ADDITIONAL V E N T U R E S

2025 Expansion Award

Request for Proposals

Proposal Deadline: November 7, 2024, by 8:00PM EST

TABLE OF CONTENTS

EXPANSION AWARD OVERVIEW
2024 KEY DATES
SCIENTIFIC FOCUS AREA
AWARD DETAILS
ELIGIBILITY REQUIREMENTS
ADDITIONAL IMPACT CONSIDERATIONS
APPLICATION INSTRUCTIONS
OVERVIEW OF PROPOSAL COMPONENTS6
REVIEW PROCESS
ACTIVITIES AND DELIVERABLES
TERMS OF GRANT AND USE OF FUNDS
QUESTIONS?
ABOUT ADDITIONAL VENTURES

EXPANSION AWARD OVERVIEW

The Additional Ventures Expansion Award enables teams to develop, test, and implement novel high-risk ideas in the single ventricle space. Through a **one-time**, **12-month**, **\$50,000 award**, teams are encouraged to rapidly explore bold new ideas with the potential to reshape single ventricle research and patient care. The Expansion Award is open to investigators in any field whose prior or ongoing **findings**, **knowledge**, **and/or technologies** can be applied in **novel and groundbreaking** ways to develop **impactful single ventricle-related aims**. The Expansion Award program encourages agile and innovative thinking to identify new paths to single ventricle treatments and cures.

These awards fill a gap in existing funding opportunities to <u>promote rapid scientific advancement, allowing</u> <u>bold new ideas to accelerate forward and find answers quickly</u>. Previously, the Expansion Award was limited to applicants with active, single ventricle-focused awards intending to explore extensions of current work; <u>this</u> <u>limitation has been lifted for the 2024 cycle</u>.

All application materials will be accepted electronically via the online <u>ProposalCentral</u> portal, in accordance with the timeline below. *Please carefully review eligibility requirements on pages 4-5 and proposal components on pages 6-7.*

KEY DATES

Application Portal Opens	August 8, 2024
Proposal Due	November 7, 2024 by 8:00pm EST
Notification of Award	By January 31, 2025
Funding Begins	February 1, 2025

Note: Deadlines are subject to change at the discretion of Additional Ventures in response to nationally or globally relevant events.

SCIENTIFIC FOCUS AREA

Single ventricle heart disease is an understudied and underfunded area that requires a multi-disciplinary approach from a research and clinical care perspective.

What is Single Ventricle Heart Disease?

In human hearts, four distinct chambers form during development: two atria and two ventricles. However, in some individuals, one ventricle does not form properly and is either smaller, underdeveloped, or is missing a valve. Such conditions are referred to as single ventricle heart defects, which encompass a spectrum of diagnoses, including but not limited to pulmonary atresia with intact ventricular septum, hypoplastic left heart syndrome, and tricuspid atresia.

Additional Ventures aims to accelerate research that will lead to both improved care and novel treatments for single ventricle based on a mechanistic understanding of the disease. In September 2020, our organization published a <u>Research Roadmap</u>, developed in partnership with investigators across disciplines to identify strategic solutions and address these gaps and challenges. The Research Roadmap is intended to guide a decade's worth of research efforts and serve as a framework for coordinating global resources to advance single ventricle research and clinical care.

For more information on single ventricle and our Research Roadmap, visit our website.

The 2024 cycle of the Expansion Award welcomes research efforts relevant to single ventricle heart disease and aligned with our Research Roadmap in Focus Areas II through V (bolded) and strategic topics (nested) related to each one (see below). <u>Registry/repository builds and proposals will not be considered.</u> Investigators are encouraged to propose research projects with relevance to multiple types of single ventricle.

- I. Understand Single Ventricle Origins
 - I-1. Deep Phenotype-Genotype Analysis
 - I-2. Biological Mechanisms Underlying SV
 - I-3. Environmental & Risk Factors of SV
- II. Define Biological Mechanisms of Outcomes
 - II-1. Etiology of Outcomes
 - II-2. Factors Leading to Resilience
 - II-3. Risk Factors of Outcomes: Modifiable & Non-Genetic
- III. Establish Predictive, Preventative, and Improved Care

III-1. Biomarkers of End-Organ Function III-2. Therapeutics for Sequelae III-3. Non-Invasive Interventions

Introduce Functional Cures IV-1. Bionic & Mechanical Approaches IV-2. In Utero Interventions IV-3. Transplant Availability & Decision Making

AWARD DETAILS

The Expansion Award program enables teams to explore new **single ventricle-focused** directions inspired by their current work. Each 12-month award will provide up to **\$50,000 USD** in funding to support novel research aims.

The Expansion Award supports investigators, both established within and new to the single ventricle field, in achieving the rapid **expansion** of the field through the **application of novel findings, technologies, and knowledge** from any field **to single ventricle-related aims.** Examples of possible Expansion Award proposals include:

- Repurpose mechanical engineering innovations to prototype and test a novel low-shear Fontan Assist Device (FAD).
- Translate genetic or molecular insights into a novel and reproducible small animal model of single ventricle heart disease.
- Apply field-specific knowledge to understand biological mechanisms that underly the development and/or treatment of non-cardiac single ventricle sequelae.
- Collaboratively develop digital or analog clinical tools to enhance the diagnosis, care, or treatment of single ventricle patients.
- Adapt bioengineering advancements to develop novel benchtop testing platforms to evaluate mechanical and bioengineered devices.

In 2025, we anticipate funding approximately ten (10) grants; however, we reserve the right to fund any number of grants based on both the quality and quantity of the applications received. Previous Expansion awardee project abstracts can be viewed in our <u>awards database</u>.

ELIGIBILITY REQUIREMENTS

1. Principal Investigator(s) (PIs) must hold doctoral degrees (e.g., PhD, MD, PsyD, or equivalent). Applications are welcome from early career investigators and those in instructor or postdoctoral roles, so long as they meet all other eligibility criteria.

- 2. Applicants must be currently affiliated with a nonprofit academic or research institution, including:
 - Domestic and international nonprofit organizations,
 - Domestic and international public/private academic universities or institutions of higher learning (colleges, medical schools, and other related academic research institutions), and
 - Governmental agencies with active biomedical research programs.
- 3. Proposed expansion plans must have demonstrated relevance to single ventricle heart defects.
- 4. PIs may only submit one application per cycle and may not currently hold an <u>active</u> Expansion Award from another award cycle (including those in a No Cost Extension period). Previous Expansion awardees are otherwise eligible to apply <u>so long as all required deliverables (including the final report)</u> <u>have been submitted</u>. PIs funded by Additional Ventures through other mechanisms <u>are</u> eligible to apply for Expansion Awards.

ADDITIONAL IMPACT CONSIDERATIONS

Additional Ventures strives to support a scientific community that is diverse, collaborative, and forwardthinking. As such, Additional Ventures recognizes the deep inequalities inherent in academia and strives to include those who have been historically excluded and underrepresented. When evaluating the overall impact of submissions, Additional Ventures will take into consideration:

- The **diversity of the expertise and background** of project leads and team members, including underrepresented racial and ethnic groups, sexual and gender minorities, and persons with disabilities.
- Proposals from investigators new to single ventricle and associated conditions.
 - For the purposes of this RFP, "new to single ventricle and associated conditions" identifies a principal investigator who has not authored a publication relating to single ventricle and associated conditions and has not been the PI on a grant related to single ventricle and associated conditions awarded from a grant-making agency, nonprofit, foundation, or other grant-awarding organization.
- Proposals from early career investigators and those in instructor or postdoctoral roles.
 - For purposes of this RFP, an "early career investigator" is an individual that has had an independent lab or clinical research position for no longer than seven (7) years past their post-doctoral position or medical fellow position. If an investigator has achieved independence directly following graduate school, an "early career investigator" is considered one who has had an independent research position for ten (10) years or less.
 - Exceptions to this timeline include, and are not limited to: 1) Childbirth or adoption (one (1) year automatic extension), 2) Extenuating circumstances related to child, elder, or family care, 3) Periods of part-time work or leave, 4) Period of time after receipt of terminal degree requirements when the investigator was not conducting research (including required clinical training/activities, or time away due to family care, medical issues, military service, or natural disasters), and 5) Significant change in field of study.

Applicants are not required to disclose the information above. Responses will be visible only to Additional Ventures; outside reviewers will not have access to this information.

APPLICATION INSTRUCTIONS

Interested candidates who meet eligibility criteria are invited to submit a proposal through <u>Additional</u> <u>Ventures' online grant portal</u>, <u>ProposalCentral</u>, by **Thursday**, **November 7**, **2024** at **8:00pm EST**.

Formatting Instructions - All application materials should be completed within the portal and prepared from provided templates, when appropriate. All uploaded application materials should be submitted as a **PDF** and formatted in a **sans-serif, 11-point font** with **0.5-inch margins** and **single-spaced**, except where provided templates or fillable forms apply; elements should not exceed the page or character limit, where applicable.

Please visit <u>ProposalCentral</u> to access the application portal and apply:

- 1. Log in (or create an account) as an 'Applicant or Awardee' to start your application.
- 2. Within the portal, Additional Ventures' open programs are listed under the 'Grant Opportunities' tab.
- 3. Click 'Apply Now' to begin your application. To revisit an existing application, select your draft under the 'Proposals' tab.

OVERVIEW OF PROPOSAL COMPONENTS

Application instructions can be found in ProposalCentral; a formal proposal detailing the intended project must be submitted as part of the application and will contain the following elements:

- Title page
- Eligibility criteria certification

for the most up-to-date application guidelines and requirements. Requirements are subject to change

at Additional Ventures' discretion; any changes will be reflected in real time within the application portal.

Please visit the application portal

- Investigator information
 - Principal Investigator (PI) name, institution, degree(s), academic rank, contact information
 - Co-Investigator contact information (limited to three (3) per proposal)
 - Investigator biosketches (NIH template; five (5) page maximum, each)
- Primary institution information & contacts
- Project summary
 - Lay summary & Technical abstract (2100 character maximum, each)
 - Succinct summaries written for the general public and technical audiences, respectively, describing the project's aims, goals, and novelty including how the completion of the study will impact the field of single ventricle research and/or care.
 - Selection of one <u>Research Roadmap Focus Area and Strategic Topic</u> reflective of the proposal's scientific focus area

Budget

- Itemized budget (fillable form, in USD) supplemented with narrative budget justification (3000 character maximum)
 - For non-US applicants: All grants will be made in USD, and Additional Ventures is not responsible for any changes in conversion rates.
- Acceptable expenditures include, but are not limited to: equipment, reagents, software and compute time, patient recruitment, project-related travel (including travel to the SVIM meeting).
- No more than 50% of the total award amount may be used to support salary and fringe costs of personnel.

- Per Additional Ventures' funding policies, all salary support is subject to the NIH cap.
- If more than one institution will be involved in the project, one should be proposed as the applicant organization, and the other(s) included as a sub-grantee. Please submit individual budgets and budget justifications for each institute.
- **Uploaded documents** (PDF format)
 - Research Plan (three (3) pages maximum; figures permitted)
 - Aim Statement
 - A delineation of the Aim to be achieved by the study. *Due to the size and scope of the Expansion Award, <u>most projects are expected to comprise a single Aim.</u>*
 - Background/Preliminary Results
 - A technical summary of relevant preliminary research, the methodology used in pursuit of the project, and discussion of relevant results or findings.
 - Approach
 - A technical narrative describing the application of the preliminary findings, technologies, or knowledge to the single ventricle field, including discussion of rationale, goals, and impact of findings. Include a sufficient description of the significance of the application, including how the award will positively impact our understanding or treatment of single ventricle.
 - References Cited (no page limit)
 - Timeline & Milestones (template provided; two (2) pages maximum)
 - A timeline indicating expected scientific milestones and products achieved during the award period.
 - Letters of support from collaborators (if applicable)
- Applicant demographics optional and confidential

REVIEW PROCESS

Upon receipt of complete proposals, Additional Ventures review committees will evaluate proposals based on scientific and technical merit, realism of cost and implementation, overall impact, and context of the proposal within existing scientific investments. Additional Ventures will provide context of the decision for proposals not selected for funding upon request.

ACTIVITIES AND DELIVERABLES

Grantees funded by this effort are expected to report to Additional Ventures the progress and results of awards in a **final report: a two (2) page summary of research progress**, including a description of scientific impact and use of funds; submitted to Additional Ventures within three (3) months of the conclusion of the award term.

Additional Ventures may make reporting inquiries and request responses relating and not limited to: publications and presentations, patents, collaborations, external award of additional or follow-on funding, students and postdoctoral associates trained in association with work funded by Additional Ventures.

Grantees are invited to engage in the following strongly encouraged activities:

• Attendance at the biennial <u>Additional Ventures Single Ventricle Investigator Meeting (SVIM)</u>. When appropriate, presentations are encouraged to be made by postdoctoral or pre-doctoral researchers.



- Active participation in virtual <u>Additional Ventures-led meetings or workshops</u> that bring together grantees to share progress and results amongst the single ventricle and cardiovascular research communities.
- Active participation in leadership and mentorship activities throughout the grant award period.

TERMS OF GRANT AND USE OF FUNDS

Each funded organization will be required to sign and agree to the Additional Ventures grant terms within thirty (30) days from receipt of notice of the award and prior to award funds being released. Full agreement terms will be distributed following notice of award; a summary of the Terms and Conditions can be found <u>here</u>.

Award funds for proposals selected for funding will be made payable to the applicant organization; under no circumstances will payment be made to an individual. Responding to this RFP and/or submitting a proposal does not entitle any individual or institution to receive funding from Additional Ventures. Funding, if any, is provided at Additional Ventures' sole discretion pursuant to the Terms and Conditions of a written grant agreement executed by Additional Ventures and the selected grantee organization, the terms of which Additional Ventures may require to be acknowledged by the PI.

QUESTIONS?

Contact our team with any inquiries at grants@additionalventures.org.

ABOUT ADDITIONAL VENTURES

Additional Ventures is a nonprofit foundation that aims to accelerate research progress and improve clinical care for children born with complex congenital heart defects so that they have a normal duration and quality of life. Although one in one hundred children are born with a congenital heart defect, there are limited options for those with the most complex forms, including single ventricle heart defects. For these children, there is no cure. With rapid advances in areas like genomics, single-cell technologies, and tissue engineering, now is the time to coordinate concerted efforts to understand how to overcome this devastating, complex disease.