**2025 Cancer Research Horizons Fund**

The Cancer Research, Training, and Education Coordination (CRTEC), in partnership with Research Administration at Karmanos Cancer Institute, is soliciting applications for the **Cancer Research Horizons Fund,** a seed grant program designed to support pilot projects in cancer research conducted by early career faculty. The funding awards pilot‐project grants to early‐career investigators who currently lack national, peer-reviewed research support, enabling them to generate the preliminary data needed to compete successfully for larger, national cancer‐research awards.

**Eligibility**

* Applicants must be investigators at Wayne State University and hold the academic rank of Assistant Professor.
* Must be eligible to apply for independent national competitive research grants and not currently hold an NIH R01-equivalent grant.
* Applicants must be within six years of their first independent faculty appointment.
* Applicants new to cancer research and employing technology relevant to the field are strongly encouraged to apply.
* Must identify a senior cancer researcher to serve as a mentor, who will provide guidance and advice for this research project.
* Applicants from disciplines outside of oncology are required to have dual mentorship, with at least one mentor being a senior cancer researcher.
* Applicants must have a commitment from their department for salary, space, and appropriate research resources.
* If not a United States citizen, noncitizen national, or permanent resident, applicants must hold a visa allowing continuous stay in the U.S. throughout the grant period and fulfill all award obligations.
* Must be a member of Karmanos Cancer Institute. For non-members: Contact Jayne Bissonette at bissonej@karmanos.org to request membership.

**Application Guidelines and Restrictions**

Investigators are limited to one application. The requested project budget must be in increments of $5,000, and the total budget request may not exceed $25,000. Below is a table listing allowable and unallowable expenditures, along with regulations:

**Expenditures Allowed:**

* Research supplies and animal maintenance.
* Technical assistance.
* Domestic travel when necessary to carry out the proposed research program.
* Publication costs, including reprints.
* Costs of computer time.
* Special fees (pathology, photography, etc.).
* Stipends for graduate students and postdoctoral assistants if their role is to promote and sustain the project presented by the early career faculty member.
* Equipment costing less than $2,000 (Special justification is necessary for items exceeding this amount.)
* Registration fees at scientific meetings.

**Expenditures Not Allowed:**

* Foreign travel (Special consideration given for attendance at scientific meetings held in Canada.)
* Secretarial/administrative salaries.
* Membership dues.
* Student tuition and fees.
* Books and periodicals.
* Office and laboratory furniture.
* Office equipment and supplies.
* Rental of office or laboratory space.
* Construction, renovation, or maintenance of buildings/laboratories.
* Recruiting and relocation expenses.
* Non-medical services to patients (Travel to a clinical site or patient incentives are allowable.)
* Salary of the principal investigator.
* Honoraria and travel expenses for visiting lecturers.
* Indirect costs.

**Area of Interest:** **Cancer Immunology & Immuno-oncology (Optional Focus)**

In alignment with Karmanos’ strategic research priorities and the NIH-funded **DIODE P20** initiative, the 2025 Cancer Research Horizons Fund invites - but does not require - applications that explore cancer immunology, immune response variation, and immunotherapy outcomes. Projects of interest may include:

* Genetic and epigenetic regulation of the tumor-immune microenvironment.
* Immune profiling across populations.
* Mechanistic studies of response or resistance to immunotherapy (e.g., monoclonal antibodies).
* Biomarker discovery related to immune function and treatment efficacy.
* Translational approaches to advance immune-based cancer care.

This area of interest reflects the institution's commitment to precision medicine and the development of immuno-oncology strategies. Investigators pursuing work in this area may be eligible for additional mentorship or proposal development support through the DIODE P20 infrastructure.

**All applications are welcome regardless of topic, and proposals in any area of cancer research will be given full consideration.**

**Regulatory Approvals**

For projects involving human subjects, vertebrate animals, and/or select agents research, it is not required to have prior Institutional Review Board (IRB), Institutional Animal Care and Use Committee (IACUC), and/or Institutional Biosafety Committee (IBC) approval at the time of application submission. However, applicants are expected to submit the appropriate protocols so that approval is imminent by the anticipated project start date. All necessary institutional approvals must be in place before award funds can be disbursed. IRB protocols must be submitted for review within 30 days of receiving the notice of award, and final IRB approval must be provided to the Cancer Center administration within 60 days of the notice of award. For projects involving cancer studies being conducted at the Karmanos Cancer Institute (KCI), the relevant protocols must be submitted to the IRB simultaneously.

**Submission Deadlines**

Full proposals are due **June 20, 2025**. The project start date is no earlier than September 1, 2025.

**Application Material**

**General formatting:** Minimum 0.5-inch margins and Arial 11-point font are required. (Smaller type size may be used for figures and legends.)

**Required documents:**

1. **Description of Research Proposed**: A maximum of three (3) single-spaced pages (including tables, figures, graphs). Use the following subheadings (in order):
* **Specific Aims**: Clearly state your central hypothesis and list your specific aims. The aims should be feasible within one year.
* **Background and Preliminary Studies**: Summarize relevant literature and preliminary data obtained by the applicant relevant to this proposal. Highlight how this proposal fills a gap or extends current knowledge.
* **Study Design and Methods**: Detail experimental design, methods, data analysis, and interpretation. Reference standard protocols; describe novel approaches fully.
* **Cancer Relevance**: Explain how your project advances understanding or treatment of cancer.
* **Literature Cited** (does not count toward the 3-page limit): List all references pertinent to the proposed research. Including full citations (authors, title, journal/book, volume, pages, year).
1. **Principal Investigator Biographical Information Form**
2. **Budget/Budget Justification**: Complete the Budget Template form. Detail the proposed budget and justifications for the project period. An additional page for budget justification may be included. Direct costs are capped at $25,000 for one year only. No indirect costs are permitted.
3. **Relevance to Catchment Area and Community Engagement (1/2 a page)**: Briefly describe how your project will meet the unique cancer needs of our catchment area. Additionally, outline any community engagement activities, if applicable. This section is a critical component of our grant application, demonstrating the way research at KCI directly addresses the cancer burden within our catchment area, while also fostering engagement with our communities. For additional information on specific cancer burdens that your work may impact, please contact Hayley Thompson, Ph.D. (hayley.thompson@wayne.edu), associate center director for Community Outreach and Engagement, or Brittany Dowe (doweb@karmanos.org), staff director of COE.
4. **Mentorship Plans and Letters of Support**: Applicants must submit a concise mentorship plan detailing meeting frequency, tasks, goals, and mentor responsibilities. It should outline mentorship structure, progress review, and feedback expectations, emphasizing mentor support for the applicant’s growth. Non-oncology applicants need dual mentorship, including one senior cancer researcher. A support letter from the mentor(s), highlighting their qualifications and mentorship commitment (e.g., meeting regularity, research guidance, project management advice, problem-solving assistance), is required. The letter should also describe how the mentorship will advance the applicant’s professional development and readiness for independent cancer research.

**Review Criteria and Scoring**

Applications will be evaluated by an ad hoc Grant Review Committee composed of faculty from Karmanos Cancer Institute and Wayne State University. Each proposal will receive two independent reviews (one KCI internal and one external). The reviewers will be selected based on their focus and expertise in cancer research, as well as the topics of the applications. The application’s “Relevance to Catchment Area and Community Engagement” will be evaluated by the associate center director for Community Outreach and Engagement (COE).

**Criterion Scores (1–9 scale)**
Reviewers will assign a score of **1 (exceptional) to 9 (poor)** for each of the five core criteria. For each criterion, they must also list key strengths and weaknesses.

* **Project Significance**
 – Scientific importance and potential impact on cancer research.
 – Relevance to KCI’s strategic goals and catchment-area needs.
* **Innovation**
 – Novelty and originality of concepts, approaches, or technologies.
 – Transformative potential for advancing cancer care or health.
* **Methodological Approach**
 – Rigor and appropriateness of experimental design, controls, and analysis.
 – Feasibility of proposed timeline and contingency plans.
* **Investigator Capabilities & Expertise**
 – Qualifications and track record of the PI and key personnel.
 – Quality of mentorship plan for early-career investigators.
* **Potential for Future Funding**
 – Likelihood that preliminary data and proposed outcomes will support larger, peer-reviewed awards.

**2. Catchment-Area & Community Engagement Score (0–2 scale)**
 The COE Associate Center Director will assign:

* **0** – No relevance to our 46-county catchment area.
* **1** – Some engagement or relevance.
* **2** – Significant, well-integrated plans for community outreach.

**3. Final Impact Score**
A single number that summarizes an application’s overall merit after both reviewers’ scores are averaged across the five core criteria and adjusted for catchment-area engagement. The score is then multiplied by 10, so **lower numbers indicate stronger proposals (10 = exceptional, 90 = poor)** and allow straightforward, NIH-style rank ordering for funding decisions.

**Funding and Reporting Requirements**

* Recipients must partner with their departmental grants administrator to oversee and manage award funds, which are expected to be fully expended within the one-year funding period.
* Awardees are required to submit written quarterly progress reports and to respond promptly to any additional update requests from the Karmanos Cancer Institute Research Administration and its collaborators.
* Awardees must notify KCI Research Administration of any publications or follow-on funding that result from their seed-grant award.
* All publications and presentations arising from the Cancer Research Horizons Fund must acknowledge support from Karmanos Cancer Institute.
* Funded investigators should be prepared to present their work to the scientific community and to potential donors upon request by KCI.

**If there are any questions, please contact Danny Inman at 313-578-4274 or** **gs3025@wayne.edu**