopy for cancer diagnostics. And by bringing Vibrational Circular Dichroism (VCD), the topic of her Ph.D. dissertation, to the market, Rina helped cement the use of VCD by major pharmaceutical companies.