

VIRIDIS MONTIS EARLY CAREER INVESTIGATOR CHALLENGE IN CARDIOVASCULAR DISEASE - APPLICATION

Mission: Develop a unique early career investigator competition highlighting cardiovascular research, health/wellness, and service in the state of Vermont.

Early Career Investigator Challenge in Cardiovascular Disease

- Merit-based scientific abstract competition to highlight the best cardiovascular research conducted by early career scientists at the University of Vermont and UVM Health Network.
- Applicants should represent the breadth of cardiovascular research, including basic science, clinical and epidemiological research. Interdisciplinary group of Finalists determined upon a merit-based review of abstracts, with the competition winner determined based upon a composite score reflecting the communication of science, impact of their work, individual/professional commitment to cardiovascular wellness/service, and abstract score.
- Applicants are encouraged to demonstrate individual and professional commitments to cardiovascular health/wellness and service.

Timeline:
Abstract due date: December 1, 2021
Finalists announced: December 20, 2021
Competition: February 2, 2022

Prerequisites of applicant:

- The applicant must be an early career investigator primarily affiliated with the University of Vermont and/or the UVM Health Network. Eligible candidates include: PhD and master's graduate students; postdoctoral fellows; residents and clinical fellows; medical students; faculty and staff within 5 years of first appointment.
- The applicant's primary mentor(s) must be affiliated with UVM and/or the UVM Health network.
- Research submitted will be directly related to cardiovascular diseases (basic, clinical, translational, and/or public health).
- Previously presented and/or published scientific work is eligible for submission if the final publication occurred within 1 year of the Investigator Challenge (after January 1, 2021).
- Abstracts must be formatted per *Viridis Montis* guidelines outlined below, with **special attention toward communication of findings to a broad cardiovascular audience**. Abstracts not meeting basic formatting criteria will not be reviewed.
- Former *Viridis Montis* participants are eligible and encouraged to apply, but the research must be distinctly different from a prior entry.
- All components of the application (Appendix I) with attestations (Appendix II) must be submitted by the stated due date. Incomplete applications will not be considered.
- Demonstration of a commitment to personal cardiovascular health/wellness and professional cardiovascular service is encouraged but not required (Form D; Appendix III). If selected as a Finalist, this component may count for up to 5% of the final competition score.

Application

The formal application is due by 5:00 p.m. on December 1, 2021 and should adhere to the guidelines below. The entire proposal, including all required documents, must be submitted as a single PDF document to CVRI-VT@med.uvm.edu. Proposals that do not meet this requirement will not be reviewed.

Appendix I: Application for *Viridis Montis* Early Career Investigator Challenge in Cardiovascular Disease

Adapted from American Heart Association Peer Review Criteria¹

Required documents from the applicant (to be submitted as one PDF file)

A. Abstract

Required abstract format (adapted from 2021 AHA abstract submission guidelines)¹

Abstract Title

An abstract must have a short, specific title (containing no abbreviations) that indicates the nature of the investigation.

Author Name(s)

The submitting author is designated as the primary and presenting author.

Abstract Text

- Structured abstracts with following sections: Introduction, Hypothesis, Methods, Results and Conclusions.
- Ensure that your abstract is written to easily communicate your findings to a **broad cardiovascular audience**.
- Describe briefly the objectives of the study unless they are contained in the title. Include a brief statement of methods. State findings in detail sufficient to support conclusions.
- Standard abbreviations may be used without definition. Nonstandard abbreviations (kept to a minimum) must be placed in parentheses after the first use of the word or phrase abbreviated.
- Do not include references, credits, or grant support.
- Abstracts are limited to 1,950 characters (about 300-350 words). This includes the text plus any graphics, but not the title or authors. Addition of an image whether a figure or a table deducts 250 characters. No more than 2 figures/tables are allowed. Spaces do not count as characters.
- Abstracts should be 1-inch margins, Times New Roman, 10-12-point font

Abstract Acceptance

- All oral presentations must be in electronic slide form
- All Finalists must provide a 2-3 sentence bio including their education background, research interests, and past research contributions (how they would like to be publicly announced at the Challenge)
- The slides and the introduction must be submitted to the CVRI ECAC committee no later than 3 days in advance of the Early Career Investigator Challenge (January 31, 2022)

B. Mentor attestation (Appendix II)

Primary research mentor must provide written attestation verifying the academic integrity of the scholarly work.

C. Applicant attestation (Appendix II)

The applicant must provide written attestation verifying the academic integrity of the scholarly work. The attestation will verify the applicant's commitment to an oral presentation at the Research Challenge if selected as a finalist.

D. Cardiovascular Health and Service Attestation (Appendix III): Optional

If the applicant chooses to submit Form D, written attestation must be provided verifying personal and professional commitments to health/wellness and service. Some examples are provided (Appendix III), but should not serve as limitations.

Though both components of the application are optional, they are strongly encouraged. For Finalists only, attestation of commitment to cardiovascular health/wellness and of cardiovascular service will each contribute 2.5% of the total competition final score (maximum 5%).

E. Reviewer/Judge Conflict of Interest (COI)/Confidentiality

Abstract Reviewers and event Judges shall avoid any potential conflict of interest (including but not limited to personal, professional, financial), and must abstain from abstract grading if/when there is any perceived COI. All abstract materials and review discussions are confidential. All reviewers/judges will exemplify conduct in accordance with the University of Vermont Larner College of Medicine statement on professionalism (<https://www.med.uvm.edu/com/professionalism>).

F. Abstract Scoring Rubric:

Scoring criteria for abstracts are adapted from AHA¹ and modified to fulfill the mission of the *Viridis Montis* challenge, that is to identify the best cardiovascular research conducted by early career investigators through a merit-based review emphasizing communication and impact of the science.

Abstracts will be judged based upon the five individual criteria outlined below. Each criteria is awarded 0-10 points and a total abstract score is summed with a maximum score of 50 points. If selected as a Finalist, this abstract score will be included in determination of the final competition score as described in the oral presentation rubric.

1. **Communication:** The abstract is written in a manner that is intended for, and easily understood by a diverse cardiovascular audience.
2. **Organization:** Structured abstract that includes all required components, is well-organized and easy to follow. Recently published/presented work is eligible for this competition as described previously, but abstract revision is strongly encouraged to ensure it meets competition guidelines.
3. **Scientific merit:** Encompassing the importance of the scientific question, approach, novelty of the study or techniques, advancement of knowledge (including consideration of importance of null results), and broader impact.
4. **Hypothesis and Methodology:** Hypothesis/aims of the study are clearly communicated and supported by a concise introduction. Methodology is concisely described, as well as sufficient such that the reader can understand the study protocol and analysis.
5. **Results and Conclusion:** Results and any included tables/graphs are clearly presented in a manner that supports the aims of the study. Succinct conclusion that addresses the significance of the study's findings.

Each of the above sections will be scored from 0-10 by the following:

Score	Description
10	Outstanding – Exceptional, clearly of very high quality. Well-written and tailored for a broad cardiovascular audience to understand. Novel, potentially transformative research.
9	Excellent – High-quality study that is clearly written and easy to follow. Innovative research that may advance knowledge. Very minor limitations.
8	Very Good – Similar to above, but less outstanding. Minor limitations.
7	Good – Reasonable communication of findings with room for improvement in communication and structure. Some limitations and shortcomings.
6,5	Average – Contains adequate information and meets all requirements.
4,3,2	Below Average – Difficult to understand at times, contains jargon or specific language that may be difficult for a general cardiovascular audience to understand. Research does not seem to add to existing knowledge.
1	Should not be considered – Does not meet basic requirements for submission.

Abstract Review

Abstracts will be reviewed by a subcommittee comprised of CVRI Early Career Advisory Committee members, CVRI Board members, and CVRI Distinguished Investigators. Subcommittee members will review all abstracts and the top 5 will be decided based on total average score. The authors of the five highest scoring abstracts will be selected as Finalists and will present their research to a panel of expert judges during the *Viridis Montis* Early Career Investigator Challenge in Cardiovascular Disease. Formal feedback will be collated for each abstract and returned to applicants.

Oral Competition Scoring Rubric:

Selection of one winner from five Finalist presentations will be at the complete discretion of the Judging Panel, following the rubric below. The rubric consists of the **abstract score** (50 points), **communication of science** (30 total points encompassing presentation and response to questions), **scientific impact** (15 points), and **commitment to cardiovascular service and wellness** (5 points). In case of a tie score, judges will discuss and select the winner from among the finalists with tied scores based on scientific merit and presentation.

Oral Presentation	Weight	Score
Clear summary of the research project	2	
Clear and succinct introduction/background	2	
Clear and succinct hypothesis/aims	2	
Clear and succinct methodology for answering the research questions and sufficiently described to understand the study protocol	2	
Clear and succinct data and results. Tables, figures, graphs, and/or charts are clear, relevant and explain the project	2	
Clear and succinct conclusion(s)/significance supported by the study's findings	2	
The extent to which the research is well organized, easy to follow and understand	5	
The extent to which the project demonstrates intellectual merit <ul style="list-style-type: none"> - Does the research advance knowledge and understanding within its field or across different fields? - How innovative, original, and potentially transformative is the research? - What is the broader impact in terms of potential benefits to society? 	15	
The extent to which the Finalist answers questions aptly and thoroughly	15	
* Abstract score	50	
* Attestation: Individual Cardiovascular Health/Wellness	2.5	
* Attestation: Professional Cardiovascular Service	2.5	
TOTAL	100	

*Abstract and cardiovascular health/service attestation scores tabulated for judges based on application materials.

- Adapted from: <https://professional.heart.org/-/media/phd-files/meetings/scientific-sessions/2021/abstract-submission-guidelines-2021.pdf?la=en> Accessed August 25, 2021

Appendix II: Research Attestation Form

Applicant attestation

The applicant must provide written attestation verifying the academic integrity of the scholarly work. The attestation will verify the applicant's commitment to an oral presentation at the *Viridis Montis* Early Career Investigator Challenge in Cardiovascular Disease if selected as a Finalist.

I _____ (print name) am the primary investigator of this research (i.e. "first author") the research submitted, and agree that it meets criteria for the *Viridis Montis* Early Career Investigator Challenge in Cardiovascular Disease. The information provided is honest, original, and accurate.

If selected as a Finalist, I agree to an oral abstract presentation at the research challenge, and my conduct will be in accordance with the University of Vermont Larner College of Medicine statement on professionalism: <https://www.med.uvm.edu/com/professionalism>.

(Name/ Title/ Date)

Mentor attestation

The primary research mentor must provide written attestation verifying the academic integrity of the work.

I _____ (print name) have supervised this research endeavor, reviewed the applicant's work as a member of my team, and agree that it meets criteria for the *Viridis Montis* Early Career Investigator Challenge in Cardiovascular Disease. To the best of my knowledge, the information provided is honest, original, and accurate.

(Name/ Title/ Date)

Appendix III: Cardiovascular Health/Wellness and Service

Demonstration of personal and professional commitments to cardiovascular health/wellness and service is encouraged but not required. If selected as a Finalist, this component may count for up to 5% of the final competition score.

Cardiovascular Health and Wellness: Applicants may attest to personal cardiovascular health and wellness practice in the past year through any of the following:

A. Complete the American Heart Association’s “My Life Check: Life’s Simple 7” questionnaire:

<https://www.heart.org/en/healthy-living/healthy-lifestyle/my-life-check--lifes-simple-7>

B. Complete any one or more Employee Wellness activities offered by the University of Vermont Medical Center and/or the University of Vermont.

<https://www.uvmhealth.org/medcenter/Pages/For-Employees/Employee-Wellness-Program.aspx>

<https://www.uvm.edu/we>

C. Describe a commitment to personal cardiovascular health and wellness

For A and B: Please indicate that you have completed an activity through your attestation. Please do not submit activity scores or results.

Applicant attestation

My signature verifies my individual commitment to cardiovascular health and wellness.

(Name/ Title/ Date)

Cardiovascular Service: Applicants may attest to professional service any time in the past year.

Professional service may include any volunteer efforts/service whereby you promoted cardiovascular health on a local, regional and/or national level.

Examples of cardiovascular service include but are not limited to (adapted from *Fellowship - Council on Cardiovascular Disease in the Young*²):

- Active leadership role (participation on committees, boards and task forces), volunteer role, or participation in development and fundraising events that cultivate cardiovascular health in the community (examples: volunteering or raising funds by participating in events such as the Heart Walk, Cycle Nation, Go Red Luncheon, Vermont City Marathon, cycling races such as the Jim Ray Memorial Heart Ride, or other outdoor athletic events such as the Lake Champlain Dragon Boat Festival).
- Active participation in advocacy efforts (examples: leading policy adoption or change, informing legislators about and cardiovascular health issues at state and national levels).

- Actively sharing cardiovascular expertise and scholarship such as teaching, abstract grading, reviewing grant proposals, and/or serving as a peer reviewer.
- Active participation in professional and lay education programs that promote cardiovascular health and fitness.
- Please describe your own professional cardiovascular service commitment.

Applicant attestation

My signature verifies my individual commitment to professional cardiovascular service.

(Name/ Title/ Date)

2. Adapted from: <https://professional.heart.org/en/partners/fellow-of-aha/fellowship-council-on-lifelong-congenital-heart-disease-and-heart-health-in-the-young> Accessed September 16, 2020