



INSTITUTIONAL REVIEW BOARD (IRB)

Date: August 13, 2012

To: Julia Morgan

From: Jamie Peno, Compliance Administrator

cc:

Protocol Number: 13-007X

Protocol Name: Collaborative Research: Bringing NSF MARGINS/GeoPRISMS Continental Margins Research into the Undergraduate Curriculum

Subject: Exempt Protocol Approval

Rice Federal-Wide Assurance Number: 00003890

Approval Date: 08/13/2012

Expiration Date: 08/13/2017

The Institutional Review Board Chair or designee has reviewed the above named and numbered protocol and found it to be exempt from the need for further IRB review (based upon Title 45, Part 46, Subpart A, Section 46.101(b)(1). Although exempt, the standard procedure at Rice is that each protocol may be active for a maximum of five (5) years. At its five-year expiration date, and in order to continue this study, a protocol must be resubmitted to the IRB as new application.

You are responsible for promptly reporting to the IRB:

- a) any severe adverse effects;
- b) any unanticipated problems involving risks to subjects or others;
- c) any proposed changes in the research activity (changes may not be initiated without IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subjects).

The below noted approved documents are attached. This approval does not apply to any other versions of these documents.

- ☒ Protocol Application
- ☒ Informed Consent Form
- ☐ Survey/Interview Questions
- ☒ Other – Carleton College IRB Documentation, University of Alabama IRB deferment, Cal Poly Pomona IRB deferment

If you have any questions, please do not hesitate to contact me by telephone at 713-348-3586 or by E-mail at jpeno@rice.edu.

**WILLIAM MARSH RICE UNIVERSITY
INSTITUTIONAL REVIEW BOARD (IRB)
FOR THE PROTECTION OF HUMAN SUBJECTS FROM RESEARCH RISKS**

APPLICATION FOR NEW PROTOCOL REVIEW

For applications requiring full board review, please access the following website
for information regarding scheduled board meetings: <http://osr.rice.edu/irb-dates.cfm>

For applications not requiring full board review (exempt or expedited), allow two (2) weeks for
protocol review following receipt of all required documents.

FOR IRB USE ONLY

PROTOCOL NO: 13-007X

APPROVAL DATE: 08/13/2012

MODIFICATION NUMBER _____

MODIFICATION APPROVAL DATE: _____

OSR NO: _____

E-MAIL ALL FORMS TO jpeno@rice.edu. All protocols must be submitted by Principal Investigator.

Address questions to Jamie Peno (jpeno@rice.edu; 713-348-3586).

The Principal Investigator and all researchers on the proposed project must complete the CITI online IRB training course **prior to initiation of the project**. Note that a passing grade of 80% is required for **each** module.

1. Activity Title (Title should be the same as a grant/proposal title, if funded by an external sponsor.)
Collaborative Research: Bringing NSF MARGINS/GeoPRISMS Continental Margins Research into the Undergraduate Curriculum
2. Principal Investigator(s) (the Principal Investigator must be a Rice faculty member or equivalent) Complete all blocks for each Principal and Co-Investigator listed.

Principal Investigator

Name:	Julia Morgan
Department:	Earth Science
Telephone:	713-348-6330

Mail Stop:	
E-mail:	

Co-Investigator(s)

Name:	
Department:	
Telephone:	

Mail Stop:	
E-mail:	

Co-Investigator(s)

Name:	
Department:	
Telephone:	

Mail Stop:	
E-mail:	

Co-Investigator(s)

Name:	
Department:	
Telephone:	

Mail Stop:	
E-mail:	

Co-Investigator(s)

Name:	
Department:	
Telephone:	

Mail Stop:	
E-mail:	

Co-Investigator(s)

Name:	
Department:	
Telephone:	

Mail Stop:	
E-mail:	

Co-Investigator(s)

Name:	
Department:	
Telephone:	

Mail Stop:	
E-mail:	

Note: This application MUST be submitted by the Principal Investigator, who assumes full responsibility for compliance with this protocol.

PRELIMINARY INFORMATION REQUIRED FOR IRB REVIEW DETERMINATION

SECTION 1: Is this a research activity using human subjects and thus requiring IRB review and approval? (see below)

Is the activity a systematic investigation of multiple human subjects, including research testing and evaluation? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is the activity designed to test a hypothesis, permit conclusions to be drawn, and thereby to develop or contribute to generalizable knowledge? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are all specimens/data collected from subjects who are known to be deceased? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SECTION 2: Exemption Categories [45 CFR 46.101(b)]

Exemption (b)(1) - Will the research be conducted in established or commonly accepted educational settings, involving normal education practices such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods? (This may include schools, colleges, and other sites where educational activities regularly occur) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Exemption (b)(2) - Will the research involve the use of educational tests, survey procedures, or observation of public behavior? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No *NOTE - research involving children is not eligible for this exemption. If 'Yes', check all that apply: <input checked="" type="checkbox"/> Educational tests <input checked="" type="checkbox"/> Surveys <input checked="" type="checkbox"/> Interviews <input type="checkbox"/> Observation of public behavior

Exemption (b)(3) - Will the research involve the use of educational tests, survey procedures, or observation of public behavior wherein the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information be maintained throughout the research and thereafter? ☐ Yes ☒ No

Exemption (b)(4) - Does the research only involve the use or study of existing (already available or on the shelf) data, documents, records, or pathological or diagnostic specimens? ☒ Yes ☐ No **If 'yes', check any items below that will be collected or studied.** (*check all that apply*)

☒ Existing data ☒ Existing documents ☐ Existing records ☐ Existing pathological specimens
☐ Existing diagnostic specimens

Is this information publically available? ☒ Yes ☐ No

What is the source of the information or material? Include hyperlink, if known. Various sources

Provide the name and hyperlink for blood/tissue bank. N/A

Will information be recorded in a manner that research participants cannot be identified, directly or through identifiers linked to the participants? ☐ Yes ☐ No

Exemption (b)(5) - Does the research evaluate or examine public benefit or service programs, such as demonstration or dissemination projects? ☐ Yes ☐ No

Exemption (b)(6) - Does the research involve taste and food quality evaluations? ☐ Yes ☒ No

If yes, what is the purpose of this study (*check all that apply*)?

☐ To evaluate the taste or quality of food ☐ To test consumer acceptance of a food

SECTION 3: Additional Information:

1. Expected Age Range of Participants: (*check all that apply*) ☒ 18 and above ☐ minors under the age of 18

2. Will this study include embryonic stem cells? ☐ Yes ☒ No

3. Does this study include a diagnostic procedure that is medically indicated? ☐ Yes ☒ No

4. Does this study include disinfectant/sterilization procedure(s) used for study instrumentation? ☐ Yes ☒ No
 If yes, please summarize procedures.

5. List any contrast agents to be applied to study subjects:

6. If this is a collaborative study, are any additional clinical procedures added to accommodate the Rice portion of the study? ☐ Yes ☒ No If yes, please explain:

7. List any instrumentation to be used that was built by Rice personnel:

8. Are you or will you be seeking FDA approval for a ☐ device, ☐ drug, or ☐ therapeutic?

9. Is this protocol being conducted under an Investigational Device Exemption (IDE)? ☐ Yes ☒ No

DETAILED INFORMATION REQUIRED FOR IRB REVIEW AND APPROVAL:

Please answer ALL questions below or indicate exemption under (b)(4). If a question does not apply to your study, please enter "N/A" in the appropriate box.

4. Study funding: Will this study be funded by an external sponsor? ☒ Yes ☐ No

If yes, please complete the information below.

Sponsoring agency(s): NSF
Grant Number (if already funded):
Rice Fund Number (if already funded):

If Rice is a subcontractor to another entity, list the prime source of funding (e.g., NSF) if known.

5. Proposed Start Date (actual date may not precede IRB approval date) **September 1, 2012**

6. Describe the purpose of the research. **In this project, scientists and curriculum specialists will work together to produce tested educational resources (mini-lessons and course segments) containing cutting-edge science. The second phase of the project will consist of designing and implementing an assessment plan for the mini-lessons, as well as placing the mini-lessons into multiple course frameworks to form coherent course segments. The SERC assessment consultant will lead the assessment effort during a face-to-face workshop. Participants will then test the curriculum at their home institutions during that academic year. The final phase of the project will focus on summarizing and evaluating results, compiling and distributing products, and publishing results. The results of the assessments will be reviewed at a face-to-face workshop, and plans made for dissemination. Faculty field testers will complete a structured reflection form as part of the assessment. The student assessments for the mini-lessons will vary depending on the given learning goals. While student assessment data will be collected from the field testing classrooms, no identifiable information will be shared in any of these dissemination methods and any assessment data will only be presented in aggregate.**

7. Participant Recruitment: describe the source(s) of potential participants; how they will be selected and recruited; and how and how you will contact them. Describe all relevant characteristics of the participants with regard to age, ethnic background, gender, institutional status (i.e., patients or prisoners), and their general state of mental and physical health. **Students in existing or future classes**

***or check here ☒ if this project qualifies for exemption under (b)(4).**

8. Describe procedures to be used and any associated risks or discomforts. **Procedures should be specific and listed step by step. N/A or check here ☒ if this project qualifies for exemption under (b)(4).**

9. Describe **in detail** any safeguards to minimize risks or discomforts, including any measures to render the data anonymous **i.e., you will not know the identity of the research subject** or confidential **i.e., subjects' identity or personal identifying information will not be disclosed**. Please be reminded that anonymity and confidentiality are not synonymous terms. **N/A**

***or check here ☒ if this project qualifies for exemption under (b)(4).**

10. Describe any financial compensation or other potential benefits to the subjects associated with this research activity. If none, please indicate this in the box as "N/A". **N/A**

***or check here ☒ if this project qualifies for exemption under (b)(4).**

11. Does the proposed human subject research involve a financial or other interest of the PI or Co-PI?
☐ Yes ☒ No (see <http://www.hhs.gov/ohrp/humansubjects/finreltn/fguid.pdf>) If yes, please explain below.

12. Is the consent form attached? ☐ Yes ☐ No ☐ Waiver requested [please justify the need to waive this requirement or attach a separate document to the application.] N/A

***or check here ☒ if this project qualifies for exemption under (b)(4).**

13. The IRB must review all materials to be seen or heard by the study participants. Are **all** materials (i.e., survey, interview questions, videos, etc.) referenced in the application form attached? ☐ Yes ☐ No
If no, please explain. N/A

***or check here ☒ if this project qualifies for exemption under (b)(4).**

14. Benefits and Risks: Please explain how the potential benefits to the subjects and/or the anticipated gain in research knowledge outweigh the risks to the subjects. (Be specific and succinct - do not simply “justify” the research.)
The risks and discomfort associated with participation in this study are no greater than those ordinarily encountered in daily life or during typical college courses, i.e., lectures, labs, and examinations. The benefits will include exposure to new, cutting-edge scientific knowledge, instruction on how to work with existing scientific data sets relevant to these topics, and other standard benefits of higher education and classroom interactions.

***or check here ☒ if this project qualifies for exemption under (b)(4).**

15. List all institution(s) involved in the proposed research (other than the funding source) that are recruiting participants, analyzing data, etc. Attach copies of their IRB approvals (including consent forms), as applicable. If copies are not attached, please explain. **University of Alabama, Cal Poly Pomona, Carleton College**
16. After reviewing Part 46 of the Code of Federal Regulations (<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm>), please check the appropriate box stating your judgment as to the required level of review for this study.

☒ Exempt from further IRB review ☐ Expedited ☐ Full Board review required

THIS SPACE FOR IRB USE

PROTOCOL NUMBER: **13-007X**

ACTIVITY TITLE: **Collaborative Research: Bringing NSF MARGINS/GeoPRISMS Continental Margins Research into the Undergraduate Curriculum**

APPROVAL DECISION:

- ☒ The protocol has been determined to be exempt from IRB review in accordance with Title 45, Part 46, Section 46.101 (b)(1) of the Code of Federal Regulations.

Exempted by **Jamie Peno** Digitally signed by Jamie Peno
DN: cn=Jamie Peno, o=Rice
University, ou=Office of Research,
email=jep5@rice.edu, c=US
Date: 2012.08.21 11:17:10 -05'00' on behalf of the IRB.
Jamie Peno, Compliance Administrator

Exemption approval date: **08/13/2012**



- ☐ The protocol has been approved through expedited review in accordance with Title 45, Part 46, Section 46.110 of the Code of Federal Regulations. **(Category N/A)**

☐ Without contingency(s) ☐ With contingency(s) ☐ Contingency(s) met

- ☐ The IRB has approved the protocol through full review in accordance with Title 45, Part 46, Section 46.111 of the Code of Federal Regulations.

☐ Without contingency(s) ☐ With contingency(s) ☐ Contingency(s) met

IRB Approving Signature: _____
Dr. John Cornwell – IRB Chair

Approval Date: _____

Consent Form for Participation in Research

Study Title: Collaborative Research: Bringing NSF MARGINS/GeoPRISMS Continental Margins Research into the Undergraduate Curriculum

Principal Investigator: Julia K. Morgan

Department Earth Science, MS-126, Rice University, 6100 Main Street, Houston, TX 77005;
713-348-6330; morganj@rice.edu

Faculty Advisor: NA

Other Investigator(s): Andrew Goodliffe (U. Alabama), Jeff Marshall (Cal Poly Pomona), Ellen Iverson (Carleton College)

Purpose of this Study

The primary purpose of the study is for scientists and curriculum specialists to work together to produce tested educational resources (mini-lessons and course segments) containing cutting-edge science. The second phase of the project will consist of designing and implementing an assessment plan for the mini-lessons, as well as placing the mini-lessons into multiple course frameworks to form coherent course segments. The SERC assessment consultant will lead the assessment effort during a face-to-face workshop. Participants will then test the curriculum at their home institutions during that academic year. The final phase of the project will focus on summarizing and evaluating results, compiling and distributing products, and publishing results. The results of the assessments will be reviewed at a face-to-face workshop, and plans made for dissemination. Faculty field testers will complete a structured reflection form as part of the assessment. The student assessments for the mini-lessons will vary depending on the given learning goals. While student assessment data will be collected from the field testing classrooms, no identifiable information will be shared in any of these dissemination methods and any assessment data will only be presented in aggregate.

Procedures

The mini-lessons and course segments will be tested on students in existing or future classes, and evaluated based on their performance, and on surveys of students and instructors. No video or audio recording will be used during the study. Duration of participation is not applicable, as participants will already be attending classes.

Participant Requirements

No requirements. Participants will be already enrolled and attending classes.

Risks

The risks and discomfort associated with participation in this study are no greater than those ordinarily encountered in daily life or during typical college courses, i.e., lectures, labs, and examinations.

Consent Form for Participation in Research

Benefits

The benefits will include exposure to new, cutting-edge scientific knowledge, instruction on how to work with existing scientific data sets relevant to these topics, and other standard benefits of higher education and classroom interactions.

Compensation & Costs

No compensation will be provided to participants, and no costs assessed.

Confidentiality

By participating in the study, you understand and agree that Rice University may be required to disclose your consent form, data and other personally identifiable information as required by law, regulation, subpoena or court order. Otherwise, your confidentiality will be maintained in the following manner:

Your data and consent form will be kept separate. Your consent form will be stored in a locked location on Rice University property and will not be disclosed to third parties. By participating, you understand and agree that the data and information gathered during this study may be used by Rice University and published and/or disclosed by Rice University to others outside of Rice University. However, your name, address, contact information and other direct personal identifiers in your consent form will not be mentioned by Rice University in any such publication or dissemination of the research data and/or results.

Participants will be subject to standard practices for protecting participant's identity employed by the college or university testing the course material. For exams and surveys, this may include following steps: (1) Each participant will be assigned a number; (2) The researchers will record any data collected during the study by number, not by name; (3) Any original recordings or data files will be stored in a secured location accessed only by authorized researchers.

Rights

Your participation is voluntary. You are free to stop your participation at any point. Refusal to participate or withdrawal of your consent or discontinued participation in the study will not result in any penalty or loss of benefits or rights to which you might otherwise be entitled. The Principal Investigator may at his/her discretion remove you from the study for any of a number of reasons. In such an event, you will not suffer any penalty or loss of benefits or rights which you might otherwise be entitled.

Right to Ask Questions & Contact Information

If you have any questions about this study, you should feel free to ask them now. If you have questions later, desire additional information, or wish to withdraw your participation please contact the Principal Investigator by mail, phone or e-mail in accordance with the contact information listed on the first page of this consent.

If you have questions pertaining to your rights as a research participant; or to report objections to this study, you should contact Vicki Colvin at Rice University. Email: vpr@rice.edu or Telephone: 713-348-2702.

Consent Form for Participation in Research

Voluntary Consent

By signing below, you agree that the above information has been explained to you and all your current questions have been answered. You understand that you may ask questions about any aspect of this research study during the course of the study and in the future. By signing this form, you agree to participate in this research study.

PARTICIPANT SIGNATURE

DATE

Carleton College Institutional Review Board

Kim Smith (Political Science and Environmental Studies, Chair)
Nathan Grawe (Associate Dean of the College, Ex Officio)
Mija Van Der Wege (Psychology)
Thabiti Willis (History)
Kari Nelson (Community Member)
Shannon Schulz (Director of Central Records)
Christopher Tassava (Corporate and Foundation Relations)

July 30, 2012

Ellen Iverson
B-SERC
CAMPUS

Dear Ellen:

I am pleased to inform you of the official approval of your IRB application in connection with your project, "Collaborative Research: Bringing NSF MARGINS/GeoPRISMS Continental Margins Research into the Undergraduate Curriculum." Your research falls within the federal **exemption** for research conducted in established or commonly accepted educational settings, involving normal educational practices, such as . . .research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods" [45 CFR 46.101(b)(1)]. Consequently, the IRB is not required by federal law to provide ongoing oversight of your project. You are not required to maintain a formal, signed consent form for each subject. Nonetheless, in accordance with federal guidelines and Carleton IRB policies, we expect that you will inform your research subjects of the purpose and scope of your research, as well as of their right not to participate, to withdraw at any time as they see fit, and to contact you if they should have any questions.

Because this research is exempt, you are not required to reapply to the IRB if this project continues beyond the usual one-year limit for IRB approvals. If, however, the scope of your research changes in such a way that it no longer clearly falls within the exemption outlined above, you would be required to inform the IRB and/or submit a new application.

I suggest that you retain a copy of this letter for your files. Please do not hesitate to contact me if you have any questions about IRB policies or procedures. I can be reached at 507-646-4123, or by e-mail at ksmith@carleton.edu. We wish you much success with this research project.

Sincerely,

Kim Smith
Chair, Carleton IRB

Jamie Peno

From: Bruce W. Kennedy <bkenedy@csupomona.edu>
Sent: Monday, August 20, 2012 1:42 PM
To: Jeff Marshall
Cc: Jamie Peno; 'Julia Morgan'; Jeffery S. Mio
Subject: RE: Questions for TUES Proposals 1141056/1140557/1140959

Thanks Jeff Marshall. With that, I can speak on behalf of the Cal Poly Pomona IRB to say that Dr. Marshall does not need to obtain any further authorization to "participate" in this activity from our IRB. Let the paper trail show that he is not engaged with human subjects in the conduct of this research.

The actions of the IRB at Rice University will pertain to the study per se. Based upon the information gathered, it should not have any impact on Dr. Marshall's role as it relates to human subjects.

I am copying Jeff Mio, chair of the CPP IRB, on this correspondence.

Take care all. I think we can check this off our collective to-do list.

Bruce

Bruce W. Kennedy MS RLATG CMAR CPIA
Compliance Associate (ACUC & IRB) and Lecturer Cal Poly Pomona - Office of Research Building 1, room 229
3801 West Temple Ave.
Pomona, CA 91768
voice: 909.869.4215, fax: 909.869.2993
bkenedy@csupomona.edu

-----Original Message-----

From: Jeff Marshall [mailto:marshall@csupomona.edu]
Sent: Monday, August 20, 2012 10:30 AM
To: Bruce W. Kennedy
Cc: Jamie Peno; 'Julia Morgan'
Subject: Re: Questions for TUES Proposals 1141056/1140557/1140959

Bruce and Jamie,

Yes, Andrew (U. of Alabama) and I (Cal Poly Pomona) will serve as workshop facilitators leading discussions among MARGINS scientists on science project outcomes. We also will be advising the curriculum development teams on the science content to incorporate within mini-lessons.

We will not be directing the assessment research with human subjects.
The assessment research is the role of the Carleton College team.

Thanks,

Jeff

Jamie Peno

From: Carpantato Myles <cmyles@fa.ua.edu>
Sent: Wednesday, August 15, 2012 5:01 PM
To: jpeno@rice.edu
Cc: Goodliffe, Andrew
Subject: Protocol Number: 13-007X

Jamie Peno,

In order to avoid duplicative review of the project identified below, **The University of Alabama** would like to defer review of the project to Rice University by entering into an IRB Authorization Agreement.

Protocol Number: 13-007X

Protocol Name: **Collaborative Research: Bringing NSF MARGINS/GeoPRISMS Continental Margins Research into the Undergraduate Curriculum**

If this is acceptable, then I will forward a draft of the agreement for your review.

Sincerely,

Tanta

Carpantato (Tanta) Myles, MSM, CIM
Director & Research Compliance Officer
Office for Research Compliance
The University of Alabama
801 University Blvd, 358 Rose Administration Bldg.
Box # 870127, Tuscaloosa, Alabama 35487-0127
Office: (205) 348-5746, Fax: (205) 348-7189
E-mail: cmyles@fa.ua.edu



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