

# IMPORTANT NOTES TO READ BEFORE PROCEEDING

An applicant may submit only one application for a 2025 LUNGevity award. Applicants with an existing LUNGevity award that would be concurrent with a 2025 award may not apply.

LUNGevity Foundation ("LUNGevity") advises potential applicants to read this RFA in its entirety, including all eligibility requirements and other terms and conditions, before starting an application. Any applicant who is deemed ineligible for this award and/or does not follow the instructions for preparing the application will be disqualified and the application will not be reviewed.

The LUNGevity Foundation ("LUNGevity") 2025 Mid-Career "Bridge to Breathe" Research Award is for mid-career physician-scientists with a successful track record (as evidenced by publications and previous grant funding) who are seeking bridge funding to sustain their research program while resubmitting a grant application for major federal funding or its equivalent. LUNGevity will grant up to three Mid-Career "Bridge to Breathe" Research Awards. More than one applicant from an institution may apply, but no more than two awards will be issued to a given institution.

At the time of submission of the letter of intent (LOI) and throughout the duration of the award term, an applicant/awardee must be continuously employed by a United States (US) institution. If the applicant resides abroad, they must have an adjunct appointment at a US institution.

A two-step application process will be used. An applicant must first submit an LOI that includes a letter of nomination from the applicant's institution. The letter of nomination should ideally be from the applicant's department chair. Because there are a limited number of awards, only a subset of applicants will be invited to submit a full application after all LOIs are reviewed. The application process will be managed through proposalCENTRAL.

Important Dates:

- February 14, 2025: Letter of Intent (LOI) deadline
- May 12, 2025: Full applications due from invited applicants
- Late Summer 2025: Award notifications made
- November 1, 2025: Awards begin

Detailed instructions for applying for this award begin on page 11.

#### LUNGEVITY FOUNDATION

LUNGevity Foundation is a 501(c)(3) philanthropy specifically focused on funding research for the early detection and effective treatment of lung cancer. LUNGevity's mission is to improve mortality rates of lung cancer patients through the development of protocols and tools for early



detection of lung cancer, early intervention in the disease progression, and treatments, including targeted therapy and immunotherapy. For more information about LUNGevity Foundation, please visit <u>www.LUNGevity.org</u>.

# FUNDING OPPORTUNITY DESCRIPTION

#### Overview

LUNGevity's Mid-Career "Bridge to Breathe" Research Award program was created to support established mid-career investigators who are seeking bridge funding to sustain their research program while they resubmit their application for federal funding (NIH R01) or its equivalent. Mid-career investigators are often burdened by increasing administrative demands that jeopardize their ability to conduct cutting-edge research that will generate the new treatments and potential cures of tomorrow. This new mechanism is part of LUNGevity's ongoing commitment to workforce development and is intended to maintain a robust pipeline of thoracic oncology leaders and research.

Eligible candidates working in lung cancer will be deemed "mid-career" if they hold the title of Associate Professor or its equivalent, are within 5-15 years of their first academic faculty position, and have a successful track record of publications and research funding. Eligible applicants must NOT hold any concurrent multi-year funding (NIH, DOD, ACS, etc.) nor have startup funding from a recent institutional change or a retention package from their current institution. Applicants must disclose all current sources of support as well as provide evidence of a previous grant submission which was not funded.

Research projects are restricted to clinical lung cancer research, and the applicant must demonstrate the clinical relevance of the research proposed. The Mid-Career "Bridge to Breathe" Research Awards may be for a maximum of \$75,000 (direct and indirect) per year for two years, for a maximum award of \$150,000. LUNGevity Foundation anticipates awarding up to three awards in 2025.

### AWARD PROGRAM REQUIREMENTS

The research projects that will be funded are expected to provide a clear conceptual or experimental foundation for the future development of methods for early detection and/or individualized treatment, including through targeted therapy and immunotherapy. The application must be related to research proposed previously that was not funded by NIH (R01 or its equivalent) or similar funding mechanism. Applications may be related to a new R01 submission or a resubmission made within the past six months that was not funded

High-risk, high-return proposals will receive equal consideration. Clinical research includes epidemiology studies, and we especially encourage clinical correlative studies.

The use of existing resources is encouraged, including libraries of compounds or probes, tissue or biospecimen repositories, and other existing sets of tissue, blood, or images. It is strongly



encouraged that those applying have direct and immediate access to the biospecimens necessary to complete their research.

Awardees are required during the duration of the award term to share their research progress with LUNGevity staff, members of the LUNGevity Scientific Advisory Board, study section reviewers, and other LUNGevity awardees on an annual basis.

During the duration of the award term, awardees are required to attend LUNGevity's annual Fall Science Meeting (whether in-person or virtual if public health conditions warrant) to report on their progress. Awardees will be required to submit a detailed plan for how they intend to use the bridge funding to secure a larger award that will be sufficient to sustain their research program.

# Eligibility

If an applicant does not currently meet an eligibility requirement at the time of application but will meet it prior to the award start date OR has special circumstances that prevent it from being met, the applicant must notify LUNGevity at the time of LOI submission. This information should be attached to the applicant's biosketch and should be no more than one page.

<u>Education and Experience</u>: At the start of the award term, the applicant, who must be the principal investigator for the proposed research, must hold a doctoral degree (MD/DO, MD-PhD, or DO-PhD), should hold the rank of Associate Professor or its equivalent, and be within 5-15 years of his/her first faculty appointment with any US-based academic institution, including research institutions that are not formally associated with a university. Applicants residing outside the US, must hold an adjunct appointment at a US-based institution. Applicants must be working in the lung cancer space. Special consideration will be given to previous recipients of a LUNGevity Career Development Award.

Because the award term for the 2025 Mid-Career "Bridge to Breathe" Research Award begins on November 1, 2025, an applicant's first faculty appointment must have begun no earlier than the start of the 2010 fall semester. The exact start date should be included in the biosketch.

Successful applicants will have a demonstrated track record of success as demonstrated by holding the rank of Associate Professor with tenure or its equivalent, previous research funding (NIH R01 or equivalent) and a strong publication history.

If it is not clear from an applicant's title or from the employment information in the biosketch that a position is considered to be faculty, a note of explanation/confirmation should be included in the personal statement.

<u>Support</u>: The applicant must demonstrate proof of a prior grant application (NIH R01 or equivalent) within the past six months that was not funded as well as not hold any concurrent multi- year sources of support (NIH, DOD, ACS, institutional startup or retention packages). This



award is intended to relieve the investigator of administrative burdens and to buy back research time to ensure the success of the proposed research and to ensure his/her ability to secure additional funding to sustain their research program. Applicant will be required to disclose all current/pending sources of support prior to award being issued.

<u>Citizenship</u>: At the time of submission of the LOI, an applicant must be a United States citizen or a foreign national holding one of the following visa immigration statuses: permanent resident (Green Card), exchange visitor (J-1), temporary worker in a specialty occupation (H-1, H-1B), Canadian or Mexican citizen engaging in professional activities (TC or TN), or temporary worker with extraordinary abilities in the sciences (O-1). A non-citizen must submit a notarized copy of proof of possession of a Green Card or J-1, H-1, H-1B, TC, TN or O-1 visas.

<u>Employer:</u> At the time of submission of the LOI and throughout the duration of the award term, an applicant/awardee must be employed by a US institution. Applicants residing outside the US, must hold an adjunct position at a US institution.

#### **AWARD INFORMATION**

#### Award Structure

LUNGevity Mid-Career "Bridge to Breathe" Research Awards may be for a maximum of \$75,000 (direct and indirect) per year for two (2) years. No more than 25% of the requested budget may be used for an awardee's salary and/or fringe benefits. No more than 10% of the total award budget may be used for overhead/indirect costs.

Award funds may be used for the salary and fringe benefit costs of the applicant and other personnel.

LUNGevity Mid-Career "Bridge to Breathe" Research Awards are subject to annual review. The second year of support is based on demonstrating satisfactory progress in year one.

#### **Award Payment Schedule**

LUNGevity will issue the first-year award payment no earlier than November 1, 2025, following receipt of fully executed agreement documents. LUNGevity will issue the second year payment following award renewal. Second year payments will be made only after the awardee's funding balance has decreased to \$25,000 or less.

An awardee may choose to temporarily stop their research at any point during their 2-year award term if they wish to take family or personal leave. To proceed with this, the awardee will need to inform LUNGevity staff of their plan and submit a revised timeline for approval by the LUNGevity Scientific Advisory Board.



Final selection of the project(s) to be funded will be contingent on scientific review and availability of funds.

Some of the factors considered when reviewing applications include:

- Candidate potential to further progress in lung cancer research
- Scientific merit, innovation, and feasibility of the research plan
- Research environment support
- Appropriateness of the requested budget and timeline to complete the proposed research project

### **OTHER TERMS AND CONDITIONS**

Following are other terms and conditions that apply to the LUNGevity Mid-Career "Bridge to Breathe" Research Awards. A more detailed set of terms and conditions will be included in the agreement document for funded projects.

#### Animal Use

LUNGevity allows animal use in biomedical research only when no other means of obtaining scientifically sound, valid, and useful results are available. Applicants must ensure that only the minimum number of appropriate animals required to obtain and validate results shall be used. In cases requiring the death of an animal, only the most appropriate and humane form of euthanasia shall be used consistent with the purpose of the research.

If animals will be used in the proposed research project, applicants must provide institutional endorsements that the research facility, its research, and its employees adhere to the appropriate animal welfare regulations in their country. In the U.S., these include:

- Animal Welfare Act
- USDA rules
- National Research Council *Guide for the Care and Use of Laboratory Animals*
- Public Health Service Policy on Humane Care and Use of Laboratory Animals

In addition to the above, applications must also include the following documents:

- Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC) accreditation.
- Institutional Animal Care and Use of Committee (IACUC) approval.



A project is **not** eligible for an award if the research proposal involves animals and the institution does not have accreditation from the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC), **or** does not hold a current Public Health Service (PHS) Animal Welfare Assurance, **or** does not have accreditation from the United States Department of Agriculture, **or** does not have accreditation from the Institutional Animal Care and Use Committee (IACUC).

### **Authorized Award Holders**

LUNGevity Mid-Career "Bridge to Breathe" Research Awards are granted only to an individual; awards are not awarded to institutions. No award may be held by or transferred to another individual.

# **Biohazards**

Biohazards are broadly defined to be recombinant and/or infectious and tumor materials that may be deleterious to normal organisms upon controlled exposure. Research involving biohazards requires one paper copy of the appropriate institutional committee approval at the time a full application is submitted.

### **Carryover of Funding**

Carryover of funding into the next year requires prior approval by LUNGevity. All requests must be in writing and received by LUNGevity 60 days prior to the end of that funding year. When making the request, the awardee must indicate the amount and from what budget-line and to what budget-line the carryover monies are being applied. In the case of supplies, all items must be itemized.

### Change in Budget

Requests for a change in budget that are 10% or more for a budget line require prior approval by LUNGevity. All requests must be in writing and received by LUNGevity at least 60 days prior to the end of the current funding year. When requesting a change in budget, the awardee must indicate the amount to be transferred, the budget line the funds are currently included in and to where they would be transferred. In the case of supplies, all items must be itemized.

### **Change of Institution**

Transfer of a LUNGevity award from one institution to another because of the relocation of the awardee requires prior approval by LUNGevity. All requests must be in writing and made as soon as the awardee officially knows of the relocation. A grant may not be transferred to a laboratory, clinic, hospital, or other research institution that is not affiliated with a tax-exempt not-for-profit institution. All unexpended funds must be returned to LUNGevity within 45 days of transfer approval. A grant agreement must then be executed by the new institution. After LUNGevity receives the unexpended funds from the original institution and the grant agreement has been executed with the new institution, the funds will be reissued to the new institution.

# **Equal Employment Opportunity**



LUNGevity awards will be made to individuals working in institutions identified as Equal Opportunity Employers.

### Human Subjects

Whenever human subjects are a part of a LUNGevity-funded research project, the following documents must be received before any award monies are released:

- A copy of the Institutional Review Board (IRB) approval and approved patient consent forms
- A copy of the appropriate institutional committee approval for research involving human adult stem cells or use of human fetal tissue.

If the proposed research project involves human subjects, the population sampled shall be inclusive of the general population of relevance to the scientific question posed, without restriction in regard to gender, race, age, and socioeconomic status. Proposals that intentionally restrict the population sampled must include a compelling scientific rationale for such design.

LUNGevity encourages applicants to submit their projects to the appropriate human subjects Institutional Review Board at the time of application.

# *IRB approval and approved patient consent forms must be provided to LUNGevity before award funds will be disbursed.*

#### **Malpractice Liability**

LUNGevity will not assume responsibility for and the institution will indemnify and hold LUNGevity harmless from any lawsuit, claim, judgment, damages, awards, or malpractice arising from research or investigations related to an award.

#### **No-cost Extension**

A no-cost award extension requires prior approval by LUNGevity. All requests must be in writing and received by LUNGevity at least 60 days prior to the award's official termination date. Requests that are not received at least 60 days prior to the award termination date **will not** be considered. When making the request, the awardee must provide a detailed rationale for the extension, project expenses to date, and a detailed revised budget. Awardees may request a no-cost extension only once per award. Approval of the no-cost extension is not automatic and will only be granted in exceptional circumstances.

#### **Other Funding**

LUNGevity research funds will not be awarded to duplicate any work that is being supported by other funding agencies.

### **Overhead/Indirect Costs**



Overhead or indirect costs are permitted up to 10% of the award but are not incremental to the award. Duplication of indirect costs on subcontracts is not allowed.

### Patent and Intellectual Property Policy

Inventions and discoveries from research performed during the term of a LUNGevity award will be subject to the current LUNGevity patent policy as well as to the patent policies of the institution where the work is performed. The LUNGevity policy is described in full on page 10.

### **Progress Reports and Renewal of Funding**

Annual written progress and financial reports (as well as presentations at the annual LUNGevity Science Meeting) are required. Interim progress reports are the basis for the decision to award subsequent years of funding. A final progress report is also required at the conclusion of the project along with a complete financial disbursement report covering the entire award period. The financial report must reflect the award expenditures as approved by LUNGevity. All unused funds must be returned to LUNGevity. In addition, any funds used for unauthorized expenditures or unexpended funds must be returned to LUNGevity.

#### **Project Support Expenditures**

No award shall be used for the purchase of furniture or computers, repair or service contracts, institutional equipment, the construction or renovation of facilities, payment of honoraria or membership dues, tuition for either the awardee or other project personnel, the purchase of textbooks or periodicals, or payment for secretarial support.

### **Preprints and Public Access Policy**

Grantees are required to deposit their submitted manuscripts, and subsequent versions, via a publicly accessible preprint server (e.g., arXiv, bioRxiv, medRxiv, or another trusted disciplinary server). Preprints must be shared under an open license (CC BY). LUNGevity Foundation recognizes preprints as evidence of productivity for purposes of grant applications, reviews, and reporting.

Upon acceptance, we require electronic copies of research papers, accepted for publication in a peer-reviewed journal and supported in whole or in part by LUNGevity Foundation, to be made freely available upon publication. Grantees may comply with this policy by publishing in an open access journal, publishing in a hybrid journal with an open access option, or by making a copy of their Author Accepted Manuscript available via a trusted open repository (e.g., PubMed Central). All peer-reviewed articles must be freely available under a suitable open license, preferably the Creative Commons Attribution (CC BY) license, which permits reuse without restriction.

#### **Publication Expenditures**

The maximum amount of funds expendable for publication costs is \$2,500. All publication costs must directly relate to the LUNGevity project.

### **Publications and Conference Presentations**



All publications and/or presentations at scientific conferences and meetings based on research conducted from this award must include a citation of LUNGevity as a supporting entity as follows: "This study was supported by a grant from LUNGevity Foundation." Reprints of abstracts, manuscripts, or other articles that reflect research done after award acceptance must be submitted to LUNGevity.

#### **Tobacco-Funded Research**

LUNGevity will not provide research or other funding to investigators who have received direct funding or funding from agencies of the tobacco industry.

#### Travel Expenditures

The maximum funds expendable for awardee travel are \$1,500 per year. Travel to LUNGevity meetings is paid directly by the Foundation and is not included in the allowable \$1,500.



# LUNGEVITY PATENT AND INTELLECTUAL PROPERTY POLICY

- a. All inventions or intellectual property made with support in whole or in part by research or training grants or awards from LUNGEVITY must be reported at the earliest practical time to the Research and Program Services Division. The grantee institution or individual awardee agrees to notify LUNGEVITY immediately of the decision to apply for letters patent or other legal protection for intellectual property, and to consider seriously and in good faith any comments or objections LUNGEVITY may have concerning such applications. LUNGEVITY agrees to keep all information confidential and to not release any information relating to such inventions, intellectual property or applications. All patenting expenses shall be borne by the grantee institution or individual awardee unless the intellectual property is ceded to LUNGEVITY (see paragraphs b and c).
- b. Title to any invention or intellectual property shall reside in the grantee institution to the extent that such title is claimed by the institution under its patent policy or procedure and paragraphs c-e shall apply. If a grantee institution has no established patent policy or procedure for administering inventions or intellectual property, or if the institutional patent policy or procedure does not claim rights for the institution or individual inventor, then LUNGEVITY shall have the right to determine the disposition of invention or intellectual property rights and paragraphs c-d shall not apply.
- c. No patent, patent application or other type of protection shall be abandoned without first notifying the Research and Program Services Division. At such time, the grantee institution and individual awardee shall give LUNGEVITY the opportunity to take title to the invention or other intellectual property.
- d. The grantee institution shall agree that when it licenses any invention or intellectual property it will obligate the licensee as follows: The licensee agrees to exert its best efforts to commercialize or cause to be commercialized the invention or intellectual property as rapidly as practical, consistent with sound and reasonable business practices and judgment. In the event that the licensee has failed to commercialize the invention or intellectual property within the number of years determined to be reasonable for the invention or intellectual property, the grantee institution upon conferring with LUNGEVITY shall have the right to convert an exclusive license to a non-exclusive license or to terminate a non-exclusive license. If the licensee or grantee institution has an ongoing and active research, development, manufacturing, marketing or licensing program as appropriately directed toward the production and sale of the invention or intellectual property, the same would be deemed to be sufficient evidence that the licensee or grantee institution has commercial property.
- e. LUNGEVITY reserves the right to public acknowledgment for inventions or intellectual property resulting from support by LUNGEVITY; however, LUNGEVITY name and logo may not be used in association with an invention or intellectual property without prior approval of LUNGEVITY.



# APPLICATION INSTRUCTIONS AND TIMELINE

Templates and detailed instructions for required information/materials can be found at https://proposalcentral.com. Be sure to read those instructions in case any instructions were changed, added, or deleted after this RFA was issued.

### Letter of Intent (LOI)

The letter of intent **must** include a narrative that contains:

- **Rationale** for the project
- Planned specific aims (these may be modified slightly if invited to submit a full application)
- Brief statement of the overall experimental approach
- Brief statement of previous unfunded grant submissions and justification for bridge funding.
- A few pertinent **references**

The narrative should be typed in Arial 11-point type, single-spaced, with .5" margins. Identifying information, per the template, must be included at the top of each page. The narrative should not exceed a total of **three pages**, including the references. **Your LOI will not be considered if these instructions are not followed**.

The following items should be included as part of the LOI:

- An NIH **biosketch** (OMB No. 0925-0001 and 0925-0002) of the applicant only. Doublecheck that the information included is current and thorough. We will not be contacting you to clarify any information.
- Documentation of previously submitted grant for major funding (NIH or equivalent) within past six months that was not funded. Documents could include email from funding agency or from institutional Sponsored Program Office. If you have questions, please reach out to us.
- If a non-citizen, **proof of visa immigration status**, as described under "Award Eligibility." This should be attached to the end of the biosketch.

No budget information or other supporting materials should be included. A sponsoring institution signature is not required.



Templates and detailed instructions can be found at <u>https://proposalcentral.com</u>.

Letters of Intent are due **by February 14, 2025 (11:59pm EST)** via proposalCENTRAL. Extensions will not be given. Once an LOI has been submitted it cannot be changed.

Applicants will be notified by email no earlier than **March 24**, **2025** whether they will be invited to submit full application. LUNGevity will **not** provide feedback regarding results of the review of any Letter of Intent submitted.

# **Full Application**

Only invited applicants may prepare and submit a full application. Instructions for how to proceed will accompany the invitation. Among other materials, the full application must include:

• A narrative to include these components:

- Lay Abstract that explains your project completely in lay terms that will be clear to individuals who do not have a scientific background.
- **Scientific Abstract** version that would be appropriate for a reviewer of a peer-review journal.
- **Background**: Present the ideas and reasoning behind the proposed research, to include relevant literature citations. Describe previous experience most pertinent to this application.
- **Hypothesis or Objective:** State the hypothesis to be tested or the objective to be reached.
- **Specific Aims:** Concisely explain the project's specific aims.
- **Research Strategy:** Describe the experimental design, methods, and analyses, including appropriate controls, in sufficient detail for analysis. Address potential problem areas and present alternative methods and approaches.
- Statistical analysis plan: A detailed statistical analysis plan is required for all applications and is limited to one single-spaced page. The analysis plan should define the primary objectives, study design, and planned analyses supporting the study hypotheses. Justification of the proposed sample size or number of patient samples to be analyzed should be stated and include all parameters required for calculation: the type I error rate, power, and target effect size. Detail regarding analysis methods, groups to be compared, and other assumptions made (for example, regarding accrual rates, follow-up, etc.) should also be included. Ideally, the applicant will collaborate with a biostatistician on their grant proposal, including this analysis plan. In the event that methods from other quantitative sciences are planned (for example, bioinformatics or computational biology), it is recommended that the applicant also collaborate with experts from those respective fields to develop their application and analysis plan. *It is recommended that candidates use a full page of the application for their statistical analysis plan.*
- References



The narrative should be typed in Arial 11-point type, single-spaced, with .5" margins. The narrative should not exceed a total of **6 pages (5 pages for the narrative and one page for the statistical analysis plan)**, excluding the references.

- NIH biosketches (OMB No. 0925-0001 and 0925-0002) of the applicant and key personnel.
- Budget information by year, along with a justification
- Other Support: For the applicant only: Be sure to include the dollar amount of each award.
- If relevant, the following documents:
- a copy of the documents listed in the "Animal Use" section
- a copy of the biohazard document named in the "Biohazards" section

- a copy of proof of visa immigrant status as described in the "Award Eligibility" section of the RFA (this may be attached at the end of the applicant's biosketch)

• Do not include reprints of your previous publications.

# Templates and more detailed instructions for all of the above materials and any other materials that must be included can be found at https://proposalCENTRAL.com.

Full applications must be submitted via proposalCENTRAL **by May 12, 2025 at 11:59pm EST.** Extensions will not be granted. Once a full application has been submitted, it cannot be changed.

Applicants will be notified of award decisions by email in **Late Summer 2025**. Review comments will be provided for full applications only.

Awardees will receive a formal agreement document at the time of or soon after award notification. This must be signed by both the awardee and an authorized representative of the sponsoring institution and then returned before any funds will be released. Funds will be released no earlier than **November 1, 2025.** 

### **APPLICATION ASSISTANCE**

For questions regarding programs, eligibility, policies, terms and conditions, or instructions for the letter of intent or full application, please contact:

Jody Roosevelt Research Program Coordinator jroosevelt@LUNGevity.org

For help with proposalCENTRAL, please contact:



proposalCENTRAL Help Desk pcsupport@altum.com 800-875-2562