Intestinal Stemness and Microenvironmental Cues

Research emphasis:
Dr. Van Landeghem’s laboratory focuses on understanding how signals emanating from the microenvironment impact normal and cancer intestinal stem cells with an emphasis on enteric glia. Her group aims to define the molecular crosstalk between intestinal stem cells and their neighboring cells such as enteric glial cells in healthy intestines, and to assess whether alterations of this crosstalk induced by chronic stress occurring during intestinal pathologies may lead to the malignant transformation of normal stem cells into cancer stem cells and promote tumor development using genetic mouse models and primary co-culture systems.

Application:
- Intestinal Repair
- Colorectal Cancer
- Intestinal Stem Cells
- Enteric Nervous System

Collaboration potential:
- Enteric Nervous System in Gastrointestinal Diseases
- Normal and Cancer Intestinal Stem Cells
- *In vitro* Co-culture Systems

Selected publications:


