

THE PENNSYLVANIA STATE UNIVERSITY COLLEGE OF MEDICINE
THE MILTON S. HERSCHEY MEDICAL CENTER

**Woodward Endowment for Medical Sciences Education
Innovation in Education Projects and Research**

REQUEST FOR APPLICATIONS

Application Receipt Date: January 7th, 2014

The Woodward Education Steering Committee invites you to submit an application for the Innovation in Education Projects & Research Award for the funding period of March 1st, 2014 to February 28th, 2015

A. Background and Purpose:

To improve the quality of educational processes and outcomes at the Penn State Hershey College of Medicine and the Milton S. Hershey Medical Center, resources have been set aside from the Woodward Endowment for Medical Sciences Education to support scholarly activities in education and education research. The Woodward Endowment Steering Committee oversees a competitive process to solicit proposals from individuals, departments, and/or curricular units on specific initiatives aligned with campus goals (see section D, below). The Steering Committee will review proposals, make awards on a competitive basis, track progress, and celebrate the success of projects. The purpose of this funding is to achieve a measurable impact on education and education research at the COM/HMC campus and thus to improve the quality of the education we provide to our students and health care we provide to our community. Acceptable projects include educational research as well as the development and implementation of innovative curricula, or innovative teaching methodologies. Projects are expected to lead to measurable outcomes including scholarly publications, implementation of novel curricula or evaluation of novel teaching methods. Meritorious applications will include specific plans for outcome evaluation, including appropriate statistical analyses.

B. Eligibility Criteria

The Principal Investigator of an application for this funding must be involved in the education mission on the campus of the Penn State College of Medicine and the Milton S. Hershey Medical Center. This may include individuals involved in undergraduate or graduate medical education, Graduate School programs, or Penn State School of Nursing programs on the COM/HMC campus. Applications initiated by students will be considered, but must include a faculty member who is willing to accept responsibility as Co-Principal Investigator.

C. Program Guidelines

The Woodward Endowment for Medical Sciences Education provides a unique and exciting opportunity for the Penn State College of Medicine and Penn State Milton S. Hershey Medical Center to enhance excellence in medical science education and research. Applications are invited for Level I funding, ranging from \$500 to \$3000, and Level II funding, ranging from \$3000 to \$25,000. Funds are for projects of one year in duration, and applications will be considered on a competitive basis for up to one renewal. Applicants must agree to submit an interim and a final progress report for their project to the Steering Committee and to present a poster of their work at the annual EdVenture celebration. The Woodward Project Manager will communicate with each project leader to monitor progress and expenditure of funds.

Inasmuch as the award may not cover all costs related to the project (such as space, administrative support, or salaried effort), departmental cost sharing is encouraged and may be required for some related salary and fringe benefits of key project personnel or for additional resources needed to ensure the successful completion of the project. Cost sharing is regarded as a positive feature of applications. All cost sharing plans must be described in detail and a letter from the Department Chair or other authorized official explicitly stating the commitment of resources must be included in the application. Funds to support effort of salaried personnel must be supported by a detailed statement of justification. Honorariums to HMC personnel are not allowed. Reasonable costs associated with incentives for participation of study subjects are allowed.

Level I Funding (\$500-\$3000):

Level I funding provides support for innovative pilot projects or one-time investments to improve a specific aspect of our education resources. Level I funding is intended for initiating a research project, proving feasibility of a concept, or obtaining preliminary data to support a Level II application. Level I funding may also support small-scale efforts to improve an ongoing educational process, as long as these improvements are innovative in nature. For example, Level I grant funds may be used to support planning meetings for educational research or curriculum development purposes (with the exception of food and refreshments), to pay for educational consultant time and travel (provided that detailed cost estimates are provided), to “buy-out” a percentage of faculty or graduate student time for curriculum development beyond the scope of their assigned effort, or to purchase or license materials necessary to support a Woodward research project. Level I funding may not be used to purchase computers or other equipment, to purchase software solely for support of existing efforts, or to provide food or refreshments. Level I grant applications will be evaluated on the likelihood of fostering future educational research or providing innovative improvements in curriculum. Applications should provide defined goals, objectives and measurable outcomes by which the progress of the project may be judged. A detailed and justified budget is required. Abbreviated curriculum vitae or biosketches (not to exceed 4 pages each) describing the relevant experience, credentials and educational grant funding of all key personnel (Principal Investigator, Collaborating Investigators, and paid consultants) involved in the project must be provided. Level I funding applications for pilot projects should provide a detailed plan for obtaining future funding.

Level II Funding (\$3000-\$25,000):

Level II funding provides support for projects with the potential to produce publishable educational research outcomes or to provide a demonstrable innovative improvement in curriculum. Level II funding is intended to support a project that is feasible based on published work, and/or is supported by preliminary data. Level II funding may also support efforts to develop and implement new curriculum, or improve an ongoing educational process; however, the application must provide a rationale for the innovative nature of the improvement and should include a plan for outcome measurement to test the educational benefit of the curriculum change. For example, Level II grant funds may be used to support faculty or graduate student time for educational research or curriculum development beyond the scope of their assigned effort, to pay for supplies and services necessary to conduct education research or curriculum development, to pay for time, travel, or reasonable incentives for participation of research subjects, or to pay for necessary consultant or statistical analyst support. Costs for equipment, software or IT support must be fully justified in terms of the proposed project. Uses for requested equipment outside the proposed project and future uses of the equipment after the project period must be explicitly described. Level II funding may not be used to purchase computers, food or refreshments. Level II grants will be evaluated on the likelihood of providing innovative and publishable educational research or providing an innovative improvement in curriculum. Proposals should include a detailed plan for assessment of the curricular improvement. A meritorious Level II application will include a well-conceived and referenced theoretical justification, a testable hypothesis, and a detailed implementation plan including defined goals, objectives, and measurable outcomes by which the progress of the project may be judged. A detailed and justified budget is required. If the scope of the project is beyond the resources of the grant award, applicants should provide a detailed description of how such additional costs would be met. A letter from the Department Chair or other authorized official explicitly stating the commitment of resources and effort must be included in the application. Abbreviated curriculum vitae or biosketches (not to exceed 4 pages each) describing the relevant experience, credentials and educational grant funding of all key personnel (Principal Investigator, Investigators, Collaborating Investigators, and paid Consultants) involved in the project must be provided. Level II projects may also have the potential to gain external funding, and each applicant should seek information from the Office of Research Affairs on this possibility, and should provide a detailed plan for obtaining future funding.

D. Institutional Priorities

Although all applications that meet the above-noted criteria will be considered, *priority will be given to applications that specifically address the strategic vision for education on the COM/HMC campus.*

- I. Achieve excellence in teaching, learning and educational scholarship while providing a professional, respectful, and intellectually stimulating learning environment.
- II. Promote professional development of faculty for effective pedagogy and scholarly educational activities.
- III. Recruit highly qualified students and educators into our educational system.
- IV. Teach students timely and relevant information, utilizing the most effective educational modalities and technologies.

- V. Connect educational outcomes to the experiences and competencies required for future practice and life-long learning.
- VI. Advance and support educational research in biomedical and health sciences.
- VII. Promote the acquisition and efficient use of internal and external resources to advance the educational mission.
- VIII. Includes a component of departmental/divisional cost sharing.

For additional information for the Strategic Plan for Education please refer to the web site: <http://infonet.hmc.psu.edu/ucteams/academic/index.htm>

E. Review Process

Applications will undergo review by the Woodward Steering Committee. **The committee will evaluate the following aspects of an application:**

1. **Rationale:** Does the application provide a convincing rationale for the project? Does the project fill an unmet need or further the educational goals of HMC?
2. **Description of hypothesis, goal and objectives:** If proposal is a research project, is there a testable hypothesis? Did the applicant provide a clear and complete description of the goals and objectives of the project? Are there defined deliverables that can be used to evaluate the progress and completion of the project?
3. **Description of the methodology to be employed:** Did the applicant describe in detail the methodology to be used during the performance of the project? Are the methods justified? (For example, are the methods established and are literature citations provided to validate the methods?)
4. **Description of expected results:** Did the applicant provide expected OUTCOMES of the project and a definitive method for evaluating the outcome? Will statistical analyses be used to establish significance of outcomes? (For example, if a new teaching method is developed, how will the new method be compared to the old method?)
5. **Significance of the project, including its relevance to strategic goals of the institution:** Will the project benefit learners at HMC? Did the applicant relate the goals of the project to the educational goals of the institution?
6. **Implementation and/or publication:** Did the applicant describe how the product of the project would be implemented and/or published? Is the project likely to provide actual improvements in learning at HMC or provide useful information to the educational community?
7. **Potential impact of the project:** If the project were successful, would it have a significant impact on learning at HMC or on medical education in general? How broad would the impact be? Is the project likely to lead to something greater, such as a more developed grant application or an established project with external funding?

8. **Overall:** Does this application represent a well thought out and complete project that is likely to benefit learners at HMC and/or benefit medical research as a whole? Is the application well written and logically organized?
9. **Credentials and experience of the applicant:** Are the investigators Penn State University Faculty Members who are involved in the educational mission on the HMC campus? Does the applicant(s) possess training and experience applicable to the proposed project? Do the personnel involved have the training and expertise required to carry out the project? Are there expert consultants or mentors involved in the project?
10. **Additional items:**
 - a. If human subjects are involved, are there any concerns regarding their welfare?
 - b. Are references provided? Are they in an acceptable format?
 - c. Is the budget detailed, well justified and reasonable?
 - d. Are personnel listed and their contributions to the project adequately described? Do CVs or biosketches adequately describe the credentials and experience of all the involved key personnel? Are there any concerns for overlap with support from other grants?
 - e. Are future plans for funding included and adequate?
 - f. Are attachments included, including letters of support from the appropriate Department Chairs? Do the letters explicitly state the availability of personnel effort for this project? Do letters explicitly describe the commitment of departmental or institutional resources to this project?

In addition, the Steering Group may make recommendations that would strengthen each proposal, and these recommendations will be returned to the applicant at the conclusion of the review process. Applicants may be requested to revise the application based on the recommendations and to resubmit the revised application for further review. The Steering Group will make all final decisions regarding awards.

F. Awards

- Examples of successful grant applications may be found on the Office of Faculty and Professional Development website at: <http://www.pennstatehershey.org/web/opd/home> - Click on “Woodward Endowment” under “Programs.” Helpful information on medical education research projects, methods and the medical education literature may also be found in the Harrell Library Guide for Medical Education Research at the following link: <http://harrell.library.psu.edu/mededresearch>.
- Further help for successful educational grant writing may be found by downloading the W.K. Kellogg Foundation Logic Model Development Guide at the following link: ww2.wkkf.org/default.aspx?tabid=101&CID=281&CatID=281&ItemID=2813669&NID=20&LanguageID=0

G. Additional Information

See the attached Instructions for Applicants. **Note that incomplete applications will be returned without review.** Applications must be accompanied by a completed FACE

PAGE and documented approval of the project by the applicant's Department Chair(s). Any questions regarding either the RFA or the following Instructions for Applicants should be referred to the Woodward Endowment Project Manager, Lisa Shantz, PhD at lms17@psu.edu.

**Woodward Endowment for Medical Sciences Education
Innovation in Education Projects and Research**

INSTRUCTIONS FOR APPLICANTS

APPLICATIONS MUST ADHERE TO THE FOLLOWING FORMAT:

1. **Completed Face Page** titled "Innovation in Education Projects and Research Application" (attached)
2. **Project Abstract:** Briefly summarize the hypothesis, goals and objectives, and relevance of this project to institutional priorities as outlined in the strategic vision for education. Abstract and application must be single-spaced and use 11 pt Arial font throughout.
3. **Project Implementation Plan:** The Implementation Plan must not exceed 10 pages for sections a through e below, must be single-spaced, and must be organized as follows:
 - a. **RATIONALE, HYPOTHESIS, GOALS AND OBJECTIVES**, including literature review and statement of need, clearly stated hypothesis (for research projects), plus goals and objectives that include clearly defined deliverables that can be used to evaluate the progress and completion of the project
 - b. **METHODOLOGY**, with a comprehensive description and time-line, an evaluation plan that includes outcomes measurement and statistical methods
 - c. **EXPECTED RESULTS**, including the anticipated quantitative outcomes of the project and what alternative results will be interpreted to mean
 - d. **SIGNIFICANCE OF THE PROJECT**, including the potential impact on learners at HMC and the wider educational community, including relevance to strategic goals of the institution as outlined in the strategic vision for education;
 - e. **PLANS FOR IMPLEMENTATION AND/OR PUBLICATION OF RESULTS**, and any other expansion or follow-up of the project
4. **Human Subjects:** Describe involvement if any. Please note that IRB approval is necessary for all work involving research with human subjects, and grant money cannot be released until all approvals are obtained.
5. **Literature Cited:** List references cited in the application.
6. **Budget:** Use PHS 398 Form Page 4 "Detailed Budget for Initial Budget Period" (<http://grants.nih.gov/grants/funding/phs398/phs398.html>). List all costs by category. For participating faculty, list the total percent effort that will be devoted to the project, explicitly delineating effort supported by the grant and effort supported with departmental funds.
7. **Budget Justification:** Provide additional breakdown and full justification for all costs, including salary support, consulting fees, supplies, services, and costs for research subjects. Consulting fees or costs for services should be supported by detailed cost estimates from the consultant or contractor.
8. **Description of Cost Sharing or Sources of Additional Support:** Provide a specific description of personnel effort commitments to be devoted to the project but not funded by the grant, departmental or institutional support for the project, and other sources of

financial support for the project, including what the sources will provide. All departmental or institutional commitments should be confirmed in an attached letter from the Department Chair or another authorized institutional official.

9. **List of all Key Personnel:** Include formal titles, departmental affiliations, expertise, role and contribution to the project. Specific responsibilities should be described.
10. **Abbreviated Curriculum Vitae or Biosketches of Key Personnel (Principal Investigator(s), Collaborating Investigators and paid Consultants):** Provide all education and experience relevant to performance of the proposed project. (Not to exceed 4 pages each.)
11. **Other Support:** Include information on other grant-funded concurrent or pending sources of salary support for Principal Investigator and all Collaborating Investigators for which salary support is requested. Use PHS 398 Other Support Format Page (<http://grants.nih.gov/grants/funding/phs398/phs398.html>). Include a statement of possible overlap between the goals and objectives of the present application and other sources of support. If there is no support to declare or no overlap, then state "none."
12. **Future Plans for Funding:** If continuation of the project beyond the limits of the grant is anticipated, describe plans to apply for external funding including the identity of the most probable sponsors, grant mechanisms, and the expected receipt dates for submitting future applications.
13. **Attachments:** For Level II applications, attach letters of support from the collaborating investigators involved to document their willingness to participate, contributions, and percent effort that they will devote for this project. Letters from the Department Chairs are required for all investigators who will be devoting a percent effort to the project. Support letters should clearly state the availability and commitment of investigator's percent effort to be devoted to this project, cost sharing, and any additional commitments of departmental resources to the project. Commitments of other institutional resources should be documented by a letter from the appropriate authorized institutional official. The availability of institutional facilities needed for the project should be explicitly confirmed.

NOTE: It is important that the application be well written and include:

- A convincing rationale for the project that describes the research question or unmet curricular need being fulfilled
- A clear description of hypothesis, goals, objectives, or specific aims for the project
- A detailed description of the methodology, including the rationale for choosing specific methods, alternative methods, and literature citations for methods
- The results that are expected, including the expected outcomes of the project and a definitive method for evaluating the outcomes and analyzing the data, including appropriate statistical analyses
- The significance of the project, including its relevance to institutional priorities as outlined in the strategic vision for education
- How the product of the project will be implemented and/or published
- The potential impact of the project to education research or the educational mission of the institution
- Plans for future funding including possible funding agencies, funding mechanisms, and application target dates
- A detailed and justified budget including all salaries, supply costs, and services
- Specific details and documentation of cost sharing and departmental, institutional, or other support for the project

- Abbreviated curriculum vitae or biosketches (not to exceed 4 pages each) describing the relevant experience, credentials and educational grant funding of all the key personnel involved in the project (Principal Investigator, collaborating Investigators, and paid Consultants); relevant education, publications, teaching experience, curriculum development experience, and past educational grant funding should be included. If personnel are providing clinical expertise, then the relevant clinical training and experience should be described.
- A description of any concurrent or pending educational grant salary support and overlap with the goals and objectives of the present application
- **Letters documenting the commitment of investigators, collaborators and consultants, the commitment of departmental or institutional support of effort for the principal investigator, cost sharing and resources that are necessary for successful completion of the proposed studies. Letters should explicitly state the availability of, and permission to use, institutional space or facilities.**

Woodward Endowment for Medical Sciences Education Innovation in Education Projects and Research Application

FACE PAGE

(ATTACH THIS TO THE TOP OF YOUR COMPLETED APPLICATION)

Date of Application: _____

Title of Project:			
Level of Funding (Indicate Level I or Level II):			
New or Renewal Application:			
Principal Investigator Name			
Academic Title			
Department		Mail Code	
Telephone Number		Fax	
Department Chair			

If applicable:

Co-Principal Investigator Name			
Academic Title			
Department		Mail Code	
Telephone Number		Fax	
Department Chair			

Signature: _____ Signature: _____
Principal Investigator Co-Principal Investigator

Application Checklist (Refer to the “Instruction for Applicants” for details):

- _____ Completed Face Page
- _____ Project Abstract
- _____ Project Implementation Plan (10 page limit, including sections a through e)
- _____ Human Subjects (if applicable)
- _____ Literature Cited
- _____ Budget (PHS 398 Form Page 4)
- _____ Budget Justification
- _____ Description of Cost Sharing or Sources of Additional Support
- _____ List of All Key Personnel (names, titles, department affiliations, contributory role in the project)
- _____ Abbreviated Curriculum Vitae or Biosketches of key personnel (Principal Investigator, Collaborating Investigators, and paid Consultants)
- _____ Other Grant-derived Salary Support for the Principal Investigator(s) or Collaborators (for which salary support is requested)
- _____ Attachments including Letters of Support (including letters from Collaborating Investigators and Consultants, letters from the applicant’s Chair or administrative supervisor, and letters from authorized administrative officials)
- _____ **3 hard copies** to the Office of Physiology (C4600) and an electronic copy (pdf) to Lisa Harman at lharman@hmc.psu.edu

****If this grant is funded you will be required to fill out an ePIAF form.**