NANETS

NORTH AMERICAN NEUROENDOCRINE TUMOR SOCIETY

NANETS Research

2009–2025

Table of Contents

NANETS
NORTH AMERICAN NEUROENDOCRINE TUMOR SOCIETY

NANETS Overview

The North American Neuroendocrine Tumor Society (NANETS) is a society of over 650 multidisciplinary medical professionals committed to the support of the medical community in treating neuroendocrine tumor (NET) patients, as well as furthering NET science and education in North America.

NANETS is the only organization in the U.S. that offers comprehensive, accredited medical education programs on NET disease that are developed by leading NET experts and designed exclusively for medical professionals. The NANETS community is actively engaged in research, consensus guidelines, education and mentoring of young professionals.

NANETS has provided research grants, travel grants and education grants. NANETS also publishes an annual abstract book and seeks to publish abstracts and guidelines in major medical journals.

Introduction

Dear Colleagues,

NANETs is proud to bring you the 2025 edition of the Research Grant Compendium, where we recognize the important research being done by members of the NET medical community.

Since 2009, NANETS has awarded $2.9 million in research grants to 35 medical professionals who have dedicated themselves to pursue a career in the field of neuroendocrinology and NET disease.

In 2025, NANETS is pleased to offer two research grants to support innovative research initiatives and encourage young researchers and scientific clinicians to become NET specialists.

We hope you will read about the latest research and that you find the information contained in this compendium compelling and thought-provoking.

We extend our gratitude to the families, friends, colleagues and supporters whose generosity makes this research funding possible. In particular, we would like to thank the North American Neuroendocrine Tumor Society Education and Research Fund, Novartis Pharmaceuticals Corporation, and Neuroendocrine Tumor Research Foundation (NETRF) for their support of the 2025 grants.

Thank you also to the NANETS Scientific Review & Research Committee for their hard work in reviewing the research proposals and making selections. We are enriched by your dedication and commitment to excellence.

After reading through the many important researchs studies contained in this compendium, I hope you will be encouraged to submit your own grant proposal in the coming year.

Thank you,

Jennifer Chan
President

Suzann Duan, PhD

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR AWARD (BTSI) RECIPIENT | 2025

The North American Neuroendocrine Tumor Society (NANETS) congratulates Suzann Duan, PhD from the University of California, Irvine as the 2025 recipient of NANETS' Basic/Translational Science Investigator Award (BTSI). Dr. Duan was awarded this scholarship for her proposal: *Targeting the Epigenetic Landscape of GEP-NETs through Menin-MLL Inhibition.* The award will be recognized at the NANETS Multidisciplinary NET Medical Symposium at the JW Marriott in Austin, TX during October 23-25, 2025 by the NANETS' Scientific Review and Research Committee.

Earlier this year, Dr. Duan joined the faculty at the UC Irvine School of Pharmacy & Pharmaceutical Sciences as an Assistant Professor in the Department of Pharmaceutical Sciences. She completed postdoctoral training at the University of Arizona Comprehensive Cancer Center, where she studied the cells-of-origin for neuroendocrine tumors in the gastrointestinal tract and pancreas (GEP-NETs) and worked to identify novel signaling pathways that contribute to the pathogenesis of these tumors. Last year, Dr. Duan received the 2024 NANETS Rising Star award at the 2024 NANETS Multidisciplinary NET Medical Symposium in Chicago, IL.

Dr. Duan will be mentored by Dr. Juanita Merchant, MD, PhD, who is the Associate Director of Basic Sciences at the UA Cancer Center and Chief of the Division of Gastroenterology and Hepatology at the UA College of Medicine. "Throughout her transition to independence, Suzann has been able to take certain resources and materials from my lab that she will continue to use for her BTSI proposal," said Dr. Merchant. "I fully support Suzann as she carries these projects forward at UCI."

This project will test the application of a new class of cancer drugs known as menin-MLL inhibitors in preclinical GEP-NET models. The goal of this project is to define how menin-MLL inhibition impacts the epigenetic landscape of these tumors by modulating the levels of the tumor suppressor protein menin. This work addresses a major gap in our understanding and is both innovative and impactful as it carries the potential to inform the delivery of menin-MLL inhibitors in the adjuvant setting.

The BTSI award is a two-year, $100,000 grant made possible through generous support from the Neuroendocrine Tumor Research Foundation (NETRF). The purpose of the BTSI Award is to encourage early career scientists in fellowship or new faculty appointments to pursue research focused on neuroendocrine cancer. NETRF has funded the BTSI since 2016.

"NETRF is proud to collaborate with NANETS to support Dr. Duan's research," said Elyse Gellerman, CEO of NETRF. "Funding basic and translational science is critical for the development of new treatments, which patients urgently need."

NANETS is grateful to NETRF, whose tremendous investment in this annual research grant has made a difference in the NET medical community and the patients we serve. The NANETS Scientific Review & Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Junaid Arshad, MD, MS

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) RECIPIENT | 2025

The North American Neuroendocrine Tumor Society (NANETS) congratulates Junaid Arshad, MD, MS, Assistant Professor of Medicine at the University of Arizona Cancer Center, Tucson, AZ, as the 2025 recipient of NANETS Clinical Investigator Scholarship (NCIS). Dr. Arshad was awarded this scholarship for his proposal: *The TROP2 Reveal; Validating the Role and Reach in a Prospective Study of Gastroenteropancreatic Neuroendocrine Tumors.*

Dr. Junaid Arshad, a recognized expert in neuroendocrine tumors (NETs), has launched a dedicated NET clinical and research program at the University of Arizona Cancer Center, marking an historic milestone for Southern Arizona. This initiative brings cutting-edge therapies, including radioligand treatments, closer to home, advancing both patient care and scientific discovery. This NET program not only offered patients access to novel therapies but also positioned University of Arizona as a regional NET research and treatment center. Dr. Del Rivero, MD from the National Cancer Institute and Dr. Rachna Shroff, MD, MS, FASCO from the University of Arizona Cancer Center are Dr. Arshad's mentors.

Dr. Del Rivero states that Dr. Arshad is a thoughtful, driven and enthusiastic colleague who has demonstrated a remarkable degree of initiative. He approached me proactively with a research concept related to TROP2 expression in NETs, and within a matter of weeks, we were able to generate preliminary data with encouraging results. The work garnered notable interest and laid a strong foundation for further investigation. "We are very excited to work together and complete this project with impactful results."

The University of Arizona Cancer Center is fully committed to supporting Dr. Arshad's career development and his mentors. The institution has provided Dr. Arshad protected time and the available resources for the duration of this project, ensuring a conducive environment for research and scholarly productivity. Dr. Arshad will have access to UACC's robust research infrastructure, including biostatistics, regulatory, data management and grant support services," said Dr. Rachna Shroff. "He will also participate in institutional multidisciplinary NET tumor board, which offers valuable exposure to real-world clinical decision-making and promotes translational research opportunities."

Dr. Shroff further adds" "We are appreciative of NANETS for supporting rising stars like Dr. Arshad as they develop into prolific clinical investigators. The University of Arizona Cancer Center has seen his remarkable growth as a bright, talented and driven scholar and we look forward to watching his commitment to and expertise in neuroendocrine cancer continue to thrive under the auspices of this prestigious award".

Dr. Arshad's long-term goal is to study the targeting of TROP2 as a novel therapeutic treatment in advanced GEP-NETs. His current project has two aims:

1. Validate TROP2 expression in GEP-NETs through a multi-institutional prospective study (NCT05237934) involving transcriptomic analysis of 300 samples. Additionally, we will assess membranous TROP2 expression via immunohistochemistry (IHC) using an anti-TROP2 monoclonal antibody in an institutional cohort.
2. Investigate the correlation between TROP2 expression and overall survival, as well as other biomarkers such as Ki-67, DLL3, and PD-L1. We will conduct univariable and multivariable analyses to identify relationships between TROP2 and these additional variables.

NANETS is pleased to support Dr. Arshad's work on this research proposal. The NCIS award is a two-year, $50,000 grant supported by an educational grant from Novartis Pharmaceuticals Corporation.

NANETS is grateful to Novartis Pharmaceuticals Corporation, whose generous investment and support of this annual research grant will make a difference in the NET medical community and the patients we serve. The NANETS Scientific Review & Research Committee establishes the award criteria, reviews process and independently selects the recipient.

Victor Santoro Fernandes, PhD

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR AWARD (BTSI) RECIPIENT | 2024

The North American Neuroendocrine Tumor Society (NANETS) congratulates Victor Santoro Fernandes, PhD, Fellow at University of Wisconsin-Madison, as the 2024 recipient of NANETS' Basic/Translational Science Investigator Award (BTSI). Dr. Fernandes was awarded this scholarship for his proposal: *Modeling to Predict Benefit of PRRT in NET Patients.*

Dr Fernandes is the inaugural recipient of the UW-Madison Department of Medical Physics' postdoctoral entrepreneurial fellowship (PEF). This fellowship recognizes his potential for leading a technology development and translation endeavor and fosters the development Dr. Fernandes' leadership and entrepreneurial skills. His PhD work, under the supervision of Dr. Robert Jeraj, focused on development, implementation, clinical validation, and translation of software to automate quantitative longitudinal image biomarker extraction and disease response assessment of solid cancers (e.g., melanoma and neuroendocrine tumors). Dr. Fernandes will be mentored by both Dr. Jeraj and Dr. Renuka Iyer, Professor of Oncology, Roswell Park Comprehensive Cancer Center.

"Dr. Santoro-Fernandes is an outstanding scientist whose skills and commitment will help advance our understanding of NET therapy benefits and risks to the patients," said Dr. Iyer. "I believe he will quickly rise to be a leader in defining and advancing high-quality investigations in the field of PRRT benefit prediction, bring a valuable new area of expertise we don't have enough of in the NET community, and give back to his mentees and trainees."

The successful completion of this research project will culminate in a much more robust and comprehensive modeling approach for predicting outcomes in NET patients receiving PRRT, thus holding significant potential for improving clinical patient management by avoiding ineffective treatment delivery and side effects. This work could result in a paradigm shift and allow its use in recently completed large trials like NETTER-1 and NETTER-2 and may also open the door for designing more personalized approach in trials for populations where this is currently not approved e.g.: lung NETs, retreatment, rare NETs by allowing better selection of patients likely to have high benefit predicted from this work as well as direct research efforts towards improving outcomes in those with low benefit scores.

The BTSI award is a two-year, $100,000 grant made possible through generous support from the Neuroendocrine Tumor Research Foundation (NETRF). The purpose of the BTSI Award is to encourage early career scientists in a fellowship or new faculty appointment to pursue research focused on neuroendocrine tumors.

"NETRF is proud to collaborate with NANETS to support Dr. Fernandes' research", said Elyse Gellerman, CEO of NETRF. "This project has the potential to ultimately improve treatment outcomes by better modeling and predicting which patients would benefit from PRRT."
NANETS is grateful to NETRF, whose tremendous investment and support of this annual research grant have made a difference in the NET medical community and the patients we serve. The NANETS Scientific Review & Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Rohit Thummalapalli, MD

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) RECIPIENT | 2024

The North American Neuroendocrine Tumor Society (NANETS) congratulates Rohit Thummalapalli, MD, Assistant Attending L1 at the Memorial Sloan Kettering Cancer Center (MSKCC), New York, NY, as the 2024 recipient of NANETS Clinical Investigator Scholarship (NCIS). Dr. Thummalapalli was awarded this scholarship for his proposal: *A pilot study of DLL3-directed immuno-PET imaging for patients with gastroenteropancreatic neuroendocrine neoplasms (GEP NENs).*

As he transitions into his faculty position at MSKCC as a clinical investigator focused on GI cancers, Dr. Thummalapalli plans to leverage his prior experiences in clinical/translational research and clinical trial development to pursue this project. He plans to deeply dive into DLL3 targeting in GI neuroendocrine cancers as a faculty member, with this planned DLL3 PET study just one of multiple planned projects. He also plans to explore additional targetable cell surface markers and theranostic approaches in GI neuroendocrine cancers, as well as novel targeted therapy approaches in hepatobiliary and pancreatic cancers, leveraging his prior work in lung cancer.

Dr. Diane Reidy-Lagunes, his mentor, is a top New York City oncologist from Memorial Sloan Kettering Cancer Center. She is the creator and host of the award-winning monthly podcast Cancer Straight Talk from MSKCC where she leans in and tackles the subject of cancer head on, in English and Spanish. She was also the 2009 recipient of the NANETS' Young Investigator Grant.

"Through his transition from the thoracic to GI oncology space, Dr. Thummalapalli has recently compiled a very exciting set of preliminary data describing frequent expression of DLL3 in tumor samples of patients with gastrointestinal neuroendocrine cancers treated here at MSK," said Dr. Reidy-Lagunes. "Given the expanding set of therapeutic agents being developed against DLL3 as described in Dr. Thummalapalli's proposal, I am excited to work with him to further our understanding of DLL3 as therapeutic target in GEP NENs through a novel DLL3 PET imaging protocol as described extensively in his proposal."

Dr. Thummalapalli has three aims: to determine feasibility of DLL3 PET imaging in GEP NENs, to evaluate correlation between DLL3 PET avidity and DLL3 IHC at the tumor level, and to assess DLL3 PET interlesional heterogeneity among WD GEP NETs, including correlation with loss of SSTR expression.

NANETS is pleased to support Dr. Thummalapalli's work on this research proposal. The NCIS award is a one-year, $50,000 grant supported by an educational grant from Novartis Pharmaceuticals Corporation.

NANETS is grateful to Novartis Pharmaceuticals Corporation, whose generous investment and support of this annual research grant will make a difference in the NET medical community and the patients we serve. The NANETS Scientific Review & Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Jose Nunez Rodriguez, MD, MSc

NANETS THERANOSTICS INVESTIGATOR GRANT (NTIG) | 2023

The North American Neuroendocrine Tumor Society (NANETS) congratulates Jose Nunez Rodriguez, MD, MSc, Fellow at the Sunnybrook Health Science Centre, Odette Cancer Centre, in Toronto, ON, Canada as the 2023 recipient of NANETS Theranostics Investigator Grant (NTIG). Dr. Nunez Rodriguez was awarded this scholarship for his proposal: *Personalized Patient Derived Xenografts (PDXovo) to test the synergistic effect of PRRT and Immunotherapy for NENs.*

After finishing a year-long neuroendocrine program with Dr. Rachel Riechelmann at the AC Camargo Cancer Centre in Sao Paulo, Brazil, Dr. Jose Nunez Rodriguez moved to Toronto to work as a Medical Oncology Clinical Fellow with a focus on neuroendocrine tumors at the University of Toronto's Sunnybrook Health Sciences Centre, Odette Cancer Centre. Dr. Simron Singh, his mentor, was crucial in bringing on board Dr. Nunez Rodriguez.

Nunez Rodriguez's interest in neuroendocrine neoplasms led to multiple publications during his training. This project will reflect his group's strategic objective of personalized care for patients with neuroendocrine neoplasms.

Nunez Rodriguez's hypothesis is that the combination of alpha-particle PRRT and immunotherapy will increase antitumor activity in PDXovo preclinical models of NENs. NANETS is delighted to support Dr. Nunez Rodriguez in this project in the area of theranostics, which was developed to push forward the boundaries of molecularly targeted radionuclide therapy and diagnostics for patients with neuroendocrine tumors.

The NTIG award is a two-year, $100,000 grant made possible through generous support from the North American Neuroendocrine Tumor Society (NANETS) and supported by an educational grant from Novartis Pharmaceuticals Corporation.

NANETS is grateful to Novartis PharmaceuticalsCorporation, for its generous investment and support of this annual research grant.

Iacovos Michael, PhD

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR (BTSI) | 2023

The North American Neuroendocrine Tumor Society (NANETS) congratulates Iacovos Michael, PhD, Scientist at Sunnybrook Research Institute and Assistant Professor at University of Toronto, Toronto, ON, Canada, as the 2023 recipient of NANETS' Basic/Translational Science Investigator Award (BTSI). Dr. Michael was awarded this scholarship for his proposal: *Development of MicroRNA-based Liquid Biopsies for Small-bowel NETs.*

Dr. Iacovos Michael joined the Sunnybrook Health Sciences Centre as a Scientist after completing his post-doctoral training under the mentorship of Dr. Douglas Hanahan at the École Polytechnique Fédérale de Lausanne (EPFL) in Switzerland. Dr. Simron Singh, his mentor, played an instrumental role in the recruitment of Dr. Michael to the Sunnybrook Institute.

"One of our key priorities is to assess the potential of miRNAs as biomarkers used in liquid biopsies for NETs, which is the focus of this grant," said Dr. Singh. "I am thrilled to be mentoring Dr. Michael in this area. This grant may be the beginning of the development of a larger career for Dr. Michael in translational science and bench-to-bedside research."

The proposed project covers two important research areas: to identify new pathways involved in the progression of NETs and to evaluate miRNAs as biomarkers for NET liquid biopsies. The project will take advantage of the established Biobank at Sunnybrook and the biospecimens available from the two clinical trials, STOPNET and NET-RETREAT, led by Dr. Simron Singh. Dr. Michael, in collaboration with Dr. Hon Leong, Dr. Neil Renwick, and Dr. Kathrin Tyryshkin, will evaluate the role of a set of miRNAs for diagnosing and monitoring small-bowel NETs. Overall, this project is expected to provide novel insights into the role of miRNAs as drivers and biomarkers for small-bowel NETs and instigate future projects in the Michael lab.

The BTSI award is a two-year, $100,000 grant made possible through generous support from the Neuroendocrine Tumor Research Foundation (NETRF). The purpose of the BTSI Award is to encourage scientists at the end of their fellowship who have secured a faculty appointment or scientists beginning their faculty appointment to pursue research focused on neuroendocrine tumors.

Abhay Singh, MD, MPH

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2023

The North American Neuroendocrine Tumor Society (NANETS) congratulates Abhay Singh, MD, MPH, Assistant Professor at the Cleveland Clinic, Cleveland, OH, as the 2023 recipient of NANETS Clinical Investigator Scholarship (NCIS). Dr. Singh was awarded this scholarship for his proposal: *A Study of the Evolution of Radio Peptide and Cytotoxic Therapy-related Hematopoietic Molecular Signatures and Role in Predicting Resultant Hematological Toxicity.*

Dr. Singh's goal is to accelerate our understanding regarding radio-ligand therapies and associated hematological toxicities, and implement these discoveries into clinical care for NET patients. Since joining Cleveland Clinic in August 2021, he has built a robust clinical and research practice focused on the care of cancer survivors at risk for developing myeloid neoplasms (MN). He plans to further build multi-disciplinary collaborations to study radioligands, toxicities and associations with clonal-hematopoiesis-of-indeterminate-potential (CHIP). CHIP is a mutational signature observed in the blood and bone marrow that increases risk for subsequent hematological-toxicity.

Dr. Singh hypothesizes that CHIP augmentation/evolutionary trajectories can be traced while on TEM and PRRT and these will be distinct to each exposure. Deeper investigation into the clinical utility of monitoring CHIP lesions to predict the risk of hematological toxicity is an unmet need for our NET patients.

NANETS is pleased to support Dr. Singh's work on this research proposal. The NCIS award is a two-year, $100,000 grant made possible by NANETS. The NANETS Scientific Review and Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Solmaz AghaAmiri, PhD

NANETS THERANOSTICS INVESTIGATOR GRANT (NTIG) | 2022

The North American Neuroendocrine Tumor Society (NANETS) congratulates Solmaz AghaAmiri, PhD, Post-Doctoral Researcher, The University of Texas Health Science Center at Houston (UTHealth), as the 2022 recipient of NANETS Theranostics Investigator Grant (NTIG). Dr. AghaAmiri was awarded this scholarship for her proposal: Overcoming MGMT resistance in NETs with a tumor-targeted drug conjugate.

Dr, AghaAmiri will be mentored by Dr. Ali Azhdarinia (Associate Professor, McGovern Medical School at the University of Texas Health Science Center at Houston (UTHealth), and Center for Translational Cancer Research at the Institute of Molecular Medicine) and Daniel Halperin, MD, medical oncologist, MD Anderson Cancer Center and NANETS board member.

The NTIG award is a two-year, $100,000 grant made possible through generous support from the North American Neuroendocrine Tumor Society (NANETS) and supported by an educational grant from Novartis Pharmaceuticals Corporation on behalf of Advanced Accelerator Applications.

Vineeth Sukrithan, MD

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2022

The North American Neuroendocrine Tumor Society (NANETS) congratulates Vineeth Sukrithan, MD, Assistant Professor of Medicine, The Ohio State University, as the 2022 recipient of the NANETS Clinical Investigator Scholarship (NCIS). Dr. Sukrithan was awarded the NCIS for his proposal: The Role of LAG-3 and its Ligands in Neuroendocrine Tumors Treated with Immunotherapy.

"Since joining the neuroendocrine tumor program at OSUCCC, Dr. Sukrithan has focused on identifying novel pathways of resistance to immunotherapy in NETs as part of an investigator-initiated trial that was conducted at OSU," said his mentor, Manisha H. Shah, MD, Emeritus Professor of Medicine and a renowned neuroendocrine medical oncologist. She added, *"The NCIS grant will help validate a unique bio-marker that potentially holds promise as a target to augment the effectiveness of immunotherapy in NETs."*

The NCIS is a $100,000 two-year award made possible by the support of Ipsen Biopharmaceuticals, a long-time supporter of NANETS' educational events and research.

Eleonora Pelle, MD

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR AWARD (BTSI) | 2022

The North American Neuroendocrine Tumor Society (NANETS) congratulates Eleonora Pelle, MD, Post-Doctoral Researcher, Moffitt Cancer Center, Tampa, FL, as the 2022 recipient of NANETS' Basic/Translational Science Investigator Award (BTSI). Dr. Pelle was awarded this scholarship for her proposal: *Development of a Novel Anti-SSTR Bispecific T-cell Engager (BiTE)* — like Molecule for the Treatment of Neuroendocrine Tumors (NETs).

Dr. Pelle's interest in preclinical/translational research started at the beginning of her career, and progressively grew after starting her fellowship in medical oncology, where tumor biology and preclinical research are deeply associated with drug development.

Before joining Moffitt Cancer Center, Dr. Pelle was part of the NET group at the University of Bari in Italy, under the mentorship of Dr. Mauro Cives, Assistant Professor of Medical Oncology, Department of Biomedical Sciences and Human Oncology, University of Bari. Since then, she has combined clinical and research work, actively contributing to clinical trials and translational projects. The BTSI award is a two-year, $100,000 grant made possible through generous support from the Neuroendocrine Tumor Research Foundation (NETRF). The purpose of the BTSI Award is to encourage scientists at the end of their fellowship who have secured a faculty appointment or scientists beginning their faculty appointment to pursue research focused on neuroendocrine tumors.

J. Barton Rose, III MD, MAS, FACS

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR (BTSI) AWARD | 2021

NANETS congratulates J. Barton Rose, III, MD, MAS, FACS of the University of Alabama, as the 2021 recipient of NANETS' Basic/Translational Science Investigator Award (BTSI). Dr. Rose was awarded this scholarship for his proposal: Molecular influences of racial disparities in pancreatic neuroendocrine tumors.

Dr. Rose is an Assistant Professor of Surgical Oncology at the University of Alabama at Birmingham. He has been involved in research for nearly 20 years, with a focus on NET research in the past four years.

Dr. Rose noted that, as the only comprehensive cancer center located in the Deep South, he treats a diverse population, and nearly 30 percent of patients are Black.

"We noticed differences in the clinical presentation between our Black and White patients and felt there was a huge need to pursue this line of investigation, especially when our early studies have suggested there are some genetic differences between these patient populations."

He noted the importance of identifying the molecular drivers that are different for these groups, and the potential to discover treatments that are better and can potentially allow physicians to person alize treatment.

"NANETS is delighted to have the opportunity to support Dr. Rose, who joins a long line of exceptionally promising early-career investigators to receive this grant. In keeping with the mission of NANETS' grants to encourage the development of outstanding clinical and laboratory-based investigators in the critical first few years of their careers, many prior grantees have gone on to make substantial contributions to the NET field and NANETS itself, including many of our current board members and committee chairs. We look forward to Dr. Rose's continued contributions and enthusiasm over the coming years," commented Daniel Halperin, MD, University of Texas MD Anderson Cancer Center, and Chair, NANETS' Scientific Review & Research Committee.

The purpose of the BTSI Award is to encourage scientists at the end of their fellowship who have secured a faculty appointment or scientists beginning their faculty appointment to pursue research focused on neuroendocrine tumors. This grant has been supported by the Neuroendocrine Tumor Research Foundation (NETRF) since 2016.

Jessica E. Maxwell, MD

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2021

NANETS congratulates Jessica E. Maxwell, MD, as the 2021 recipient of the NANETS Clinical Science Investigator Award (NCIS). She was awarded this scholarship for her proposal: *Characterization of the small bowel neuroendocrine tumor immune environment.*

Dr. Maxwell is an Assistant Professor of Surgical Oncology at the University of Texas MD Anderson Cancer Center.

"Working on an immunophenotyping project is a natural marriage between two of my great interests—GI NETs and the role of the immune system in cancer patients. I have been fortunate to find great mentors at MD Anderson who brought me into the fold on projects they had underway, allowing me to learn early in my career how to put together collaborative research groups and design translational projects. This was the foundation I needed to put this project together and move toward my goal of building a NET-focused translational research program in our surgical oncology department," commented Dr. Maxwell upon learning of the award.

"The long term goal of my research is to develop novel immunotherapies that will extend patient survival. Currently, there are few options for NET patients, but these agents have shown promise in other cancers. There are clearly mechanisms at play that researchers and clinicians do not completely understand, and to determine which patients may benefit from existing therapies or to develop new therapies, a more complete understanding of the immune environment in NET patients is needed," said Dr. Maxwell.

"NANETS is delighted to have the opportunity to support Dr. Maxwell, who joins a long line of exceptionally promising early-career investigators to receive this grant. In keeping with the mission of NANETS' grants to encourage the development of outstanding clinical and laboratory-based investigators in the critical first few years of their careers, many prior grantees have gone on to make substantial contributions to the NET field and NANETS itself, including many of our current board members and committee chairs. We look forward to Dr. Maxwell's continued contributions and enthusiasm over the coming years," commented Daniel Halperin, MD, University of Texas MD Anderson Cancer Center, and Chair, NANETS' Scientific Review & Research Committee.

Brendan Finnerty, MD

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2020

NANETS congratulates Brendan Finnerty, MD of Weill Cornell Medicine as the NANETS 2020 Clinical Investigator Scholarship (NCIS) award recipient. The NCIS award focuses on supporting a clinical project as well as the investigator's potential to make future clinical contributions to the neuroendocrine tumor field. This award is in honor of Edda Gomez-Panzani, MD for her dedication and work on behalf of patients living with neuroendocrine tumors.

Dr. Finnerty received the scholarship for his proposal, *"Developing a Predictive Molecular Model for Cytologic Detection of Aggressive Pancreatic Neuroendocrine Tumors: A Multi-Institutional Study."* Dr. Finnerty will be mentored by Dr. Thomas Fahey, III, Chief of Endocrine and Minimally Invasive Surgery and Professor of Surgery at New York Presbyterian Hospital - Weill Cornell Medicine.

The NCIS grant is a two-year, $100,000 award funded through the generous support of Ipsen Biopharmaceuticals, who has been a funding partner of NANETS since the research grant program's inception in 2009. The NCIS award focuses on supporting a clinical project as well as the investigator's potential to make future clinical contributions to the neuroendocrine tumor field. This award is in honor of Edda Gomez-Panzani, MD for her dedication and work on behalf of patients living with neuroendocrine tumors. The NANETS Scientific Review & Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

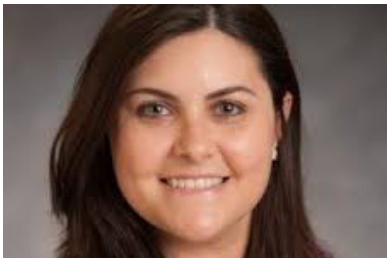
Xavier Keutgen, MD

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR (BTSI) AWARD | 2020

NANETS congratulates Xavier Keutgen, MD of the University of Chicago Medical Center as the recipient of the 2020 NANETS Basic/Translational Science Investigator (BTSI) for his research, *"Deciphering and Potentiating Intrinsic Radiosensitivity of Pancreatic Neuroendocrine Tumors"* (PanNETs). Dr. Keutgen will be mentored by Ralph R. Weichselbaum, MD, Chair of the Department of Radiation and Cellular Oncology, University of Chicago, and Co-Director of the Ludwig Center for Metastasis Research, University of Chicago.

The BTSI award is a two-year, $100,000 grant made possible through generous support from the Neuroendocrine Tumor Research Foundation (NETRF). NANETS is grateful to NETRF, whose tremendous investment and support of this annual research grant have made a difference in the NET medical community and the patients we serve. The NANETS Scientific Review & Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Heliosa Soares, MD, PhD



NANETS THERAGNOSTICS INVESTIGATOR SCHOLARSHIP (NTIG) AWARD | 2020

NANETS congratulates Heloisa Soares, MD, PhD of the University of Utah as the NANETS 2020 Theragnostics Investigator Scholarship (NTIG) award recipient. The NTIG is intended to push forward the boundaries of molecularly targeted radionuclide therapy and diagnostics for patients with neuroendocrine tumors.

Dr. Soares received the scholarship for her proposal, *"The Role of HDAC Inhibitors in Combination to PRRT in NET Xenografts."* Dr. Soares will be mentored by Kathryn Morton, MD, Professor of Radiology at the University of Utah.

NTIG is made possible by the support of Advanced Accelerator Applications (AAA), a long-time supporter of NANETS' educational events and research. NTIG is a two-year, $100,000 award. The NANETS Scientific Review & Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Po Hien Ear, PhD

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR (BTSI) AWARD | 2019

NANETS congratulates Po Hien Ear, PhD, of the University of Iowa, as the NANETS 2019 Basic/Trans-lational Science Investigator (BTSI) Award recipient.

Dr. Ear received the grant for her proposal, *Development of in vitro pre-clinical models for small bowel neuroendocrine tumor drug testing.*

Dr. Ear's current capabilities support a promising future in the field of NET research. Dr. Ear has a unique background suited for discovering novel therapeutic agents for NETs because she has a profound understanding of cell cycle regulation and large scale-data analysis/integration. Her work has been published in numerous prestigious journals. She has 14 publications (five additional manuscripts in preparation) and three patents.

Dr. Ear's research will utilize her expertise in proteomics and metabolomics to the field of neuroendocrine tumors. Bridging these fields will allow for the identification of new therapies for patients with neuroendocrine tumors and to better understand their mechanism of action.
The Basic/Translational Science Investigator (BTSI) Grant is funded by the Neuroendocrine Tumor Research Foundation (NETRF). The $100,000 BTSI Grant is administered over the course of two years. The NANETS Research Committee establishes the award criteria, reviews process and independently selects the recipient.

Sarbajit Mukherjee, MD, MS

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2019

NANETS congratulates Sarbajit Mukherjee, MD, MS, of Roswell Park Comprehensive Cancer Center, as the NANETS 2019 Clinical Investigator Scholarship (NCIS) Award recipient. The NCIS award focuses on supporting a clinical project as well as the investigator's potential to make future clinical contributions to the neuroendocrine tumor field. This award is in honor of Edda Gomez-Panzani, MD for her dedication and work on behalf of patients living with neuroendocrine tumors.

Dr. Mukherjee received the grant for his proposal, *Circulating Tumor DNA (Ct DNA) as a Biomarker in High-Grade Neuro-endocrine Tumor.*

This research will use patients' blood samples to identify those genetic alterations in the circulating tumor DNA (Ct DNA) which may allow for the development of personalized treatments for this rare disease. The proposed study will collect serial blood samples from patients and monitor their Ct DNA over time. Analysis of that data will provide insight into the biology of disease evolution which may help Dr. Mukherjee build an optimal sequence of targeted therapeutic interventions. It will also inform whether Ct DNA can predict response to therapy in high-grade GEP-NETs.

IPSEN is proud to sponsor the continuation of Dr. Gomez-Panzani's work on behalf of NET patients through this Clinical Investigator Scholarship. IPSEN Biopharmaceuticals supports this research scholarship in the form of a $100,000 grant directed to NANETS to administer over the course of the two year grant period. The NANETS Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Julie Hallet, MD, MSc, FRCSC

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2018

Julie Hallet, MD, MSc, FRCSC, surgical oncologist, Odette Cancer Center, Sunnybrook Health Sciences Centre, was the 2018 NANETS Clinical Investigator Scholarship (NCIS) recipient. The NCIS award focuses on supporting a clinical project as well as the investigator's potential to make future clinical contributions to the neuroendocrine tumor field. This award is in honor of Edda Gomez-Panzani, MD, for her dedication and work on behalf of patients living with neuroendocrine tumors.

Dr. Hallet received the NCIS award for her proposal, *An Evaluation of Patient Reported Outcomes, Patterns of Symptoms Severity, and Survival for Neuroendocrine Tumors.* The focus of her program in health services population-based research examines process, patterns of care and outcomes for neuroendocrine tumors (NETs) in order to improve care by identifying and establishing enablers to timely diagnosis and effective management.

Dr. Hallet conducts health services population-based research to examine processes, patterns of care and outcomes in hepato-pancreato-biliary malignancies. She is also working on implementing and evaluating outcomes of pre-operative 3-D planning and intra-operative navigation programs for liver surgery.

Dr. Hallet has conducted several projects documenting the epidemiology of NETs and exploring possible sources of care and outcome disparities. Using this previous work as background, support from the NCIS grant has allowed her to further her research into process of care of NETs.

IPSEN Biopharmaceuticals is proud to sponsor the continuation of Dr.Gomez-Panzani's work on behalf of NET patients through the Clinical Investigator Scholarship. IPSEN supports this research scholarship in the form of a $50,000 grant directed to NANETS to administer over the course of the one-year grant period.

Thomas Hope, MD

NANETS THERAGNOSTICS INVESTIGATOR GRANT (NTIG) | 2018

Thomas Hope, MD, Director of Molecular Therapy, Department of Radiology and Biomedical Imaging, University of California San Francisco and San Francisco Veterans Affairs Medical Center, and member of NANETS' Board of Directors, was the 2018 NANETS' Theragnostics Investigator Grant (NTIG) recipient. The NTIG is intended to push forward the boundaries of molecularly targeted radionuclide therapy and diagnostics for patients with neuro-endocrine tumors.

Dr. Hope received this grant for his proposal, *Optimization of Intra-Arterial Y90-DOTATOC PRRT.* He has used the funds to continue his work with Y90-DOTATOC using intra-arterial administration, an important therapeutic route for peptide receptor radionuclide therapy (PRRT). The NTIG also provides significant insight into the issues related to receptor saturation, which is not a well-addressed limitation to improving PRRT treatment.

Dr. Hope is an Associate Professor in Residency in the Abdominal Imaging and Nuclear Medicine sections at UCSF and the San Francisco Veterans Affairs Medical Center. He has published 60 peer-reviewed articles, including 21 first author publications.

His research program is focused on imaging cancer using MRI and novel PET tracers. At UCSF, he has developed the gallium-68 DOTA-TOC imaging program for neuroendocrine tumor staging, and he is the principle investigator on the FDA IND. He has also successfully brought Ga-68 PSMA imaging to UCSF and is currently drafting the IND submission to allow for the evaluation of the clinical use of this agent.

Dr. Hope is interested in using somatostatin receptor and PSMA based PET agents in order to distinguish neuroendocrine prostate cancer from adenocarcinoma. Additionally, he believes that the combination of MR and PET parameters will aid in the staging of cancers.

Most straightforward is a study Dr. Hope and his team are carrying out in low risk prostatectomy patients, where they evaluate the use of PET/MRI using Ga-68 PSMA and MR imaging of the primary tumor. In the setting of patients with metastatic disease, PET/MRI will likely have an even more important role, as response to treatment will change uptake of non-FDG tracers in ways that are not immediately clear, and interpretation will likely rely on changes in MR imaging parameters such as diffusion weighted imaging (DWI).

Advanced Accelerator Applications (AAA) is proud to sponsor the NTIG in the form of a $100,000 grant directed to NANETS to administer over the course of the two year grant period. The NANETS Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Renata Jaskula-Sztul, PhD

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR (BTSI) AWARD | 2018

Renata Jaskula-Sztul, PhD, of the University of Alabama at Birmingham School of Medicine (UAB), was the recipient of NANETS 2018 Basic/Translational Science Investigator (BTSI) award.

Dr. Jaskula-Sztul received the BTSI grant for her proposal, *Novel Antibody-Drug Conjugate (ADC) for Pancreatic Neuroendocrine Tumor (PanNET) Targeted Therapy.* She has published more than 40 papers and, as a co-investigator, she has received funding for five research grants on targeted drug delivery to neuroendocrine tumors.

Since joining the Department of Surgery at UAB, Dr. Jaskula-Sztul has been working on multiple projects investigating the role of several small molecules in suppression of neuroendocrine cancers growth. Some of these compounds are already in Phase I clinical trials.

In addition, she is investigating the tumor suppressor role of the Notch pathway in vitro and in vivo in medullary thyroid cancer. Most recently, she has changed the scientific direction to utilize novel nanomedicine techniques in order to develop targeted cancer therapies. In collaboration with bioengineers, she has developed nanoparticles (nanopolymers and unimolecular micelles) conjugated with anticancer drugs specifically targeting neuroendocrine tumor cells and tissues.

The goal for the multi-functional nanoparticle therapeutics is to provide safe, effective treatments that can either augment or supplant surgical operations in the treatment of neuroendocrine cancer.

"Part of the results supported by this NANETS grant were just accepted for publishing. Most importantly, because of the NANETS grant I was able to complete additional experiments for NIH-NCI R21 grant to achieve the fundable score of 3 percent. This will be my first NIH grant in my neuroendocrine tumor scientific career and I'm very grateful that NANETS supports my research."

The Basic/Translational Science Investigator (BTSI) award is funded by the Neuroendocrine Tumor Research Foundation (NETRF). The $100,000 BTSI grant is administered over the course of two years. The NANETS Research Committee establishes the award criteria, reviews process, and independently selects the recipients.

Irene Min, PhD

YOUNG INVESTIGATOR (YI) AWARD | 2018

Irene Min, PhD, Assistant Professor of Molecular Biology Research in Surgery at Weill Cornell Medical College, Surgery Endocrine Research Department was the 2018 recipient of the Young Investigator award for her proposal, *Analysis of Immune Environment for Targeting Metastatic Pancreatic Neuroendocrine Tumors.* The goal of this study has been to elucidate the tumor-immune networks in localized and metastatic pancreatic neuroendocrine tumors (PNETs) and to determine the effect of macrophage inhibitors on enhancing T cell proliferation in metastatic PNET mouse model.

Dr. Min's focus is pancreatic neuroendocrine cancer, with a specific interest in immune cells.

"I want to look at multiple proteins and cells in the tumor at the same time so I can understand the interactions between different cells and molecules."

As a junior investigator, funding for this study was critical to Dr. Min's ability to advance her proposal.

"Funding allowed me to continue to work on this project and it gave me the momentum necessary to see it through to its conclusion," said Dr. Min.

Dr. Min's research has been broadly concerned with the recognition of the tumor-associated antigens by antibodies and T lymphocytes. She has been working on a new technology in immune-oncology field leveraging her expertise in gene expression analysis and genetic engineering.

Recently, Dr. Min defined a correlation between ICAM-1 expression and malignant features in poorly-differentiated thyroid cancer and anaplastic thyroid cancer, and subsequently reported the promising preclinical development and efficacy of a chimeric antigen receptor (CAR) T cell therapy that recognizes ICAM-1, which is highly expressed in advanced thyroid cancers (Clin Cancer Res 2017).

In collaboration with endocrine surgeons in her division, Dr. Min has established many endocrine tumor patient-derived tumor cells, xenografts, and autologous immune cells for translational research. Currently, her team is developing technology and protocol to increase therapeutic efficacy of adoptive T cell therapy in endocrine cancers.

Dr. Min will present her research findings at a future Multidisciplinary NET Medical Symposium.

The Young Investigator grant is funded by Novartis International AG, a multinational pharmaceutical company based in Basel Switzerland. The $50,000 grant is administered over the course of one year. The NANETS Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Brian Untch, MD, FACS

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR (BTSI) AWARD | 2017

Brian Untch, MD, FACS, of Memorial Sloan Kettering Cancer Center is the recipient of NANETS 2017 Basic Translational Science Investigator (BTSI) Award.

Dr. Untch proposes to explore new approaches for treating neuroendocrine cancers. The award funds Dr. Untch's work assessing the effectiveness of peptide receptor radionuclide therapy (PRRT), which targets somatostatin receptors in mouse models of neuroendocrine cancer.

Somatostatin receptor ligands such as DOTA-TATE have been established as effective tools for detection of neuroendocrine tumors such as those found in pancreatic and gut cancers. However, these detection agents are now also being considered for their potential as treatments.

This new field of "theragnostics" holds promise as an approach that may be combined with other classes of drugs to more effectively treat neuroendocrine cancers. Dr. Untch's research includes assessing the combined effects of PRRT and other promising chemotherapeutic approaches. The potential of these studies to have an impact on neuroendocrine cancer treatment, together with the strength of Dr. Untch's investigator/mentor team and institution, convinced NANETS that this was the project to support with this year's award.

The BTSI is sponsored by the Neuroendocrine Tumor Research Foundation (NETRF) and is made possible by the generous support of the Margie and Robert Peterson Foundation. The BTSI is awarded to a NANETS member in their first five years of faculty appointment and is meant to encourage the pursuit of basic or translational research with a focus on neuroendocrine tumors. The BTSI is a grant award of $100,000 to be distributed over the two year grant award cycle.

Etay Ziv, MD, PhD

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2017

Etay Ziv, MD, PhD, Memorial Sloan Kettering Cancer Center, is the 2017 recipient of NANETS Clinical Investigator Scholarship. The NCIS award focuses on supporting a clinical project as well as the investigator's potential to make future clinical contributions to the neuroendocrine tumor field. This award is in honor of Edda Gomez-Panzani, MD, for her dedication and work on behalf of patients living with neuroendocrine tumors.

Dr. Ziv, seeks to improve the outcome of patients undergoing liver directed therapy of pancreatic neuroendocrine tumor liver metastases. He will evaluate whether the molecular biomarker, DAXX mutation, is a predictor of poor response to liver-directed therapy. This work has the potential to identify which patients will most likely benefit from treatment and to provide insight into why patients may or may not respond to treatment.

As an interventional radiologist, Dr. Ziv uses image guidance (x-rays, ultrasound, CT, PET, or MRI) to perform minimally invasive procedures. The images are used to direct tiny catheters, wires, and needles in order to diagnose and treat tumors. Using image guidance allows Dr. Ziv and his team to perform a wide variety of procedures without making large incisions, leading to shorter recovery times and fewer complications.

They can also treat tumors by burning or freezing them (ablation) or clogging the arteries that supply them with different materials (embolization). Other procedures include biopsies, opening an obstructed channel (for example, a vessel, a bile duct, or a ureter), or stopping a bleeding vessel.

"The NANETS grant allowed us to collect preliminary data on patients undergoing embolization, which formed the basis for several other grants that we have obtained since then (Functional Genomics Initiative Grant and MSK Society Grant). Our preliminary results were published in JVIR (https://www.jvir.org/article/S1051-0443(18)31249-1/abstract) and were the basis for winning the 2018 Gary J Becker Young Investigator Award."

IPSEN is proud to sponsor the continuation of Dr. Gomez-Panzani's work on behalf of NET patients through the NANETS Clinical Investigator Scholarship. IPSEN Biopharmaceuticals supports this research scholarship in the form of a $100,000 grant directed to NANETS to administer over the course of the two year grant period. The NANETS Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Claudius Conrad, MD, PhD

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2016

Claudius Conrad, MD, PhD, surgical oncologist, St. Elizabeth's Medical Center, Boston, MA, was the 2016 NANETS Clinical Investigator Scholarship (NCIS) recipient. The NCIS award focuses on supporting a clinical project as well as the investigator's potential to make future clinical contributions to the neuroendocrine tumor field. This award is in honor of Edda Gomez-Panzani, MD, for her dedication and work on behalf of patients living with neuro-endocrine tumors.

Dr. Conrad used the scholarship to continue his focus on the treatment of patients with pancreatic neuroendocrine tumors and neuroendocrine liver metastasis. He is the chief of general surgery and surgical oncology and the director of hepato-pancreato-biliary surgery at St. Elizabeth's Medical Center in Brighton, MA. He brings highly specialized care for patients with diseases and cancers of the liver and pancreas.

As a hepato-pancreato-biliary surgeon, Dr. Conrad treats conditions of the liver and pancreas, as well as diseases and cancers of the gallbladder, bile ducts, duodenum, and spleen. He is an international pioneering expert in minimally invasive surgery, using both laparoscopic and robotic-assisted techniques in treating these conditions.

Liver and pancreatic cancers affect thousands of people in the United States annually. This year, the American Cancer Society estimates that more than 42,000 people will be diagnosed with liver and other cancers that start in the bile duct. Another 56,770 are estimated to be diagnosed with pancreatic cancer. *"Given the incidence of liver and pancreatic diseases and cancers, having a surgeon with the skills and expertise that Dr. Conrad possesses can make an important difference in patient outcomes," said Michael Bushell, president of Saint Anne's Hospital.*

"Working closely with our local specialists, he brings world-class, unique talents that benefit the patients he treats throughout the Fall River-New Bedford area."

Dr. Conrad also is a classically trained and accomplished concert pianist and co-founded the field of clinical research on the science of music in medicine.

"Music has been a part of healing since the beginning of mankind. Being a surgeon helps me become a better pianist, and being a pianist helps me become a better surgeon. Science and art, precision and creativity, discipline and transcendence. In the end, both are about connection."

IPSEN is proud to sponsor the continuation of Dr. Gomez-Panzani's work on behalf of NET patients through the NANETS Clinical Investigator Scholarship. IPSEN Biopharmaceuticals supports this research scholarship in the form of a $100,000 grant directed to NANETS to administer over the course of the two year grant period. The NANETS Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Christopher M. Heaphy, PhD

BASIC/TRANSLATIONAL SCIENCE INVESTIGATOR (BTSI) AWARD | 2016

Christopher M. Heaphy, PhD, formerly Assistant Professor, Dept. of Pathology Johns Hopkins University School of Medicine, and currently Associate Professor, Hematology & Medical Oncology, Boston University School of Medicine, was the 2016 recipient of NANETS' Basic Translational Science Investigator (BTSI) award.

The BTSI is awarded to a NANETS member in their first five years of faculty appointment and is meant to encourage the pursuit of basic or translational research with a focus on neuroendocrine tumors. Dr. Heaphy utilized the BTSI award to invest in his translational research to further the understanding of pancreatic neuroendocrine tumor biology.

In discussing his proposal, Dr. Heaphy had this to say:

"Our group and others have shown that loss of function of the ATRX/DAXX chromatin remodeling complex, primarily through inactivating somatic mutations, and acquisition of Alternative Lengthening of Telomeres (ALT) are associated with decreased recurrence-free survival among patients with a primary well-differentiated PanNET. Thus, there is promise for these molecular biomarkers to be incorporated in pre- and/or post-operative risk stratification models to accurately predict prognosis for an individual patient. Additionally, since telomere maintenance through ALT activation is a fundamental mechanism of tumorigenesis, identifying ALT positive PanNETs may become increasingly important in the design of clinical trials for new targeted therapies, including small molecules that may specifically target ALT."

Dr. Christopher Heaphy is an Assistant Professor of Pathology at the Johns Hopkins University School of Medicine. His research focuses on basic and translational studies to elucidate the role of telomere alterations in the initiation of human diseases, particularly cancer.

His team's current projects include assessing the translational potential of telomere length measurements.

Dr. Heaphy received his PhD from the University of New Mexico and did his postdoctoral training at the Johns Hopkins University School of Medicine.

The BTSI is sponsored by the Neuroendocrine Tumor Research Foundation (NETRF) and is made possible by the generous support of the Margie and Robert Peterson Foundation. The BTSI is awarded to a NANETS member in their first five years of faculty appointment and is meant to encourage the pursuit of basic or translational research with a focus on neuroendocrine tumors. The BTSI is a grant award of $100,000 to be distributed over the two-year grant award cycle.

Arvind Dasari, MD

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2015

Arvind Dasari, MD, Associate Professor, Dept of Gastrointestinal Medical Oncology, MD Anderson Cancer Center, was the 2015 recipient of the NANETS Clinical Investigator Scholarship (NCIS). The NCIS award focuses on supporting a clinical project as well as the investigator's potential to make future clinical contributions to the neuroendocrine tumor field. This award was funded in honor of Edda Gomez-Panzani, MD, for her dedication and work on behalf of patients living with neuroendocrine tumors.

In discussing his project, Dr. Dasari said:

"Neuroendocrine tumors, NETs, are lethal when advanced, with limited treatment options, in large part due to lack of adequate understanding of the underlying molecular aberrations. Overwhelming evidence point towards dysregulation of the retinoblastoma pathway (and thus cyclin-dependent kinases, 4,6 CDK 4/6) in the majority of foregut NETs."

He explained the goals of the study:

"Our goal in the study was to demonstrate activity of CDK 4/6 inhibitors in foregut NETs by: 1) conducting pharmacodynamic (PD) and correlative studies on paired biopsies from a clinical trial of patients with foregut NETs treated with an oral CDK 4/6 inhibitor; 2) determining activity of mTOR inhibitor with an oral CDK 4/6 inhibitor in xenograft models of NETs."

Dr. Dasari had this to say about the impact of receiving the NCIS:

"The NANETS grant helped successful completion of a phase II trial of ribociclib in patients with advanced foregut neuroendocrine tumors. The experience gained from this trial has enabled me to design and conduct other research in NET, including outcomes – translational and clinical. I continue to be active in NANETS and currently serve on the Communications Committee (co-chair) and the Organizing Committee (member)."

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Bryson Katona, MD, PhD

YOUNG INVESTIGATOR (YI) AWARD | 2015

Bryson William Katona, MD, PhD, Director, Gastrointestinal Cancer Genetics Program Director, Gastrointestinal Cancer Risk Evaluation Program Member, Abramson Cancer Center Assistant Professor of Medicine at the Hospital of the University of Pennsylvania, was the 2015 recipient of the Young Investigator grant for his work on ER stress and the unfolded protein response in neuroendocrine tumor proliferation.

Despite many recent advances in the field of neuroendocrine tumors, there still remains a critical need to develop novel therapeutic approaches to better treat these tumors. Within the distinct genetic landscape of neuroendocrine tumors, the focus of Dr. Katona's project was to better understand the role of ER stress and the unfolded protein response in neuroendocrine tumor proliferation and resistance to chemotherapy. The ultimate goal of this project was the development of novel methods to selectively target ER stress pathways to improve current treatment paradigms for the treatment of neuroendocrine tumors.

Dr. Katona is Director of the Acute and Transitional Gastroenterology Program, Director, Gastroentestinal Cancer Genetics Program, and Assistant Professor of Medicine at the Hospital of the University of Pennsylvania. He conducts his research in a cancer biology lab focusing on menin.

He was awarded a $50,000 grant, generously sponsored by Novartis Oncology and NANETS, to pursue basic science/translational research focused on neuroendocrine tumors.

His clinical and research interests focus on the fields of gastrointestinal cancer, specifically neuroendocrine tumors and colon cancer, as well as cancer genetics. He is also the recipient of an NIH K08-funded basic science research program, focused on epigenetic regulatory mechanisms in colon cancer and neuroendocrine tumors, and how these mechanisms can be modulated to aid in the development of novel therapeutic strategies for these cancers. His clinical interests are in hereditary gastrointestinal cancer and polyposis syndromes.

Dr. Katona currently serves as the Editor-in-Chief of the American Gastroenterological Association's (AGA's) publication, The New Gastroenterologist. He also serves on committees for NANETS, the AGA, and the Collaborative Group of the Americas on Inherited Colorectal Cancer. Dr. Katona received his BA and MS in chemistry from the University of Pennsylvania and completed his MD and PhD in biochemistry at Washington University in St. Louis. He completed his internal medicine residency and gastroenterology fellowship at the University of Pennsylvania.

Jennifer Eads, MD

YOUNG INVESTIGATOR (YI) AWARD | 2014

Jennifer Eads, MD, Associate Professor of Clinical Medicine, UPenn, was the 2014 recipient of the Young Investigator (YI) award. An Assistant Professor, Division of Hematology and Oncology, Department of Medicine at University Hospitals Cleveland Medical Center, Dr. Eads is board certified in internal medicine and medical oncology.

Dr. Eads' special interests include gastrointestinal oncology, including cancers of the esophagus and stomach, pancreas, gallbladder and bile ducts and gastrointestinal neuroendocrine tumors. She joined the University Hospitals Cleveland Medical Center staff in 2009.

Dr. Eads' research interests include understanding the role of DNA repair in neuroendocrine tumors and esophageal cancers. She is currently the Principal Investigator on several clinical trials related to gastrointestinal malignancies including esophageal cancer, pancreatic cancer, gallbladder and bile duct cancer and multiple types of neuroendocrine tumors.

The Young Investigator (YI) Grant is funded by Novartis International AG, a multinational pharmaceutical company based in Basel Switzerland. The $50,000 Young Investigator (YI) Grant is administered over the course of one year. The NANETS Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Hala Elnakat Thomas, PhD

YOUNG INVESTIGATOR (YI) AWARD | 2013

Hala Elnakat Thomas, PhD, University of Cincinnati School of Medicine, was the 2013 recipient of NANETS' Young Investigator (YI) $50,000 award for her work on mTOR inhibition in the treatment of pNETs.

Because the allosteric inhibitor of the mammalian Target Of Rapamycin (mTOR), everolimus (RAD001), had already shown efficacy in pancreatic neuroendocrine tumors (pNETs), it was compelling to assess in this indication, the ability of the next-generation mTOR inhibitors to impede tumor progression.

"Toward this end, BEZ235 a dual phosphatidylinositide-3OH kinase (PI3K)/mTOR inhibitor is currently being evaluated as a single agent in a number of phase I/II clinical trials for treatment of patients with pNETs either prior to or after failure of allosteric mTOR inhibitors," said Dr. Thomas.

Based on the previous work done by Dr. Thomas, she predicted that a major benefit of treating pNETs with RAD001 in combination with BEZ235 woul be a synergistic inhibition of mTOR at lower doses of each drug, which would increase specificity while decreasing toxicity.

"The preclinical data generated from this award will not only improve our molecular and mechanistic understanding of the drug combination, but will more importantly potentially improve the clinical outcome for pNET patients treated with RAD001 and BEZ235 in combination in lieu of either drug as a single agent," said Dr. Thomas.

The findings of Dr. Thomas' study, which were reported in the November 2017 issue of Molecular Cancer Therapeutics, could lead to another targeted treatment for patients and prevent the onset of additional complications from their cancer.

"Pancreatic neuroendocrine tumors—pancreatic NETs, pNETs or islet cell tumors—are tumors that form from the abnormal growth of neuroendocrine cells in the pancreas. . . . Most pancreatic NETs are functional, meaning they produce hormones. The overproduction of certain hormones results in a number of symptoms termed carcinoid disease which may impact the patients' quality of life if not managed appropriately," she said.

Dr. Thomas noted that mutations in key players of the mTOR pathway, a molecular pathway present and active in several types of cancer, have been identified in pNETs.

Inhibiting mTOR signaling using everolimus, a targeted therapy, known as a rapalog, for patients with lung and gastroenteropancreatic NETs, has been approved by the FDA. A rapalog inhibits the mTOR protein by preventing it from activating some signals.

However, patients eventually experience progression of cancer on this treatment, highlighting the need for additional therapies. In this study, Dr. Thomas focused on pancreatic NETs (pNETs) and thought that treatment of these tumors upon progression on rapalog therapy, with an mTOR kinase inhibitor (mTORKi), could overcome a number of resistance mechanisms in tumors and delay cardiac carcinoid disease.

The Young Investigator (YI) award is funded by Novartis International AG, a multinational pharmaceutical company based in Basel Switzerland. The $50,000 grant is administered over the course of one year. The NANETS Research Committee establishes the award criteria, reviews process, and independently selects the recipient.

Katherine Van Loon, MD, MPH

NANETS CLINICAL INVESTIGATOR SCHOLARSHIP (NCIS) | 2013

Katherine VanLoon, MD, MPH, University of California San Francisco, was the 2013 recipient of the NANETS Clinical Investigator Scholarship (NCIS). The NCIS award focuses on supporting a clinical project as well as the investigator's potential to make future clinical contributions to the neuroendocrine tumor field. This award is in honor of Edda Gomez-Panzani, MD, for her dedication and work on behalf of patients living with neuro-endocrine tumors.

Dr. Katherine Van Loon is a specialist in gastrointestinal cancers, with a particular interest in colon cancer. As part of her proposal, Dr. Van Loon noted that:

"Because NCCN guidelines for surveillance imaging following resection are vague and reflect lack of standardization, I will describe the surveillance practices of the member institutions for patients who undergo complete surgical resection of gastroenteropancreatic NETs. This analysis will attempt to identify patient subgroups at particularly high risk of recurrence following surgical resection of gastroentero-pancreatic NETs."

With a background in public health, Van Loon's research focused on epidemiology – the study of which populations develop diseases and which factors contribute – as well as outcomes in gastrointestinal malignancies. She has a long-standing interest in global health and has also studied the epidemiology of gastrointestinal cancers in the developing world.

Van Loon earned her Master's degree in public health from the Yale School of Public Health before attending the Medical College of Georgia. She completed a residency in internal medicine at Beth Israel Deaconess Medical Center, a teaching hospital of Harvard Medical School. She came to UCSF for a fellowship in oncology in 2009.

Van Loon is a member of the American Society of Clinical Oncology (ASCO). She received a Young Investigator Award from the ASCO Conquer Cancer Foundation in 2012.

Funding from the NCIS enabled Dr. Van Loon to use the robust database available from the NCCN's multi-institutional Neuroendocrine Tumor Outcomes Project to report recurrence rates, time to tumor recurrence, and survival for patients with gastroenteropancreatic neuroendocrine tumors (NETs) who undergo surgical resection with curative intent.

"This award was the launching pad for several subsequent studies related to outcomes for patients with NETs. I continue to work with our institutional NET database and mentor trainees to develop independent research projects using this rich data source."

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Lauren Fishbein, MD, PhD

EARLY CAREER DEVELOPMENT GRANT | 2012

Lauren Fishbein, MD, PhD, Department of Endocrinology, University of Colorado School of Medicine and 2021 Chair of NANETS' Guidelines Committee, was the recipient of the 2012 Early Career Development award.

Her research proposal titled, *Somatic Mutations in Pheochromocytomas and Paragangliomas,* proposed to use cutting edge "next generation" sequencing techniques to identify somatic mutations which contribute to tumorigenesis or malignant transformation.

"Our hope is to determine if distinct patterns of somatic mutations are associated with different inherited mutations. Since pheochromocytomas and paragangliomas are tumors associated with high morbidity and mortality with limited treatments for recurrent or metastatic disease, it is critical to understand tumorigenesis in order to identify novel molecular markers for future therapeutic targets," said Dr. Fishbein in her proposal.

Dr. Lauren Fishbein joined the faculty at the University of Colorado Denver School of Medicine in October 2015. She graduated from Vassar College with a BA in Biochemistry, earned her MD and PhD degrees from the University of Florida College of Medicine and completed her residency training in Internal Medicine at Harvard's Beth Israel Deaconess Medical Center in Boston. She then completed her fellowship in Endocrinology, Diabetes and Metabolism at the University of Pennsylvania, where she remained as an Instructor for several years before coming to the University of Colorado as an Assistant Professor.

Dr. Fishbein's research focuses on understanding neuroendocrine tumorigenesis and malignant transformation using massively parallel sequencing (next gen sequencing) and other genetic and molecular genetic approaches. The ultimate goal of the work is to identify novel biomarkers for predicting metastatic disease as well as potential targets for therapeutic intervention. Her clinical interests are in endocrine tumors and endocrine tumor genetics, adrenal nodules and disorders and pheochromocytomas/paragangliomas as well as other neuroendocrine tumors.

"The Early Career Award I received from NANETS helped to kick start my career in neuroendocrine tumor research. The funding from this award helped to support a genomics project for human pheochromocytoma and paraganglioma tumors, which showed for the first time that a subset of aggressive pheochromocytoma/paraganglioma had recurrent somatic ATRX mutations, hinting at mechanisms for tumorigenesis not previously known in this tumor type," said Dr. Fishbein.

This one-year, $50,000 award is supported by Novartis with the goal to improve patient outcomes in NETs. This collaborative partnership and the assistance of Novartis in funding research is a critical component of improving the lives of people with carcinoid/NET cancers. Their continued support and commitment to assist NANETS in fulfilling our mission is critical to the success of the NANETS organization.

Tae-Hee Kim, PhD

EARLY CAREER DEVELOPMENT GRANT | 2011

Tae-Hee Kim, PhD, Hospital for Sick Kids, University of Toronto, was a 2011 recipient of NANETS Early Career Development Grant for his proposal, *Transcriptional regulation of intestinal secretory cell differentiation through Atoh1 and Tcf4,* which addressed the need to better understand the cells from which intestinal neuroendocrine (carcinoid) tumors originate to help in the development of targeted therapies.

Dr. Kim's reviewers gave this rationale for his proposal:

"The treatment and cure of neuroendocrine tumors require an accurate and deep understanding of the molecular processes that govern normal endocrine cell behavior. These cells originate in intestinal crypt stem cells and Dr.Kim's research program focuses on studying the molecular mechanisms of secretory (endocrine) cell differentiation. In this proposal, he emphasizes the roles of two important proteins, Atoh1 and Tcf4. These proteins are transcription factors, i.e., proteins that control hundreds of other genes, and his research studies how these proteins do so. His work will help advance understanding of fundamental mechanisms and therapeutic targets in neuroendocrine tumors."

Dr. Kim further explained:

"We are interested in the mechanisms of stem cell renewal and differentiation and their perturbation in diseases such as cancer. Using the gut as a model system and applying mouse genetics, epigenomics and gut organoid cultures, we investigate signaling, chromatin modification and the transcriptional basis of gastrointestinal stem cells."

"Our lab addresses two fundamentally important questions: (1) how different organs and cell types are generated from stem cells and maintained for proper function over a lifetime; and (2) how mechanisms of normal stem cell homeostasis may be altered in diseases such as cancer. Since the gastrointestinal tract rapidly self-renews throughout life and is a common target of deadly cancers, our lab studies the gut as a model system, applying the combined approaches of mouse genetics, epigenomic analyses, and stem cell and organoid cultures. We hope understanding stem cell homeostasis in gut development and disease will provide deeper insight into the relationship between normal development and mechanisms of disease and help identify new therapeutic targets for lethal digestive tract cancers and regenerative medicine."

In response to the shortage of young scientists focused on the clinical investigation of neuroendocrine tumors, NANETS created this grant to encourage physicians, at the end of their fellowship or beginning of their faculty appointment, to pursue clinical or translational research in this field. Dr. Kim's research demonstrated the capability of producing results that would make significant contributions to NET research and lead to a productive career in neuroendocrine tumors.

This one-year $50,000 grant was funded with the support of Novartis Oncology. Their continued support and commitment to assist NANETS in fulfilling its mission has been critical to the success of NANETS. This collaborative partnership and their assistance in funding research has made a positive impact in improving the lives of people with carcinoid/NET cancers.

Karine Pozo, PhD, MSc

EARLY CAREER DEVELOPMENT GRANT | 2011

Karine Pozo, PhD, MSc, was the recipient of a 2011 Early Career Development award in the amount of $50,000.

Her research proposal, entitled *Identification of new RET-associated signaling mechanisms in medullary thyroid carcinoma (MTC),* focused on the protein kinase, cyclin-dependent kinase 5 (Cdk5), and its activating cofactor, p25 which was implicated in medullary thyroid carcinoma (MTC) oncogenesis and proliferation.

"The aim of this study is to delineate the role of p25/Cdk5 in the activation of RET signaling cascade and subsequent mechanisms leading to MTC tumorigenesis. This work will lead to the identification of novel targets on which to base the development of treatments for MTC," explained Dr. Pozo.

As an innovative PhD scientist with nearly 20 years of experience in leading research and development projects in the fields of oncology and neuroscience, Dr. Pozo creates knowledge that can be used to address critical medical needs. Her research work has led to the discovery of a potential new therapeutic target for the treatment of neuro-endocrine tumors.

Dr. Pozo received a bachelor's degree from the University Paul Sabatier, Toulouse, France, and a Master's degree from the University Louis Pasteur — Euro≠≠pean School of Biotechnology, Strasbourg, France. She graduated with a PhD in Molecular Neurosciences from the University College of London (UCL) - School of Pharmacy, London, UK. For her post-doctorate, she joined the Medical Research Council Laboratory for Cellular and Molecular Biology at UCL, London, UK. Dr. Pozo currently works as an Instructor at The University of Texas Southwestern Medical Center, Dallas, TX with a joint appointment in the Departments of Neuroscience and Surgery.

Dr. Pozo's research interests are the molecular mechanisms underlying neuroendocrine tumors. In particular, she focuses on intracellular signaling mechanisms involving the protein kinase Cdk5, the receptor tyrosine kinase RET and the transcription factor ASCL1. In her studies, Dr. Pozo employs an integrative approach that comprises biochemical analysis, cell culture and genetically-modified mouse models. Notably, she has characterized a novel animal model for medullary thyroid carcinoma for the exploration of signal trans-duction pathways.

This Early Career Development Grant award is supported by Ipsen Biopharmaceuticals4 with the goal to improve patient outcomes in NETs. This collaborative partnership and the assistance of Ipsen in funding research has been a critical component of improving the lives of people with carcinoid/NET cancers. Their continued support and commitment to assist NANETS in fulfilling our mission is critical to the success of the NANETS organization.

Mei Dong, MD, PhD

YOUNG INVESTIGATOR (YI) AWARD | 2010

Mei Dong, MD, PhD, Cancer Care Northwest, Spokane, WA, was the recipient of the second of two 2010 Young Investigator awards in the amount of $50,000.

Her research proposal, entitled *Role of Hedgehog Pathway in Gastrointestinal Neuroendocrine Tumorigenesis* focused on the well-known premise that a significant number of patients with NETs may have harbored the slow-growing lesions since a very young age, which suggests that it could result from alterations of pathways involved in development.

Hedgehog (Hh) signaling has been found to be important in embryonic patterning, stem cell maintenance and tissue repair, and is normally silenced in most mature adult tissue. Dr. Dong's innovative strategy investigated this signaling pathway as a target in the tumorigenesis of NETs and their development.

"The goal of the proposed project is to study the role of Hedgehog signaling pathway in neuroendocrine tumorigenesis and its potential as a therapeutic target," wrote Dr. Dong.

Dr. Dong earned a doctor of medicine from Harbin Medical University in Harbin, China. She received a PhD in biomedical science at the University of Connecticut in Storrs, Connecticut. From there she performed cancer research at Duke University in Durham, North Carolina. She completed an internship and residence at Yale-affiliated Norwalk Hospital in Norwalk, Connecticut. She also completed a fellowship in medical oncology and hematology at the MD Anderson Cancer Center at the University of Texas. She has performed extensive research in gastrointestinal malignancies.

The Young Investigator Award was created to help address the current shortage of young scientists focused on the investigation of neuroendocrine tumors and is open to investigators at the end of their fellowship or beginning of their faculty appointment.

This one-year $50,000 award was supported by Ipsen Biopharmaceuticals, with the goal to improve patient outcomes in NETs. This collaborative partnership and the assistance of Ipsen in funding research has been a critical component of improving the lives of people with carcinoid/NET cancers.

Dr. Dong presented developments from her research project at the NANETS annual symposium in 2011.

Haggi Mazeh, MD

EARLY CAREER DEVELOPMENT GRANT | 2010

Haggi Mazeh, MD, Hadassah Medical Center, was one of two recipients of NANETS' 2010 Early Career Development grant for his research proposal, *The Role of Notch 1, 2 and 3 in Neuroendocrine Tumors,* which addresses the need for development of other forms of therapy for NET cancers by characterizing the roles of the Notch isoforms in regulating NE cancer cell growth and hormone secretion.

Dr. Mazeh had this to say about his research proposal:

"It has previously been shown that Notch 1 markedly suppresses NE tumor cell growth and hormone production. The aim of this study is to investigate the role of Notch 2 & 3 in regulating NE cancer proliferation and hormone secretion in vitro. Furthermore, the effects of Notch 2 & 3 activation on NE cancer progression and hormone production in vivo will be determined."

Dr. Mazeh has conducted numerous studies in the field of endocrine surgery (dealing with thyroid, parathyroid, adrenal, and neuroendocrine tumors), which have been published in prestigious scientific journals and highlighted at conferences in Israel and abroad. Having gained international recognition as an expert in the field, Dr. Mazeh is often cited by his colleagues. In 2017, he was named Director of General Surgery at Hadassah Hospital Mount Scopus.

In an effort to address current shortage of young scientists focused on the clinical investigation of neuroendocrine tumors, NANETS created the Early Career Development Grant to encourage physicians, at the end of their fellowship or beginning of their faculty appointment, to pursue clinical or translational research in this field. Dr. Mazeh's application demonstrated the capability of producing results that would make significant contributions to NET research and lead to a productive career in neuroendocrine tumors.

NANETS acknowledges Novartis Oncology for funding this one-year $50,000 grant. Their continued support and commitment to assist NANETS in fulfilling our mission has been critical to the success of the NANETS organization. This collaborative partnership and their assistance in funding research continues to make a positive impact in improving the lives of people with carcinoid/NET cancers.

Dr. Mazeh presented developments from his research project at the NANETS annual meeting in 2011.

"This study was a collaboration of several researchers all working at Professor Herbert Chen's lab. Numerous publications followed this grant. Although my current research involves microRNAs in thyroid cancer, the NANETS grant introduced me to the world and joy of basic science research and, without it, I could not have stayed for another year of research during my fellowship at Madison, Wisconsin. I do realize that without the NANETS grant I would not get to where I am now – Chief-of-Surgery and Chairman of the Israeli National Endocrine Surgery Society," said Dr. Mazeh.

Hans Kumar Ghayee, DO

YOUNG INVESTIGATOR (YI) AWARD | 2009

Hans Kumar Ghayee, DO, University of Florida College of Medicine and the Malcom Randall VA Medical Center, was one of the first recipients of the NANETS Young Investigator (YI) Award in 2009 for his research proposal, *mTOR Inhibitors Effect on Growth & Catecholalmine Synthesis of Human Pheochromocytoma Cells.* His study offered a distinctive concept of developing a new pheochromocytoma cell line and of testing new agents in that cell line, which had the potential of being highly relevant to the field.

As part of his 2009 research application, Dr. Ghayee summarized the scope of his project:

"Our group is interested in studying tumors called pheochromocytoma that arise from the adrenal medulla. These tumors secrete catecholamines, and affected patients may present with hypertension or palpitations and can have devastating complications resulting in cardiovascular collapse. We are interested in identifying compounds which might inhibit pheochromocytoma cell proliferation or catec-holamine production.

"One such candidate class of compounds are called mTOR inhibitors. We hope to further investigate whether hypersecretion of catecholamines would be controlled with mTOR inhibitors. A human pheochromocytoma cell line has been generated in our laboratory and affords us an opportunity to study the effects of mTOR inhibitors and other drugs on human pheochromocytoma cells which will give us an insight for future therapeutic targets."

In 2009, NANETS created the one-year $50,000 Young Investigator grant to address the shortage of young scientists focused on the clinical investigation of neuroendocrine tumors. The goal of the YI grant has been to encourage physicians, at the end of their fellowship or beginning of their faculty appointment, to pursue clinical research in this field.

The Carcinoid Cancer Foundation worked with NANETS to fund this grant in 2009. It is collaborative partnerships such as these that enable NANETS to fulfill its mission and make a positive impact in improving the lives of people with NET tumors and carcinoids.

Dr. Ghayee presented developments from this research project at the NANETS annual meeting in 2010. He continues to be an active member of NANETS today and was a presenter at the 2018 Annual NET Multidisciplinary Symposium in the Clinical Management category, with his topic, *"Uncommon NETs: A Poster Child for Cancer Metabolism."*

Diana Reidy-Lagunes, MD, MS

YOUNG INVESTIGATOR (YI) AWARD | 2009

Diane Reidy-Lagunes, MD, MS, Memorial Sloan Kettering Cancer Center, was the recipient of NANETS Young Investigator (YI) award. Her research proposal, entitled *A Novel Therapeutic Strategy to Identify the Pathways Driving Neuroendocrine Tumors & Improve Our Treatments: From Mouse Models to Human Patients,* described an innovative, collaborative strategy that brings together clinical and basic researchers to uncover and therapeutically target the pathways driving neuroendocrine tumor (NET) development.

Reviewers of the project described the merits of Dr. Reidy-Lagunes' study:

"The project will help address current knowledge gaps by integrating the analysis of human NET samples with appropriate mouse models of NET cancer. Of particular interest is Dr. Reidy-Lagunes' approach of testing specific, novel targeted therapies in the mouse model to speed their path to the clinic."

Dr. Reidy-Lagunes is a board-certified medical oncologist whose primary focus is treating patients with neuroendocrine, colorectal, pancreas, biliary, and other gastrointestinal cancers. She works closely with a team of surgeons, oncologists, and radiation therapists to provide the best treatment and care for each patient with NET disease.

Dr. Reidy-Lagunes outlined her goals for the project:

"We will move back and forth between human and animal studies, which will continuously cross-inform each other, with the ultimate goal of rapidly translating the knowledge we gain into a novel and effective treatments for this disease."

Her research initiatives include developing methods to integrate molecular-based therapies into the treatment of neuroendocrine tumors, as well as designing and conducting clinical trials to improve treatment strategies for patients with this uncommon cancer type. She received a Young Investigator Award from the American Society of Clinical Oncology (ASCO) in 2008, followed by the NANETS Young Investigator Award in 2009.

This $50,000 one-year award helped address the shortage of young scientists focused on the investigation of neuroendocrine tumors and is open to investigators at the end of their fellowship or beginning of their faculty appointment. The award was supported by The NET Alliance, a long-term commitment by Novartis Oncology, with the goal of improving patient outcomes in NETs. This collaborative partnership and the assistance of Novartis in funding research is a critical component of improving the lives of people with carcinoid/NET cancers.

Dr. Reidy-Lagunes presented developments from this research project at the NANETS annual meeting in 2010.

Publications

Hans Kumar Ghayee, DO
Young Investigator (YI) Award | 2009

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Diane Reidy-Lagunes, MD, MS
Young Investigator (YI) Award | 2009

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Haggi Mazeh, MD
Early Career Development Grant | 2010

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Tae-Hee Kim, PhD
Early Career Development Grant | 2011

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Karine Pozo, PhD, MSc
Early Career Development Grant | 2011

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Lauren Fishbein, MD, PhD

Early Career Development Grant | 2012

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Hala Elnakat Thomas, PhD

Young Investigator (YI) Award | 2013

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Katherine Van Loon, MD, MPH

NANETS Clinical Investigator Scholarship (NCIS) | 2013

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Jennifer Eads, MD

Young Investigator (YI) Award | 2014

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Arvind Dasari, MD

NANETS Clinical Investigator Scholarship (NCIS) | 2015

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Bryson Katona, MD, PhD

Young Investigator (YI) Award | 2015

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Christopher Heaphy, PhD

Basic/Translational Science Investigator (BTSI) Award | 2016

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Etay Ziv, MD, PhD

NANETS Clinical Investigator Scholarship (NCIS) | 2017

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Renata Jaskula-Sztul, PhD

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Irene Min, PhD

Young Investigator (YI) Award | 2018

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Julie Hallet, MD, MSc, FRCSC

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Sarbajit Mukherjee, MD, MS
NANETS Clinical Investigator Scholarship (NCIS) | 2019

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