

# SE&T Colloquium Series-Fall 2015

Speaker	Dr. Bryan Essien Division of Gastroenterology University of Michigan  Host: Dr. Bing Yang
Title	<b><i>ZBP-89 Cooperating with <math>\beta</math>catenin to modulate Colorectal Cancer Progression and Heterogeneity</i></b>
Abstract	Butyrate induces expression of transcription factor Zinc-finger Binding Protein-89 (ZBP-89, Zfp148). We previously showed that mucosal restitution after bacterial infection requires ZBP-89 cooperation with $\beta$ catenin signaling suggesting its role in cell proliferation. To determine how ZBP-89 cooperates with $\beta$ catenin to modulate cell growth, human tissue microassays containing mucosa from normal colon, adenomatous polyps and 375 colorectal cancers (TNM stage I-IV) were examined immunohistochemically for ZBP-89 expression. EMSA and DAPA were performed to show direct ZBP-89 binding to the human $\beta$ catenin promoter. Total lysates of SW480 were used to co-immunoprecipitate (CoIP) ZBP-89 with $\beta$ catenin. VillinCre-mediated deletion of the Zfp148 locus (Zfp148 <sup>IEC</sup> ) and WT littermates were treated with azoxymethane (AOM) and 3 cycles of 2% dextran sodium sulfate (DSS). Colonic butyrate levels were determined by gas chromatography and microbiota analysis by 16S sequencing. The results will be discussed during the talk.
Date	Tuesday, October 20
Time	4:10-5:00pm
Place	Pioneer 240  Refreshments will be served at 4:00pm.