



Request for Proposals: 2022 LCRF Minority Career Development Award (CDA) in Lung Cancer

1. Program Summary

National Institutes of Health (NIH) funding is considered a prerequisite for establishing independence, academic promotion, recognition as an expert, serving on grant review panels, and leadership roles. Minority applicants are less likely to receive grants, to have the R phases of K01 or K99 awards activated, need more submissions to obtain funding, and often will not resubmit proposals.¹⁻⁵ As minority applicants must overcome systemic and structural barriers due to race, ethnicity, country of origin, socioeconomic status, and/or language, many leave academia which further exacerbates the lack of diversity in STEM and medical fields. To provide protected time and mentoring to these trainees, we are launching the LCRF Minority Career Development Award (CDA) for Lung Cancer for minority Postdoctoral/Clinical Fellows and Assistant Professors within 10 years of completing their MD and/or PhD degrees to submit proposals.

The newly launched LCRF Minority Career Development Award (CDA) for Lung Cancer is a two-year career development award intended to support early-stage scientists from underrepresented groups working in lung cancer and working in diverse areas of research including basic, clinical, translational, disparities, and social determinants of health research. The objective of this award is to increase the number of highly skilled and trained researchers from groups that are historically underrepresented in academia, medicine, and leadership in lung cancer research. This program aims to close the gap between the mortality rates and representation in lung cancer research by funding minority researchers \$150,000 over a period of two years.

We encourage applications on a wide variety of topics including but not limited to the following:

- Lung cancer biology
- Prevention 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

2. Eligibility Criteria

Investigators must be from racial or ethnic groups that are underrepresented in health-related sciences and biomedical research (<https://nces.nsf.gov/pubs/nsf19304/digest/introduction>). This includes Blacks or African Americans, Hispanics or Latinos, American Indians or Alaskan Natives, Native Hawaiians and other Pacific Islanders. Individuals from racial or ethnic groups that can demonstrate convincingly that they are underrepresented by the host institution will also be eligible. Investigators will need to fill out demographic information and a short statement indicating or affirming their eligibility. 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 within 10 years of receiving their MD and/or Ph.D.

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).

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 are:

- 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 totaling in excess of 20% of the 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 that could be reimbursed by other sources will not be covered.
- Travel and publication costs are permitted.

4. Open Science and Data Sharing 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 application, 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 for ProposalCentral 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 Minority Career Development Award" and click the "Apply Now" button in the "Apply Column".
- D. See the deadlines for the the Full 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 through ProposalCentral. 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 1/2" x 11"), and you must verify the margins on the documents that you upload. Submissions must include the following components:

Full Proposal
<ul style="list-style-type: none">● General Information● Demographics● Eligibility Statement● Specific Aims (one page in length)● NIH Biosketch● Mentoring Plan (1 pages)● 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

- Eligibility Statement
 - Several sentences to one paragraph stating eligibility.
 - This will not be shown to reviewers.
- Key words (up to 5 key words describing the work that will help with review selection)
- Mentoring/Professional Development Plan (1 page)
 - Mentor/Mentoring Team and how they will work with applicant
 - Trainee's accessibility to the mentoring team
 - Trainee's plan for professional development
 - List any course/workshops
 - Applicants career goals
- NIH Biosketch* (no more than 5 pages per person)

*Additional Considerations:

- The application must include a NIH biosketch of the primary investigator and any key personnel involved in the project.

- The application must include at least one letter of support from the applicant’s primary mentor affirming the following statements:
 - The applicant will be formally affiliated with and/or employed by the institution/organization during the grant period.
 - There is adequate institutional space and equipment to accomplish the proposed project.
 - The mentor’s willingness to serve as a mentor for the applicant.

A preview of the full application including more detailed instructions is available at ProposalCentral.

6. Timeline

- Application deadline: **May 27**¹
- Notification of award: September
- Project start: December 1

7. Evaluation of Applications

All applications will be evaluated using a review process consisting of an administrative review, a pre-screening round, and a full review by a panel of experts, which will include LCRF’s Scientific Advisory Board and additional individual reviewers with relevant expertise (see figure below). Applications passing the administrative review will be evaluated in the pre-screening stage on criteria including feasibility, overall rationale, and the potential impact in the lung cancer space. At the full review stage, submissions will be evaluated by reviewers for sound scientific rationale, study design, feasibility, mentoring plan, and creativity/innovation.² When scoring applications, reviewers are asked to provide a numerical overall impact score for the proposal. Similar to an NIH R21 award, reviewers will be asked to provide an impact score reflecting their assessment of the likelihood for the project to exert a sustained, powerful influence on understanding lung cancer, career trajectory of applicant, and/or reducing disparities in lung cancer outcomes.



Application review process.

8. Award Notification and Announcement

¹ Full proposals must be submitted by 11:59pm Eastern US time on the date indicated

² 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.

All applicants will be notified of their award status by the date specified in the Timeline section above. Due to the high volume of submissions, LCRF does not provide specific feedback on applications that are not selected to receive an award. Awards will be publicly announced via press release, the LCRF website, and additional outlets such as social media.

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 grant term	TBD

All reports must be submitted via the LCRF online grants management system, and additional reports may be assigned when projects 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) 588-1902.

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).

References

1. Ginther DK, Schaffer WT, Schnell J, Masimore B, Liu F, Haak LL, and Kington R. (2011). "Race, Ethnicity, and NIH Research Awards." *Science*. 333(6045):1015-9.
2. Hoppe TA, Litovitz A, Willis KA, Meseroll RA, Perkins MJ, Hutchins BI, Davis AF, Lauer MS, Valantine HA, Anderson JM, and Santangelo GM. (2019). "Top choice contributes to the lower rate of NIH awards to African-American/black scientists". *Sci Adv*.5(10):eeaw7238. doi:10.1126/sciadv.aaw7238.
3. Pickett C. (2018). "Examining the distribution of K99/R00 awards by race." <http://rescuingbiomedicalresearch.org/blog/examining-distribution-k99r00-awards-race/> [Accessed August, 24, 2021].
4. Eblen MK, Wagner RM, RoyChowdhury D, Patel KC, and Pearson K. (2016). "How criterion scores predict the overall impact score and funding for national institutes of health peer-reviewed applications0". *PLoS One*. 11(6):e0155060.
5. Erosheva EA, Grant S, Chen M-C, Lindner MD, Nakamura RK, and Lee CJ. (2020). NIH peer review: criterion scores completely account for racial disparities in overall impact scores. *Sci Adv*. 6(23):eaaz4868.