



## Request for Proposals: 2023 LCRF Research Grant on Early-Detection and Pre-Neoplasia in Lung Cancer

### 1. Program Summary

Lung cancer continues to be the number one cause of cancer deaths in the United States and worldwide, accounting for an estimated 130,180 deaths annually in the United States alone<sup>1</sup>. When detected at early stage (Stage I), the prognosis is good for most patients. The current standard for detecting lung cancer is low-dose computed tomography (LDCT), with follow-up confirmation via biopsy. The U.S. Preventive Services Task Force (USPSTF) updated recommendations in 2021<sup>2</sup> to include annual LDCT screening for patients that are 50-80 years of age, have a 20 pack-year smoking history, and are either a current smoker or have quit within the past 15 years. While this has increased the number of people eligible for screening, it is still limited to people with a smoking history. Given the significance and need for early detection of lung cancer and advancements in molecular screening, LCRF continues this mechanism to support research projects that facilitate or advance the understanding and characterization of pre-neoplasia or approaches for early detection of lung cancer. Work supported through this mechanism addresses important questions in non-small cell and small cell lung cancer.

This funding mechanism is focused on identifying, characterizing, and developing approaches and techniques that will allow early detection and/or prevention of lung cancer and gaining insight into pre-neoplastic processes in the lungs. The ultimate goal is to detect lung cancer at the earliest stages and subsequently increase survival and survivorship. The program is designed to support early-stage researchers and faculty within the first 10 years of their faculty appointment. While this list is not exclusive, general areas of interest include:

- Identification and characterization of new biomarkers for NSCLC and SCLC
- Liquid biopsy assays and related techniques
- Improvements in risk stratifying patients for screening
- Development of predictive, diagnostic, or prognostic biomarkers
- Genomic and histological approaches to improve early detection in tissue samples
- Novel imaging modalities to identify and risk stratify pre-neoplastic lesions
- Studies of pre-neoplasia and progression to lung neoplasia that may inform prevention strategies
- Development of pathways to increase uptake and utilization of lung cancer screening

### 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.

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<sup>1</sup> American Cancer Society. Cancer Facts & Figures 2022. Atlanta: American Cancer Society; 2022.

<sup>2</sup> Lung Cancer Screening. US Preventive Services Task Force Website.

<http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lung-cancer-screening>.

Published March 9, 2021. Accessed February 2, 2022.

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.
- 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 Proposal Central, 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:

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

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.

## 1. Timeline

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

## 6. 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 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.

## 7. 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.

## 8. 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
Interim Report	At conclusion of year one of the grant term
Final Report (includes financial summary report)	Within sixty days of conclusion of the grant term

All reporting is required to be done in 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.

## 9. Inquiries

For questions, please contact the LCRF office at [grants@lcrf.org](mailto: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 Proposal Central Customer Support at: 800-875-2562 (Toll-free U.S. and Canada), +1-703-964-5840 (Direct Dial International).