



Request for Proposals: 2022 LCRF Research Grants on Oncogenic Drivers in Lung Cancer

1. Program Summary

Lung cancer is responsible for more deaths worldwide than any other cancer accounting for an estimated 130,180 deaths annually in the United States alone¹. The last 10-15 years have seen accelerated clinical trials and FDA approvals of targeted therapies for non-small cell lung carcinoma in part due to advances in molecular profiling of tumors. Many of these targeted therapies are directed against oncogenic drivers². To better understand oncogene-driven lung cancers, LCRF has launched a new funding mechanism to support research projects with a focus on characterizing, identifying, treating or overcoming/preventing resistance to therapies in tumors harboring alterations in oncogenic drivers in NSCLC cells, tissues, mouse models, or patients. Work supported through this mechanism will address important mechanistic questions and developmental therapeutics across the care continuum and have the potential to increase survivorship. In 2022, in partnership with leading patient advocacy organizations, this grant mechanism will focus on three specific oncogenes; EGFR, MET and KRAS. Please see below for specific topic areas of interest for each. Research should be designed with the intent of having a positive impact on those living with EGFR-, MET- or KRAS-driven lung cancer.

We encourage applications on a wide variety of topics related to EGFR, MET or KRAS-driven lung cancer, including, but not limited to the following:

- Biology and mechanisms of tumor progression
- Mechanisms of resistance to targeted therapies
- Novel treatment approaches, combinations, and new therapies
- Studies on the immune landscape, tumor microenvironment, and immunotherapies

Additional specific topics of interest related to the individual oncogenic drivers are listed below.

LCRF and EGFR Resisters Research Grant on EGFR- Driven Lung Cancer

This project is led and funded in partnership with the EGFR Resisters.

While this list is not exclusive, specific areas of interest include:

- Methods for optimizing first-line EGFR TKI therapy
- Novel combination treatment approaches
- Identification of biomarkers to predict either sensitivity to specific therapies and/or timing of relapse on therapy
- Effective treatment strategies for brain metastases and leptomeningeal disease

LCRF and MET Crusaders Research Grant on MET- Driven Lung Cancer

This project is led and funded in partnership with the MET Crusaders.

While not exclusive, specific areas of interest include work on new therapies for MET-dependent lung cancers such as:

- Next-generation drugs or agents with novel mechanisms of action
- Agents that improve the safety profile of existing therapies

LCRF and KRAS Kickers Research Grant on KRAS-Driven Lung Cancer

This project is led and funded in partnership with the KRAS Kickers.

While not exclusive, specific areas of interest include:

- Evaluation of new therapeutic regimens (i.e. ADCs, targeted therapies, nanoparticles)
- Translational studies that may lead to clinical trials
- Assessment and impact of therapies on patients

2. Eligibility Criteria

Investigators must be affiliated with a non-profit academic or research institution and must be post-doctoral researchers, clinical fellows, or investigators at any level of research experience.

Applicants from US-based and international institutions are eligible to apply and may hold any residency/citizenship status. Applicants may only apply for one LCRF grant per grant cycle. Applicants are prohibited from applying if they have received funding from the LCRF within the last 4 years. Ineligible investigators with these or other special circumstances may request review by contacting the LCRF grants office (see Inquiries section below) before submitting an application.

3. Budget Requirements

The maximum award amount is \$150,000 for a period of two years (disbursed at \$75,000 per year). Additional budget requirements and considerations include the following:

- Funding from this award may not be used to support institutional indirect / facilities and administrative costs.
- The LCRF grant must be the primary source of support for the project. Additional secondary funding (e.g. for core services support) is permitted.
- There is no limit on the amount of salary support that may be requested. However, appropriate justification for all budget items is required. Any salary requests in excess of 20% of the total budget must be explicitly justified.
- Any equipment costs must be limited and directly applicable to the research project (i.e. large, general equipment costs are not permitted).
- Direct patient care costs reimbursable by other sources may not be included.
- Travel and publication costs are permitted.

4. Data Sharing and Open Access Policy

LCRF is committed to promoting open science by helping to increase access to investigators' findings and improving collaboration and data sharing among the lung cancer research community. Accordingly, it is a condition of LCRF funding that all peer-reviewed articles supported in whole or in part by LCRF funds must be made available in the PubMed Central online archive no later than twelve months after publication. In addition, LCRF grantees must indicate explicitly in all reports, publications, and other research

communications whether the data, methods used in the analysis, and materials used to conduct the research will be made available to any researcher for purposes of reproducing the results or replicating the procedure. At the time of submission of the full proposal, all investigators must indicate if they will or will not make their data, analytic methods, and study materials available to other researchers.

5. Application Instructions and Requirements

All applications for funding must be submitted through a two-stage process consisting of a letter of intent (LOI) and full proposal. Upon submission and review of the LOI, applicants whose submission is reviewed favorably will be invited to complete a full proposal. Any applications for an extension of a previously awarded grant require resubmission as a new complete application (LOI and subsequent full proposal) and must include an update describing the progress made during the prior award period. Specific Aims at the LOI stage do not require references and should not exceed 1 page. Text should be Arial, Times, Calibri, or Helvetica 11-point font or higher. Margins should not be less than 0.5”.

The following application components are required for a complete submission:

Letter of Intent	Full Proposal
<ul style="list-style-type: none"> • General Information / Demographics • Specific Aims (one page in length) • Lay Narrative/Summary (one page in length maximum) • NIH Biosketch 	<ul style="list-style-type: none"> • Proposal Summary • Narrative (six pages maximum): <ul style="list-style-type: none"> ○ Background and Significance ○ Specific Aims ○ Experimental Approach ○ Preliminary Data (if applicable) ○ References (not included in page-limit) • Success Factors • Timeline • Future Plans • Budget • Letter(s) of Support

Additional Considerations:

- All LOIs must include the NIH biosketch (five pages maximum length) of the primary investigator and any key personnel involved in the project.
- At the full proposal stage, applications must include at least one letter of support from the principal investigator's program director/advisor affirming the following statements:
 - The applicant will be officially affiliated with or employed by the institution during the grant period.
 - There is adequate institutional space and equipment to accomplish the proposed project.
 - The program director/advisor confirms his/her commitment to and provision of institutional space and equipment for the grantee.

Both LOIs and full proposals must be submitted through LCRF's online grants management system accessible at [Proposal Central](https://proposalcentral.com/GrantOpportunities.asp?GMID=247). Previews of the LOI and full application may be accessed at <https://proposalcentral.com/GrantOpportunities.asp?GMID=247>.

6. Timeline

- LOI submission deadline: **April 30¹**
- Applicants notified of LOI decision: **Late June**
- Full proposal submission deadline: **August 29²**
- Notification of award: **Late October**
- Project start: **December 1**

7. Evaluation of Applications

All applications are evaluated using a two-stage review process that includes review of LOIs and select full proposals. Only applicants whose LOI is reviewed favorably will be invited to submit a full proposal. At each stage, the evaluation consists of an administrative review followed by a comprehensive review by LCRF's Scientific Advisory Board and patient advocates from the corresponding advocacy group (see figure below). At the LOI stage, evaluations will focus on high-level aspects of the research proposal including overall rationale, feasibility, and potential impact on the lung cancer field. At the full proposal stage, submissions will additionally be evaluated for sound scientific rationale, study design, feasibility, and creativity/innovation.² Similar to an NIH R21 award, reviewers at the full proposal stage will be asked to provide an impact score reflecting their assessment of the likelihood for the project to exert a sustained, powerful influence on the field of lung cancer research.



² LOIs and full proposals must be submitted by 11:59pm Eastern US time on the date indicated.

³ Note regarding preliminary data: A grant application need not have extensive background material, and preliminary data are not required. Reviewers focus their evaluations on the conceptual framework, the level of innovation, and the potential to significantly advance our knowledge or understanding. Appropriate justification for the proposed studies can be provided through literature citations, data from other sources, or, when available, from investigator-generated data.

8. Award Notification and Announcement

All applicants will be notified of their award status by the date specified in the Timeline section above. Regrettably, due to the high volume of submissions, LCRF is not able to provide feedback on LOIs or proposals that are not selected to receive an award.

9. Post-award Reporting Requirements

During the funding period, all investigators are required to submit at least two progress reports including the following:

Report Type	Due Date	Templates
Interim Report	At conclusion of year one of the grant term	TBD
Final Report (includes financial summary report)	Within sixty days of conclusion of the grant term	TBD

All reports must be submitted via Proposal Central, and additional reports may be assigned when project terms are amended (e.g. in the case of a no-cost extension or institutional transfer). Receipt of the second year of funding is contingent upon submission and approval of the interim progress report at the conclusion of the first year of the grant term. In addition, recipients will be expected to provide lay updates to the community at six months intervals.

10. Inquiries

For questions, please contact the LCRF office at grants@lcrf.org or via phone at +1 (212) 588-1580.