

ACVIM CARDIOLOGY RESIDENT RESEARCH GRANT COMPETITION

Fall 2021 Request for Proposals

In 2010, the Membership of the ACVIM Specialty of Cardiology established an annual Cardiology Resident Research Grant. This award is intended to provide support to cardiology residents in their research endeavors, provided that the expenditure is consistent with the responsible stewardship of the Pacemaker Fund, which is where grants are sourced.

Pursuant to a modification enacted in 2017, the maximal grant amount will increase by \$500 annually. The maximal grant award for the current call is \$17,000 and the total amount available for each of the two annual calls for proposals (1 Fall, 1 Spring) will be three times the maximum grant amount (e.g., total available for Fall 2021 is \$51,000) Applications will be ranked in order of merit, and projects will be funded in order of ranking until the funds for that call are exhausted. Grants may be funded in part or fully.

The purpose of these grants is to provide cardiology residents with an opportunity to develop grant writing skills and to support meaningful clinical research as a part of their cardiology residency training programs. To be eligible, residents must be currently registered in an ACVIM cardiology residency, and the project completion date must be prior to the end of the residency period.

The resident should write the proposal with careful guidance from a mentor.

Presentation of final data obtained from the project as an ACVIM Forum research abstract is strongly encouraged, and publication in a peer-reviewed scientific journal, such as the Journal of Veterinary Internal Medicine or the Journal of Veterinary Cardiology, is expected.

Deadline for the receipt of applications is October 29th, 2021.

Grant Instructions

Grant applications must be typed in 12-point Arial font, single-spaced, with 1" margins, and follow the format described below. The body of the grant application (which excludes the required budget, reference list, disposition of previous ACVIM grant funding, and letters of support) must be no longer than 5 pages total.

Grant applications should be submitted in Microsoft Word format. Two copies of the grant proposal should be submitted; one with requested applicant information and one that has been de-identified to ensure blinded review. It is the responsibility of the applicant to remove identifying information from one copy of the application (including the top section of the template). "Masked for review" may replace any information that could be used to identify the individual, the mentor or the institution in the text. File names should clearly identify the investigator for both copies of the application as follows: resident last name, hyphen, institution name (single word or acronym), hyphen, the word resident, hyphen, and grant cycle (season when submitted [fall or spring] and 4-digit year). Example: Braunwald-MGH-resident-Fall 2018. The Cardiology Secretary will relabel the blinded copy with a number. Please e-mail grant applications as attachments to Dr Peg Sayer at acvimcardiosecretary@gmail.com.

The grant application should include the following sections (use of the grant and budget template attached is required; Sections 1 through 9 must be no longer than 5 total pages).

1. *Title of study*, with name of the resident, the identified mentor (supervising cardiology Diplomate, graduate advisor, etc) and the location of residency
2. *Background* (including any preliminary data & appropriate references)
3. *Hypothesis* of the proposed study
4. *Aims and significance* of the study
5. *Materials and Methods*, including planned statistical analysis and power analysis if applicable, and information on current caseload if case accrual is important for completion of study
6. *Ethical Approval* (confirmation that the research has been approved by an Institutional Animal Care and Use Committee {IACUC} or submitted for approval to an IACUC). When a standard IACUC is unavailable (e.g., foreign country, veterinary practice, animal ranch/sanctuary, wildlife preserve, etc.), the Cardiology Research Committee (CRC) requires the review of the proposed animal use by an equivalent institutional review committee/agency or an established collaborating institution's IACUC.
7. *Timeline* (predicted schedule of activity). Projects must be scheduled to be completed before the end of the applicant's residency program. For the purposes of these grants, "completion" is defined as full collection of data, data analysis, and final preparation of a complete manuscript. The CRC recognizes that the peer-review process after submission for review can be time-consuming and is outside the control of the resident and mentor. Realistically, this typically means the project execution (performing the entire study and collecting all data) will be complete within 1 year of receiving the granted funds, to account for the steps to follow: data analysis, manuscript preparation, +/- abstract presentation, and submission for publication while also preparing for the General and Specialty exams.
8. *Pitfalls*. Anticipated limitations and means by which the study will address or circumvent them

9. *Resubmission Summary.* If the grant was previously submitted and not funded by ACVIM, the investigator must describe how the previous grant comments and criticisms were addressed in the new submission.
10. *Budget* (including justification; maximal amount \$17,000 per grant).
 - a. In the event that the *entire* budget for a given project is greater than \$17,000 (i.e. the Resident Research Grant is requested to fund only a portion of an overall budget), then the application must include written assurances from the entity funding the residual balance, describing the funds that they have provided or are committed to providing. These can be included as letters of support and the amount committed must be reflected in the budget template page.
 - b. Up to \$500 may be requested for travel for presentation or publication costs.
 - c. No university overhead or capital equipment costs will be paid and no salaries will be paid (excluding minimal student and technical support as required to complete the study).
 - d. A one-page budget template is provided and must be utilized.
11. *References* (limited to <40)
12. *Disposition of previous ACVIM Resident Grant funding* at the resident's institution should be detailed.
13. *Letters of Support:* Provide if needed. If the proposal requires special agreements or additional funding sources, these should be detailed by relevant letters of support.

Grant Evaluation Criteria

Individual proposals will be scored according to the scheme outlined below by the ACVIM CRC. Acceptable, high-quality proposals will be funded based on merit, in order of their score, until the funding is exhausted (typically 3 per funding cycle).

The proposals will be evaluated according to the following criteria:

Importance of the hypothesis & purpose of the study to clinical veterinary cardiology

Scientific validity: do the proposed methods likely answer the proposed question?

Feasibility: can the investigators actually perform the work in the time allotted?

Budget justification

In the event that 2 grants are judged to be of equal merit, preference will be given to a grant that involves investigation of cardiac conduction system diseases (motion passed in 2013, amended in 2017)

Grants will be scored and funding announced within 2-3 months of the submission deadline. Submissions scoring over 60 points will remain in the grant competition. The decision to fund a grant will be made based on reviewers' overall decision, and the CRC's decisions will be final. All applicants (successful and unsuccessful) will receive a copy of reviewer comments, with the aim of providing structured feedback. Ideally, funded projects will be completed within two years, but they MUST be completed by the resident within the residency training program. All unused funds must be returned to ACVIM (Cardiology) at the end of the project. If projects remain incomplete once a resident has completed the residency training program, funds must be returned to ACVIM (Cardiology) after consultation with the CRC chair – failure to do so will result in a 5 year exclusion of the mentor from applying for further research funding from ACVIM (Cardiology) both for the mentor's own projects and for projects involving the mentor's residents.

Project Reporting

Annual reports to the CRC are required by December 31st of each year until the research is completed. The annual report should include a summary of the work completed in the past year, a review of any difficulties encountered in the research, an updated budget (indicating approximately how much of the grant has been spent) and an anticipated timetable for completion of the research. Reports should be submitted by email to Dr Peg Sayer at acvimcardiosecretary@gmail.com.

A final report of the data obtained from the grant is required. This can take the form of an accepted abstract published at a national or international meeting, a peer-reviewed publication, or a formal report to the CRC detailing the main results of the study. Presentation of the results of the study as a research abstract or a research report at the annual ACVIM Forum is strongly encouraged. Reports should be submitted by email to Dr Peg Sayer at acvimcardiosecretary@gmail.com by the end of the recipient's residency program.

Data Accessibility

At the time of publication, or in the event of failure of publication (18 months after the recorded project completion), data arising from the funded project should be made publicly available. This data should either appear within the manuscript or in the event that a publication is not generated within 18 months of project end within a public database. A number of publicly accessible databases can be used to meet this requirement. The committee suggests Dryad Digital Repository as an acceptable cross-disciplinary generalist data repository (<https://datadryad.org/stash>). The citation for data must be provided to the Secretary and will be made publicly available. If funds are used for biobanking samples, these samples should be made available to the membership for future use with approval of the CRC. Investigators may request extensions to the data availability policy, which will be adjudicated by the CRC.

The titles of grant proposals and names of applicants and their institutions will be in the public domain from the time of grant award onward.