

## **About the American Lung Association COVID-19 and Emerging Respiratory Viruses Research Award**

There is an urgent need to better understand the pathobiology and both long term and immediate clinical implications of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) viral infection that leads to the morbidity and mortality seen with COVID-19, as well as increase knowledge about the potential emerging threat of other novel respiratory viruses. We are looking for proposals to advance research against emerging respiratory pathogens like SARS-CoV-2.

The Lung Association is interested in applications that address the following types of clinical, basic, translational, and population health questions:

- A new understanding of the basic biology of respiratory viruses that could lead to better treatment and prevention
- Understanding host factors that alter response to these infections
- Understanding individual, regional, or social factors increasing or decreasing community spread of COVID-19 and other respiratory viruses
- Case tracking and epidemiological approaches to understanding COVID-19 and other respiratory viruses

### **About the Funding Opportunity**

**The American Lung Association COVID-19 and Emerging Respiratory Viruses Research Award is for \$100,000 per year for two years.** The award is intended to support independent investigators with a stellar track record of accomplishment, who have the potential to advance our knowledge and understanding of COVID-19 and other novel respiratory viruses with epidemic potential.

Successful applicants will be independent investigators with strong evidence of ongoing excellence and productivity in a related field.

Grants are subject to annual review and may be granted for up to two years. The second year of support is contingent on demonstration of satisfactory progress, as well as the availability of funding from the Lung Association.

No more than 25% of the requested budget may be used for an awardee's salary and/or fringe benefits and no more than 30% of the total award budget may be used to fund the purchase of permanent equipment. Grant funds may be used for the salary and fringe benefit costs of personnel other than the Applicant.

#### **Key Dates:**

|                    |  |
|--------------------|--|
| August 6, 2021     | Letter of Intent (LOI) accepted through proposalCENTRAL                            |
| September 23, 2021 | Deadline to submit LOI is Thursday, September 23, 2021<br>(11:59 PM, Eastern Time) |
| November 1, 2021   | LOI Notifications  |

December 16, 2021 By Invitation Only - Deadline to submit an application is Thursday, December 16, 2021 (11:59 PM, Eastern Time)

January- April Peer Review Period

June 2022 Outcome notifications are sent to all applicants

July 1, 2022 Research term begins

## **Eligibility Requirements**

This funding opportunity does not limit the applicants based on academic rank or discipline. It requires only evidence of employment at a nonprofit academic institution, and independence beyond the fellowship/training stage. The institution must commit that the applicant is eligible to be continuously employed throughout the duration of the grant term and should state so in the Department Chair's Letter of Support.

## **Experience and Productivity**

At the time of application, the applicant must hold a doctoral degree and have a faculty appointment or equivalent with demonstrated institutional commitment (salary support, research space as evidenced by a Department Chair or equivalent letter) in a recognized academic not-for-profit research institution.

## **Letter of Intent (LOI)**

### ***Requirements for the Letter of Intent Submission:***

- A 2-page Letter of Intent including brief descriptions on the:
  - Rationale and Significance of the research project
  - Specific Aims and Hypotheses (may be modified slightly in full application)
  - Overall experimental approach
- Budget
- Applicant Biosketch

## **Important Notes**

It is recommended that applicants submit projects to the appropriate Institutional Animal Care and Use of Committee (IACUC) and human subjects Institutional Review Board (IRB) at the time of application or before. Copies of the approvals must be provided to the American Lung Association prior to funding.

## **COVID-19 and Emerging Respiratory Viruses Research Award Application Guide- By Invitation Only**

The American Lung Associations used the e-grantmaking website, proposalCENTRAL, to process all awards and grants applications. Please access this website at: <https://proposalcentral.altum.com> The deadline for submission: December 16, 2021.

For questions about the electronic application process, e-mail: [pcsupport@altum.com](mailto:pcsupport@altum.com)

### **PROPOSAL SECTIONS**

#### **Title Page**

To initialize your application, enter a title for your project.

Applicants are also asked to select the first-year monetary amount requested. The project start and end dates are automatically entered for you as we do not allow flexible start dates. The American Lung Association COVID-19 and Emerging Respiratory Viruses Research Award period is July 1, 2022 to June 30, 2023.

Once complete, press the 'SAVE' button and watch the gray Proposal Navigation box on the left portion of your screen become activated. Click 'NEXT' or on a section name to move to another section.

#### **Download Templates & Instructions**

All downloadable files are located on this page and consist of instruction files and required templates for your application submission. Click the 'DOWNLOAD' link for each file, and 'SAVE' to your computer. Go to the "Research Plan and other Supporting Documents" menu option in the gray navigation menu to upload your completed template files.

#### **Enable Other Users to Access this Proposal**

This section allows you to give other users access to your grant application. When you give a person access to your grant application, you can give them one of three levels of permissions: View (cannot change any details), Edit (can view and change information in the grant application, but cannot submit or view the access permission page), or Administrator (can view, edit and submit the application, as well as give access rights to others).

#### **Applicant Contact Information**

The person who creates the application is the default Applicant. Contact information from this person's Professional Profile, including primary institution affiliation, is automatically loaded to this section of the application. As all American Lung Association correspondence occurs with the Applicant, please provide the correct contact information for the applicant. The Sponsored Research Program Office is **NOT** acceptable.

To change the Applicant and the institution affiliation, choose from the list of available names and institutions. For privacy reasons, the list contains only the following: the name and institution of the person who created the application and the names of individuals included in the Access Permissions section of their Professional Profile (such as administrators at the institution). If, after changing the Applicant you need to update the contact information that

appears below it, you can click 'EDIT PROFESSIONAL PROFILE' to go directly to your Professional Profile. You can exit this screen and select the 'PROFESSIONAL PROFILE' tab from the proposalCENTRAL management window and changes will be automatically uploaded to the Applicant screen. Contact information and institution affiliation from the selected Applicant's Professional Profile is preloaded to the Applicant's contact information section below.

**Complete all the required fields that are marked with a red asterisk.** If the required fields are incomplete or incorrect, changes must be made in the Applicant's Professional Profile. You can go directly to the selected Applicant's Professional Profile by clicking the button 'EDIT ACCOUNT INFORMATION.' Alternatively, you may exit the Applicant's section and use the Professional Profile tab in your proposalCENTRAL management window which is usually located in a different proposalCENTRAL browser window than the application. **The percent of Applicant's total effort currently devoted to each of the listed activities must be indicated before going on to the next section.**

### **Institution and Contacts**

The institution of the Applicant will be as selected as the default Institution and will have primary contractual responsibility for the grant if awarded. Institution information is pre-loaded to this section of the application. **NOTE: If the required fields marked by a red asterisk are incomplete or incorrect, changes must be made in the Institution Profile.** To change the Institution choose from the list of institutions and press the button 'CHANGE INSTITUTION'. Initially, the list contains only the following: the current institution, the institutions that you listed in your Professional Profile, and any other institutions that include your UserID in their Access list. Use the 'SEARCH' option to search the other institution profiles available in proposalCENTRAL. Results of the Search will be added to the list of institutions. To change the Institution choose from the new list of institutions and press the button 'Change Institution'. If, after changing the Institution you need to update the contact information that appears below it, contact the Grants and Contracts office of your institution to update the Institution Profile or call Customer Service at proposalCENTRAL at 1-800-875-2562 for assistance.

Next, choose the appropriate institutional officials for the particular grant program; (\*) indicates a required contact. There are two ways to enter contact information for the requested contact - you can select from the list of Institutional Officials from the Institution Profile of the Institution selected at the top of this page OR enter an email for the appropriate contact and complete and save the form. When you have selected the appropriate institution officials, click the red 'ADD' button. The contact information is loaded into your proposal and the contact will be shown in the table below. Be advised that the contact form may be pre-filled with some information if the email you entered is already associated with a proposalCENTRAL user.

### **Key Personnel**

The applicant is responsible for listing all personnel who will have a significant role with the research project (i.e., will have impact on project content, data collection, data interpretation).

#### ***Steps for the Applicant to Submit Key Personnel:***

- Enter the email address of the key personnel in the text box provided and click 'ADD'.
- A window will open; enter the requested information. Complete all the required fields that are marked with a red asterisk. If the person is already registered in proposalCENTRAL, some information will be pre-loaded into the contact form.

- Click the 'SAVE' button and 'CLOSE WINDOW'.

### **Project Summaries**

#### ***General Audience Summary***

Provide a succinct and accurate description of the research project in non-scientific terms that could be clearly understood by a general audience. Include the project's relevance and significance to the mission of the American Lung Association. Do not include any proprietary or confidential information.

Please observe the following limitations for the general audience summary:

- Limit the summary to 1,000 characters or less.
- Information entered in this field must be text only: scientific notations, special characters, special fonts, and other rich-text formatting (e.g., bold, italics, underline) cannot be saved or displayed.
- Please type continuously - do NOT click 'ENTER' at the end of each line. After a cut and paste, check the text to make sure the lines are continuous. Click 'ENTER' to begin a new paragraph(s).

#### ***Technical Audience Summary***

Provide an abstract of the research project in technical terms that would be appropriate for experts in the field. Do not include any proprietary or confidential information.

Please observe the following limitations for the technical abstract:

- Limit the abstract to 3,000 characters or less.
- Information entered in this field must be text only: scientific notations, special characters, special fonts, and other rich-text formatting (e.g., bold, italics, underline) cannot be saved or displayed.
- Please type continuously - do NOT click 'ENTER' at the end of each line. After a cut and paste, check the text to make sure the lines are continuous. Click 'ENTER' to begin a new paragraph(s).

#### ***Scientific and Research Categories***

Select the most appropriate category(s) for your proposed project in order of relevance. Select choices carefully as they will partially be used to facilitate selection of scientific peer reviewers.

#### **Assurances**

All research funded by the American Lung Association must comply with federal requirements regarding the use of human subjects, animals or biohazards in research. *It is recommended that applicants submit projects to the appropriate Review Board at the time of application or before.*

#### ***Human Subjects and Stem Cells***

Applicants/ awardees conducting research on human subjects and/or human stem cells must comply with the provisions of the United States Department of Health and Human Services 45 C.F.R. pt. 46 to the same extent as each would were the research funded by the National Institutes of Health.

Indicate whether the proposed project involves Human Subjects. If so, add the institutional OHRP Assurance Number as well as the individual proposal IRB status – "approved", "exempt" or "pending". If approved or exempt, please provide the corresponding date of approval or exemption.



### ***Animal Use***

The American Lung Association allows animal use in biomedical research only when no other means of obtaining scientifically sound, valid and useful results are available. Applicants/awardees must comply with the Public Health Service Policy on *Human Care and Use of Laboratory Animals* and the National Research Council *Guide for the Care and Use of Laboratory Animals* to the same extent as each would were the research funded by the National Institutes of Health. Indicate whether the proposed project involves vertebrate animals. If so, add the institutional Animal Welfare Assurance Number as well as the Institutional Animal Care and Use of Committee (IACUC) status – “approved”, “exempt” or “pending”. If approved or exempt, please provide the corresponding date of approval or exemption. Also, indicate whether or not the institution has been accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC). Applicants from institutions that do not have an IACUC or accreditation from the AAALAC are not eligible to apply.

### ***Biohazards***

Biohazards are broadly defined to be recombinant and/or infectious and tumor materials that may be deleterious to normal organisms upon controlled exposure. Indicate on the electronic application the Institutional Biosafety Committee (IBC) status. If approved, please provide the corresponding date of approval on the electronic application. If “exempt” from IBC approval within your institution, place “exempt” and the date the exemption was approved.”

## **Research Plan and Other Supporting Documents**

### **Templates and Uploaded Files (attachments):**

Click the ‘DOWNLOAD’ link for each template file, and ‘SAVE’ to your local workstation to complete.

### **Using the Provided Templates**

Before submitting an application, the following components must be uploaded to proposalCENTRAL. All components of the application require the use of provided templates also available on this page. All the required attachments are listed in the section directly above the templates section. This display is merely a tool to help you keep track of your completed *required* files. Once you upload a completed “required” template, the template name will display in the “Current List of Uploaded Attachments.” The ‘VALIDATE’ link in the Navigation Menu of the online application serves as a tool to check that all *required* attachment files are included in your application. *The Validate link will also check for any missing required online entries.*

### **Language and Format Requirements**

All applications must adhere to the following language and format requirements. *Not adhering to these requirements may result in an application being administratively withdrawn.*

- ✓ The applicant’s name should always be in the top ‘HEADER’ portion. The header information should carry forward to subsequent pages in the template.
- ✓ Use English only and avoid jargon and any unusual abbreviations. Your application should read like a Scientific American journal article.
- ✓ Use Arial 11 point font size, the NIH-suggested font, unless otherwise specified in the instructions for a specific template.
- ✓ Be consistent with the use of font styles and indentation.

- ✓ Type density, including characters and spaces, must be no more than 15 characters per inch (cpi). For proportional spacing, the average for any representative section of text must not exceed 15 cpi.
- ✓ No more than 6 lines of type within a vertical inch.
- ✓ Margins, in all directions, must be at least ½ inch.
- ✓ Figures, charts, tables, figure legends, and footnotes may be smaller in size but they must be clear and legible.
- ✓ Applicants are responsible for correcting any changes to templates resulting from input of data. Data should be completed in the space provided. Each template page must respect the original margins on all sides.
- ✓ Attached files should be no larger than 3-5 MB to facilitate review of the application. Very large files can make a full and comprehensive review of the application difficult. The objective is to find a balance between the content of your application and file size.

### **Uploading to Online Application**

Attachment files must be submitted and uploaded to electronic application as PDF files. Once attachments are uploaded, you will get a confirmation message and see that your file is now listed in the “Uploaded Attachment” section of the screen. Two links are available in each row of an uploaded attachment: **DEL** and **SHOW**. “Del” allows you to delete the file, if necessary, and “Show” opens the uploaded file. It is strongly recommended that you **open and review** your uploaded file. If, for any reason, you wish to modify the file, make the revisions in the **original** document (offline), **convert** the file to PDF and once again, **attach** the newly revised file. **Remember to delete any previously submitted versions of the file.**

### **Biographical Sketch**

Using the template provided, submit biographical sketches for the applicant and all key personnel listed in Section 6. **Biographical Sketches must not exceed five (5) pages for each person and should provide the following information about each key person, starting with the applicant:**

**A. Personal Statement:** Briefly describe why your experience and qualifications make you particularly well-suited for your role in the project that is the subject of the application. You may include factors such as your training, technical expertise, your previous experimental work on related topics, and your past performance in the field of study.

**B. Positions and Honors:** List in chronological order previous positions, concluding with your present position, list any honors.

**C. Contributions to Science:** Briefly describe up to five of your most significant contributions to science. The description of each contribution should be no longer than one half page, including citations.

**D. Additional Information:** Research Support: List selected ongoing or completed (during the last three years) research projects (federal and non-federal support). Use the Other Support Template provided to detail your other support.

### **Budget and Justification**

**The budget justification must not exceed three (3) pages.**

Using the template provided, submit a budget and justification for your full research project. Awards are only given in one-year increments, all awardees will be given the opportunity to renew their project for a second year of funding. *Funding is contingent on individual progress during the award year and the availability of funds.*

***Budget Spreadsheet***

The first page asks the applicant to estimate direct costs for the first year of the proposal only. The second page asks the applicant to estimate direct costs for the entire period of the award. Indirect costs are **not** allowed for any American Lung Association award. Where applicable, only indicate dollars (no cents).

***Personnel:*** Fringe benefits may be requested provided such are treated consistently by the applicant's organization as a direct cost. No more than 25% of funds may be used for an awardee's salary and/or fringe benefits.

***Equipment:*** Itemize equipment with costs. Equipment is defined as an item that costs \$500 or more, has a primary function related to the research project, and ordinarily has a usable life expectancy of one year or greater. No more than 30% of the total award budget may go to fund the purchase of permanent equipment.

***Supplies:*** Itemize supplies with costs. For example, indicate the number of experimental animals to be used, unit cost per animal, and cost for daily use.

***Discretionary Funds:*** No more than \$2,500 per annum may be used for travel or publication costs directly related to the American Lung Association- funded project and within the scope of the award terms and conditions.

***Other Project Support Expenses:*** No award shall be used for the purchase of furniture, computers, the construction or renovation of facilities, payment of honoraria, membership dues or tuition, purchase of textbooks or periodicals or payment for secretarial support.

*Total Costs may not exceed allowable award amounts. Correct arithmetic is the applicant's responsibility.*

**Resources**

Using the template provided, describe the institutional resources available for the project. **The resource section must not exceed two (2) pages.**

***Facilities:*** Specify the facilities to be used for the conduct of the proposed research. Indicate the performance sites and describe capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Under "Other," identify support services such as machine shop, electronics shop, and specify the extent to which they will be available to the project. Use continuation pages if necessary.

***Equipment:*** List the most important equipment items already available for this project, noting the location and pertinent capabilities of each.



### **Other Support**

Using the template provided, list any and all active and pending support for each key personnel. **No page limit applies to the Other Support information.**

Other Support includes all financial resources, whether Federal, non-Federal, commercial or institutional, available in direct support of an individual's research endeavors, including but not limited to research grants, cooperative agreements, contracts, and/or institutional awards.

***Please specify who the Primary Investigator is for all other support listed.*** Prizes or gifts do not need to be included.

The American Lung Association will not award funds to duplicate any work that is being supported by other funding agencies. Budgetary overlap is **not** permitted; however, scientific overlap will be evaluated on an individual basis. In cases of significant scientific overlap, a successful applicant will have the option to choose between the American Lung Association award and that of the other organization.

### **Research Plan**

*Please note: Page limits, language and format requirements listed in the Language and Format Requirements must be adhered to in preparing your research plan. Not adhering to format and page limitations may result in an application being administratively withdrawn.*

***Specific Aims:*** State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved. **The Specific Aims section must not exceed one (1) page.**

List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology.

***Research Strategy:*** Organize the Research Strategy in the specified order using the instructions provided below. Start each section with the appropriate section heading — Significance, Innovation and Approach. Cite published experimental details in the Research Strategy and provide the full reference in the References section. **Applicants are limited to 6 pages.**

#### **Significance**

- Explain the importance of the problem or critical barrier to progress within the field of viral research.
- Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice the field of viral respiratory research.
- Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

#### **Innovation**

- Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions. Clearly synthesize your own contributions to the field, and demonstrate your relative stature in the area.

- Explain how the application challenges and seeks to shift current research or clinical practice paradigms. This provides an opportunity to demonstrate your knowledge and ability in this area, and to synthesize large volumes of information into a succinct and cohesive statement.
- Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

### **Approach**

- Explain why you have chosen to address a particular portion of the overall problem and why you have chosen a particular approach. Discuss any preliminary studies, data and/or experience pertinent to this application and specify all novel data.
- Describe the overall strategy, methodology, and analyses to be used to accomplish each of the specific aims of the project. For each aim, include how the data will be collected, analyzed, and interpreted (e.g., number of experiments, types of measurements to be made).
- Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims. This should include discussion of what you will do if conflicting and contradictory data are obtained.
- If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.

### **Assurances**

State concisely how assurances will be met within the confines of the proposed research project. Assurances must not exceed two (2) pages.

***Human Subjects:*** When human subjects or material obtained from such subjects are used in the proposed project, the application must state how the rights and welfare of the individual subjects are protected and assured. Include consent forms and questionnaires in appendix, if applicable.

***Animal Use and Justification:*** When animals are used in the project, the application must include a succinct and complete description of the following points:

- Provide a detailed description of the proposed use of the animals in the work outlined in the Research Strategy section. Identify the species, strains, ages, sex, and numbers of animals to be used in the proposed work.
- Justify the use of animals, choice of species and numbers to be used. If animals are in short supply, costly, or to be used in large numbers, provide an additional rationale for their selection and numbers.
- Provide information on the veterinary care of the animals involved.

***Biohazard Materials:*** When biohazard materials, defined as recombinant, infectious and tumor selected agents (i.e. radioisotopes) that may be detrimental to normal organisms upon controlled exposure are used:

- Describe procedures that will be used to monitor possession, use and transfer of the Select Agent(s).
- Describe plans for appropriate biosafety, bio-containment and security of the Select Agent(s).
- Describe the bio-containment resources available at all performance sites.

**References:** **References must not exceed five (5) pages.**

**Appendix:** May contain additional and relevant material such as letters of support, questionnaires and/or consent forms. No other material such as preliminary data, photographs/images or publications, is allowed in the appendix. **The appendix is limited to 5 pages.**

#### **Department Head Statement Letter**

Please note: ***A Department Head Letter on institutional letterhead is required.***

#### ***Content of Department Head Statement:***

1. State the applicant's current and projected status during the initial term of the award.
2. State the applicant's faculty title and from what academic institution does the applicant currently hold his/her faculty appointment. Confirm the applicant is eligible for continued employment for the duration of the award. **The Department Head Statement must be explicit about the applicant's faculty status.**
3. State your department's financial and space commitment to the applicant, and to the American Lung Association project being submitted.
4. Describe the intellectual environment and your involvement in the applicant's award.
5. State minimum percent of overall effort and guaranteed time to be protected for research to complete the project.

#### **Certification Form**

Prior to submitting an application, an applicant must obtain signatures (electronic signature is allowed) from key officials certifying compliance with American Lung Association policies and requirements, including the following Conflict of Interest Clauses:

***Tobacco Use:*** The American Lung Association will not provide research or other funding to investigators who have received direct funding or funding from agencies of the tobacco industry.

***Financial Disclosure:*** American Lung Association applicants/awardees must comply with the provisions of the United States Department of Health and Human Services regulations on financial conflicts of interest 42 C.F.R. pt. 50, Subpt. F to the same extent as each would were the research funded by the National Institutes of Health. In general, the purpose of the Conflict of Interest policy is to ensure that there is no possibility that an applicant or their family will receive financial gain as a result of American Lung Association supported research.

#### **Demographics**

Please note that the information under the Demographic Information will be used only for statistical purposes and will not be provided to the reviewers.

#### **Validate**

Click the 'VALIDATE' link (from any page of the online application). Validate checks for missing **required** information or files. Any missing required information will be listed on the screen. All required information must be supplied before you can **Submit** an application.

#### **Print Application (no upload required)**

Please note: When you print the application, a proposalCENTRAL generated certification page automatically prints- **DISREGARD THIS FORM.** It is **NOT** required by the American Lung Association.



**Submit (Last Step)**

The American Lung Association requires all applications to be submitted electronically through proposalCENTRAL. Once you have completed and validated your application, you can then 'SUBMIT' electronically to proposalCENTRAL. **The deadline for submission: By invitation only December 16, 2021.**