ACVO Vision for Animals Foundation

2023 Grant Announcement & Grant Instructions Form
Invitation for ACVO Resident Research Grant Proposals

The ACVO Vision for Animals Foundation will offer several research grants to ABVO-approved residents in areas of veterinary ophthalmology. **Proposals must be sent in an Adobe Acrobat digital format and received electronically by 11:59 pm EST, December 2nd, 2022**. The funding period will begin February 1st, 2022. All successful proposals will be announced in the ACVO spring newsletter and when the resident presents the data at the ACVO annual conference.

Residents must be in ABVO-approved residencies and sponsored by his/her ABV mentor(s).

Grant applications for up to $5,000 may be submitted. The ACVO-VAF will support research supplies, materials, limited equipment, publication costs, statistical support, limited travel costs, and limited salary for technical support. The ACVO-VAF does not support any salary for faculty, reside tuition, major equipment, travel costs to conferences, or institutional indirect (F&A) costs. Submissions involving animal related experiments are required to provide proof that an Institutional Animal Care and Use Committee protocol was submitted or approved. Submissions involving client-owned animals are required to provide proof that a Hospital Executive Committee (or equivalent) protocol has been submitted or approved and must include a copy of the Informed Consent document. Results of the research must be presented at the annual ACVO meeting within 2 years after funding has been awarded; failure do so may detrimentally impact the applying institution's future funding through the ACVO-VAF.

You will need to follow the guidelines provided in the below document.

Please email proposals to: Dr. Georgina Newbold, Grants Committee Chair
georginanewbold@yahoo.com

ACVO Vision for Animals Foundation

ACVO-VAF Grant Guidelines and Instructions
Do Not Include These Pages in the Grant Application

Please read the application guidelines carefully. The entire application package should be submitted as a single, comprehensive Adobe Acrobat PDF document, **not to exceed 5MB**. PDF files larger than 5MB will be rejected, though you may not receive a bounce-back message. Failure to follow these guidelines will result in the grant not being reviewed. Upon submission, you will receive a confirmation of receipt email from the VAF grants committee chair within 24 business hours. If you have not received an email receipt within 24 business hours, it is the responsibility of the applicant to contact the VAF grants committee chair.

The application must be submitted by **December 2, 2022 by 11:59 pm EST**. Only PDF formats will be accepted; the application file should be named as follows: "last name, first name.pdf" (for example "Smith, John.pdf"). No late submissions or submissions sent by regular mail or facsimile will be accepted. All applicants are welcome to contact the VAF grants committee chair (georginanewbold@yahoo.com) at any time with any questions or concerns.

Format specifications
Please follow all font and format specifications. Any deviations from the format specifications may result in deductions or no review of the application. A template application for residents to model is posted https://www.visionforanimals.org/grant-programs/vaf-resident-grant-program/
Residents are expected to work closely with their mentors to address any questions associated with the grant application. If additional questions arise, please direct them to the ACVO-VAF grants committee chair georginanewbold@yahoo.com. Be advised that grant preparation and writing is very time consuming; to ensure the grants committee has enough time to answer potential questions, residents must plan accordingly to ensure that all questions are asked in a timely fashion.

Font
1. For all text portions of the document use Arial typeface and a font size of 12 points (lettering in charts, figures, and tables may be smaller; see below). A symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.
2. Print must be clear and legible.

Page margins
1. Use standard size (8 ½" x 11") paper format.
2. Use at least ½ inch margins (top, bottom, left, and right) for all pages.

Application paging
1. The application must be single-sided and single-spaced.
2. Consecutively number pages throughout the application, starting with the cover/signature page. Do not use suffixes (e.g. 5a, 5b).
3. Do not include unnumbered pages within the application body.

Figures, graphs, diagrams, charts, tables, figure legends, and footnotes

1. You may use a smaller type size but it must be readily legible and follow the font typeface requirements.
2. Any photographs, images and/or illustrations must be of good quality, placed directly in the body of the application, and placed on the appropriate page where cited in the application.
3. Do not submit any photographs, images, or illustrations as attachments to the main document.
4. When possible, reduce the file size of any photographs or images so they are less than 1MB in size but still readable.

Grantsmanship

1. Use English and avoid jargon.
2. For all abbreviations, spell out the term the first time it is used and note the appropriate abbreviation in parentheses. The abbreviation may be used thereafter.
3. Make use of template provided to assist in good grantsmanship.

Page Limitations and Content Requirements

All applications for funding must be contained within specified page limitations.

Suggestions to assist in grant writing:

Every effort should be made to address each of the following items and in the appropriate place in the grant.

1. Include a clear thoughtful hypothesis that can be tested and identify specific project aims.
2. Pay attention to statistics. If this is not your strength, seek a co-investigator or consultant that can help with experimental design, power calculations, and data analysis. Grant monies may be used to defray the cost of statistical consultation, if appropriate.
3. Make sure the appropriate co-investigators or consultants are included in areas of specialty. For example, if your study calls for histological interpretation, you may want to include a pathologist.
4. A sign of a well-developed grant proposal is the recognition of pitfalls and potential problems. Be sure to include this information in the grant and provide a brief description of alternative approaches should a problem arise.
5. Feasibility is paramount. Can the proposed work be completed in the time available (i.e., 24 months) and within the budget limits? If not, think of alternate approaches, reduce the size of the study, or specify where additional necessary funding has already been achieved to ensure that the project aims are achievable.
6. Sloppy grant writing suggests a lack of preparation and is a sign that the Principal Investigator is not serious about the proposed work or is not receiving appropriate mentorship from his/her ABVO mentor(s). The chances of funding are markedly reduced for poorly written grants.
7. If animals or animal tissue (from any source or species) are used in the grant, the necessary appropriate Institutional Animal Care and Use Committee (IACUC) or Hospital Board approval must be included in the appendices.
8. Reviewers are aware of most of the costs of goods and services for doing research. Any cost that seems outside the expected norm should be well justified. See the budget instructions for a list of what the ACVO-VAF will not fund. Reviewers are also looking for original work and are apprehensive of a proposal that appears to be rewritten from a larger, possibly already funded project, so you must adequately explain the individual project and resident's role if it appears to be connected to a larger investigation.
9. If a technician participates in the grant, the following questions need to be addressed:
    a. Will the research be performed by that technician or will they be training the resident to do the proposed work?
    b. Keep in mind that it is the intention of the VAF to fund projects where the resident's role in conducting research has been carefully specified. The reviewers understand that a resident may need assistance to complete the proposed research and this will, in part, be through the resident's close association with any listed co-investigators or consultants (e.g., ABVO mentor to assist in ophthalmic medical or surgical procedures, pathologist for histopathologic interpretation, or statistician for project design/data analysis). Additional technical support to complete the proposed research must be well justified.

Common Mistakes to Avoid (note that this list is to assist the grant writer but is not all inclusive):
Applicants should note that there are several seemingly small mistakes that can significantly affect the outcome of the grant review. As applicants read through the grant instructions form and grant template, they should make note of anything that is bolded and/or underlined – these are **requirements** for a successful application. It is **STRONGLY** suggested that all applicants read the following list to avoid common mistakes. Any deviation from the grant instructions form or grant template will result in deductions or the application will not be reviewed.

- No signature(s) on the cover page.
- Abstract is too long.
- Failure to comply with format and page requirements.
- The included checklist is missing or incomplete.
- Incorrectly formatted references.
- Incorrect or inappropriate description of percent effort involved or poorly described investigator roles.
- Incorrectly formatted biosketch(es). Please note that a sample biosketch is included with the grant template for applicants to follow – do not use alternate forms.
- Missing biosketch(es).
- Failure to provide proof that an IACUC (or other institutional review committee) protocol was submitted or approved. If applicable, the applicant is required to provide official proof that an experimental protocol has been submitted to or approved by the institutional IACUC (or other institutional review committee). Examples of official proof include: a dated letter of protocol approval from IACUC, a dated letter of protocol submission to IACUC, the entire protocol that was approved or submitted to IACUC, or an abbreviated protocol that was approved or submitted to IACUC.
- Failure to provide proof that a Hospital Executive Committee (or equivalent) protocol was submitted or approved. If applicable, the applicant is required to provide official proof that an experimental protocol has been submitted to or approved by the institutional Hospital Executive Committee (or equivalent). Examples of official proof include: a dated letter of protocol approval from the Hospital Executive Committee, a dated letter of protocol submission to the Hospital Executive Committee, the entire protocol that was approved or submitted to the Hospital Executive Committee, or an abbreviated protocol that was approved or submitted to the Hospital Executive Committee.
- Failure to provide a copy of the Informed Consent form, if applicable.

The following instructions are specific to the template application which can be found here. Please use this format to maintain consistency and continuity for reviewers.
Deviations from the format specifications may result in deductions or no review of the application. Prior to creating the final PDF, please delete all ACVO-VAF comments (in blue colored font) found in the template application; these comments are intended to assist the applicant and should not be found in the final grant application.

PAGE 1 – Cover/Signature Page
The title of the proposal, resident's name/degree (e.g. John Doe, DVM, Principal Investigator), and Co-Investigators' and Mentors' names/degrees must be filled in. It is **required** that this signature page is **complete and signed** by the Principal Investigator, Co-Investigators, Mentors, and an authorized organizational official (if needed). Be mindful of appropriately classifying individuals as Co-Investigators; see "Investigator Information" below for definitions. By signing this cover page, the Principal Investigator, Co-Investigators, and Mentors certify that all statements found within the application are true and complete, to the best of their knowledge.

Any additional signatures or paperwork required to fulfill individual institutional requirements prior to grant submission are acceptable and will not result in any deductions.
The cover page may be signed using electronic signatures or the signed cover page may be scanned as a PDF and included in the overall Adobe Acrobat file submission. Failure to follow these guidelines will result in the grant not being reviewed.

PAGE 2 – Checklist
Please follow the included checklist. It is designed to assist applicants in the grant writing process. All items in the checklist are **required** to be completed prior to grant submission.

PAGE 3 – Abstract and Project Duration
The abstract should be a concise summary of the proposal and include the following sections: purpose (including hypothesis and specific aims), methods and materials, expected outcome, and significance. The abstract body cannot exceed 300 words. List the expected project duration in months; please note all ACVO-VAF resident projects must be completed primarily by the resident within 24 months of being awarded the grant.

PAGE 4 – Resources
Please describe the facilities to be used for the conduct of the proposed research. Indicate the performance sites and describe the capacities, pertinent capabilities, and extent of availability to project personnel. Additionally, identify support services and specify the extent to which they will be available to the proposal.

PAGE 5 – Research Plan – this section is limited to 8 pages (sections a – e). This page limit excludes the literature cited (section f).
All tables, graphs, figures, diagrams, and charts must be included within the 8-page limitation. Font to be used is 12-point Arial, margins must be at least half (0.5) inch in all directions. Proposals exceeding this page limit will not be reviewed

a. Hypothesis Specific Aims – recommended length is 0.5 – 1 page
• State the hypothesis and describe the objectives or specific aims that will address the hypothesis.

b. Background and Significance – recommended length is 2 pages
• Briefly review the literature including significant points and/or the current status of the field with references.
• Describe how the proposal will contribute to the general knowledge of the area of study including novel concepts and potential applications.
• Describe how the results obtained from this study are relevant to our current understanding of the

disease problem.
- Describe how results obtained from this study are furthering potential research program and future funding, if applicable.
- Articulate significance and potential impact.

c. Preliminary Data – recommended maximum length is 1 page
- If available, present preliminary data, including figures and tables, or work in progress that supports the hypothesis and/or the suggested methodology.
- If not available, provide adequate justification of the proposal from the literature review and provide supplemental information as appropriate.

d. Experimental Plan – recommended length is 3 – 3.5 pages
- Provide details of your research plan, including a description of the experiments, species, and techniques employed. Follow the outline that is provided in the grant template:
  - *i. Specific Aim Title*
  - *ii. Rationale*
    - Briefly summarize why the experiment will be performed.
  - *iii. Experimental Design*
    - Provide details of the methods and procedures used in the experiments.
    - Provide adequate power analyses to justify and support the proposed sample size.
    - Be comprehensive enough that reviewers can assess technological aspects of the proposal separately from the experimental plan.
  - *iv. Data Analysis*
    - Clearly indicate the experimental outcomes and describe the plan for using data to answer the specific aim.
    - Statistical consultation is encouraged and may be beneficial.
  - *v. Expected Results*
    - Describe the experimental results that are expected and how this will impact the area of study.
  - *vi. Limitations, Potential Pitfalls, and Alternate Approaches*
    - Indicate any potential limitations of either the experimental procedures or of the specific aim.
    - Describe any alternate experimental outcomes and how the applicant will deal with this (i.e., if conducting a study that could cause pain, outline an appropriate "rescue plan").

e. Time Line for the Experimental Plan – recommended length is 0.5 page
- Specify how long each of the specific aims will take to complete.

f. Literature Cited – not included in the 8-page limit

The references should be formatted in the same manner as manuscripts cited in the journal "Veterinary Ophthalmology". References should be numbered sequentially as they occur in the text and identified in the main text by superscript Arabic numbers after the punctuation. The reference list should be listed numerically in the Literature Cited section of the grant application. The following are examples of style. All authors should be listed and journal titles and page ranges should not be abbreviated.

1. Bagley LH, Lavach JD. Comparison of postoperative phacoemulsification results in dogs with and without diabetes mellitus: 153 cases (1991-1992). *Journal of the American Veterinary Medical Association* 1994; 205: 1165-1169.

2. Barnett KC. *Color Atlas of Veterinary Ophthalmology.* Williams and Wilkins, Baltimore, 1990.

3. Davidson MG. Equine ophthalmology. In: *Veterinary Ophthalmology* 2nd edition (ed. Gelatt KN). Lea and Febiger: Philadelphia, 1991; 576-610.

4. Maggs DJ, Nasisse MP. Effects of oral L-lysine supplementation on the ocular shedding rate of feline herpesvirus (FHV-1) in cats (abstract). *28th Annual Meeting of the American College of Veterinary Ophthalmologists* 1997; 101: 67-78.

Budget – this section is limited to 2 pages

The ACVO-VAF budget limit is **$5,000**. If a portion of the proposed study will be paid by an alternate funding source because the project costs exceed $5,000, applicants **must** explicitly state the additional funding source in the proposal. Appropriate justification should be provided for each section.

Only travel directly related to conducting the research (i.e. to collect samples from a second source, to work in a collaborators lab for a certain time period) will be supported. Careful consideration should be given to the inclusion of travel costs in the budget. All travel costs are to be capped at **$500**. The ACVO-VAF **will not** support travel costs associated with conferences.

The ACVO-VAF will only support supplies (i.e. Schirmer strips, dyes) used during the ophthalmic exam. An ophthalmology exam service fee **cannot** be included in the budget. Examples of ophthalmology exam service fees that are **not** supported by the ACVO-VAF include, but are not limited to: tonometry, slit lamp examination, fundus examination, standard photography. If the applicant has any questions on acceptable budgetary items, they are encouraged to contact the ACVO-VAF grant committee chair in advance of the proposal deadline. Additionally, all client incentive costs cannot be more than 50% of the requested budget. If there are specific institutional requirements associated with either of these items, the applicant should contact the ACVO-VAF grant committee chair (georginanewbold@yahoo.com) to make alternate arrangements or to determine if a budgetary exception can be made. Any potential deviations from the ACVO-VAF budgetary constraints must have thorough justification and documentation for the request and must receive approval from the ACVO-VAF grant committee prior to grant submission

The ACVO-VAF **does not** support any faculty or resident salary, tuition, major equipment, or institutional indirect (F&A) costs.

Budget categories listed below are intended to be examples. Additional categories may be used to sufficiently communicate the project expenses.

a. Animals, Per Diem, and/or Owner Compensation – list purchase price and per diem rates if laboratory animals are being used. List details and expenses of owner compensation if client-owned animals are being used.
b. Equipment – grant monies are not to be used for large equipment purchases. Small equipment purchases must be well-justified.
c. Expendable Supplies – identify by category and show the estimated cost for individual items for each category.
d. Other – includes services that are to be purchased such as laboratory tests, anesthesia fees, surgical suite fees, statistical analyses, histopathology services, etc.
e. Total Project Costs – please note that ACVO-VAF does not support institutional F&A.
f. Total Costs Requested from ACVO-VAF – no greater than $5,000.

Investigator Information

a. Role of Investigators and Key Personnel

- Describe the roles of the Principal Investigators and Co-Investigators, and provide evidence that the investigator and/or the consultants are competent to perform the experiments detailed in the project proposal. Also include descriptions of technician(s) roles. What will each person be responsible for? The resident should have the primary role in conducting research so it is important to carefully specific any technician participation. Please indicate the percent effort devoted to this project by each investigator or key personnel. This percent effort should total 100%. Note the percentage of time or number of weeks the resident has off clinic duty to be able to work on the research project.

b. Letters of Cooperation

- Letters of cooperation outlining the proposed investigative contribution in the proposed study are required from any consultant, excepting those from a *paid* statistician.
- Please ensure that classification of people associated with your grant application is correct and follows the definitions listed below.
    - The definition of a Co-Investigator is: an individual that is jointly involved with the Principal Investigator in the scientific development and/or execution of the proposed work. This individual bears responsibility for progress of some portion of the project. This individual is typically associated directly with the organization submitting the proposal. A co-investigator does not need to provide a letter of cooperation.
    - The definition of a Consultant is: an individual that provides expert advice or services, but is not heavily involved in the design or execution of the project. This individual does not bear responsibility for the progress of the project. This individual is not necessarily directly associated with the hospital or specific department submitting the proposal. Any consultant needs to write a letter of support that will be included in the application.

c. Curriculum Vitae

- Curriculum vitae in 2-page NIH type of format for all investigators listed on the signature page. Each investigator's biosketch **must** start on a new page (i.e., a hard page break occurs between every biosketch). The ACVO-VAF grant committee realizes that the biosketch template provided is not the same as the current NIH-required biosketch. Please use the biosketch format in the template.

Appendices

Any of the following can be included as Appendices.

a. Manuscripts

- Manuscripts accepted for publication or published in direct support of the grant proposal.

b. IACUC (or Other Institutional Review) Approval

- If applicable, the applicant is **required** to provide official proof that an experimental protocol has been submitted or approved by the institutional IACUC (or other institutional review committee). Examples of official proof include: a dated letter of protocol approval from IACUC, a dated letter of protocol submission to IACUC, the entire protocol that was approved or submitted to IACUC, or an abbreviated protocol that was approved or submitted to IACUC.
- All proposals must adhere to the ACVO-VAF's Research Animal Involvement Policy (http://www.visionforanimals.org/wp-content/uploads/2015/05/VAF_Animal_Research_Policy.pdf)
- In the case that a grant application receives a high enough score to warrant funding, but the applicant only included a submitted (not approved) IACUC, the applicant **must** demonstrate final approval from the IACUC prior to funds being awarded.

c. Use of Client Owned Animals

- If applicable, any proposals involving the use of client owned animals **must** include a copy of the Informed Consent form that clients will be given. If desired, you may use this Clinical Trial Research Study Owner Informed Consent Form as your template https://www.visionforanimals.org/wp-content/uploads/2018/10/Clinical-Trial-Research-Study-Owner-Informed-Consent-Form.pdf
- If applicable, the applicant is **required** to provide official proof that an experimental protocol has been submitted or approved by the institutional Hospital Executive Committee (or equivalent). Examples of official proof include: a dated letter of protocol approval from Hospital Executive Committee, a dated letter of protocol submission to Hospital Executive Committee, the entire protocol that was approved or submitted to Hospital Executive Committee, or an abbreviated protocol that was approved or submitted to Hospital Executive Committee.
- All proposals must adhere to the ACVO-VAF's Research Animal Involvement Policy (http://www.visionforanimals.org/wp-content/uploads/2015/05/VAF_Animal_Research_Policy.pdf)
- In the case that a grant application receives a high enough score to warrant funding, but the applicant only included a submitted (not approved) Hospital Executive Committee, the applicant **must** demonstrate final approval from the Hospital Executive Committee prior to funds being awarded.

d. Miscellaneous

- The following may also be included as appendices: data collection forms or statistical calculations in direct support of the grant proposal.