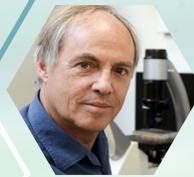


May 2023



Breakthrough Discovery,

Life-Changing Impact

The Neuroendocrine Tumor Research Foundation's (NETRF) mission is to

drive transformational
discoveries
 in the study of
 neuroendocrine
 tumors.

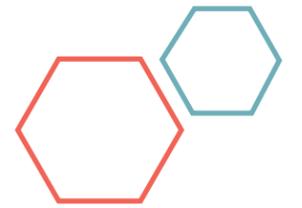
As the largest private global funder of NET research, NETRF is leading the fight to bring life-changing treatments to patients.

- We **invest boldly** in the most promising scientific projects worldwide.
- We **fund the most brilliant NET scientists** who bring their original thinking and determined spirit to their work.
- We **offer hope to patients** and families.
- NETRF is **shaping the future** of neuroendocrine cancer care to save lives.

If not NETRF, who?

We know neuroendocrine tumors behave differently from other cancers. But we do not know why. **More often than not, NETRF is the only funding source available for scientists working to understand this complicated and uncommon cancer.** Through 2020, NETRF funded two and a half times more NET investigators than the National Institutes of Health (NIH). **If not for NETRF funding, these investigators would likely pursue other areas of cancer research.**

NETRF's impact on the field of NET research has been profound. Thanks to NETRF-funded discoveries and the efforts of the NET medical community, the therapeutic landscape of NET management looks entirely different now than it did in 2005, when NETRF began. **Such advances are not random. They are the fruit of many years of NETRF-funded research.**



The Multiplier Effect

NETRF is an
incubator
 of novel ideas.

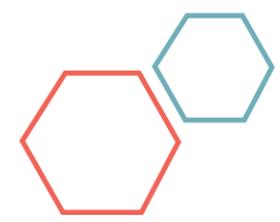
Through the generosity of the NETRF community, our ability to invest in landmark research has totaled more than **\$36 million across four continents.** **NETRF's investments have a multiplier effect on the NET research landscape to unlock NET mysteries and propel the development of new treatments.**

NETRF seeks out NET research with the greatest potential for transformational discoveries. We fund the most innovative scientific projects across the globe, stimulating new areas of neuroendocrine research. Papers published by our grantees and their presentations at prestigious scientific meetings influence other scientists' research, thus multiplying NETRF's impact on the field. Breakthroughs in cancer treatment do not happen overnight, so every project adds to our collective knowledge of NETs and takes us closer to a cure.

NETRF's Board of Scientific Advisors (BOSA), composed of some of the world's most accomplished NET researchers and clinicians, ensures that NETRF strategically invests in the most promising science. NETRF is proud to nurture this NET scientific community which in turn energizes and educates the next generation of NET scientists. Rising stars and renowned leaders alike bring their energy and determination to advance our quest for better treatments and ultimately a cure.

The Multiplier Effect





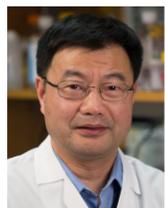
Together, we have made first-of-its-kind discoveries in the NET research landscape:

• **On the forefront of immunotherapy:**

When CAR T therapy was approved for blood cancer, NETRF recruited the pioneer in that research to study whether it could be effective for neuroendocrine cancer. We have funded a team at the University of Pennsylvania to advance the study of CAR T cell therapy for NETs, which is headed for a clinical trial as early as next year. Thanks to multiple



Carl June, MD



Xianxin Hua, MD, PhD



David Metz, MD

NETRF grants since 2014, this team has moved this technology from bench to bedside. As CAR T-cell therapy has done for those living with blood cancer, NETRF hopes it will be a revolutionary step forward in treatment.

• **Breakthrough discoveries in tumor biology:**



Ramesh Shivdasani, MD, PhD

NETRF funding has unlocked some of the biggest mysteries of NETs, including what causes some tumors to recur and metastasize, while other tumors remain less aggressive. Led by Ramesh Shivdasani, MD, PhD, with the Dana-Farber Cancer Institute, Harvard Medical School, the investigators identified molecular substances called biomarkers that may help predict the recurrence of non-functional pancreatic neuroendocrine tumors (pNETs). **The finding moves us closer to identifying patients with a high risk for metastasis at diagnosis and initial treatment, personalizing follow-up and treatment.**

• **Improving personalized medicine:**



Rodney Hicks, MD

PRRT, Peptide Receptor Radionuclide Therapy, is an effective treatment for many but not all patients with NETs. NETRF has funded research around the world to study new nuclear particles and combination therapies to improve the effectiveness of PRRT for more patients. NETRF awarded Rodney Hicks, MD, of the University of Melbourne with a 2018 Accelerator Award to test whether tumor cells can be “prepped” to be more receptive to PRRT, using medications such as a PARP inhibitor. **This work has led to a landmark clinical trial in Australia that could help guide the future of NET treatments.**

• **Landmark findings in tumor genetics:**



Nickolas Papadopoulos, PhD

NETRF funded the first large-scale genome sequencing study of pancreatic neuroendocrine tumors, which discovered mutations in two genes (DAXX and ATRX) not previously associated with cancer. The landmark paper by Nickolas Papadopoulos, PhD, of Johns Hopkins University School of Medicine was published in the preeminent journal Science in 2011 and has since had a tremendous influence on NET research and beyond. This remarkable finding has led to more research funded by NETRF to better understand the function and behavior of *DAXX* and *ATRX* genes in neuroendocrine tumors. **The long-term objective of this exciting line of inquiry is to develop new therapeutic approaches based on a better understanding of DAXX and ATRX alterations in pancreatic neuroendocrine tumors.**

• **Unique incubator for NET cell lines:**



Hans Clevers, MD, PhD

Because of the difficulty in growing NET tumor models in the laboratory, researchers do not have enough cell models to perform their experiments. **With more models, research can move faster.** NETRF has invested in multiple solutions to solve this critical problem. NETRF funded the creation of the first NET organoids, three-dimensional “mini-organs,” by Dr. Hans Clevers, recipient of an Accelerator Award in 2017. Dr. Clevers and his team developed intestinal, lung, and pancreatic NET organoid models, now shared around the world. **Their accomplishment represents a significant scientific milestone, as the team identified a biomolecule that may be capable of promoting or slowing the growth of NET cells and could reveal new promising targets for future therapies.**



“Receiving NETRF funding was a career changer for me. I was able to transition from a staff scientist position to faculty at the University of Iowa and pursue NET research. Now, I am focused on ... developing experimental preclinical models of small bowel NETs. Since we started, we have used spheroids to screen a collection of 175 drugs and have identified 21 potential anti-cancer drugs for further study.”

- Po Hien Ear, PhD

Supporting Patients and Families: Credible & Compassionate Patient Education

Inspired by the bravery of all those affected by NETs, we are dedicated to saving and improving lives, today and every day into the future. An estimated 175,000 people are living with NETs in the United States alone, and 12,000 are newly diagnosed each year. Yet, because NETs are often misdiagnosed, more than half of patients are diagnosed when their cancer has already spread.

With better tools to monitor tumors and more treatment options, those facing a NET diagnosis have more choices to consider. But patients and their families can only make informed decisions if they understand their disease and can advocate for themselves. **That's why NETRF'S patient education activities are vital.**

NETRF is committed to producing the most current, credible, and compassionate educational programs, in collaboration with NET experts and patient advocates around the world.

- NETRF's tremendously successful **Neuroendocrine Cancer Guide for Patients and Families**, funded by a generous donor, has been updated and shared freely with thousands of NET patients worldwide.
- In 2019, NETRF launched a first-of-its-kind **NETWise** podcast dedicated to NET education and patient stories, to help guide patients and their families through their NET journey. Topics include understanding a NET diagnosis and optimal treatment strategies, symptom management, survivorship, and navigating the range of mental, physical, and financial stressors that can all be part of the neuroendocrine cancer journey.
- NETRF proudly hosts patient education conferences throughout the United States and online, including our annual **Know Your NETS** virtual patient education forum.
- NETRF nurtures meaningful connections by linking patients and their caregivers with NET specialists and support groups.



"Neither my mom nor I had ever heard of NETs, and your website was one of the places that gave us exactly what we needed to navigate her diagnosis. I am so immensely grateful to have found NETRF. NETRF's support and tremendous resources have inspired me to raise funds within my community to help NETRF and other patients like my mom."

- Shane Peters with his mom, Ilka



This impactful work is made possible through the generosity of our community— grateful patients and their caregivers—who join us in our mission.

Through our patient education programs, **we support each person** to live their fullest life.

Impact



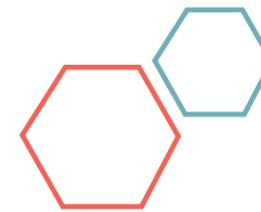
NETWise podcast: 25 episodes downloaded more than 45,000 times across 93 countries. 10,000 unique monthly listeners.



7,200 free Neuroendocrine Cancer Guide for Patient & Families distributed since 2020, reaching 36 countries.



Know Your NETs virtual conferences from 2020-2022 viewed more than 36,000 times.



Our Imperative

Our tenacity is embedded in our DNA. In 2005, NETRF was founded as the Caring for Carcinoid Foundation by a patient, Nancy Lindholm, who was diagnosed at age 29. Nancy was determined to learn all that she could about her diagnosis, even though little was known about NETs at that time. Nancy keenly understood the leadership role she could play in kickstarting research for these rare neuroendocrine cancers. We remain true to the mission that Nancy and the founding Board established. In 2015, Caring for Carcinoid changed its name to the Neuroendocrine Tumor Research Foundation (NETRF) to reaffirm the mission of funding research to understand NETs, improve treatments, and find cures.

We are proud of our growth and progress. But we still have much more to accomplish. There is still much we don't understand about neuroendocrine cancers and diagnoses are increasing. NET research is underfunded, so **NETRF must step up and close the gap.**

We will not stop until we find a cure.

Our NETRF-funded investigators are stars, with the experience, innovation, and drive to improve treatments for NETs and discover a cure. With NETRF support, they have been steadily building momentum.

Now, with your partnership, our multiplier effect can have an even greater impact.

Together, we can
unlock game-changing

breakthroughs



"NETRF has in me a fundraising partner for life. I will work tirelessly to raise money to combat this insidious disease that stole from me the greatest love of my life, Sheryl. We must work together to find better treatments and a cure so no one else will have to suffer. Even with a diagnosis, people can live long, healthy, and fulfilled lives."

- Jim Jungsten

Your Impact

When you support NETRF, you ensure the world's most promising NET research will continue. Your partnership will help push the boundaries of our science, fostering the innovation we have begun and activating new pathways in the discovery of a cure.

The philanthropic investments of generous partners like you play a greater role than ever before in our ability to make breakthrough discoveries. Your support is vital to help us save and improve the lives of more people—today and in the future.

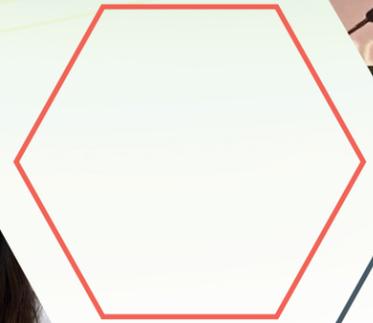
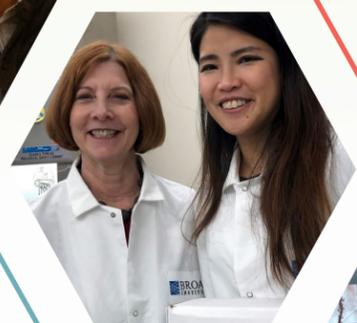
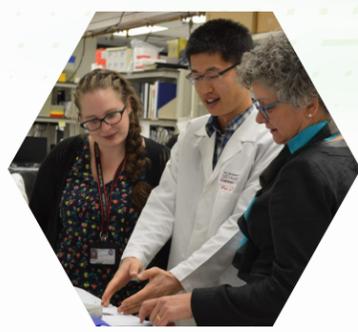
There are a number of ways you can help to transform NET research and care:

- **The NETRF Fund:** The NETRF Fund provides the opportunity to make an exponential impact by uniting the gifts of many individuals to provide resources where they are most needed, including cutting-edge NET research and patient education. Your generous support provides hope to patients and families battling NETs and ensures that we can continue our life-changing work.
- **Pilot Award:** Through the generosity of our partners, these one-year awards provide vital seed funding for investigators to launch their proof-of-concept research to help them secure larger grants from funders such as the NIH. This seed funding is critical to kickstart novel approaches to research and help rising stars stay in the field.
- **Mentored Award:** These two-year awards are designed to encourage early career investigators to pursue neuroendocrine tumor research and make a commitment to the field. They are vital to recruiting and retaining talented scientists, energizing the next generation of NET research leaders.
- **Investigator Award:** These are two-year grants, equivalent to an NIH R21 grant. They are high-risk high-reward studies that may lead to a breakthrough and result in novel techniques, agents, methodologies, models, or applications that will transform future research.
- **The Accelerator Award:** The Accelerator Award is our largest grant and is often multi-disciplinary or multi-institutional. It is a four-year award that allows highly-skilled investigators to pursue a larger scope of research in an area that shows high potential. They can be considered equivalent to an NIH RO1 grant.
- **Patient Education Sponsorship:** NETRF's patient education resources and conferences provide credible information to patients and families for their own NET journeys. Thanks to the support of donors like you, NETRF continues to expand our library of resources, ensuring that our patient community - in the United States and worldwide - has access to timely and culturally appropriate information to make the most informed decisions for their health.

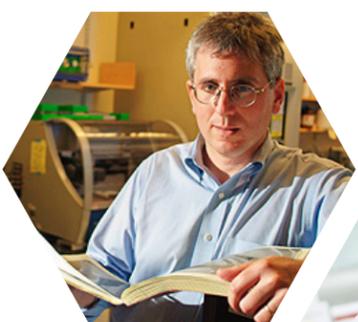
Your Opportunity to Make a Difference

We are grateful to generous friends like you who help us to open new doors to NET discoveries. We cannot achieve breakthroughs without your support. We invite you to join us by considering a philanthropic partnership with NETRF. Through your investment, together we can act boldly and pursue the high-reward discoveries that will lead to a cure.

To explore making an investment in the future of NETs care, please contact Susan Harrington, Chief Development Officer, at 617.465.1069 or at susan.harrington@netrf.org. To make your gift now, please visit netrf.org/give-now.



Thank you!



"I come from a family of doers. When I was diagnosed, we started a non-profit to raise money for NET research. We chose to support NETRF because they are funding research that otherwise won't happen, and we don't want to miss an opportunity to find life-changing treatments for people living with NETs."

- Brittany Holzhauer (center) NET patient and co-founder of the CureNET Project



netrf.org/give-now

