**The University of Tennessee Medical Center Cancer Institute**

**Cancer Research Endowment**

**Grant Application and Instructions**

**2024 - 2025**

**Grant Application Process**

Applications will be accepted after a Request for Grant Applications notification is distributed to faculty at the University of Tennessee Graduate School of Medicine (UTGSM) and UT Medical Center medical staff. Grant application instructions will designate the awards available, as well as the submission date deadline.

**Investigator Eligibility**

The main PI submitting the application must have a full-time, part-time, or volunteer faculty appointment with the UTGSM. Faculty from other Departments, Schools or Colleges in the University of Tennessee system or residents/fellows can serve as a Co-PI.

**Application Requirements**

The following requirements must be met by the application submission date:

1. The application must be complete, signed by the Principal Investigator (PI) and submitted in accordance with the policy and procedures established by the UTGSM and UTMC.
2. Requests ***must*** include a letter of support by the applicant’s UTGSM Department Chair, UTMC Center of Excellence (COE) Vice President or COE Medical Director.
3. If the project involves human subjects, the grant award will be contingent upon receipt of the IRB Approval Letter or an IRB Letter acknowledging that the project does not meet the definition of human research and is exempt from IRB approval.
4. If animal research is being performed, grant award will be contingent upon receipt of an IACUC Approval Letter.
5. Collaborative projects involving more than one school or college in the University of Tennessee system are strongly encouraged; however, it is recommended that the majority of the research be performed on the UTMC campus. If a collaborative project is submitted, letters of support from the non-UTGSM faculty engaged in the research are required.
6. Applicants must complete a NIH-style Biosketch (template included in application). Biosketches should be modeled from the NIH template but reduced to two pages if possible. Proposals will ***not*** be rejected if formatting or page length does not fully comply with NIH guidelines.

*\*\*If you have previously been funded through the Cancer Research Endowment, please read the following section carefully before you apply\*\**

If previously funded, you must meet *ALL* of the below criteria before submitting an application for another funding cycle.

1. The new Cancer Research Endowment grant application is unrelated to the originally funded project(s).
2. Work on a previously funded, and related, Cancer Research Endowment grant must be complete, and a final report submitted to the Oversight Committee prior to applying in another funding cycle.
3. Extramural funding, relating to the previously funded project by the Cancer Institute Research Endowment, has been obtained from a federal agency, state agency, or foundation, and/or, a publication, relating to the Cancer Institute Research Endowment previously funded project, has been accepted in a peer-reviewed journal with an impact factor of 5 or greater.

**Conditions of Award**

1. These grants are a one-time award and ***are not renewable***.
2. Awards will provide no more than 2 years of funding. Unspent funds will be returned to the Cancer Research Endowment.
3. No-cost extensions are NOT permitted. Unspent funds will be returned to the Cancer Research Endowment.
4. For all awards, an interim report will be required 6 months after the start date and an interim Annual Progress Report is required on the anniversary of the start date.
5. For all awards, a Final Report must be submitted to the Chair of the Cancer Research Endowment Oversight Committee, Dr. John Bell (jlbell@utmck.edu) and the Graduate School of Medicine Assistant Dean for Research, Dr. Jon Wall ( jwall@utmck.edu ) within 3 months of the date of the end of the funding period. This will include a Lay Summary for distribution to the Supporting Donors.
6. Salary support for Principal Investigator, Co-PI, and administrative personnel **will not** be considered. However, salary support for research technicians, residents/fellows, coordinators, etc. is permitted.
7. Projects may require purchase of materials not anticipated/itemized at the time of application submission; reimbursement for expenditures above $1000 and not detailed in the application will require submission, via email, of an updated budget to the Chair of the Cancer Research Endowment Oversight Committee, Dr. John Bell (jlbell@utmck.edu) and the Graduate School of Medicine Assistant Dean for Research, Dr. Jon Wall (jwall@utmck.edu).
8. Awards are to be used for research projects only.
9. Awards may not be used for travel expenses.
10. Awards may be used to cover publication expenses associated with research performed under the award.
11. No Facilities and Administrative (F&A) costs are permitted.
12. Upon receipt of the award there is an expectation that data generated in the study will:
	* Be presented at scientific meetings, and/or;
	* Submitted in manuscripts, and/or;
	* Used to support the submission of grants seeking extra-mural funding

**Anticipated Grant Award Types for 2024-2025 Grant Cycle**

* Up to two grants of $40,000 (total cost)
* Up to three grants of $20,000 (total cost)
* Up to three grants of $10,000 (total cost)

**Submission Deadline and Relevant Dates for 2024-2025 Grant Cycle**

* + **Grant Submission Deadline (Due date):** Friday February 16th, 2024 @ 5pm EST. No exceptions will be granted.
* **Award Decision Notification:** Friday May 31, 2024
* **Earliest Start Date:** June 1st, 2024 (or the date of IRB or IACUC application approval)
* Completed grant applications, in PDF format, should be submitted via email to the GSM Director of Research, Jennifer Ferris (JFerris@utmck.edu) and the GSM Grants Coordinator JoAnn VanSickle (jvansickle@utmck.edu). They will obtain University of Tennessee Health Science Center approval prior to forwarding applications to the GSM Assistant Dean for Research (Jon Wall, PhD) and the Cancer Research Endowment Oversight Committee Chair (John Bell, MD).
* Grant applications will be reviewed by the Cancer Institute Scientific Review Committee (CISRC), which will make recommendations for funding to the Cancer Research Endowment Oversight Committee. *If you have questions regarding the application process, please contact the GSM Director of Research, Jennifer Ferris (**jferris@utmck.edu**) or the GSM Assistant Dean for Research, Jon Wall, PhD (**jwall@utmck.edu**).*

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**GRANT APPLICATION**

Submit the completed application (PDF) via email to the GSM Director of Research (jferris@utmck.edu) and to the GSM Grants coordinator (jvansickle@utmck.edu).

Please read the Informational page prior to completing this application.

|  |
| --- |
| Project Title: Click or tap here to enter text. |
| Applicant Information[Last, First, Middle, Degree(s)] |
| Last: First: Degree:  |
| Institutional Title | Choose an item. |
| Telephone Number: |  |
| Email Address: |  |
| Department/Division:  | Choose an item. |
| Previous funding from the Cancer Institute Endowment Grant program |
| Have you, or a listed Co-I previously received funding from the Cancer Institute Endowment Grant program? YES [ ]  NO [ ]  |
| If you selected yes, please confirm the below information: |
|  | The new Cancer Research Endowment grant application is *unrelated* to originally funded project(s) that you or a Co-I have previously been awarded. YES [ ]  NO [ ]  |
|  | Work on a previously funded, and related, Cancer Research Endowment *grant is complete*, and a final report has been submitted to the Oversight Committee via emailed to jferris@utmck.edu YES [ ]  NO [ ]  |
|  | If you, or a Co-I, has had a related project funded through the CRE during another cycle, the following criteria must be met in order to apply. 1. Extramural funding, *relating to the previously funded project* by the Cancer Research Endowment, has been obtained from a federal, state, or foundation.

YES [ ]  NO [ ] [ ]  *Please provide a copy of the award letter with your application*1. A publication, relating to the Cancer Research Endowment previously funded project, has been accepted in a peer-reviewed journal with an impact factor of ≥ 5.

YES [ ]  NO [ ] [ ]  *Please provide the journals’ letter of acceptance and impact score details with your application.* |
| Administrative Assistant(If preferred as additional contact): |
| Name | Last: Click or tap here to enter text. First: Click or tap here to enter text. |
| Email Address |  |
| Research Support Staff Contact |
| Name: |  |
| Title/Position: |  |
| Telephone Number: |  |
| Email Address: |  |
| Department/Division |  |
| Total Grant Funds Requested: | **$** |

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**Project Description:** In this section, describe the project. The application should be organized with the following subheadings: **Abstract, Specific Aims, Research Plan, and References**.

In the Specific Aims and Research Plan sections, you should include a description of the relevance of the proposed research to the Cancer Institute and the Graduate School of Medicine and its strategic objectives. Please limit the application to 6 single spaced pages including tables, figures and graphs (excluding Abstract, Budget Justification, and References). Use a font no smaller than 11 point.

**Title of Project:**

**Abstract:** (Provide a layperson’s abstract of no more than 300 words.). Following the Abstract, provide a list of 5 Keywords that describe the field of cancer research and methods used in the application.

**Specific Aims:** (1-page limit). Provide a description of your specific aims. You may include graphs and tables, but they must fit within the 1-page limit.

**Research Plan:** (4.5-page limit). Provide a description of the research plan, including Introduction/Background, Innovation, and Methods that you will employ to accomplish the aims. Pay particular attention to the Significance/Impact of the study as well as the study design and statistical methods (if the project is a pilot study, please state that). You may include graphs and tables, but they must fit within the 4.5-page limit.

**References:** (No page limit)

**Follow-on studies and Future Extramural Funding: (**0.5-page limit). Provide a detailed description of anticipated follow-on studies. Describe how the data from the project may impact clinical care or may be used to obtain subsequent extramural funding. Be specific and as detailed as possible – this section will contribute significant weight to the overall impact score of the application.

**Budget Justification**: (No page limit)

**The University of Tennessee Medical Center Cancer Institute**

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**Grant category:** [ ]  $40,000 [ ]  $20,000 [ ]  $10,000

**Total Grant Requested:** $

**NOTE**: Equipment costs are limited to $7,500. If the PI is requesting equipment over $7,500, a formal letter of request stating the need for the equipment and how it will be used should be addressed to the committee and submitted as a one-page attachment to this application.

**Research Budget (add more lines as necessary):**

|  |
| --- |
| GSM INVESTIGATORS (Salary support is *not* allowed for investigators)  |
| First Name | Last Name | Project Role | Department | (For internal purpose only) |
| Effort % | Credit % |
| PI:  |  | Choose an item. | Choose an item. |  |  |
|  |  | Choose an item. | Choose an item. |  |  |
|  |  | Choose an item. | Choose an item. |  |  |
|  |  | Choose an item. | Choose an item. |  |  |
| NON-GSM INVESTIGATORS (Salary support is *not* allowed for investigators) |
| First Name | Last Name | Project Role | Institution Affiliation |
|  |  | Choose an item. | Choose an item. |
|  |  | Choose an item. | Choose an item. |
|  |  | Choose an item. | Choose an item. |
|  |  | Choose an item. | Choose an item. |
| Comments:  |

**Personnel:** (salary support for the PI/Co-PI are **NOT** allowed)

|  |
| --- |
| RESEARCH SUPPORT STAFF (Salary request for support staff *is allowed*)Total Salary requested should include salary + fringe benefits.  |
| First Name | Last Name | Project Role | Affiliation | Effort %(GSM only) | Salary\* Year 1 | Salary Year 2 | Total |
| Effort % |  |  |  |
|  |  | Choose an item. | Choose an item. |  |  |  |  |
|  |  | Choose an item. | Choose an item. |  |  |  |  |
|  |  | Choose an item. | Choose an item. |  |  |  |  |
| \*Please combine salary and fringe into one total for year 1 and 2, and detail salary and fringe specifics in the justification.  | **Total Salary** |  |

**MATERIALS AND SUPPLIES**

List the materials and other costs required for this project. Please include in the Budget Justification a rationale for each item listed. NOTE: ***Equipment costs are limited to $7,500.***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Category | Detailed description | Year 1 | Year 2 | Total Costs |
| Equipment |  |  |  |  |
|  |  |  |  |  |
| Materials and Supplies1 |  |  |  |  |
|  |  |  |  |  |
| Publication Costs |  |  |  |  |
| Clinical Costs2 |  |  |  |  |
| Patient Stipends  |  |  |  |  |
|  |  |  |  |  |
| Other Expenses |  |  |  |  |
|  |  |  |  |  |
| Grand Total Materials and Supplies  |  |  |  |

1 This includes items such as: consumables (plastic ware and glassware); laboratory tests and kits, reagents, etc.

2 This can include items such as: patient incentives; laboratory tests; clinical consumables; etc.

|  |  |  |  |
| --- | --- | --- | --- |
| **BUDGET SUMMARY** | **Year 1** | **Year 2** | **Total** |
| **Salary** |  |  |  |
| **Materials and Supplies** |  |  |  |
| **Grand Total** |  |  |  |

**BUDGET JUSTIFICATION**

**Salary Support:**

For any individual for which salary has been requested, provide a description of their role and how salary was calculated, including any fringe rate, effort, or hourly rate used.

**Materials and Supplies:**

Provide a brief justification for materials needed.

**Other Expenses:**

Provide a brief justification for any additional expenses.

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By the act of submitting an application for a grant, the applicant agrees: (1) he/she has read and understands the application instructions provided in this document; (2) all funds awarded as a result of this request will be expended for the purposes set forth in the application; (3) the information herein is true and complete to the best of his/her knowledge; (4) if discoveries or inventions are made in the course of work aided by a grant made as a result of this application which result in patentable or other intellectual property rights, the Applicant will conform to the applicable policies of The University of Tennessee Research Foundation and any applicable policies of University Health System.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Signature of Principal Investigator Date

**The University of Tennessee Medical Center Cancer Institute**

**Cancer Research Endowment**

**ASSURANCES FOR RESEARCH INVOLVING HUMAN SUBJECTS**

The grant applicant has the primary responsibility for protecting the rights and welfare of human subjects in all research activities supported by the Cancer Research Endowment (CRE) and of informing the CRE Oversight Committee of all relevant assurances. If an award is made as a result of this application, it is the responsibility of the grantee to inform the CRE committee within a reasonable time of any significant changes in the research protocol. By virtue of the approval and signature of the Chairman of the CRE Oversight Committee and/or the Institutional Review Board (IRB), the grantee is declaring that all applicable Federal, State and Local regulations will be followed during the tenure of any grant awarded as a result of the application. NO FUNDS WILL BE DISBURSED FOR ANY AWARD UNTIL THE CRE OVERSIGHT COMMITTEE HAS RECEIVED THESE MATERIALS.

**HUMAN SUBJECTS** [ ] **will** [ ]  **will not be used**

If human subjects are involved in the proposed studies, IRB review and approval **must be** completed **before** disbursement of funds. Please indicate IRB application status below.

1. The Research Project is exempt from IRB review by reasons(s) of:

[ ] WAS SUBMITTED ON [date]

Please attach confirmatory IRB letter of exemption

1. The Research Project has/will be submitted to the IRB and approval:

[ ] WILL BE SUBMITTED ON [date]

[ ] WAS SUBMITTED ON [date]

[ ] WAS APPROVED ON [date] Approval Number:

Include a copy of the IRB approval letter with application.

Comments pertaining to IRB Approval

|  |
| --- |
|  |

PI Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The University of Tennessee Medical Center Cancer Institute**

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**ASSURANCES FOR RESEARCH INVOLVING ANIMALS**

The grant applicant has the primary responsibility for protecting the rights and welfare of animals used in all research activities supported by the Cancer Research Endowment (CRE) and of informing the CRE Oversight Committee of all relevant assurances. If an award is made as a result of this application, it is the responsibility of the grantee to inform the CRE Oversight Committee within a reasonable time of any significant changes in the research protocol. By virtue of the approval and signature of the Chairman of the CRE Oversight Committee and/or the Chair of the Institutional Animal Care and Use Committee (IACUC), the grantee is declaring that all applicable Federal, State and Local regulations will be followed during the tenure of any grant awarded as a result of the application. NO FUNDS WILL BE DISBURSED FOR ANY AWARD UNTIL THE CRE OVERSIGHT COMMITTEE HAS RECEIVED THESE MATERIALS.

**ANIMALS** [ ] **will** [ ] **will not be used**

If animals are involved in the proposed studies, IACUC review and approval **must be** completed **before** disbursement of funds. If an IACUC application has already been submitted, will be submitted, or is already approved, please indicated below:

[ ] WILL BE SUBMITTED ON [date]

[ ] WAS SUBMITTED ON [date]

[ ] WAS APPROVED ON [date] Approval Number:

Include a copy of the IACUC approval letter with application.

Comments pertaining to IACUC Approval

|  |
| --- |
|  |

PI Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

BIOGRAPHICAL SKETCH

**DO NOT EXCEED TWO PAGES.**

NAME:

POSITION TITLE:

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

|  |  |  |  |
| --- | --- | --- | --- |
| INSTITUTION AND LOCATION | DEGREE(If applicable) | Completion DateMM/YYYY | FIELD OF STUDY |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**A. Personal Statement** (Describe your research and clinical research experience and suitability for performing the described research – 30 lines maximum)

**B. Positions, Scientific Appointments, and Honors**

**C. Contributions to Science**

**Instructions for Submission**

1. *Combine all components of the Application Package* ***into one PDF file*** *with the 2-page NIH-style Biosketch(es) for the PI and Key Personnel, and Letter(s) of Support from collaborators (if applicable).*
2. *Name the single PDF file as follows:*

*PILastName\_PIFirstName\_DeadlineMonthDeadlineYear*

*Example: Jones\_Tom\_Feb2024*

1. Send all completed applications via email to the UTGSM Director of Research (jferris@utmck.edu) and to the UTGSM Grants Coordinator, JoAnn VanSickle (jvansickle@utmck.edu). Research support staff will enter grants into Cayuse for UTHSC review and correspond with investigators for any additional information or requested updates to the application.
2. If there are co-investigators from other UT Schools or Colleges (e.g., at UTK or UT CVM), please advise them to route their respective proposal into the Cayuse systems five days before the deadline.

**APPLICATION REVIEW CRITERIA**

**Overall Impact**: Reviewers will provide an overall impact score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence in the field of cancer research, in consideration of the following review criteria and additional review criteria (as applicable for the project proposed).

**Scored Review Criteria: Impact Scoring System**

**Significance** (1 – 9) [1 = exceptional; 9 = poor]

Does the project address an important problem or a critical barrier to progress in the field of cancer research? Is the prior research that serves as the key support for the proposed project rigorous? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions for cancer?

**Innovation** (1 – 9) [1 = exceptional; 9 = poor]

Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to the field of cancer research? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

**Approach** (1 – 9) [1 = exceptional; 9 = poor]

Is the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Have the investigators included plans to address weaknesses in the rigor of prior research that serves as the key support for the proposed project? Have the investigators presented strategies to ensure a robust approach? Are potential problems and alternative strategies addressed? Have the investigators presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects?

**Follow-on plan** (1 – 9) [1 = exceptional; 9 = poor]

Do the applicants provide a detailed description of potential follow-on studies? How will the data and results from the study impact scientific knowledge, technical capability, and/or clinical practice related to the field of cancer. How will the results from the project be used to obtain subsequent extramural or additional funding?

**Protection of Human Subjects/Vertebrate animals** (unscored but considered during review)

For research that involves human subjects but does not involve one of the categories of research that are exempt under 45 CFR Part 46, the committee will evaluate the justification for involvement of human subjects and the proposed protections from research risk relating to their participation according to the following five review criteria: 1) risk to subjects, 2) adequacy of protection against risks, 3) potential benefits to the subjects and others, 4) importance of the knowledge to be gained, and 5) data and safety monitoring for clinical trials. This category will not be scored

**Overall Scoring Strategy**: The overall impact score for each application will be determined by calculating the mean score from all the impact scores and multiplying the average by 10; the overall impact score will be reported on the summary statement. Thus, the possible overall impact scores will range from 10 – 90 [10 = exceptional; 90 = poor].

**Data Analysis:** An overall research design and statistical rigor score will be provided for each grant during the review process. Although it will not be included in the final grant score it will be sent to the Oversight Committee with the final overall review scores.