PENNSTATE HERSHEY
Eye Center

Request for Applications

Frontiers in Eye and Vision Research Award

For Collaborative Basic Science, Clinical/Translational, and Educational Research

Revised Application Receipt Date: Noon, June 29, 2012

A. <u>Background:</u> The mission of the Penn State Hershey Eye Center is to provide the highest quality eye care to our patients, to improve this care through research and education, and to create an environment where our people can develop professionally and find fulfillment in their work. Basic science, clinical/translational, and educational research are essential to the mission of the Penn State Hershey Eye Center. In order to further develop and strengthen Penn State Hershey Eye Center's sponsored research activities, we have created the **Frontiers in Eye and Vision Research (FEVR)** award. Since 2008 when the program was initiated, a total of 9 awards have been made in the amount of $90,000.

B. <u>Eligibility Criteria:</u>

1. The Principal Investigator (PI) of a FEVR application must be an active member of the Penn State Hershey Eye Center and participate in the patient care, research, education, and/or service missions of the Penn State Hershey Eye Center.

2. Applicants to the FEVR program may also be eligible to apply for and receive other competitive institutional research support (e.g. Resubmission Grants, Junior Faculty Research Scholar Awards, Woodward Collaborative Awards, etc.) provided that they meet the eligibility criteria for those programs and that there is no scientific overlap between the projects.

3. Investigators who are **currently serving as the PI or Co-PI of an active FEVR grant** award are **not** eligible to submit an application in response to this RFA.

C. <u>Program Guidelines:</u>

1. The scope of the FEVR award program is broad and includes basic science, clinical, translational, and educational research that focus on the eye and vision.

2. Applicants may request up to $25,000 (direct costs) for a period of up to 12 months to support eye and vision research projects at any of the Penn State campuses provided that the Principal Investigator (PI) is an active member of the Penn State Hershey Eye Center.

3. Although no minimum percent effort is required for the PI, the effort that the PI and others plan to devote to the project must be specified in the application. Grant funds may be requested to support salaries and benefits for staff **(except for the PI or other faculty members),** student stipends, supplies, equipment, and expenses related to the use of human subjects.

4. Grant funds **may not** be requested to support the salaries of the PI, either fixed term, tenured or tenure track, or any other tenured or tenure-track faculty members;

5. PIs of funded FEVR awards must agree to a) submit a final progress report 30 days following the end date of the project period; b) provide the Director of the Penn State Hershey Eye Center with a copy of any publication(s) resulting from the FEVR project; c) acknowledge funding from the Penn State Hershey Eye Center in future publications related to this research; and d) notify the Director of the Penn State Hershey Eye Center regarding any external funding that is subsequently received using preliminary data obtained with support from the FEVR award.

D. Institutional Priorities: Priority will be given to applications that propose new and promising projects that may lead to independent support as the result of FEVR awards.

E. Application Process: Applications must be submitted in the format described in the document entitled "Instructions for Applicants- Frontiers in Eye and Vision Research Awards" that is available on the Research Development Website, http://www.pennstatehershey.org/web/researchdevelopment/home .

F. Review Process: Applications will undergo an initial review for scientific and technical merit by the FEVR Steering Group appointed by the Director of the Penn State Hershey Eye Center that will consider the responsiveness of the proposal to this RFA, the scientific and technical merit of the proposal, and the potential for the project to subsequently attract independent support from NIH or other external sponsors. In addition, the FEVR Steering Group will be asked to identify changes in study design and methodology that would strengthen each proposal and these recommendations will be returned to the applicant with the reviewer's critique at the conclusion of the review process. The FEVR Steering Group will make its recommendations to the Director of the Penn State Hershey Eye Center who will make all final decisions regarding awards.

G. Awards: A reserve of $25,000 direct costs has been set aside for this program. Contingent on the receipt of meritorious applications, it is anticipated that one award will be made on or about August 1, 2012 in response to this RFA.

H. Additional Information: Any questions regarding this RFA should be referred to Research Development (researchdevelopment@hmc.psu.edu; Phone x6949).

PENNSTATE HERSHEY
Eye Center
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INSTRUCTIONS FOR APPLICANTS

Frontiers in Eye and Vision Research Awards

For Collaborative Basic Science, Clinical/Translational, and Educational Research

APPLICATIONS MUST FOLLOW THE FOLLOWING FORMAT:

1. **Page Format**: All pages of the application should have 1" margins all around and use Arial, Helvetica, Palatino Linotype or Georgia typeface and a font size of 11 points or larger. Number all pages consecutively beginning with the Face Page.

2. **Face Page:** titled "New" or "Revised" 2012 Frontiers in Eye and Vision Research Award Application" with a **short** descriptive title of the project; the name, department, and the signature of the Principal Investigator and all Co-Investigator(s); the email and phone number of the PI; and the funding requested (direct costs) in the application.

3. **Table of Contents:** Number all pages consecutively and include a short Table of Contents.

4. **Abstract:** Briefly summarize the objective, specific aims and health-relatedness of the project in terms that will be understood by a non-scientific lay audience.

5. **Introduction: For revised applications only** to address previous reviewer comments (1 page)

6. **Research Strategy:** This section should describe the proposed research project and be organized as outlined below. Sections a-c should not exceed 5 pages single spaced including figures and tables. If the application has multiple Specific Aims, the Significance, Innovation and Approach for each Specific Aim may be addressed either individually or collectively.

   a. Significance- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses, how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields, and how the concepts, methods, technologies, treatments, services, or preventative interventions will be changed if the proposed aims are achieved.

   b. Innovation- Explain how the application challenges and seeks to shift current research or clinical practice paradigms. Describe any novel theoretical concepts, approaches or methodologies, instrumentation, or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions. Explain any refinements, improvements, or new applications of

theoretical concepts, approaches or methodologies, instrumentation, or interventions.

c. Approach- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project, how the data will be collected, analyzed, and interpreted, and how the proposed research will make substantial use of the PSHMC EHR. Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims. If the project is in the early stages of development, describe any strategy to establish feasibility, address the management of any high risk aspects of the proposed work, and describe precautions to mitigate any procedures, situations, or materials that may be hazardous to personnel.

d. Vertebrate Animals- If Vertebrate Animals are involved, please address each of the following issues. Although no specific page limitation applies to this section of the application, generally 1-2 pages should be adequate. If IACUC approval has been obtained, provide the protocol number and date approved.:

(1) Provide a detailed description of the proposed use of the animals including the species, strains, ages, sex, and numbers of animals to be used.
(2) Justify the use of animals, the choice of species, and the numbers to be used, with additional rationale if they are in short supply, costly, or to be used in large numbers.
(3) Describe arrangements for the veterinary care of the animals involved.
(4) Describe the procedures for ensuring that discomfort, distress, pain, and injury will be limited to that which is unavoidable in the conduct of scientifically sound research. Describe the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices, where appropriate, to minimize discomfort, distress, pain, and injury.
(5) Describe any method of euthanasia to be used and the reasons for its selection. State whether this method is consistent with the recommendations of the American Veterinary Medical Association (AVMA) Guidelines on Euthanasia. If not, include a scientific justification for not following the recommendations.

e. Human Subjects – Please clarify the status of your IRB application (in preparation, submitted and currently under review, determined to be exempt, or approved). In addition, please briefly address the issues noted below. Although no specific page limitation applies to this section of the application, generally 1-2 pages should be adequate. If IRB approval has been obtained, provide the protocol number and date approved

(1) Involvement, Characteristics and Design- Describe the proposed involvement of human subjects and justify the characteristics of the subject population, including their anticipated number, age range, and health status if relevant. Describe and justify the sampling plan, the recruitment and retention strategies. and the criteria for inclusion or exclusion of any subpopulation. If relevant, explain the rationale for the involvement of special vulnerable populations, describe procedures for assignment to a study group, describe and justify the selection of an intervention's dose, frequency, and administration, list any collaborating sites where human

subjects research will be performed, and explain how data from each site will be obtained, managed, and protected.

(2) Sources of Materials- Describe the research material that will be obtained from living individuals in the form of specimens, records, or data. Indicate who will have access to individually identifiable private information about human subjects and provide information about how the specimens, records, and/or data will be collected, managed, and protected as well as whether material or data that include individually identifiable private information will be collected specifically for the proposed project.

(3) Potential Risks- Describe any potential risks to subjects (physical, psychological, financial, legal, or other), and assess their likelihood and seriousness to the human subjects. Where appropriate, describe alternative treatments and procedures, including the risks and potential benefits of the alternative treatments and procedures, to participants in the proposed research.

7. **Literature Cited- (**no page limit)

8. **Research Project Budget and Justification–** Use the budget form on the Research Development Website: http://www.pennstatehershey.org/web/researchdevelopment/home Use August 1, 2011 as the requested start date of the award and calculate Direct Costs only. Also provide a brief justification for the requested budget items on a separate page.

9. **Biographical Sketch** of the PI. Use the new PHS 398 Biographical Sketch Format H: http://www.pennstatehershey.org/web/researchdevelopment/home/forms . Complete the educational block at the top of the format page, and complete sections A, B, C, and D as follows:
   a. **Personal Statement.** Briefly describe why your experience and qualifications make you particularly well-suited for your role in this project.
   b. **Positions and Honors**. List in chronological order previous positions, concluding with the present position. List any honors.
   c. **List selected peer-reviewed publications** or manuscripts in press in chronological order. Do not include manuscripts submitted or in preparation.
   d. **D. Research Support.** List all active and pending research projects. Provide project title, sponsor, project period, and funding awarded/requested. Indicate whether each project listed does/does not overlap with this application.

10. **Future Plans:** Assuming that this feasibility study is successful, describe anticipated plans to apply for external funding including the identity of the most probable sponsor and the expected receipt date for submitting the first such application.

11. **Attachments:** Attach the information requested below. DO NOT INCLUDE ANY REPRINTS, MANUSCRIPTS, CDs, DVDs, OR OTHER ATTACHMENTS.
    a. **Departmental Commitments-** Attach a letter(s) from the Department Chair(s) to document the percent effort that the PI and Co-PI will commit to this project and describe any commitment of departmental resources that will contribute to the project.
    b. **Other Commitments-** If the research proposed requires the use of facilities or other resources that are under the purview of another investigator(s), include a letter from that individual to document the availability of those resources for use in the proposed research**.**

12. **A Proposal Internal Approval Form will be required at a later date if the application is selected for award.**

13. **Application Deadline:** On or before Noon, Friday, June 29, 2012 applicants should: a) submit three (3) hard copies of the application to Research Development, Room C1630; and b) submit an electronic Adobe version (.PDF) of the application in ONE file string via email to researchdevelopment@hmc.psu.edu . The PIAF and Hershey Blue Sheet are not required at this time.

Questions may be referred to Research Development, via email or x6949.