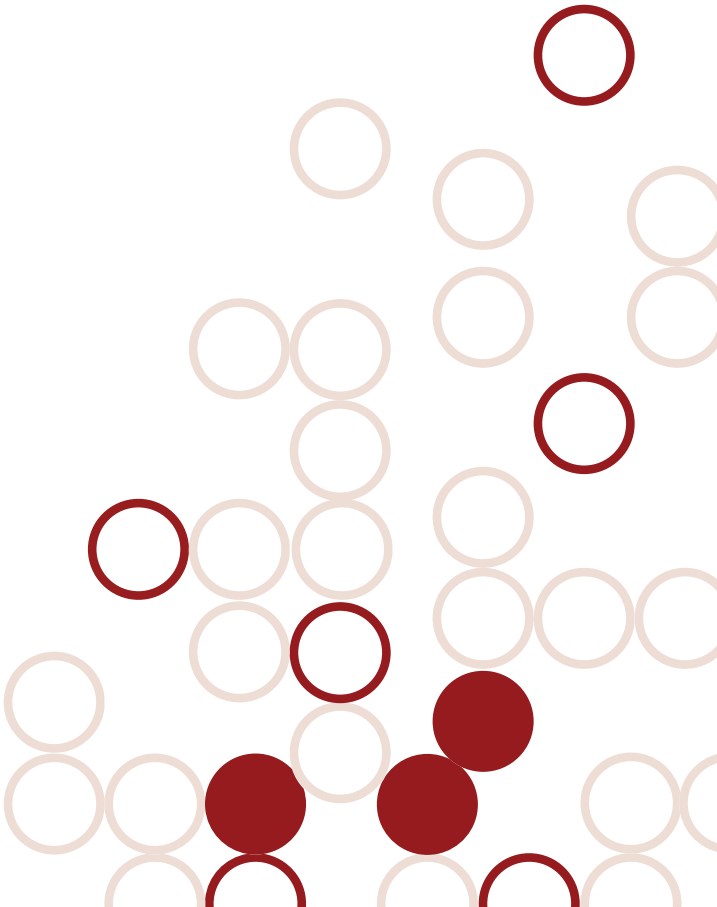
CRI Cancer Research Institute™

2026 CRI

IGNITE Award



Uniting for a World Immune to Cancer

About IGNITE

The Cancer Research Institute (CRI) IGNITE Program (Inspiring Growth and Nurturing Independence Through Excellence) is a bold new initiative designed to close a critical funding gap for early-career scientists in cancer immunology and immunotherapy.

The IGNITE Award provides up to five years of catalytic support, including two years of mentored postdoctoral funding, followed by three years of independent faculty support, paired with a formal co-investment from host institutions. This dual commitment maximizes the likelihood of long-term success for scientists embarking on independent research careers.

It was modeled on the National Institutes of Health's K99 career development grant and designed specifically to support early-career immunotherapy researchers whose federal funding has been cut or delayed.

A centerpiece of this year's grant cycle, eight grants totaling $2.4 million were awarded to early-career researchers to navigate the transition from mentored postdoctoral research to independent faculty leadership.

Early-career scientists are facing unprecedented headwinds — fewer jobs, tighter institutional budgets, and shrinking federal support. "If we don't protect this next generation of researchers, we risk losing the very people who will drive the discoveries of tomorrow," said E. John Wherry, PhD, an associate director of CRI's Scientific Advisory Council and co-chair of the IGNITE Award selection committee. "IGNITE fills this gap and ensures that the best and brightest can thrive."

The IGNITE Award is more than just CRI's newest granting mechanism; it's a continued commitment to investing in the people driving scientific progress.

Letter from the CEO

Early-career scientists are facing a pivotal moment. Shrinking funding and rising attrition are forcing many to reconsider their careers — and the U.S. risks losing a generation of talent.

That's why we launched IGNITE — Inspiring Growth and Nurturing Independence Through Excellence — to provide stable funding, mentoring, and institutional backing when the risk of losing talented minds is highest. CRI has always invested in people whose discoveries redefine what is possible in cancer treatment.

It is my pleasure to introduce the inaugural class of CRI IGNITE Fellows – nine talented early-career scientists who are looking to launch their independent research careers. Their research spans some of the most exciting topics in immunotherapy today, including enhancing T cell function and targeting hard-to-treat tumors. Together, this class represents the future of cancer immunotherapy research.

As you learn about this talented group of young scientists, I hope you share my excitement for this new initiative. Through IGNITE, we're betting on the next generation of leaders in cancer immunotherapy, giving them the runway to turn bold ideas into breakthroughs that will change how we treat, and ultimately defeat, cancer.



With admiration,



Alicia Zhou, PhD
Chief Executive Officer
Cancer Research Institute



Amin Aalipour, MD, PhD

IGNITE Fellow | Dana-Farber Cancer Institute

Mentor (s): Michael Birnbaum, PhD

Project Title:

A modular platform for reprogramming cytokine signaling in cellular immunotherapies

Relevance:

Blood Cancers, Ovarian Cancer

Project Summary:

Chimeric antigen receptor T-cell (CAR-T) therapy is a type of immunotherapy that reprograms a patient's own immune cells to find and eliminate cancer. While it has transformed the outlook for some blood cancers, many patients eventually relapse, and the therapy has struggled to work effectively for solid tumors. A major hurdle is that these engineered cells often lose their effectiveness or die off before a cancer is fully eliminated. Signaling molecules called cytokines can boost CAR-T activity and maintain their function for longer stretches, but current methods of providing this boost have been limited by high toxicity and l ow precision.

Dr. Aalipour proposes a previously unexplored strategy to further engineer CAR-T cells with cytokine boosting proteins that are both more powerful and precise. Dr. Aalipour will test several dozen designs to identify the most promising candidates that can then be tested in clinical trials. His initial efforts will be in lymphoma and ovarian cancer, and his goal is to fully realize the curative potential of CAR-T therapies for patients with hard-to-treat cancers.

Dr. Aalipour is an oncologist who specializes in treating lymphoma patients. It is through his firsthand experience administering CAR-T therapies that has motivated him to improve this therapeutic strategy for his patients. Dr. Aalipour earned his Bachelors, Masters, PhD and MD degrees from Stanford University. In 2022, he was named to the Forbes Science 30 Under 30 list. He is currently an Oncology Clinical Fellow at Dana-Farber Cancer Institute, pursuing his postdoctoral work at MIT.



Adam Blaisdell, MD, PhD

IGNITE Fellow | University of California, San Francisco

Mentor(s): Averil Ma, MD

Project Title:

Enhancing perforin-dependent anti-tumor immunity by exhausted CD8 T cells

Research focus:

Broad cancer relevance

Project Summary:

Dr. Blaisdell is studying how to restore the tumor-killing capacity of exhausted CD8 T cells, a major barrier to successful cancer immunotherapy. His work focuses on perforin, a protein that immune cells use to punch holes in cancer cells and trigger their destruction. In many tumors, chronic stimulation causes T cells to lose this cytotoxic (killing) function. Dr. Blaisdell aims to identify the pathways that suppress perforin release and develop strategies to preserve or restore killing activity, potentially improving immunotherapy efficacy.

Dr. Blaisdell is a physician-scientist whose clinical practice focuses on caring for patients experiencing immune-related side effects from cancer immunotherapies. This gives him a unique perspective on how to improve both treatment effectiveness and safety. He completed his MD/PhD training at New York University and is now a postdoctoral fellow at UCSF, with funding from a CRI Irvington Postdoctoral Fellowship.

Projects and Grants

A20 in cancer immunity and regulation of CD8 T cell function and fate

University of California, San Francisco | Fellowship | All Cancers | 2023 | Mentor: Averil Ma, MD



Chin San Loo, PhD

IGNITE Fellow | Harvard Medical School

Mentor (s): Jun Huh, PhD

Project Title:

Reprogrammed T cells for sensing GPCR-ligand engagement and enhancing anti-tumor immunity

Relevance:

Broad cancer relevance

Project Summary:

Dr. Loo is engineering T cells that can sense chemical signals in the tumor microenvironment through G-protein coupled receptors (GPCRs), one of the body's most important signaling systems. Tumors often use these signals to suppress immune responses or prevent T cells from entering the tumor. His approach is to redesign therapeutic T cells so these same signals instead trigger activation, trafficking, and tumor killing. This could create smarter cell therapies that use the tumor's own biology against itself.

Dr. Loo has built a career at the intersection of molecular biology and immunology, with training in both Asia (National Taiwan University) and the United States (Salk Institute). He now works at Harvard Medical School in the lab of Dr. Jun Huh.



Luiz Henrique Medeiros Geraldo, MD, PhD

IGNITE Fellow | NYU Grossman School of Medicine

Mentor(s): Amanda Lund, PhD,
Eva Hernado-Monge, PhD, Alexandra Miller, PhD

Project Title:

Targeting immune niches and meningeal lymphatics to unleash CNS anti-tumor immunity

Research focus:
CNS Tumors

Project Summary:

Dr. Geraldo is focused on one of the greatest unmet needs in oncology: making immunotherapy work for brain tumors. His project studies how immune cells access and function within the central nervous system, particularly through meningeal lymphatic vessels that help drain fluid and coordinate immune surveillance around the brain. By improving immune trafficking and activation in these specialized compartments, he aims to develop new strategies for glioblastoma and other cancers involving the brain.

Dr. Geraldo is a physician-scientist currently completing neurology residency while pursuing a research career in neuro-oncology. He has authored 35 publications, is an inventor on three patents, and has trained internationally across Brazil (Federal University of Rio de Janeiro, MD/PhD), France (Paris Cardiovascular Research Center), Yale. He is completing his postdoctoral fellowship at NYU.



Simone Park, PhD

IGNITE Fellow | University of Pennsylvania

Mentor (s): E. John Wherry, PhD, Junwei Shi, PhD, Ben Stanger, MD, PhD

Project Title:

Defining and exploiting regulators of functional tissue-resident CD8+ T cell fate to enhance anti-tumor immunity

Relevance:

pancreatic cancer, solid tumors

Project Summary:

Dr. Park studies tissue-resident memory T cells (TRM), a specialized population of immune cells that remain embedded in tissues and may provide long-term local surveillance against cancer recurrence. She aims to define the molecular programs that control whether these cells become potent anti-tumor defenders or dysfunctional exhausted cells. Her work could help create therapies that generate durable immune protection directly within tumors.

Dr. Park is already internationally recognized as a rising star in immunology. She has published first-author papers in Nature, Science, and Nature Immunology, received more than 45 awards, and secured substantial competitive funding early in her career, including being on the 2022 Forbes 30 Under 30 Science list. Originally from Australia, she was recruited to the University of Pennsylvania to train in the laboratory of E. John Wherry.



James Swann, BVetMed, PhD

IGNITE Fellow | Columbia University

Mentor(s): Emmanuelle Passegué, PhD, Raul Rabadan, PhD

Project Title:

Role of YBX1 in myeloid-derived suppressor cell emergence and function

Research focus:

Breast Cancer, Lung Cancer, Solid Tumors

Project Summary:

Many cancers, including breast cancer, cause blood stem cells in the bone marrow to change their activity, leading to the formation of abnormal myeloid-derived suppressor cells (MDSCs). These MDSCs return to the tumor, where they prevent the body's immune system from targeting cancer cells and also interfere with anti-cancer treatments. MDCCs are found in many tumor types, and higher numbers are associated with worse survival for cancer patients.

In this proposal, Dr. Swann will investigate the signals and cellular mechanisms that cause blood stem cells to make MDSCs, to prevent MDSC formation and improve the effectiveness of anti-cancer immune therapies for tumor types such as breast and other solid tumors.

Dr. Swann originally trained as a veterinarian at the University of Cambridge before shifting towards immunology research in his PhD at Oxford. Through his PhD and postdoctoral fellowship work, he has contributed deeply to the fundamental understanding of hematology and hematopoietic stem cells. He is currently pursuing his postdoctoral work at Columbia University.



Shayna Thomas-Jardin, PhD

IGNITE Fellow | UT Southwestern Medical Center

Mentor(s): Kathryn O'Donnell, PhD

Project Title:

The regulation and function of uORFs during integrated stress response activation in cancer

Research focus:

Lung, Breast, and Prostate Cancer

Project Summary:

Dr. Thomas-Jardin studies how stressed cancer cells selectively produce proteins that help them survive and evade immune attack. Her focus is on upstream open reading frames (uORFs), small regulatory elements in RNA that control whether certain proteins are translated during cellular stress. She has already shown that this pathway can increase immune checkpoint proteins such as PD-L1 and CD155, allowing tumors to suppress immune cells. Her project aims to block this mechanism to improve immunotherapy responses, which may yield new therapeutic targets for the treatment of lung, breast, and prostate cancers.

Dr. Thomas-Jardin has built her career around understanding how inflammation and stress signaling drive cancer progression. She trained at the University of Texas at Dallas, and is currently pursuing her postdoctoral fellowship at the University of Texas Southwestern Medical Center.



Yahui Wang, PhD

IGNITE Fellow | Johns Hopkins University

Mentor (s): Chi Dang, MD, PhD,
Drew Pardoll, MD, PhD

Project Title:

Fasting–refeeding cycles enhance anti-tumor immunity

Relevance:

Broad cancer relevance

Project Summary:

Dr. Wang is investigating how cycles of fasting and refeeding reshape metabolism in ways that strengthen the immune system's ability to fight cancer. Alternate day fasting (ADF), a practiced regimen known to improve human metabolic health, exhibits anti-tumor activity in preclinical studies. She has identified naturally occurring metabolites such as beta-hydroxybutyrate and succinate that may improve immune cell function or reprogram the tumor microenvironment.

She aims to better understand the molecular mechanisms that make ADF an effective dietary regimen. In doing so, she hopes to translate these findings into safe metabolic therapies that enhance cancer treatment without the toxicity often associated with drugs.

Dr. Wang's scientific background spans nutrition, metabolism, and immunology. Earlier in his career, she helped answer a longstanding question in cancer biology related to the Warburg effect, work that was highlighted by Science and MIT Technology Review. She is currently completing her training at John Hopkins under leaders in cancer metabolism and immunotherapy.

About CRI

The Cancer Research Institute (CRI) is a nonprofit organization dedicated to advancing the field of cancer immunotherapy through rigorous scientific research and global collaboration. Since 1953, CRI has been instrumental in uncovering the fundamental biology of the immune system and its application to cancer treatment, laying the groundwork for breakthroughs such as checkpoint blockade, cancer vaccines, and engineered cell therapies.

CRI's mission is to create a world immune to cancer by driving scientific discovery, accelerating collaboration, and turning breakthroughs into life-saving treatments. Our work bridges the gap between discovery and patient impact, ensuring that scientific innovation translates into real-world treatments.

To date, CRI has committed over $600 million to research impacting more than 30 cancer types. Our funding strategy is built on the framework of People × Biology × Data: supporting world-class scientists, deepening understanding of tumor-immune system interactions, and harnessing data to guide discovery and translation. By uniting these elements, CRI catalyzes innovation through our global research ecosystem to drive the next generation of discoveries forward.

CRI Cancer Research Institute™

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