



NEUROENDOCRINE TUMOR RESEARCH FOUNDATION
DEDICATED TO CURING NEUROENDOCRINE CANCER

RESEARCH GRANT AWARDS

Announced February 2023

INVESTIGATOR AWARDS



Scott André Oakes, MD
The University of Chicago

mTORC1 Signaling Drives Amino Acid Biosynthesis to Promote PanNET Growth

Approved for patients with advanced pancreatic neuroendocrine tumors (PanNETs), the mTORC1 inhibitor everolimus generally results in tumor control benefits that are short-lived. Through his research program Dr. Oakes aims to understand how mTORC1 signaling promotes PanNET growth, uncover mechanisms that allow the tumors to circumvent mTORC1 inhibition, and use this knowledge to design novel strategies to improve the effectiveness and durability of mTORC1 inhibition in this disease.



Xavier M. Keutgen, MD
The University of Chicago

Radiosensitizing NETs: A Two-Pronged Approach Using ERa and Pin1 Inhibition

Dr. Keutgen's research project focuses on understanding the unique components of DNA repair in neuroendocrine tumor (NET) cells. More specifically, Dr. Keutgen and his colleagues will investigate how estrogen receptor alpha (ERa) and the enzyme Peptidyl-prolyl cis-trans isomerase (Pin1) interact to modulate DNA repair response to radiation therapies like peptide receptor radionuclide therapy (PRRT).



Matthieu Foll, PhD
International Agency For Research On Cancer

Reconciling Lung Carcinoids Histopathological and Molecular Classifications

This research project aims to improve the diagnosis and treatment of lung NETs using a multidisciplinary approach to reconcile the histopathological and molecular classifications of these tumors and generate the knowledge to allow the translation of the molecular classification into the clinical setting.



Melpomeni Fani, PhD
University Hospital Basel

COPPER PET with 61Cu-NODAGA-LM3 for the Detection of Neuroendocrine Tumors

This study evaluates Copper-61 (61Cu)-tagged NODAGA-LM3, a new drug under development, for the detection of NET. 61Cu-NODAGA-LM3 is a unique positron emission tomography (PET) imaging agent with properties that may outperform the standard-of-care PET agents.

MENTORED RESEARCH AWARDS



Daphne de Vries-Huizing, PhD
Netherlands Cancer Institute

Increasing the Therapeutic Window in PRRT with Long-Acting SSAs

Dr. de Vries-Huizing and her colleagues will perform a clinical trial to evaluate the effect of using long-acting somatostatin analogues during peptide receptor radionuclide therapy (PRRT). Current guidelines advise temporary discontinuation of somatostatin analogues while continuous use could prevent increased functional symptoms like flushing and diarrhea.

Generously funded by ITM Isotope Technologies Munich



Jules Derks, MD, PhD
GROW School for Oncology & Reproduction at Maastricht University

Biopsy Specimen Molecular Stratification of Metastatic Pulmonary Carcinoid

Dr. Derks will use state-of-the-art information on molecular subtypes in pulmonary carcinoid and work to translate this knowledge toward daily clinical practice in patients with disseminated disease that has spread.

PILOT AWARDS



Carl Gay, MD, PhD
The University of Texas MD Anderson Cancer Center

Characterizing Drug-Tolerant Persister Cells in Relapsed High Grade Neuroendocrine Carcinomas

In his previous NETRF-supported research, Dr. Gay and his colleagues generated novel resources, including mouse and cell line models, derived from patients who have rare neuroendocrine carcinomas. In the newly funded work, the investigators plan to use these models to address a major unmet need in neuroendocrine carcinomas - namely how these tumors manage to persist and become treatment-resistant.

Generously funded by The Martha O'Donnell Pagel Fund for Research of Rare Cancers



Aatur D. Singhi, MD, PhD
UPMC Hillman Cancer Center

Defining the Multicellular eEcosystem of Nonmetastatic & Metastatic PanNETs

The goal of Dr. Singhi's pilot project grant is to characterize gene expression changes that occur in pancreatic neuroendocrine tumors as they metastasize to other organs. The project's two-phase approach will not only evaluate the tumor but also the surrounding tumor microenvironment.

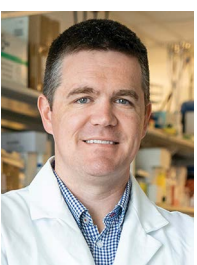
Generously funded by The Karpus Family Foundation



Iacovos Michael, PhD
Sunnybrook Research Institute

Establishment of Novel PDXovo Models for Neuroendocrine Neoplasms

Dr. Michael and his colleagues will establish novel patient-derived xenograft (PDX) models for gastroenteropancreatic-neuroendocrine neoplasms (GEP-NENs), called PDXovo models. These models will enable the team to characterize the response to various treatments and identify new therapeutic strategies.



Kevin James McHugh, PhD
Rice University

Personalized Immunotherapy for Atypical Pulmonary Carcinoids

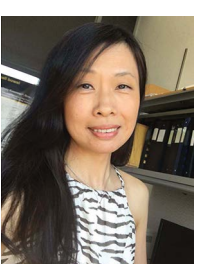
McHugh and his research team are developing a personalized immunotherapeutic platform to treat atypical pulmonary carcinoids. They will employ genome-editing tools that uniquely recognize cancer cells based on mutations found in each individual patient's cancer.



Christopher Michael Heaphy, PhD
Boston Medical Center

Spatial Transcriptomic Profiling of the PanNET Tumor Microenvironment

Dr. Heaphy, in collaboration with Dr. Ruben Dries (Boston Medical Center), will comprehensively profile PanNETs by integrating spatial transcriptomics with established biomarkers to accurately map these tumors and explore their biological underpinnings.



Po Hien Ear, PhD
The University of Iowa

Targeting Serotonin Metabolism in SBNETs

Small bowel neuroendocrine tumors (SBNETs) are the most common NETs of the gut and are highly invasive. They produce lots of serotonin, a small molecule that can induce SBNET patients to have excessive diarrhea and stiffening of the heart valves. The direct effect of serotonin on cancer cells remains understudied. Dr. Ear and her colleagues will explore the effect of blocking serotonin production in NET cells and making a tumor more sensitive to an anti-cancer drug.