Figure 1. USC-CCMNC Research Projects

Aim 1: Role of mesenteric nerve plexus to induce CRC GABAergic phenotype and promote metastasis

Aim 2: GABA-enriched Liver microenvironment promotes colonization of CRCs

Liver-Derived GABA

Liver-Derived GABA Metabolism

Project 1: Role of the enteric nervous system in promoting CRC metastasis

Project 2: Reelin-mediated STAT3 Activation

Project 3: To determine the interaction of liver derived-Reelin on CRC metastatic plasticity

Reelin

Project 1 & 2: Collaboration

Project 2: Reelin-mediated STAT3 Activation for Metastatic Growth

IL6/IL8-mediated STAT3 Activation

Project 3: Testing targets for intervention properties of CTCs homing to pre-metastatic niche.

Aim 3: Seeding and Soil Synergy: Circulating tumor cells and the premetastatic niche in CRC liver metastasis

CTCs with PTEN mutation

Aim 1: Contribution of primary tumor-derived EVs to the premetastatic/metastatic niche

CTCs

Colorectal Cancer (CRC)