

ADDITIONAL VENTURES

Catalyst to Independence Award

Supporting the next generation of Single Ventricle scientists

2023 Request for Proposals

Letter of Intent Deadline: March 16, 2023 (8 PM EDT)

Invited Full Proposal Deadline: May 31, 2023 (8 PM EDT)

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CATALYST TO INDEPENDENCE AWARD OVERVIEW

The Additional Ventures Catalyst to Independence Award is a research award program that supports exceptional early career scientists during the final years of their mentored postdoctoral research position (Level I), through their transition to an independent faculty position (Level II). The Catalyst program supports investigators pursuing [research relevant to single ventricle heart disease](#), including genetics, basic cardiovascular development, tissue engineering, computational modeling, and other relevant areas.

In addition to providing [generous funds](#) to support research, the Catalyst program utilizes a multi-pronged approach to equip investigators with skills and tools critical to their success as leaders of outstanding independent research programs, such as lab management and grant-writing training. The program is structured to **put the investigator first**, providing unique layers of [financial](#) and [mentoring](#) support to bolster the personal *and* professional success of awardees.

2023 KEY DATES

| | |
|-----------------------------|--|
| Application Portal Opens | February 2, 2023 |
| Letter of Intent Due | March 16, 2023, 8 pm Eastern Time |
| Full Proposal Due | May 31, 2023, 8 pm Eastern Time |
| Interviews | August, 2023 |
| Notification of Award | September 29, 2023 |
| Funding Begins | January 1, 2024 |

Note: Deadlines are subject to change at the discretion of Additional Ventures in response to nationally or globally relevant events, including the COVID-19 pandemic.

PROGRAM STRUCTURE

The Catalyst to Independence Award provides generous [monetary](#) and programmatic support for both scientific and professional development of awardees. The program provides up to six (6) years of support in two phases across the transition from advanced postdoctoral fellow to independent faculty.

- ◆ The first phase of the award (Level I) provides up to three (3) years of support for awardees in mentored, research-focused roles, such as postdoctoral research associate or instructor appointments.
- ◆ The second phase provides up to three (3) years of support for fellows who have achieved independence and are appointed to tenure-track faculty roles (Level II).

The two phases of the program are intended to be contiguous, and **support for Level II is contingent upon satisfactory progress achieving key milestones proposed during Level I**, as well as acceptance to tenure-track ([see Transition to Independence](#)).

Additional Ventures anticipates awarding up to four (4) new Level I investigators in the 2023 cycle.

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 based on a mechanistic understanding of single ventricle congenital heart disease. In September 2020, our organization published a [Research Roadmap](#), which was developed in partnership with investigators across disciplines to identify strategic solutions to address these gaps and challenges. This 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 2023 cycle of the Catalyst to Independence Award welcomes research efforts relevant to single ventricle heart disease and aligned with the Research Roadmap focus areas (bolded) and strategic topics (nested). Registry builds and proposals within Focus Area I will not be considered. Investigators are encouraged to propose research projects with relevance to multiple types of single ventricle.

II. **Understand the Origins of Single Ventricle Disease**

- II-1. Deep phenotype-genotype
- II-2. Model organisms
- II-3. Non-genetic and modifiable risk factors
- II-4. Normal cardiac development

III. **Define Biological Mechanisms of Outcomes**

- III-1. Outcome origins
- III-2. Substrate-outcome relationship
- III-3. Predictive models
- III-4. Early detection

IV. **Effectively Predict, Prevent, and Address Clinical Sequelae**

- IV-1. End-Organ trajectory, mapping, and biomarkers
- IV-2. Personalized medicine approaches
- IV-3. Alternative interventions
- IV-4. Learning networks

V. **Focus on Functional Cures, Not Palliative Approaches**

- V-1. Enabling technologies
- V-2. Standardization and scale
- V-3. Cross-disciplinary teams
- V-4. Bionic, regenerative, and transplant approaches

PROFESSIONAL DEVELOPMENT

Supporting outstanding research begins with a focus on people and projects. In addition to monetary support for fellows and their research, the Catalyst award provides additive programming dedicated to skill building, peer support, lab and people management, mentorship, networking, and career growth. These include but are not limited to:

- ◆ Sponsored attendance at our [Single Ventricle Investigator Meeting](#), held biannually (every two years) in the United States
- ◆ Individual career coaching and participation in regular training workshops

- ◆ Participation in the [Additional Ventures Speaker Series](#) - a virtual seminar series that tackles diverse topics within and adjacent to the SV field
- ◆ Round table and networking programming for Catalyst awardees

Each of the above provides an opportunity for awardees to network with others within the field, share their work, and learn new skills that are critical for the success of their independent careers.

MENTORSHIP

Applicants must identify **one** primary mentor who will provide supervision and support for the proposed research plan and commit to the applicant’s career development. Applicants are strongly encouraged to work with their mentor in preparation of the application and are welcome to recruit the support and expertise of additional mentors where appropriate. Mentors may transition in and out of the primary role as needed through the course of the award period.

During Level I, the primary mentor will ideally be the principal investigator of the laboratory in which the fellow resides; however, we recognize this is not always possible. In these cases, it is preferred that the mentor be an active investigator in the proposed or adjacent research area and be able to attest to the facilities and resources available for high-quality research. Mentors must certify that they are committed to providing the resources, expertise, and time necessary to ensure the success of the applicant.

Mentors can be changed at any time with written approval, including at the transition to independence.

TRANSITION TO INDEPENDENCE

The Catalyst award was designed to support successful advancement of awardees to tenure-track faculty positions. At the time a fellow is appointed to a tenure-track faculty position, they are expected to apply to transition to Level II of the program. To apply for transition to independence, Level I awardees must provide a letter of institutional commitment and faculty appointment along with a satisfactory progress report, abbreviated research plan, and categorical budget for the independent years of the award.

Qualifying Level II awardees are eligible for up to three (3) years of support as newly appointed tenure-track faculty members at qualifying academic institutions. Transition to Level II can be requested at any time during the three (3)-year mentored period after a tenure-track faculty appointment has been obtained. No cost extensions be discussed on a case-by-case basis if a fellow does not transition within the three (3)-year Level I award term.

PROGRAM FUNDS

Awardees are eligible to receive up to approximately \$1.2M (USD) over the course of the award period. Funds include stipend, annual research expenses, salary support for support staff, and a supplement that can be used for health or family care, as shown below. Due to differences in length of time supported and geographic location, the total award amount will vary amongst awardees.

| Program Funds | Level I | Level II |
|--|---------------------------------|---------------------------------|
| Stipend* | Starts at GS-11 | Starts at GS-12 |
| Max. annual research expenses | \$30,000 | \$100,000 |
| Max. annual support staff compensation | Up to \$50,000 starting Year 2 | Up to \$50,000 |

| | | |
|--|---------|---------|
| Annual supplemental health/family care** | \$5,000 | \$5,000 |
|--|---------|---------|

* Annual stipend levels are determined using the [US General Schedule](#), which standardizes compensation based on locality, experience, and position.

** Health- and family-care funds are intended to supplement university-provided health care.

HEALTH AND FAMILY CARE SUPPLEMENT

Additional Ventures recognizes that the high costs of health and family care impact the ability of early career investigators to fully participate in the extramural workforce. To ensure that this opportunity is welcoming to and supportive of fellows from diverse backgrounds and life stages, all awardees are eligible to receive a \$5,000 supplemental award per annual budget period to offset family- and/or health-related expenses.

The award may be used at the discretion of the fellow in addition to institution-provided health and family-related benefits. **Supplemental funding is not subtractive from research funds.**

ELIGIBILITY REQUIREMENTS

1. Applicants must have earned a PhD, MD, or doctoral equivalent **more than 1 year** prior to the application due date and must have held their current role for at least 1 year.
2. Applicants must have current postdoc or instructor status (or equivalent) and be in non-independent, mentored positions.
3. Applicants cannot concurrently hold a transition award from another organization. Applicants must commit to a minimum 9 calendar months (75% of the year) dedicated effort to the proposed work.
4. All applicants must be affiliated with a domestic nonprofit academic or research institution, including public/private academic universities or institutions of higher learning (including colleges, universities, medical schools, and other related academic research institutions); certain qualified governmental agencies with active biomedical research programs may also meet eligibility criteria.
5. Applicants must be legally qualified to work in the US (including citizens, non-citizen permanent residents, or temporary residents of the US). Immigration-related matters and visa applications are the responsibility of the fellow and sponsoring institution.

APPLICATION PROCESS

Application to the Catalyst award includes multiple steps with rigorous evaluation at each stage:



PRE-SUBMISSION CONSULTATION

Additional Ventures is committed to application processes that increase the impact and success of funded studies. Applicants are strongly encouraged to consult with Additional Ventures program staff prior to submitting a letter of intent. Contact us at grants@additionalventures.org for guidance on program scope or to seek feedback on proposal fit.

LETTER OF INTENT SUBMISSION ELEMENTS

Interested candidates who meet eligibility criteria are invited to submit an online Letter of Intent through [Additional Ventures' online grant portal](#) by March 16, 2023, 8 pm ET. All application materials should be completed within the portal or prepared from provided templates. The Letter of Intent includes the following elements:

- Title Page
- Eligibility criteria certification
- About the Applicant
 - Including applicant's name, institution, degree(s), academic rank, and contact information
 - Applicant biosketch (template provided within the portal; five (5) page maximum)
- Mentor information
 - Including name, position, and contact information
 - Mentor biosketch (template provided within the portal; five (5) page maximum)
- Institution information
- Project Summary
 - Project Summary: a brief summary of the applicant's proposed project, describing the research aims and goals for Level I of the award (a three (3) year period), including the primary hypothesis of the proposed work; (one (1) page maximum, figures allowed)
 - Key words selection (up to 6)
 - Selection of [Research Roadmap](#) category reflective of the applicant's scientific focus area
- Applicant Statements
 - Prompt 1: Why do you want to be a faculty member and head your own research group? (up to 6000 characters, inclusive of spaces)
 - Areas for consideration include: scientific passions, interests, and career goals, and/or brief discussion of the applicant's future independent research program.
 - Applicants are strongly encouraged to discuss how future programs will contribute to our understanding or treatment of single ventricle congenital heart defects.
 - Prompt 2: What skills are necessary for the success of an academic researcher? What have you done (and/or plan to do) to attain these skills and prepare for an independent career in academic research? (up to 3500 characters, inclusive of spaces)
 - Areas for consideration include development of teaching, lab management, and/or leadership skills; research commitment to the field; network development and maintenance; funding strategy; mentoring style; and approach to collaborations.
 - Prompt 3: Why is this the right award for you, and why are you right for this award? (up to 3500 characters, inclusive of spaces)

Please visit the application portal 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.

Login to ProposalCentral by visiting proposalcentral.com and select the Catalyst to Independence Award in the Grant Opportunities tab. To revisit an application already in progress, select your draft under the Proposals tab.

- Areas for consideration include: how this specific award program (and specific elements of it) will impact the applicant’s research and career trajectory, discussion of new opportunities or area of discovery, personal and/or professional hurdles overcome, impact on or of the single ventricle field.
- Applicant demographic information (optional)
 - Additional Ventures strives to support a scientific community that is diverse, collaborative, and forward thinking. A response is not required, and data will not be shared with reviewers.

FULL PROPOSAL SUBMISSION ELEMENTS

Select applicants will be invited to submit a full proposal describing the applicant’s research plans (applicable to the first three (3) years of the award). Invitations will be communicated by April 7, 2023. Full proposals are due **May 31, 2023, 8 pm ET**. Complete full proposals include the following elements:

- Technical abstract (2100 characters)
- Lay summary (written for the general public) describing the applicant’s research aims and goals, including how the completion of the work will impact single ventricle research and/or care (up to 2100 characters).
- Scientific Significance (2100 characters)
 - The statement should address the purpose of the proposed studies, potential key findings and why they matter, and possible future directions.
 - Select the primary [Research Roadmap](#) category addressed by this proposal and explain how your research is critical to advancing the field of single ventricle. Additional context for how the proposed research is relevant to science and society should be provided.
- Uploaded documents:
 - Specific Aims (One (1) page, PDF upload)
 - A brief, technical summary of the project’s scientific goals and expected outcomes, including the impact that the research results will have on the single ventricle and adjacent fields.
 - Include specific objectives of the research proposed.
 - Research Plan (Five (5) pages, PDF upload)
 - Outline of research methodology to be used in pursuit of the project (over a three (3) year period), including background and relevant preliminary results, research methods and study design, discussion of expected results, statistical analysis of data (where appropriate), and possible alternative approaches. Figures are permitted and are included in the page count.
 - References Cited (PDF upload, no strict page limit)
 - Categorical Budget (fillable form)
 - A categorical budget in USD covering the first three (3) years of the award, including research-related and indirect costs.
 - Categories include:

Please visit the application portal 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.

Login to ProposalCentral by visiting proposalcentral.com and select the Catalyst to Independence Award in the Grant Opportunities tab. To revisit an application already in progress, select your draft under the Proposals tab.

- Stipend: Applicants should request a specific GS-level stipend that is dependent on number of months in their current role and geographic location. For example, using the General Schedule [website calculator](#), an individual who has been in their current postdoctoral/instructor/or equivalent role for 3 - 4 years would select GS 11 and step 4. A postdoc in their current role for 4 years and 3 months would choose step 5.
Stipend supplementation is allowed but must be provided by the host institution and cannot be subtracted from research expenses. Additionally, the host institution is responsible for fringe benefits.
- Research Expenses: equipment, consumables, project-related or conference travel, publication costs, etc.
- Indirect Costs: Up to 10% of the research budget amount (see [here](#) for our institutional policy)
- Support Staff Compensation: Up to \$50,000 starting in year 2 can be requested to fund a research technician or other support staff role.
- Facilities & Resources (one (1) page, PDF upload)
 - Describe the organizational resources available to perform the specific work proposed in the research plan. Include facilities, major equipment, and other resources (such as institutional services).
- Data Sharing Plan and Philosophy (one (1) page, PDF upload)
 - Specifies the applicant's and the applicant organization's commitment to sharing project results, data, and/or resources with other institutions and researchers for non-commercial use to advance the understanding and treatment of single ventricle heart defects. This may include how data will be deposited, how resources will be shared, or the use of preprint servers to communicate findings.
- Institutional letter of commitment (one (1) page, PDF upload)
 - This letter of commitment should state that applicant organization will be able to support the research led by the fellow and provide any supplemental salary or benefits required, and confirming the current status of the applicant as a postdoc, instructor, or equivalent.

INTERVIEW PROCESS

Following review of the Full Proposal, Finalists will be selected and invited to participate in a 90-min virtual interview, to be scheduled in the month of August, 2023. The interview will be conducted in two parts:

- Part 1 (20-30 minutes; mentor only)
 - The mentor will be asked to make a statement in support of the Finalist, outlining their career trajectory and potential, as well as their role in current and future mentorship of the Finalist.
- Part 2 (50-60) minutes; applicant only)
 - Finalists will be asked to present their projects in a pitch-style format, no more than 10 minutes. Following the pitch, Additional Ventures staff and selected external advisors will engage applicants in a series of questions, with a significant focus on the Finalist's readiness for independence (including scientific vision and leadership potential).

Additional details on the interview process will be provided at the time of invitation. Letters of Support from mentors will be collected ahead of interviews; additional information from applicants may be requested.

REVIEW AND SELECTION

Additional Ventures utilizes a multi-step internal and external review process to evaluate applications and select finalists for funding.

LETTER OF INTENT REVIEW AND SELECTION

Using assessments generated in consultation with career coaching and faculty development experts, Additional Ventures reviews letters of intent and invites select applicants to submit full proposals. Review criteria include eligibility, commitment to the single ventricle field, leadership readiness, perceived impact, and fit. A subset of applicants will be invited to submit full proposals.

FULL PROPOSAL REVIEW AND FINALIST SELECTION

Upon receipt of full proposals, internal and external panels of reviewers, including subject matter experts and Catalyst program advisors, will evaluate application materials and make recommendations for selection of Finalists. Finalist selection will be based on:

- Significance of scientific questions identified in the proposal and alignment with the strategic investment areas of the [Research Roadmap](#).
- Scientific merit
- Impact of award on applicant and fit with Catalyst and Additional Ventures missions
- Potential of candidate to transition to a successful independent career
- Eligibility

Additional Ventures will provide Full Proposal critiques to all applicants not selected for funding.

ADDITIONAL AREAS OF CONSIDERATION

Additional Ventures strives to support a scientific community that is diverse, collaborative, and forward thinking. As such, Additional Ventures recognizes the deep inequalities inherent in academia and strives to support those who have been historically excluded and underrepresented. We highly encourage applications from women, minorities, individuals with disabilities, and individuals from disadvantaged backgrounds.

ACTIVITIES AND DELIVERABLES

Catalyst awardees will be expected to engage in the activities and provide deliverables as described below:

- ◆ Annual progress reporting, including conversation via teleconference, virtual meetings, and/or written reports; that including commentary on annual participation in Additional Ventures- and partner-led professional development programming
- ◆ Attendance and presentation at the biannual Additional Ventures [Single Ventricle Investigator Meeting](#)
- ◆ Active participation in AVCIA-sponsored professional development programming and activities
- ◆ Active participation in Additional Ventures-led monthly fellows' meetings and workshops
- ◆ Active participation in Additional Ventures [Speaker Series](#)

- ◆ Response to reporting inquiries as requested by Additional Ventures, relating & not limited to: publications and presentations, patents, collaborations, external award of additional funding.

TERMS OF AWARD AND USE OF FUNDS

Each funded organization will be required to sign and agree to Additional Ventures' grant terms within sixty (60) days from receipt of notice of the award and prior to the funds being released. The grant terms will be available upon submission of a full proposal.

Grants 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, submitting a letter of intent and/or a full 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.

COVID-19 POLICY AND SUPPORT

As a foundation, Additional Ventures is deeply committed to supporting our scientific communities. We are sensitive to how COVID-19 is affecting the wellbeing of our grantees, and are dedicated to supporting scientists, clinicians, and academics through these unprecedented times.

We anticipate that COVID-19 will cause delays and changes to planned research activities, through the introduction of both professional and personal difficulties. The Additional Ventures team is cognizant that no standard plan will work for all grantees or apply to all situations; as such, we are willing to work with our grantees on a personal basis to discuss options and find appropriate solutions. These may include, and is not limited to: budgeting revisions, revisions to timelines and due dates of deliverables, personnel changes, shifts to remote work (e.g. computational approaches), allowances for child/dependent care or transportation, and mental health support. Please contact our team to discuss how we can help; we know that allowing flexibility means a greater chance of success.

QUESTIONS?

Applicants are strongly encouraged to consult with Additional Ventures program staff prior to submitting a letter of intent. Contact us at grants@additionalventures.org for guidance on program scope, feedback on proposal fit, and any other inquiries.

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 SV 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.