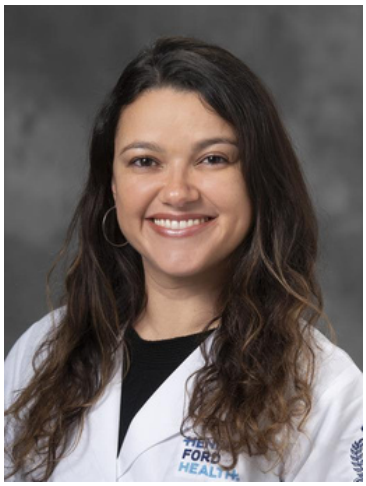
Department of Medicine
College of Human Medicine
MICHIGAN STATE UNIVERSITY

Department of Obstetrics, Gynecology and Reproductive Biology
College of Human Medicine
MICHIGAN STATE UNIVERSITY

JOINT SEMINAR
MAY 20TH, 2025 • 1:00 - 2:00 PM
GRAND RAPIDS RESEARCH CENTER, ROOM 1102



"Can CAF metabolism control anti-tumor immunity in pancreatic cancer?" presented by Ralph Francescone, PhD

"Stressed fibroblasts and immunosuppression in pancreatic cancer" presented by Débora Vendramini, PhD

The Vendramini-Francescone Lab was established in January of 2023 at the Henry Ford Pancreatic Cancer Center and is co-led by husband/wife duo Débora Barbosa Vendramini Costa and Ralph Francescone. The lab is focused on understanding the tumor microenvironment, the collection of cancerous and non-cancerous cell types and their secreted material, and how they interact at the cellular and molecular levels within pancreas cancer. The pancreatic tumor microenvironment is characterized by an intense stromal fibrotic reaction, known as desmoplasia, where there is an activation and expansion of wound healing cells known as fibroblasts, and a large deposition of extracellular matrix and secreted factors. "Islands" of tumor cells reside within this "sea" of activated stroma, which is known to promote tumorigenesis by shielding tumor cells from therapies, inactivating the anti-tumor immune system, and providing nutrients to cancer cells. The "R&D lab" is specifically interested in how fibroblasts and their extracellular matrix suppress NK and T-cell responses to tumors, an evolving area of study.

The lab utilizes a number of methods to tackle the complex biology behind fibroblasts and the pancreatic cancer tumor microenvironment: 1.) 3D multicellular culturing system, 2.) CRISPR/CRISPRi based methods to modulate protein expression, 3.) single cell and spatial technologies, 4.) advanced genetic and orthotopic mouse models of pancreatic cancer, 5.) patient derived tissue, cells, and interstitial fluid for translational projects. These integrated in vitro, in vivo, and translational approaches allow the team to probe basic biology questions in pancreatic cancer, with the hope of translating these novel findings to the clinic in the future.

Zoom Link:

Join Zoom Meeting
https://msu.zoom.us/j/92763759934

Meeting ID: 927 6375 9934
Passcode: 209729

In-person meeting:

Grand Rapids Research Center
Room 1102
400 Monroe Ave NW
Grand Rapids MI 49503