



2017 Grant Announcement & Grant Instructions Form Invitation for Research Grant Proposals in the Area of

Canine Glaucoma (with a special emphasis on surgical therapies)

ACVO Vision for Animals Foundation

The ACVO Vision for Animals Foundation (VAF) will offer one research grant to in the focused area of canine glaucoma. **Proposals must be sent in an Adobe Acrobat digital format and received electronically by 11:59 pm ET, October 23rd, 2017.** Funding decisions will be announced December 2017.

Grant applications for up to \$30,000 may be submitted. The ACVO-VAF will support research supplies, materials, limited equipment, laboratory or client-owned animal fees, and limited travel costs. The ACVO-VAF does not support any salary, tuition, major equipment, travel costs not associated with sample collection, 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 to do so may detrimentally impact the applying institution's future funding through the ACVO-VAF.

The guidelines provided in the below document must be followed.

Please direct any questions to the ACVO-VAF Grants Committee Chair using the email address below. Final proposals should also be emailed to the ACVO-VAF Grants Committee Chair:

Dr. Heather Chandler
Associate Professor
The Ohio State University
chandler.111@osu.edu



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

ACVO Vision for Animals Foundation

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, although 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 ACVO-VAF grants committee 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 ACVO-VAF grants office. The application must be submitted by **October 23rd, 2017 by 11:59 pm ET**. Only PDF formats will be accepted. Some applicants have experienced page number increases after conversion to PDF, so please check closely as exceeding page limits will result in disqualification. No late submissions or submissions sent by regular mail or facsimile will be accepted. All applicants are welcome to contact the ACVO-VAF grants committee (chandler.111@osu.edu) at any time with any questions or concerns.

Proposals should be designed to convince the reviewers that the applicant clearly understands the problem to be studied, has the expertise to conduct the study, has devised a logical scientific approach for the study, and is in alignment with the ACVO VAF's RFP.

(https://www.visionforanimals.org/wp-content/uploads/2015/05/Glaucoma_RFP_Final.pdf)

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. Applicants should use the posted template proposal.

(<https://www.visionforanimals.org/grant-programs/vaf-canineglaucoma-rfp/>)

Font

1. For all text portions of the document use Arial typeface and a font size no smaller than 11-points (lettering in charts, figures, and tables may be smaller; see below).
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-spaced.
2. Consecutively number pages throughout the application, starting with the cover/signature page. Do not use suffixes (e.g. 5a, 5b).

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 images so they are less than 1MB in size but still readable.

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. 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.

The following instructions are specific to the template application.

<https://www.visionforanimals.org/grant-programs/vaf-canineglaucoma-rfp/>). Please use this format to maintain consistency and continuity for reviewers. Deviations from the format specifications may result in deductions 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.

Cover/Signature Page

The title of the proposal and the names and degrees of the Principal Investigator and Co-Investigators. It is **required** that this signature page is **completed and signed** by the Principal Investigator, Co-Investigators, and if needed, an authorized organizational official. By signing this cover page, the Principal Investigator and Co-Investigators 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 may result in the grant not being reviewed.

Abstracts and Project Duration

The scientific 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 scientific abstract body cannot exceed 300 words.

The lay abstract should include a statement of the research problem, the study's objectives, and the study design in lay language for public audiences. This abstract will be posted on the ACVO-VAF website. The lay abstract body cannot exceed 250 words.

List the expected project duration in months; please note this ACVO-VAF research project must be completed within 24 months of being awarded the grant.

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. Proposals exceeding this page limit will not be reviewed.

a. Hypothesis and Specific Aims

- State the hypothesis and describe the objectives or specific aims that will address the hypothesis.

b. Background and Significance

- 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.

c. Preliminary Data

- Present preliminary data, including figures and tables, or work in progress that supports the hypothesis and/or the suggested methodology.

d. Experimental Plan

- Provide details of your research plan, including a description of the experiments, species, and techniques employed. The experimental plan should address the following:
 - i. *Specific Aim*
 - ii. *Rationale*
 - Briefly summarize why the specific aim and subsequent experiments 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.

e. Time Line for the Experimental Plan

- 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 submitted to 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.

Animal Involvement Justification (no page limit)

Humane treatment of animals is of utmost priority to the ACVO-VAF and will be reviewed closely. Although specific treatment protocols for the animals should be included in the Experimental Design section, please use this section to indicate where the participating dogs and/or samples will be obtained. Studies that involve euthanasia as a final endpoint should provide appropriate justification in this section.

The research proposal must adhere to or be exempt from ARVO's policy on use of animals in ophthalmic research. Use of research animals must ultimately be approved by an Institutional Animal Care and Use Committee; investigators must provide proof that a protocol was submitted or approved by including it in the appendix. Proposals 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. A proposal will be rejected if it does not adhere to the ACVO-VAF's [Policy for Animals Involved in Research](https://www.visionforanimals.org/grant-programs/vaf-canineglaucoma-rfp/) (<https://www.visionforanimals.org/grant-programs/vaf-canineglaucoma-rfp/>)

Budget – this section is limited to 2 pages

The ACVO-VAF budget limit is **\$30,000**. If a portion of the proposed study will be paid by an alternate funding source because the project costs exceed \$30,000, 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) will be supported. Careful consideration should be given to the inclusion of travel costs in the budget as they will be heavily scrutinized by reviewers. All travel costs are to be capped at **\$1000**. 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. Additionally, all client incentive costs cannot be more than 25% 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 (chandler.111@osu.edu) 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 salary
- tuition or registration fees
- major equipment (cost exceeding \$500)
- laboratory equipment repair
- purchase of dogs
- 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. Each category must have appropriate justification.

- 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 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 and Indirects – please note that ACVO-VAF does not support institutional indirects (F&A). This category only needs to be included if it is an Institutional requirement.
- f. Total Costs Requested from ACVO-VAF – no greater than \$30,000.

Resources – this section is limited to 2 pages

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.

Investigator Information

a. 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 recognizes that the required biosketch is not the most current NIH format. Please use the biosketch format that is associated with the template.

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.

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 involving the use of animals **must** indicate that research will be conducted in accordance with the ARVO Statement for the Use of Animals in Ophthalmic and Vision Research.
- 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 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 involving the use of animals **must** indicate that research will be conducted in accordance with the ARVO Statement for the Use of Animals in Ophthalmic and Vision Research.
- 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.