FIU Engineering & Computing
FLORIDA INTERNATIONAL UNIVERSITY

Electrical & Computer Engineering

NANOTECHNOLOGIES, ENVIRONMENTAL SENSING AND BIOINFORMATICS – THE IMPENDING TRANSFORMATION OF PUBLIC HEALTH

DR.SHEKHAR BHANSALI
ALCATEL-LUCENT CHAIR AND PROFESSOR,
DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
FLORIDA INTERNATIONAL UNIVERSITY

Friday, August 31st, 2012
LECTURE: 10:00 AM – 12:00 PM

ENGINEERING CENTER
ROOM EC 1110
10555 WEST FLAGLER STREET
MIAMI, FL 33174

Abstract:

Micro and nano sensors that identify biological entities has been one of the more popular applications of nanotechnologies. With the maturatization of the technologies, there is an increased focus on standardized interfaces for wearable devices to enable personalized health monitoring. With increased understanding of biology, there has been greater appreciation of the fact that biologics and longitudinal health monitoring needs to be coupled with environmental triggers to gain a realistic understanding of human body responses. This talk reviews the current state of the art and needs for personalized environmental health monitoring systems to understand the effects of pollutants, chemicals, toxins, and radiation on human health. The talk explores the question, with a $10 gene sequence, unlimited data storage and affordable computation around the corner what needs to happen in the personalized environmental sensing space to really advance human health.

About the speaker:

Shekhar Bhansali, PhD, is Alcatel-Lucent Professor and Chair of Electrical and Computer Engineering at Florida International University. Prof. Bhansali receiving his Ph.D. in Electrical Engineering from RMIT University in Australia (1997). A prolific researcher and mentor, he has published over 100 peer reviewed papers, holds 16 patents and has directed training programs that supported over 150 doctoral students in all areas of STEM. Dr. Bhansali has received numerous awards including the William R. Jones Outstanding Mentor Award, Alfred P. Sloan Foundation Mentor of the Year Award, and the NSF CAREER Award. Prof. Bhansali serves on the editorial boards of Recent Patents in Nanotechnology, and Technology and Innovation.

Contact: 305-348-2807

Map: http://campusmaps.fiu.edu/ (Other campuses/ - Engineering Center)