Request for Proposals: 2023 LCRF Leading Edge Research Grant Program

1. Program Summary
Lung cancer continues to be the number one cause of cancer deaths worldwide, accounting for an estimated 130,180 deaths annually in the United States alone\(^1\). Despite being the most common cancer killer for both men and women, lung cancer research remains critically underfunded. To help close this gap and improve outcomes, the goal of the 2023 LCRF Leading Edge Research Grant Program is to fund innovative projects across the full spectrum of basic, translational, clinical, epidemiological, health services, early detection, disparities, and social determinants of health research. 2023 LCRF Leading Edge Research Grant Program will provide $150,000 over a period of two years for projects including but not limited to the following topics:

- Lung cancer biology
- Risk reduction and screening for early detection
- Identification of new biomarkers
- Development of more effective and less toxic therapies including but not limited to targeted and immune-therapies
- Genetic and gene-environment interactions
- Interactions and contributions of multiple factors (e.g. smoking, genetics, environment, societal factors) to disparities in lung cancer outcomes
- Mechanisms of sensitivity and resistance to lung cancer therapies
- Bioengineering approaches to understanding and/or treating lung cancer (i.e., theranostics, biomaterials, nanotechnology, controlled-drug release, and gene-therapy)
- Supportive measures for people with lung cancer and their families
- Identification of metabolic vulnerabilities in lung cancer

2. Eligibility Criteria
Investigators must be affiliated with a non-profit academic or research institution and must be post-doctoral researchers, clinical fellows, or early-career and mid-career investigators with less than ten years’ experience since their initial faculty appointment.

Applicants from US-based and international institutions are eligible to apply and may hold any residency/citizenship status. Applicants are prohibited from applying if they have received funding from the LCRF within the last 4 years. Senior investigators with more than ten years’ experience since faculty appointment are generally not eligible for funding and are encouraged to mentor a junior team member through the application process. However, exceptions will be made for investigators with more than ten years’ experience in other disease areas or topics. 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.

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• 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
A. Go to https://proposalcentral.com/ and login under the “Application Login” section. After logging in, complete your Professional Profile before starting an application If you are already registered with ProposalCentral, access the site and log in with your Username and Password. If you do not have an account yet, please click on “Need an account?” and follow the instructions.
B. Click on the “Grant Opportunities” Tab.
C. A list of applications will be displayed. The list of applications can be filtered for just this organization by clicking “Filter by Grant Maker” at the top and selecting “Lung Cancer Research Foundation” in the drop-down menu. Find the “LCRF Pilot Grant” and click the “Apply Now” button in the “Apply Column”.
D. See the deadlines for the LOI stage, if applicable, and the Proposal stage. All deadlines are in US Eastern Time. If a document icon is showing, you can click on it to download it. This includes necessary information about the deadline from the grant maker.
E. Click the link or download the document in the Contact Information column. Clicking the link opens an email to the program administrator. If a document is provided instead, it includes the grant maker contact information.

All applications for funding must be submitted online at Proposal Central through a two-stage process consisting of a letter of intent (LOI) and full proposal. Applicants may only apply for one LCRF grant per grant cycle. 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 New Roman, Palantino Linotype, Courier New, Georgia, or Helvetica 11-point font or higher. Margins should not be less than 0.5” on standard letter paper (8 ½” x 11”), and you must verify the margins on the documents that you upload.
The following application components are required for a complete submission:

<table>
<thead>
<tr>
<th>Letter of Intent</th>
<th>Full Proposal</th>
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<tbody>
<tr>
<td>• General Information / Demographics</td>
<td>• Lay Summary</td>
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<td>• Specific Aims (one page in length)</td>
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<td>• NIH Biosketch (NIH Biosketch Instructions)</td>
<td>• Narrative (six pages maximum):</td>
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<td>o Background and Significance</td>
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<td>o Preliminary Data (if applicable)</td>
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<td>o Experimental Approach</td>
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<td>o References (not included in page-limit)</td>
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<tr>
<td>• Lay Summary</td>
<td>• Success Factors (half page in length)</td>
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<td>• Specific Aims (one page in length)</td>
<td>• Timeline</td>
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<td>• Narrative (six pages maximum):</td>
<td>• Future Plans (half page in length)</td>
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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.
- Funding will only be awarded to one PI, not to a team.
- 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.

6. Timeline

- LOI submission deadline: March 10, 2023
- Applicants notified of LOI decision: April 17
- Full proposal submission deadline: May 31st
- Notification of award: November 2023
- Project start: December 1, 2023

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, a comprehensive review by LCRF’s Scientific Advisory Board and a review conducted with patient advocates (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. 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

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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.
project to exert a sustained, powerful influence on the field of lung cancer research and/or reducing disparities in lung cancer outcomes.

Application review process.

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:

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<th>Due Date</th>
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<tr>
<td>Interim Report</td>
<td>At conclusion of year one of the grant term</td>
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<tr>
<td>Final Report (includes financial</td>
<td>Within sixty days of conclusion of the grant</td>
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<td>summary report)</td>
<td>term</td>
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All reporting is required to be done in ProposalCentral, 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.

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

If you have any difficulties registering, logging in, or creating your application, contact ProposalCentral Customer Support at: 800-875-2562 (Toll-free U.S. and Canada), +1-703-964-5840 (Direct Dial International).