

# SCIENCE SEMINAR

FRIDAY, MARCH 13  
KNOTT HALL B01  
3PM

## EPIGENETICS IN CANCER

JASON M. D'ANTONIO

POST-DOC AT SIDNEY KIMMEL COMPREHENSIVE CANCER CENTER  
AT JOHNS HOPKINS

FOR DECADES, SCIENTISTS HAVE DEBATED THE ROLE OF GENETICS VERSUS EPIGENETICS IN THE DEVELOPMENT OF CANCER. ALTHOUGH RESEARCH IN THESE TWO DYNAMIC FIELDS STARTED AROUND THE SAME TIME, UNTIL RECENTLY, GENETICS WAS THOUGHT TO PROVIDE MOST OF THE EXPLANATIONS TO THE MYSTERIES OF CANCER. ESCALATING RESEARCH EFFORTS IN THE STUDY OF EPIGENETICS HAVE REVEALED THAT EPIGENETIC REGULATION OF GENE EXPRESSION IS NOT ONLY A MAJOR PLAYER IN EUKARYOTIC BIOLOGY, BUT ALSO A SIGNIFICANT MECHANISM, CLOSELY LINKED WITH GENETICS, IN DISEASE PATHOBIOLOGY. A BRIEF SUMMARY OF OUR UNDERSTANDING OF EPIGENETIC REGULATION OF GENE EXPRESSION WILL BE PRESENTED AND THE DISTINCTION BETWEEN GENETIC AND EPIGENETIC MECHANISMS, IN THE CONTEXT OF CANCER, WILL BE DISCUSSED.

REFRESHMENTS WILL BE SERVED