



LUNGEvity Foundation 2022 Request for Application Pierre Massion Young Investigator Award for Early Detection Research

IMPORTANT NOTES TO READ BEFORE PROCEEDING:

An applicant may submit only one 2022 LUNGEvity application.

An applicant with an existing LUNGEvity award that would be concurrent with a 2022 award may not apply.

An 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 not reviewed.

LUNGEvity will grant only one Pierre Massion Young Investigator Award per institution, although more than one applicant from an institution may apply.

The Pierre Massion Young Investigator Award for Early Detection Research uses a **two-step application process**. An applicant must first submit a letter of intent (LOI). Because there are a limited number of awards, only a subset of applicants will be invited to submit a full application after the LOIs are reviewed.

Detailed instructions for submitting the Pierre Massion Young Investigator Award for Early Detection Research application, including critical dates, begin on page 8.

LUNGEvity manages its grant process within proposalCENTRAL.

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. LUNGEvity focuses on translational science.

PIERRE MASSION YOUNG INVESTIGATOR AWARD FOR EARLY DETECTION RESEARCH FUNDING OPPORTUNITY DESCRIPTION

Overview

The Pierre Massion Young Investigator Award for Early Detection Research was established in 2022 in memory of Dr. Pierre Massion, an internationally known expert on early detection and prevention strategies for lung cancer. Dr. Massion served on the LUNGEvity Scientific Advisory Board and was one of its founding members. He was director of the Cancer Early Detection and Prevention Initiative and co-leader of the Cancer Health Outcomes and Control Research Program at Vanderbilt-Ingram Cancer Center (VICC). He was director of Faculty Development in the Division of Allergy, Pulmonary, and Critical Care Medicine and served as a member of the Diversity Liaison Committee in the Department of Medicine. He received the Patricia A. Stern Award from LUNGEvity Foundation, the ASCO Foundation Advanced Clinical Research Award in Lung Cancer, and the Damon Runyon Lilly Clinical Investigator Award. He was named a Fellow of the American Association for the Advancement of Science in 2015.

The Award has been established to honor Dr. Massion's passion for early detection research and his spirit of mentoring young investigators in the field of early detection. Dr. Massion was also committed to eradicating health disparities. Eligible candidates will reflect the National Science Foundation (NSF) definition of underrepresented populations in the US Biomedical, Clinical, Behavioral and Social Sciences Research Enterprise:

- African Americans or Blacks
- Hispanics or Latinos
- American Indians or Alaska Natives
- Native Hawaiians or Other Pacific Islanders



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Research projects are restricted to translational lung cancer research, and the applicant must demonstrate the translational relevance of the research proposed. The Pierre Massion Young Investigator Award for Early Detection Research is a mentored award; a mentoring plan is part of the required submission. The awards may be for a maximum of \$100,000 (direct and indirect) for one year. It is anticipated that the **Foundation will fund one young investigator in 2022.**

Pierre Massion Young Investigator Award for Early Detection Research Requirements

Goal: Supporting the training and development of underrepresented junior faculty members in the field of lung early detection research

Studies may include any of the following, **but not limited to:**

- **Integration of molecular, clinical epidemiological and robust statistical methods to produce realistic multiple early stage models for the clinician purpose of diagnosis and preventive and prognostic measures.**
- **Biomarker discovery, validation, and implementation (including combinations of multiple biomarkers and assay development). Biomarker categories include risk assessment, early detection, and prediction of recurrence after curative-intent therapy for localized disease.**
- **Biomarkers to guide management of lung lesions**
- **Imaging, including integrating novel molecular and functional imaging strategies**
- **Minimally invasive strategies for early detection**
- **Identification of etiological mechanisms leading to development of various types of lung cancer, with a plan for how to translate these findings to novel early detection strategies**
- **Identifying implementation challenges of lung cancer screening or early detection strategies, including research within groups outside of current screening guidelines to promote equitable approaches**

The following studies will not be considered:

- Pre-clinical drug development studies, such as toxicology or chemical compound screening
- Projects focused purely on animal or in vitro models,

The use of existing resources is encouraged, including molecular tools, tissue or biospecimen repositories, and other existing collections of tissues, blood, or images. It is also strongly encouraged that those applying have direct and immediate access to the biospecimens necessary to complete the research.

High-risk, high-return proposals will receive equal consideration.

Successful applicants are required during the duration of their award to attend the annual LUNGEvity Science Meeting (whether virtual or in-person), where they must present their research progress to the LUNGEvity Scientific Advisory Board, LUNGEvity staff, other reviewers, other awardees, and invited guests.

Award eligibility

If an applicant does not currently meet an eligibility requirement, but either will meet it soon or has special circumstances that prevent it from being met, the applicant must let us know at the time the LOI is submitted. A page with the information should be attached to the back of the biosketch.

- Member of underrepresented population, as defined earlier.
- Education and Experience: The award is open to all levels of junior investigators, who could be at any level of fellowship or be a faculty member within the first 5 years of their first faculty appointment. At the beginning of the grant term, an applicant (who must be the principal investigator for the proposed research) must hold a doctoral degree (PhD, MD, MD/DO, MD-PhD, or DO-PhD) and either:



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1. be a postdoctoral fellow at any academic institution, including research institutions that are not formally associated with a university

OR

2. be within the first five (5) years of his/her first faculty appointment with any academic institution, including research institutions that are not formally associated with a university, and have completed a training fellowship. **If an applicant has taken time off for personal or family leave, this time shall not count toward the five years.**

For applicants who are faculty members: Because the award term for the 2022 Pierre Massion Young Investigator Award for Early Detection Research begins on November 1, 2022, an applicant's first faculty appointment must have begun no earlier than the start of the 2017 fall semester. The exact start date should be included in the biosketch. **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.** If an applicant is not currently a faculty member but will be by the November 1, 2022, start date of the grant term, a letter from the institution where the applicant will be a faculty member confirming the institution's commitment to the applicant and including the applicant's official start date should be attached to the LOI (and full application, if the application moves forward.)

- **Support:** At the beginning of the grant term, an applicant may NOT have a major award, such as an RO1, DOD, or Merit review, or a Career Development Award, such as a T32, F32, K07, K08, K22, or K23.
- **Citizenship:** 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.
- **Employer:** At the time of submission of the LOI and throughout the duration of the award term, an applicant/awardee must be employed by a U.S. institution.

Award information

- **Award Structure and Allocation:** The Pierre Massion Young Investigator Award for Early Detection Research may be for a maximum of \$100,000 (direct and indirect costs) for one year. Funds may be used for applicant's and personnel salary (including fringe benefits) and supplies. No more than 5% of the funds may be allocated as indirect costs. .
- **Duration:** The Pierre Massion Young Investigator Award for Early Detection Research is for a one-year project with the possibility of a one-year no-cost extension.

Factors considered in evaluating applications

Some of the factors considered when reviewing applications include:

- Candidate potential to further progress in lung cancer research
- Mentoring and career plans. A letter of support from an established mentor is required
- Scientific merit, innovation, and feasibility of the research plan and its relevance to the mission of LUNGEvity
- Research environment support
- Appropriateness of the requested budget and timeline to complete the proposed research project



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OTHER TERMS AND CONDITIONS

Following are other terms and conditions that apply to the Pierre Massion Young Investigator Award for Early Detection Research. A more detailed set of terms and conditions will be included in the agreement document for funded projects.

Award Payment Schedule

LUNGeVity will issue the award payment no earlier than November 2022, following receipt of the fully executed agreement documents.

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.

Change in Budget

Requests for a change in budget that is 10% or more for a budget line requires prior approval by LUNGeVity. All requests must be in writing and received by LUNGeVity. When requesting a change in budget, the awardee must indicate the amount and from what budget-line and to what budget-line the monies are being transferred. In the case of supplies or equipment, all items must be itemized.

Change of Awardee or Institution

No award may be transferred from the awardee to another individual. 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.

Equipment and Supply Purchases

Upon conclusion of the award, equipment and supplies purchased with award funds become the property of the institution at which the work was done.

Equipment Expenditures

Award monies will not be utilized to purchase equipment.

Equipment Repair & Service Contracts

No award shall be used for repair or service contract costs for institutional equipment.

Financial Reports

At the conclusion of the award period, LUNGeVity requires 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.

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.



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

- 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.

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 90 days prior to the award's official termination date. 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 may not exceed 5% of the budget.

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 7.

Presentation Posters

Posters prepared for the LUNGeVity science meeting are the responsibility of the awardee to print out. The cost of printing comes from the funds awarded.

Progress Reports

A written progress report (as well as a presentations at the annual LUNGeVity Science Meeting) is required along with the financial report at the conclusion of the award term.

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.



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Public Access Policy

LUNGEVITY established a public access policy in 2012 that requires all journal articles resulting from all or partial LUNGEVITY funding to be made freely available in PubMed Central (PMC) within 12 months of publication. It is the responsibility of the awardee to ensure that journal articles are deposited into PMC. LUNGEVITY has adopted the procedures established by the Health Research Alliance (HRA) which has partnered with the National Library of Medicine (NLM) to enable HRA member-funded awardees to deposit their publications into PMC with an embargo no longer than 12 months. LUNGEVITY will provide a user guide.

Publication Expenditures

The maximum amount of funds expendable for publication costs is \$1,000 per year. All publication costs must directly relate to the LUNGEvity project.

Publications

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 \$1,000 per year. Travel to LUNGEvity meetings is paid directly by the Foundation and is not included in the allowable \$1,000.



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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 commercialized the invention or intellectual 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.



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**PIERRE MASSION YOUNG INVESTIGATOR AWARD FOR EARLY DETECTION RESEARCH 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 with these components:
 - **Rationale** for the project
 - Planned **specific aims** (may be modified slightly in the full application)
 - Brief statement of the **overall experimental approach**
 - Brief statement of **career and mentoring plan**
 - 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 **two pages**, including the references. **Your LOI will not be considered if these instructions are not followed.**

- An NIH **biosketch** (OMB No. 0925-0001 and 0925-0002) of the applicant only. Double-check that the information included is current and thorough. **We will not be contacting you to clarify any information.**

- If a non-citizen, **proof of visa immigration status**, as described under "Award Eligibility." Attach this to the end of the biosketch.

- A **letter of recommendation** from the applicant's primary mentor in whose laboratory the applicant will be conducting the proposed research.

No budget information or other supporting materials should be included.

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

Applicants are required to electronically submit the LOI by **Wednesday, February 23, 2022 (11:59pm EST)**, via proposalCENTRAL. Extensions will not be given. Once an LOI has been submitted electronically via proposalCENTRAL, it cannot be changed. proposalCENTRAL will be open to submit letters of intent beginning on Wednesday, January 26, 2022.

A sponsoring-institution signature is not required.

Applicants will be notified by email no earlier than **Friday, April 1, 2022**, whether they may proceed with the full application.

FEEDBACK WILL NOT BE PROVIDED FOR THE LOIs. LUNGEvity will provide results of the peer review process upon request for full applications only.



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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 eight 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.
 - **Career and Mentoring Plan:** Describe your career and mentoring plan in detail.
 - **A few pertinent references.**

The narrative should be typed in Arial 11-point type, single-spaced, with .5" margins. Clarity and brevity are highly desirable qualities in an application. The narrative should not exceed a total of **five pages**, including the references.

- NIH **biosketches** (OMB No. 0925-0001 and 0925-0002) of the applicant and key personnel, including the primary mentor and any other mentors. ***The mentor(s) should include a list of previous mentees and the mentees' current institutions.***
- **Budget information** by year, along with a justification
- **Other support:** Be sure to include the dollar value 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
- Do **not** include reprints of your previous publications.
- Include any additional **letters of reference** from the mentors, if more than one mentor will be involved.



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Applicants are required to electronically submit the full application by **Monday, May 9, 2022 (11:59pm EST)**, via proposalCENTRAL: <https://proposalcentral.com>. Extensions will not be given. Once a full application has been submitted electronically, it cannot be changed.

Applicants will be notified by email in **late summer 2022** whether they will receive an award.

LUNGEvity will provide results of the peer review process upon request for full applications at that time.

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 the **November 1, 2022, start date of the grant term**.

APPLICATION ASSISTANCE

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

Margery Jacobson
Senior Research and Education Services Manager
mjacobson@LUNGEvity.org

For help with the proposalCENTRAL electronic application process, please contact:
Help Desk at proposalCENTRAL
pcsupport@altum.com
1-800-875-2562