

2023 Awardees

Student: Kathleen Waeldner **Mentor:** Christopher Anker, MD **Department:** Radiation Oncology **Research Project:** Non-operative management paradigm clinical trial with rectal cancer patients

Student: Erin Mathieu **Mentor:** Jon Boyson, PhD **Department:** Surgery **Research Project:** Conducting the preliminary characterization of the B16F10 melanoma model in mice.

Student: Anika Advant
Mentor: Jan Carney, MD, MPH
Department: Med-Pulmonary
Research Project: Identifying barriers and facilitators to awareness and rural Vermont participation in cancer clinical trials.

Student: John Rustad
Mentor: Frances Carr, PhD
Department: Pharmacology
Research Project: Establishing that bromodomain inhibitors in combination with agonist selective activation of the tumor suppressor TRb would be a novel therapeutic option.

Student: Kanayo Ikeh
 Mentor: Nimrat Chatterjee, MSc, PhD
 Department: Microbiology and Molecular Genetics
 Research Project: Understanding the role of translesion synthesis in cancer resistance to therapy.

Student: Ava Cote **Mentor:** Brian Cunniff, PhD **Department:** Pathology and Laboratory Medicine **Research Project:** Evaluating molecular mechanism by which the new mesothelioma drug thiostrepton elicits cell death.

Student: Logan Sands Mentor: Paula Deming, PhD



Department: Biomedical and Health Sciences **Research Project:** Investigating the effects of STK11 on ER+ breast cancers.

Student: Cong Gao
Mentor: Seth Frietze, PhD
Department: Biomedical and Health Science
Research Project: Establishing some analysis parameters to study the RNA and protein expression patterns in distinct regions of breast tumors using available data.

Student: Myeongjin Bae
Mentor: Nancy Gell, PT, PhD, MPH
Department: Rehab & Movement Science
Research Project: Conducting a longitudinal study that comparing fall trajectories, based on physical function impairment at baseline, in older cancer survivors to those without a cancer history.

Student: Ian Orsmond Mentor: Karen Glass, PhD Department: Biochemistry Research Project: Understanding how bromodomain-containing proteins contribute to the development of Tamoxifen resistance in breast cancer.

Student: Kassandra Mastras
 Mentor: Marc Greenblatt, MD
 Department: Med-Hematology Oncology
 Research Project: Participating in the curation process and evaluating evidence to develop the rules for classifying MUTYH variants as either pathogenic or benign.

Student: Hayden Christensen
Mentor: Melanie Bui, MD, PhD
Department: Med-Dermatology
Research Project: Conducting a retrospective chart review to describe oncologic outcomes for invasive squamous cell carcinoma of the skin.

Student: Abigail Wootton Mentor: Nataniel Lester-Coll, MD Department: Radiation Oncology Research Project: Conducting a chart review/database build in order to examine the association between hydrid technique and patient side effects.



Student: Mikaela Mari
Mentor: Puyao Li, MD
Department: Radiation Oncology
Research Project: Conducting multiple retrospective studies looking at outcomes and toxicity of radiation treatment for breast and gyn cancers.

Student: Amy Chang Mentor: Sarah Nowak, PhD Department: Pathology & Laboratory Medicine Research Project: Evaluating factors associated with the decline in mammography screening utilization in Vermont and the US over the past decade.

Student: Petergaye Murray
Mentor: Conor O'Neill, MD
Department: Surg-Oncology
Research Project: Coordinating data collection and data instrument validation for the prehabilitation project, engaging dedicated nutrition services to ensure timely nutrition interventions.

Student: Jenna Eaton
Mentor: David Seward, MD, PhD
Department: Pathology and Laboratory Medicine
Research Project: Identifying putative molecular network alterations that might inform anti-PD-1 therapy response

Student: Priyanka Chavarkar **Mentor:** Gary Stein, PhD **Department:** Biochemistry **Research Project:** Investigating cancer-compromised genetic and epigenetic control of prefoliation and differentiation

Student: Petra Kapsalis
Mentor: Jason Stumpff, PhD
Department: Molecular Physiology & Biophysics
Research Project: Understanding the molecular basis of CIN cell dependence on KIF18A.

Student: Isabella Sutherland **Mentor:** Alissa Thomas, MD **Department:** Neurological Sciences



Research Project: Determining the timing and evolution of post-radiation changes for IDH-mutant low grade glioma (astrocytoma and oligodendroglioma, grade 2 and 3).

2022 Awardees

Student: Jennifer Chen
Mentor: Thomas Ahern, PhD, MPH
Department: Surgery
Research Project: Racial and geographic disparities in breast lymphedema

Student: Randi Gravelle
Mentor: Brian Cunniff, PhD
Department: Pathology and Laboratory Medicine
Research Project: Mitochondrial dynamics support breast cancer tumorigenesis

Student: Kanayo Ikeh
 Mentor: Nimrat Chatterjee, MSc, PhD
 Department: Department of Microbiology and Molecular Genetics
 Research Project: Unraveling the functional dynamics of REV1 during cancer cell response to therapy

Student: Ellen Mats
 Mentor: Shahid Ahmed, MBBS
 Department: Department of Internal Medicine, Division of Hematology and Oncology
 Research Project: The Influence of Bacteria on the Formation of an Immune-Escaped Bladder Cancer: A Pilot Correlative Study

Student: Gopika Nandagopal
Mentor: Alan Howe PhD
Department: Department of Pathology and Laboratory Medicine
Research Project: Investigating the STK11 C-terminal domain in lung cancer

Student: Arjune Nibber
Mentor: David Seward, MD, PhD
Department: Pathology and Laboratory Medicine
Research Project: Characterization of STK11 Missense Variants Using Prime Editing

Student: Shannon Prior Mentor: Paula Deming, PhD



Department: Biomedical and Health Sciences **Research Project:** Investigating metabolic rewiring in progression of STK11-null lung cancer: glutamine dependence and the hexosamine biosynthetic pathway

Student: Alyssa Richman **Mentor:** Seth Frietze, PhD **Department:** Biomedical and Health Science **Research Project:** Epigenetic Analysis of Acute Lymphoblastic Leukemia

Student: Jennifer Toner **Mentor:** Peter Kaufman, MD **Department:** Hematology & Oncology **Research Project:** Correlating Properties of Breast Cancer Organoids to Patient's Tumor Information

2021 Awardees

Student: Alqassem Abuarqoub
 Mentor: James Stafford, PhD
 Department: Neurological Sciences
 Research Project: Targeting novel metabolic and epigenetic interactions in pediatric high grade glioma

Student: Rachel Bombardier Mentor: David Krag, MD Department: Surgery Research Project: COVID-19 and Cancer

Student: Amy Chang Mentor: Alissa Thomas, MD Department: Neurological Sciences Research Project: The effect of frailty score on treatment decisions and overall survival rate in elderly patients with glioblastoma

Student: Trevor Coles **Mentor:** Gary Stein, PhD **Department:** Biochemistry **Research Project:** Cancer-Compromised Epigenetic Control of Nucleolar Function

Student: Linda Cui



Mentor: Nataniel Lester-Coll, MD Department: Radiation Oncology Research Project: Adult Prostate Sarcoma: An Analysis of the National Cancer Database

Student: Sean Lenahan Mentor: David Seward, MD, PhD Department: Pathology and Laboratory Medicine Research Project: GLUL repression may exacerbate anti-PD1 therapy resistance in KRAS-driven NSCLCs lacking STK11

Student: Kiera Malone
Mentor: Karen Glass, PhD
Department: Biochemistry
Research Project: Recruitment of the AAA domain-containing protein 2 to nucleosomes

Student: Mikaela Mohardt
Mentor: Brian Sprague, PhD
Department: Surgery
Research Project: Collagen organization as a novel predictor of malignant potential in pre-invasive breast cancer

Student: Allison Morrissey Mentor: Andrea Lee, PhD Department: Microbioloby and Molecular Genetics Research Project: The Role of Two Histidine Residues in MutY Glycosylase Detection of 8oxoguanine: Adenine DNA Damage Sites

Student: Joaquin Reategui
Mentor: Andrea Villanti, PhD, MPH
Department: Psychiatry
Research Project: Does dose or type of vaping prevention messaging impact vaping-related beliefs and behaviors in Vermont young adults?

Student: Kayla Sohl **Mentor:** Frances Carr, PhD **Department:** Pharmacology **Research Project:** Synergistic effects of JQ1 and TRbeta in tumor suppression



Student: Joshua A. Victor
Mentor: Nimrat Chatterjee, PhD
Department: Microbiology and Molecular Genetics
Research Project: Ascertaining SARS-COV2-dependent DNA damage response in human cells¶