

Woodward Endowment for Medical Sciences Education
Innovation in Education Projects and Research
FACE PAGE

ATTACH THIS TO THE TOP OF YOUR COMPLETED APPLICATION

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

If applicable:

Co-principal Investigator Name		Not applicable	
Academic Title			
Department		Mail Code	
Telephone Number		Fax	
Department Chair			

Signature: _____
Principal Investigator

signature: N/A
Co-Principal Investigator

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

- Face Page
- Proposal Clearance Form (Blue Sheet)
- Project Abstract
- Implementation Plan (10 page limit)
- Human Subjects (if applicable)
- Reference Page
- Budget
- Budget Justification
- Continuation Plan
- List of ancillary personnel (names, titles, department affiliations, contributory role in the project)
- Other Support
- Attachments
- Letter of support from the applicant's chair/administrative supervisor
- 14 copies to the Office of Educational Affairs (C1708)

NOTE: Funding Award Cycle July 1, 2009 – June 30, 2010

2. **Completed and Signed Proposal Clearance Forms (AIF and HERSHEY BLUE) – Attached**

3. **Project Abstract:** Attendance at the 2011 Institute, *Supporting Clinical Care: an Institute in Evidence-Based Practice for Medical Librarians*, will help the principal investigator increase the level of support offered to clinicians in evidence-based practice as well as the library's integration into undergraduate and graduate medical curricula in evidence-based medicine (EBM), which have been ongoing for approximately four years. The investment will be leveraged when the PI shares the skills learned with other library faculty at the George T. Harrell Health Sciences Library who will also be able to improve their support to clinicians, medical, and nursing students.

4. **Background and Rationale:**

Preparing medical students with the information management skills necessary for lifelong learning is a required component of medical education programs as described by Liaison Committee on Medical Education (LCME) Accreditation Standards and the Association of American Medical Colleges (AAMC) Medical School Objectives Project (MSOP). For example, LCME standard ED-5-A states that medical education programs should include instruction and assessment in the areas of "...independent, identification, analysis, and synthesis of relevant information; and the appraisal of the credibility of information sources." (LCME, p. 7) A similar learning objective in the MSOP states that medical students should be able to "...retrieve (from electronic databases and other resources), manage, and utilize biomedical information for solving problems and making decisions that are relevant to the care of individuals and populations." (AAMC, p. 9) Therefore, a solid grounding in the concepts and skills in evidence-based medicine – formulating an answerable clinical question; identifying EBM information sources and effectively searching for the best evidence; critically appraising the evidence found; and then applying the evidence in accordance with patient values – is an important part of the medical school curriculum.

As information specialists and educators, health science librarians are uniquely positioned to partner with clinical faculty to train learners in EBM-related skills. For example, previous studies show that students who were trained to search the EBM literature effectively by librarians show an increase in the quality of their literature search skills, both objectively assessed and self-assessed, and an increase in the frequency with which they searched for evidence. (Berner 2002, Dorsch 2004, Gruppen 2005)

For several years now, HHSL faculty have collaborated with COM faculty to design and deliver EBM-related lectures and learning activities in several required courses in the undergraduate medical curriculum. HHSL faculty also have collaborated with COM faculty to teach residents EBM-related concepts and skills and have developed course-integrated instruction in evidence-based nursing practice with nursing faculty here at PSMSHMC. Currently, HHSL faculty (specifically, this applicant) are responsible for delivering literature searching and EBM-related instruction, or have worked to design online modules, integrated into the following required courses in the undergraduate medical education program:

- Evidence-Based Medicine 713 (Year I)
- Cellular and Molecular Basis of Medical Practice (Year I)
- Biological Basis of Disease (Year I)

- Renal & Reproductive Medicine blocks of Foundations of Clinical Medicine (Year II)
- Improving Healthcare (Year III)
- Family medicine clinical rotation (Year III)

The principal investigator is also currently partnering with the Associate Deans for Preclinical and Clinical Education on an assessment of the EBM knowledge, skills, and attitudes of 4th year medical students which will be repeated over the next several years to assess effectiveness of changes in the undergraduate medical curriculum. The skills gained by the principal investigator at the Institute will benefit learners at the PSMHMC by allowing the PI to contribute towards what has already been developed and to develop new EBM-related learning activities and curricula. Learners will benefit from:

- Improved learning objectives and activities in the sessions in which HHSL faculty are currently partnering (outlined above);
- Curricular integration of EBM skills and objectives throughout the medical school curriculum, especially in the 3rd and 4th years in which the EBM-related curriculum is still under development;
- Increased integration of EBM skills and objectives in residency curricula at PSMHMC;
- Improved library support for EBM-related clinical activities; for example, design of a specialized library website providing access to EBM-related information tools.

5. **Value to the Institution:** EBM-related skills and concepts are addressed by the medical education curriculum at present, particularly in years I and II, but there is room for improvement. EBM learning objectives should be integrated throughout the undergraduate medical curriculum in a spiraling, intentional fashion. The training received at this institute will help the principal investigator to better contribute to curricular innovations in EBM throughout the curriculum, including years III and IV and residency programs, where EBM skills can support clinical decision-making. The knowledge gained will also support evidence-based clinical practice throughout the institution. It is a particularly opportune time for this integration as the curricula in all undergraduate years is under consideration.

6. **Meeting, Training or Performance Site:** The Institute is sponsored by the Dartmouth Biomedical Libraries at the Dartmouth Medical School in Hanover, New Hampshire and is supported by a grant from the National Network of Libraries of Medicine, New England Region. The training is led by health sciences librarians who specialize in EBM and is widely regarded in medical libraries as the premier EBM training opportunity for health sciences librarians. The attendance is limited to 32 participants which allows intensive instruction from the eight faculty.

7. **Budget:**

\$700 Includes registration and course materials, dorm accommodations, and all meals while at the institute.

\$550 Round-trip plane fare to Boston, MA

\$60 Round-trip bus fare from Boston to Hanover, NH (Dartmouth College)

\$80 Meals while en route to and from the institute

\$30 Incidentals (taxi from bus to Dartmouth College; tips)

\$1,420 TOTAL REQUESTED (Library may be able to support cost sharing if amount cannot be fully funded by the Woodward Endowment.)

8. **Attachments:** Please find attached the following:

- Letter of support from HHSL director, Cynthia Robinson
- Print-outs from institute website describing the meeting
- Principal investigator's CV

9. **References**

Association of American Medical Colleges. "Report I: Learning Objectives for Medical Student Education: Guidelines for Medical Schools." (1998)

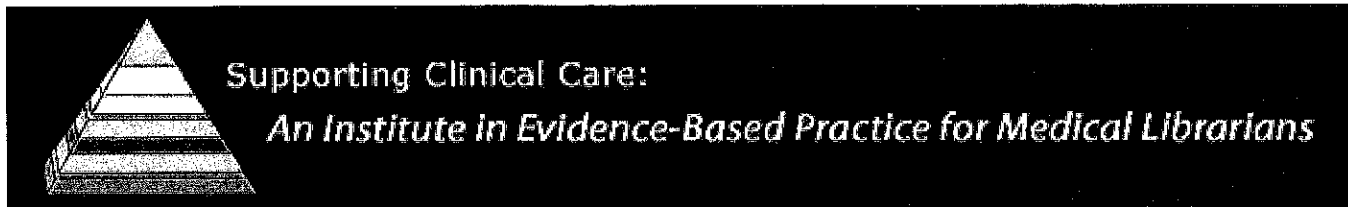
Berner, E.S.; McGowan J.J.; Hardin, J.M.; Spooner S.A.; Raszka, W.V.; Berkow, R.L. "A Model for Assessing Information Retrieval and Application Skills of Medical Students." *Academic Medicine* 77, no. 6 (June 2002): 547-51.

Dorsch, J.L.; Aiyer, M.K.; Meyer, L.E. "Impact of an Evidence-Based Medicine Curriculum on Medical Students' Attitudes and Skills." *Journal of the Medical Library Association* 92, no. 4 (October 2004): 397-406.

Gruppen, L.D.; Rana, G.K.; and Arndt, T.S. "A Controlled Comparison Study of the Efficacy of Training Medical Students in Evidence-Based Medicine Literature Searching Skills." *Academic Medicine* 80, no.10 (October 2005): 940-944.

Liaison Committee on Medical Education. "Accreditation Standards." (2008)
< <http://www.lcme.org/functions2010jun.pdf>>.

**LETTER OF SUPPORT FROM DEPARTMENT
HEAD**



[Home](#) [Registration](#) [Schedule](#) [Faculty](#) [Directions](#) [Materials](#) [Contact Us](#) [Local Info](#)

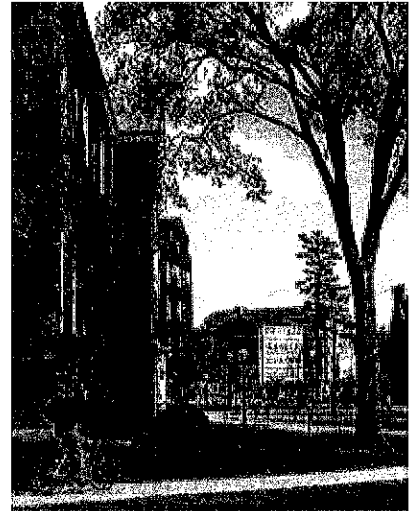
2011 Institute

Monday, August 1st, 5:00pm - Thursday, August 4th, 5:00pm
Dartmouth College, Hanover, New Hampshire

Registration is Full!

[Click here to be added to the wait list.](#)

Individuals on the wait list who do not get into this year's Institute will have priority registration next year.



Institute Description

This is an intensive, introductory, 3 day course. Through discussion and hands-on learning, you'll acquire skills needed to support evidence-based practice. We use an active, case-based approach in a comfortable, small-group environment. A hallmark of this Institute is the low student-faculty ratio and the individual attention each participant receives.

Audience

Medical librarians who want to learn evidence-based medicine concepts in order to comfortably support and teach EBCP at their institutions. Attendance will be limited to 32 participants to maximize individual learning.

Learning Objectives

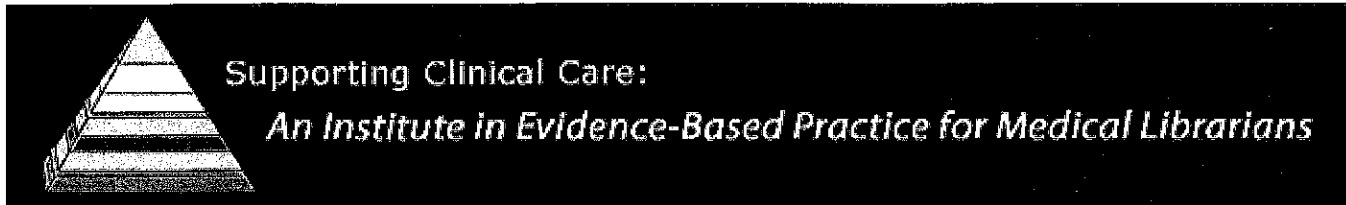
After completing this Institute, students will be able to:

- Identify and explain the concept, issues and process of evidence-based clinical practice (EBCP).
- Recognize study designs and understand their strengths and limitations.
- Create well-built, answerable clinical questions.
- Use clinical questions to find the best evidence in the literature about the diagnosis and treatment of disorders.
- Identify and explain the criteria for judging the internal validity of randomized controlled trials (RCTs), systematic reviews, clinical practice guidelines, qualitative and diagnostic studies.

CE Credit

20 MLA CE credits pending.

Comments from previous Institute Attendees:



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2011 Tentative Schedule

Monday, August 1

1:00pm - 5:00pm	Dorm Check-In
4:00pm - 6:00pm	Registration and Computer Check
6:00pm - 8:00pm	Opening Dinner

Tuesday, August 2

7:30am - 8:30am	<i>Continental Breakfast</i>
8:30am - 9:15am	Welcome and Overview [Large Group]
9:15am - 12:00am	Clinical Question and Study Design [Small Group]
12:00pm - 1:00pm	<i>Lunch</i>
1:00pm - 4:15pm	Finding the Evidence [Small Group]
4:15pm - 4:45pm	Review of Day 1 [Large Group]
6:30pm	<i>Institute Dinner</i>

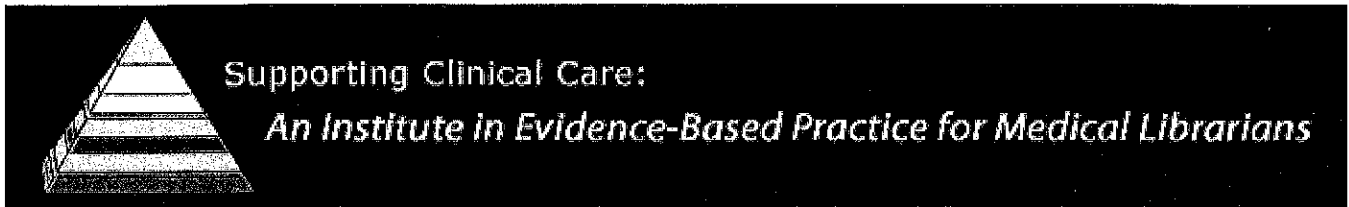
Wednesday, August 3

7:30am - 8:30am	<i>Continental Breakfast</i>
8:30am - 10:15am	Therapy: Critical Appraisal [Large Group]
10:30am - 12:30pm	Therapy: Critical Appraisal [Small Group]
12:30pm - 1:30pm	<i>Lunch</i>
1:30pm - 2:30pm	Systematic Review & Practice Guidelines: Critical Appraisal [Large Group]
2:45pm - 4:15pm	Systematic Review & Practice Guidelines: Critical Appraisal [Small Group]
4:15pm - 4:45pm	Review of Day 2 [Large Group]
6:30pm	<i>Institute Dinner & EBCP Jeopardy</i>

Thursday, August 4

7:30am - 8:30am	<i>Continental Breakfast</i>
8:30am - 10:00am	Diagnosis: Critical Appraisal [Large Group]
10:15am - 12:30pm	Diagnosis: Critical Appraisal [Small Group]
12:30pm - 1:30pm	<i>Lunch</i>
1:30pm - 2:00pm	Qualitative Studies: Critical Appraisal [Large Group]
2:00pm - 3:30pm	Qualitative Studies: Critical Appraisal [Small Group]
3:45pm - 5:00pm	Putting it into Practice and Wrap Up [Large Group]

Note: There will be daily mid-morning and mid-afternoon breaks.



Home Registration Schedule Faculty Directions Materials Contact Us Local Info

2010 Faculty

Course Directors

Connie Schardt, MLS, AHIP
Associate Director for Public Services
Duke University Medical Center Library

Connie is the Associate Director for Public Services at Duke University Medical Center. She is Co-Director of Teaching and Leading EBM: A Workshop for Teachers and Champions of Evidence-Based Medicine, which is a 4 day workshop for clinicians and health professionals. Connie also co-teaches a distance education course on EBM for Medical Librarians. And from 2001 to 2008 she participated as a librarian faculty at the McMaster EBCP annual workshop.



Karen Odat, MSN, MSLIS
Research and Education Librarian
Dartmouth College Biomedical Libraries

Karen is a Research and Education Librarian at Dartmouth Biomedical Libraries. She has been the course director and librarian faculty for the Dartmouth Summer Institute in Evidence-Based Psychiatry and Mental Health. For the last 4 years, she participated as a librarian faculty at McMaster EBCP annual week-long workshop. She attended Duke University's Teaching and Leading EBM workshop in 2005. Karen is a co-developer with Jan Glover of the [EBM Page Generator](#) and an administrator with Connie Schardt of the [EBM Librarian Wiki](#). She has been teaching EBM concepts and supporting EBM practice at Dartmouth since 1998.



Additional Faculty

Pamela Bagley, PhD, MSLIS
Research and Education Librarian
Dartmouth College Biomedical Libraries

Pamela is a Research and Education Librarian at Dartmouth College Biomedical Libraries. She regularly teaches evidence based practice principles to medical students and clinicians. In 2006, she attended the three-day Workshop on Evidence Based Practice at the Oxford Centre for Evidence-Based Practice. Pamela has participated on the Planning Committee and as a faculty librarian in the annual three-day Dartmouth Summer Institute in Evidence-Based Psychiatry and Mental Health since



it began in 2006. Pamela's background as a research scientist gives her extensive experience in evaluating and appraising research studies.

Janene Batten, MLS, AHIP
Reference Librarian
Cushing/Whitney Medical Library
Yale University

Janene Batten is the Reference Librarian to the Yale School of Nursing. Janene has extensive experience teaching evidence-based research principles to nursing students through course-integrated instruction. She has also worked closely with nursing staff in the hospital setting training them to do research for their clinical setting. She currently works with nursing faculty, graduate and PhD students, assisting them with all aspects of their research. Janene has participated in the 2007 and 2008 Teaching and Leading EBM: A Workshop for Teachers and Champions of Evidence-Based Medicine at Duke University.



Heather Blunt, MSLIS
Research and Education Librarian
Dartmouth College Biomedical Libraries

Heather is a Research and Education Librarian at Dartmouth College and Dartmouth Medical School, where she regularly teaches EBM principles and practices to students and clinicians. She has received training at the Oxford Centre for Evidence-Based Practice. Since 2006, Heather has participated as librarian faculty in the annual 3-day Dartmouth Summer Institute in Evidence-Based Psychiatry and Mental Health. She co-taught a workshop for psychiatrists on creating a participatory evidence-based journal club at the 2007 annual meeting of the American Association of Directors of Psychiatric Residency Training.



Jan Glover, MLS, AHIP
Education Services Librarian
Cushing/Whitney Medical Library
Yale University

Jan is the Education Services and Reference Librarian at the Cushing/Whitney Medical Library, Yale School of Medicine. She has been teaching evidence-based practice principles and techniques to Medical Center students and faculty through course-integrated instruction, workshops, one-on-one sessions or to anyone who will listen. Jan attended the Duke University Medical Center Teaching and Leading EBM workshop and co-developed the EBM Page Generator with Karen Odató. Jan participated in the 2006 and 2007 Dartmouth Summer Institute in Evidence-Based Psychiatry and Mental Health as librarian faculty.



Jeff Mason, MLIS
Client Services Librarian
Regina Qu'Appelle Health Region, Canada

Jeff is a hospital-based librarian providing evidence-based services and instruction to staff and students in Regina, Saskatchewan, Canada. He has participated as a librarian faculty at McMaster University's week long EBCP workshop. He has recently brought library services to the bedside by rounding with residents on a new internal medicine teaching unit. Working in a hospital setting allows him to work closely with physicians, residents, nurses, pharmacists, dieticians, and administrators to support evidence-based health care and provide quality patient care. In recognition of his work Jeff was presented with the 2009 Canadian Health Libraries Association Emerging Leader Award.



Angela Myatt, M.Sc.
Curriculum Liaison Librarian
Briscoe Library
University of Texas, Health Science Center at San Antonio

Angela is Curriculum Liaison Librarian at the Briscoe Library, the University of Texas, Health Science Center at San Antonio (UTHSCSA). At the University of Cincinnati, Angela was a member of the working group charged with integrating EBM into the medical school curriculum. She has extensive experience teaching evidence based principles and practice to faculty, residents and students in many different settings. She has attended the McMaster EBCP Workshop as librarian faculty since 2005. She co-teaches a distance education course, with Connie Schardt, on EBM for Medical Librarians through the University of North Carolina at Chapel Hill, School of Information and Library Science (SILS). She also has been an instructor at the Cincinnati Children's Hospital Medical Center (CCHMC) workshop Practicing Evidence Based Pediatrics for over 4 years. She has been an advocate of EBM since her days as a Clinical Medical Librarian.



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APPLICANT'S CV

PENN STATE UNIVERSITY

PROPOSAL INTERNAL APPROVAL FORM

College Proposal ID No.: _____

Date: _____

INVESTIGATOR DATA

1. Principal Investigator/Project Correspondent	2. PI Notification e-mail
3. College/Unit	4. College/Unit Notification e-mail
5. Department/Subunit (Consortium/Institute/Center, etc.)	6. Project Location/ Building Name: _____

PROPOSAL DATA

7. Type of Project <input type="checkbox"/> RESEARCH <input type="checkbox"/> INSTRUCTION <input type="checkbox"/> OUTREACH <input type="checkbox"/> SERVICE (Hershey Only)	
8. Project Title	
9. Type of Submission (Check Applicable) <input type="checkbox"/> New Proposal <input type="checkbox"/> Continuation <input type="checkbox"/> Supplement <input type="checkbox"/> Grant Transfer <input type="checkbox"/> Renewal <input type="checkbox"/> Resubmission to College Proposal ID No: _____	10. If Not New, List Current Grant, Contract or PSU Account Info. _____

SPONSOR TRANSMITTAL DATA

11. Prime Sponsor: (Sponsor's Source of Funding)	14. Submitted by: <input type="checkbox"/> College/Unit <input type="checkbox"/> OSP
12. Sponsor Name and Address	OSP Instructions <div style="border: 1px solid black; height: 60px; width: 100%;"></div>
Contact: _____	15. Number of copies sent or to be sent: _____
Sponsor Protocol No. : _____	16. Deadline (Check Box) <input type="checkbox"/> YES Mailing Date: _____ Date Due in Hands of Sponsor: _____
13. CFDA No.: _____	

BUDGET DATA

17. Initial Start Date: End Date:	18. Total Start Date: End Date:	19. Applicable F&A Rate(s) or Management Fee: ____ % ____ % ____ N/A <input type="checkbox"/> MTDC <input type="checkbox"/> Other _____ <input type="checkbox"/> TDC <input type="checkbox"/> Total Amount
20. Initial Requested Direct: \$ Requested F&A: \$ Requested Fee: \$ Total Requested: \$	21. Total Requested Direct: \$ Requested F&A: \$ Requested Fee: \$ Total Requested: \$	
22. University Cost Sharing: (Check all that apply) <input type="checkbox"/> Includes Committed* Cost Sharing <input type="checkbox"/> College/Unit Is Providing Cost Sharing (Responsibility of College/Units) <input type="checkbox"/> Central Is Providing Cost Sharing (Documentation of Commitment Attached)		

*Committed Cost Sharing includes both mandatory (sponsor-required) cost sharing and voluntary cost sharing committed in the proposal (see RAG10).

REMARKS OR SPECIAL INSTRUCTIONS

Proposal Internal Approval Form -- Page 2

SPECIAL REVIEW CHECKLIST

The proposal submitted herewith involves the following:

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**Checking this box yes invokes the requirement for the PI to submit the material to appropriate offices or committees for review in accordance with each applicable University Policy or Guideline.*

PRINCIPAL INVESTIGATOR/PROJECT CORRESPONDENT DISCLOSURES AND ASSURANCES

By signing below (or on the *Additional Approvals Page -Page 3*), I certify that I have read the following statements and those contained on the *Proposal Internal Approval Form -- Assurances Page (Pages 5 and 6)*, and I further certify that the statements contained herein are accurate and truthful to the best of my knowledge and belief:

- | | | | | | |
|---|--------------------------|-----------|--------------------------|--------------------------|--|
| <table border="0" style="width: 100%;"> <tr> <td style="width: 5%; text-align: center;">Yes</td> <td style="width: 5%; text-align: center;">No</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> | Yes | No | <input type="checkbox"/> | <input type="checkbox"/> | <ul style="list-style-type: none"> • All applicable items contained in the Special Review Checklist have been identified. Investigators agree to abide by any obligations that university policies or legal requirements governing these items may evoke (e.g., obtaining approval for protocols, abiding by export laws, maintaining confidentiality, etc.). • All investigators have read and understood Penn State's conflict of interest and Investigator Significant Financial or Business Interests Disclosure Policies (HR91, RA12, RA20, and RA21), have made all disclosures required by them, and, <i>prior to the expenditure of any award funds</i>, shall have reached an agreement with the University which provides for conditions or restrictions necessary to manage, reduce, or eliminate conflicts of interest under University policy. • The proposal submitted herewith is (i) complete in its technical content, (ii) adheres to the rules of proper scholarship, including specifically the proper attribution and citation for all text and graphics, (iii) complies with federal standards for the integrity of research (e.g., <i>NSF Misconduct in Science Policy</i>, see Penn State Policy RA10 and IAF-P08 Instructions), and (iv) is in accordance with specifications established by the sponsoring agency. • The facilities/space and other University resources necessary to complete the proposed project are available to the project, or provisions have been arranged with Department/College/Unit to make such space or other University resources available in the event an award is made. • If the proposal submitted herewith is funded and accepted by the University, I will conduct the project in accordance with the terms and conditions of the sponsoring agency and the policies of the University, and I will be fully responsible for meeting the requirements of the award, including, but not limited to, providing the proper stewardship of sponsored funds, submitting all required technical reports and deliverables on a timely basis, properly disclosing all inventions to the University's Intellectual Property Office, and adhering to all federal compliance requirements, (e.g., Export Control, HIPAA, Human Research Participants, etc.). |
| Yes | No | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | | | | |

APPROVALS

(All investigator signatures and initials must be original; no proxies allowed - see instructions for details. Use Proposal Internal Approval Form - Additional Approvals Page, if necessary.)

Approvals given on the Proposal Internal Approval Form represent general approval of technical merit, allocation of University space/ resources, and fiscal budgeting, but do not represent specific approval of personnel titles, classifications, salary rates, or other issues governed by University policy. Where funds are requested for the purchase of equipment, a determination has been made that no other equipment at the University is available or accessible or suitable for the intended use.

Principal Investigator/Project Correspondent Assurance (Initial one): Project ____ does ____ does not require SFBID.	Department Head(s) or Subunit Director(s) or Director(s) of Academic Affairs
Signature _____ Date _____	Signature _____ Date _____
Dean(s), Director, or Designated Representative(s):	Campus Chancellor
Signature _____ Date _____	Signature _____ Date _____
Other (e.g., Physical Plant for Construction Project)	University Authorization
Signature _____ Date _____	Signature _____ Date _____

PROPOSAL INTERNAL APPROVAL FORM - ADDITIONAL APPROVALS PAGE - Page 3

Investigators Assurance: "By signing below, I certify that I have read the assurance statements contained on the *Proposal Internal Approval Form (Page 2)* and on the *Proposal Internal Approval Form -- Assurances Page (Pages 5,6,7)*, and I further certify that the statements contained therein and below are accurate and truthful to the best of my knowledge and belief."

ADDITIONAL INVESTIGATOR APPROVALS

Investigator	Status: <input type="checkbox"/> Co-Principal Investigator <input type="checkbox"/> Investigator or Associate	Assurances (<u>Initial</u> : Project _____ does _____ does not require SFBID)
		Signature _____ Date _____
College/Unit	College/Unit Approval	
		Signature _____ Date _____
Department	Department/Subunit or Director(s) of Academic Affairs Approval	
		Signature _____ Date _____
Other Approval	Campus Approval	
		Signature _____ Date _____
Investigator	Status: <input type="checkbox"/> Co-Principal Investigator <input type="checkbox"/> Investigator or Associate	Assurances (<u>Initial</u> : Project _____ does _____ does not require SFBID)
		Signature _____ Date _____
College/Unit	College/Unit Approval	
		Signature _____ Date _____
Department	Department/Subunit or Director(s) of Academic Affairs Approval	
		Signature _____ Date _____
Other Approval	Campus Approval	
		Signature _____ Date _____
Investigator	Status: <input type="checkbox"/> Co-Principal Investigator <input type="checkbox"/> Investigator or Associate	Assurances (<u>Initial</u> : Project _____ does _____ does not require SFBID)
		Signature _____ Date _____
College/Unit	College/Unit Approval	
		Signature _____ Date _____
Department	Department/Subunit or Director(s) of Academic Affairs Approval	
		Signature _____ Date _____
Other Approval	Campus Approval	
		Signature _____ Date _____
Investigator	Status: <input type="checkbox"/> Co-Principal Investigator <input type="checkbox"/> Investigator or Associate	Assurances (<u>Initial</u> : Project _____ does _____ does not require SFBID)
		Signature _____ Date _____
College/Unit	College/Unit Approval	
		Signature _____ Date _____
Department	Department/Subunit or Director(s) of Academic Affairs Approval	
		Signature _____ Date _____
Other Approval	Campus Approval	
		Signature _____ Date _____

ASSIGNMENT OF CREDIT FORM - Page 4

One objective of this form is to assign credit to the home colleges/departments of the PIs and principal contributors on a grant. Shared credit will be assigned to investigators, co-investigators, project directors, and other participants identified in the left hand column of the table below. Credit will be attributed to the home college and department of those individuals in proportion to the percentages appearing in the far right column. These percentages reflect "credit" for intellectual and technical responsibility for the project. They need not represent salary or time distributions for all project participants. No Research Incentive Funds (RIFs) go to the strategic initiative areas, and columnar summations for strategic initiatives do not take credit away from the colleges/departments.

The second objective is to identify connections with a strategic initiative area. The fractions provided in the bottom row associate the project with the University's Strategic Interdisciplinary Research Initiatives (SIRI) areas. The work need not be specifically within or supported by one of the Consortia or Institutes in order to be associated with an SIRI area. If the work is at all related to one or more of the SIRI areas, then the work should be specifically identified as falling within that field. The information collected is, in part, aimed at communicating with those outside of Penn State where we wish to project the full extent of the University's research programs in these key areas. If a project is in the area of Life Sciences, then the individual's percent credit is entered in the Life Sciences column. If this project supports more than one area, the individual's percent credit can be divided between different SIRI. For instance, if this project is partially Materials and partially Computational Sciences, the individual's percentage can be divided between these two areas. Please note that in the annual report, CYF will be rolled up under Social Sciences.

Please take a minute to accurately complete the form -- use whole percentages for all table entries. Data collected provides a global assessment of the size and vitality of the University's research activities in each SIRI area. In addition to providing a gauge on size and growth, the information provided identifies college/departmental contributions to each area, thereby allowing deans and department heads to assess the extent to which their faculty benefit from participation in each of the Strategic & Interdisciplinary Research Initiatives. Summaries of data collected using this form allow the University to capture the full breadth and strength of its programs in each of the SIRI areas and to subsequently communicate those strengths to potential students, sponsors and faculty recruits.

Investigator Name	Arts & Humanities	Children, Youth & Families	CyberSciences	Energy and the Environment	Life Sciences	Materials	Social Sciences	College-Based or PI Initiatives	Total
Total									

Proposal Internal Approval Form -- Assurances Page - Page 5
Investigator/Project Director Assurances

Certification of Procurement Integrity

(Applicable only if proposal is part of a Federal Procurement and amount proposed or awarded is equal to or in excess of \$100,000)

- 1) By signing the Proposal Internal Approval Form, I certify, to the best of my knowledge and belief, that I am the employee responsible for the preparation of the proposal submitted herewith and that I have no information concerning a violation or possible violation of subsection 27 (a), (b), (d) or (f) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), hereinafter referred to as "the Act") as implemented in the FAR, occurring during the conduct of this procurement.
- 2) As required by subsection 27 (e) (1) (B) of the Act, I further certify that, to the best of my knowledge and belief, each employee and consultant who has participated personally and substantially in the preparation or submission of this offer has certified that he or she is familiar with, and will comply with, the requirements of subsection 27 (a) of the Act, as implemented in the FAR, and will report immediately to me any information concerning a violation or possible violation of the Act, as implemented in the FAR, pertaining to this procurement.

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER TITLE 18, UNITED STATES CODE, SECTION 1001.

Certification Regarding Lobbying

By signing the Proposal Internal Approval Form, I certify, to the best of my knowledge and belief, that:

- 1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the [Investigator], to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or intending to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the [Investigator] shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," [to the University].
- 3) The [University] shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U. S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less that \$10,000 and not more that \$100,000 for each such failure.

Debarment, Suspension, and Other Responsibility Matters

(Applicable only if proposal is submitted to the Federal Government)

By signing the Proposal Internal Approval Form, I certify to the best of my knowledge and belief, that:

- (a) I am not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or agency;
- (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against me for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Have not within a three-year period preceding this application/proposal has one or more public transactions (Federal, State or local) terminated for cause or default.

Required Education in the Protection of Human Research Participation

(Applicable to all projects involving the use of human subjects)

By signing the Proposal Internal Approval Form, I certify to the best of my knowledge and belief, that:

All individuals responsible for the design and conduct of the proposed research involving human subjects have completed (or shall have completed by the time of award) the University's required web-based educational program on the protection of human subjects.

Investigator Financial or Business Interest Disclosure Policy

(Summary of Penn State Policy RA20 -- Applicable to all Sponsored Project Proposals)

What is required?

Federal regulations require institutions to have policies and procedures in place that ensure that Investigators disclose any significant financial or business interest that may present an actual or potential conflict of interest in relationship to externally sponsored projects. Such disclosures must be made **prior to the submission of a proposal** for funding,* and institutions must develop specific mechanisms by which conflicts of interest will be satisfactorily managed, reduced, or eliminated prior to the expenditure of any funds on an award.

- * If a new reportable significant conflict of interest arises at any time during the period after the submission of the proposal through the period of the award, the filing of a disclosure is also required.

Who is covered?

"Investigator" means the principal investigator/project director, co-principal investigators, and any other person at the University who is responsible for the design, conduct, or reporting of research, educational, or service activities funded, or proposed for funding, by an external sponsor. In this context, the term "Investigator" includes the Investigator's spouse and dependent children.

What must be disclosed?

Each Investigator shall disclose all *significant financial or business interests*:

- (i) that would reasonably appear to be affected by the research, educational, or service activities funded, or proposed for funding, by an external sponsor; or
- (ii) in entities whose financial interests would reasonably appear to be affected by such activities.

What is covered?

"**Significant financial or business interests**" means anything of monetary value/interest, including, but not limited to, compensation or other payments for services (e.g., consulting fees or honoraria); equity interests (e.g., stocks, stock options, or other ownership interests); intellectual property rights (e.g., patents, copyrights, and separately, royalties from such rights); and/or holding a management position or playing an advisory or consultative role (whether compensated or not) with a company or on the board of a company. The term **does not include**:

- (1) Salary or other remuneration from the University;
- (2) Income from seminars, lectures, or teaching engagements sponsored by public entities;
- (3) Income from service on advisory committees or review panels for public or non-profit entities;
- (4) Income from service on advisory committees or review panels for non-profit entities that are not affiliated with "for profit" companies;
- (5) An equity interest that, when aggregated for the Investigator and the Investigator's spouse and dependent children, meets any of the following tests: does not exceed \$10,000 (considered as a *de minimis* amount) in value as determined through reference to public prices or other reasonable measures of fair market value, does not represent more than a five percent ownership interest in any single entity, does not involve research with human participants, and will not be affected by the outcome of the study;
- (6) Broad based mutual funds;
- (7) Other compensation, royalties or other payments that, when aggregated for the Investigator and the Investigator's spouse and dependent children over the next twelve months, are not expected to exceed \$10,000 (considered as a *de minimis* amount), does not involve human participants and will not be affected by the outcome of the study.

Financial and business interests in human participants research must be the focus of intense scrutiny. When human participants are involved, no de minimis will apply.

Disclosure Procedures:

- (1) All Investigators must disclose their significant financial or business interests using COINS (Penn State's electronic Conflict Of Interest System) by following the link: <http://coins.psu.edu>.
- (2) Financial disclosures submitted in COINS will be automatically forwarded to the discloser's Department Head for review.
- (3) After Department review, disclosures are electronically routed to the Conflict of Interest Program. Conflict of Interest staff determine whether disclosures can be processed administratively, or if they need to be reviewed by the Conflict of Interest Committee.
- (4) A plan to manage any conflicts of interest must be in place prior to the expenditure of any award funds.