



ACVIM Cardiology Pacemaker Fund Research Grants Resident Submission Guidelines

A 2010 vote of 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.

The maximal grant award for the current call is \$16,500 in 2020, with a \$500 increase annually. 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 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 currently be registered in an ACVIM cardiology residency and the project completion date must be prior to the end of the residency period.

The proposal should be written by the resident with careful guidance from a mentor.

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

Grant Instructions:

Grant applications must be typed in 12 point Arial font, single spaced, with 1" margins, and follow the format described below. The entire grant application must be no longer than five pages total, including references (prior grant funding information excluded).

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 fourdigit 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. Lori Hitchcock at acvimcardiosecretary@gmail.com.

The grant application should include the following sections, (use of the template at the end of this RFP is recommended):

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 and 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). In the event that the resident is from an institution without an IACUC, the ACVIM Cardiology Research Committee (CRC) may be asked to evaluate the proposal for the humane and ethical use of animals.
7. *Budget* (including justification; up to maximal amount per grant).
 - a. In the event that the *entire* budget for a given project is greater than maximum funding amount, (i.e. the 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.
 - b. Up to \$300 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.
8. *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 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 one 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.
9. *Pitfalls*. Anticipated limitations and means by which the study will address or circumvent them
10. *References*
11. *Disposition of previous ACVIM Resident Grant funding* at the resident's institution should be detailed.

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 three per funding cycle).

The proposals will be evaluated according to the following criteria:

1. *Importance of the hypothesis and purpose of the study* to clinical veterinary cardiology
2. *Scientific validity*: do the proposed methods likely answer the proposed question?
3. *Feasibility*: can the investigators actually perform the work in the time allotted?
4. *Budget justification*

In the event that two 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 two to three 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 the 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 the ACVIM (Cardiology) after consultation with the CRC chair. Failure to do so will result in a five year exclusion of the mentor from applying for further research funding from the 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. Lori Hitchcock 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. Lori Hitchcock at acvimcardiosecretary@gmail.com by the end of the recipient's residency program.

Grant Funding

Grant funds may not be used for indirect costs, equipment (other than supplies to perform the procedures as outlined in the proposal), or salaries (faculty or resident). Grant funds may be used to employ a student for part-time and/or seasonal work on the project (undergraduate or veterinary student, but not masters or PhD student), with appropriate justification.

Funds will not be awarded until Institutional Animal Care and Use Committee (IACUC) approval is obtained. A statement of IACUC approval should be included in the grant application. IACUC submission is allowable for the grant proposal, but IACUC approval must be provided after funding. If the group submitting the proposal does not have an IACUC, the applicant may submit a request for the CRC to serve in this capacity and the CRC may provide a letter of approval if the use of animals in the proposal is deemed ethical and humane.

Funds remaining at the completion of the project must be returned to the ACVIM Cardiology Pacemaker Fund unless the committee allows an extension after a formal request. Funds cannot be carried over to other projects without approval of the CRC, even if another project is similar to the original project.

Return of only the remaining funds for incomplete, or aborted projects may be allowed if the investigators can show that scientific value was derived from the utilized funds (e.g. pilot data, a smaller study than planned was presented at the institution or meeting), or if specific circumstances are reviewed and accepted by the CRC. In the past, the committee has allowed return of funds not utilized because the awarded resident and mentor were no longer at the institution and the responsibility for finishing the project fell to another mentor whose area of interest and expertise



did not align well with the project. In all other instances, the awarded resident and mentee will be expected to return the entirety of the funded amount if the project is aborted without generation of data.

Data Accessibility

At the time of publication, or in the event of failure of publication and at the discretion of the CRC, data arising from the funded project should 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.

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

ACVIM Cardiology Pacemaker Fund Grant Application – Residents

Resident & Mentor Information

Resident name		Name of Cardiology Diplomate Co-PI (mentor)	
Residency location		Mentor phone number	
Residency address		Mentor email	
Resident email:		Residency start and end dates	

Study Title:

Background:

Please describe briefly any background information relevant to the study and indicate to readers why they should be interested in your proposed research project. Include any preliminary data (if applicable), and appropriate references.

Hypothesis:

Aims of the study:

Proposed materials and methods:

Briefly describe proposed materials and methods, with a specific discussion of planned statistical tests, intended group size and power calculation (if applicable). Please provide information on current caseload if intending to recruit clinical cases.

Budget:

Please provide details of the budget with justification for costs clearly stated.

Timeline:

Please give details of the projected timeline for the study.



Pitfalls: Anticipated limitations and means to address or circumvent them

References:

Disposition of previous ACVIM Resident Grant Funding at your Institution:

Please provide details regarding funding from ACVIM-Cardiology for resident grants since 2010, including dates, amount funded, date of project completion and disposition of results (presentations and/or publications)