

# ANNOUNCING

**CoSMIC \* SCHOLAR LECTURE, FALL 2009**

FEATURING

**DR. SUDHIR VARMA,  
MICROARRAY AND DATA MINING SPECIALIST,  
LOCKHEED MARTIN  
NATIONAL INSTITUTES OF HEALTH**



## **ENTITLED: BIOINFORMATICS**

**LEARN HOW MATHEMATICS, STATISTICS, COMPUTING, BIOLOGY  
AND CHEMISTRY WORK TOGETHER TO BETTER UNDERSTAND  
GENE EXPRESSION AND AID IN THE DEVELOPMENT  
OF NEW CANCER THERAPY DRUGS!**

IN THE PAST 10 YEARS, SCIENTISTS HAVE DEVELOPED EXPERIMENTAL METHODS THAT CAN MEASURE THE EXPRESSION OF EACH AND EVERY GENE IN A CELL. THIS, ALONG WITH THE MATHEMATICAL METHODS TO ANALYZE THE DATA, HAVE GIVEN US A POWERFUL TOOL TO UNDERSTAND WHICH GENE EXPRESSION CHANGES IN A NORMAL CELL CONVERTS IT INTO A CANCER CELL AND HOW WE CAN USE THIS INFORMATION TO DEVELOP BETTER DRUGS AGAINST CANCER.

***4:30-5:30 PM***

***WEDNESDAY, OCTOBER 21, 2009***

***SMITH HALL ROOM 289***

***Students, Faculty, and Visitors are Invited***

***Light refreshments will be served***