



University of Illinois at Urbana-Champaign IRB Application for Exemption	Institutional Review Board Suite 203, MC- 419 528 East Green Street Phone: 217.333.2670 Fax: 217.333.0405 irb@uiuc.edu www.irb.uiuc.edu
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**All forms must be completed, signed by the RPI, and submitted by FAX, Email, or single-sided hard copy.
NO STAPLES PLEASE!**

Version 1.01

Project Title: XSEDE: The Extreme Science and Engineering Discovery Environment
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1.1 Responsible Project Investigator. The RPI must be a non-visiting member of UIUC faculty or staff who will serve as project supervisor at UIUC. Students, interns, post-doctoral researchers, and visiting faculty from other campuses may not serve as RPI, but should be listed as investigators, if applicable.

Last Name: DeStefano	First Name: Lizanne	Academic Degrees: Ph.D.
Dept. or Unit: I-STEM	Office Address: 704 South Sixth St	Mail Code: 308
Street Address:	City: Champaign	Zip Code: 61820
Phone: 217-333-9625	Fax: 217-244-3949	E-mail: destefan@illinois.edu
UIUC Status (please mark one): Non-visiting member of <input checked="" type="checkbox"/> Faculty		<input type="checkbox"/> Staff

1.2 Investigators. Please list: All investigators who are different from the RPI, including those from other institutions. Include all persons who will be directly responsible for the project's design or implementation, the consent process, data collection, data analysis, or follow-up.

Last Name: Rivera	First Name: Lorna	Academic Degrees: M.S.
Dept. or Unit: I-STEM	Office Address: 704 South Sixth St	Mail Code: 308
Street Address:	City: Champaign	Zip Code: 61820
Phone: 217-333-9625	Fax: 217-244-3949	E-mail: lirivera@illinois.edu
UIUC Affiliation (please mark one): <input type="checkbox"/> Faculty <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Student		
<input type="checkbox"/> Visiting Scholar <input type="checkbox"/> Non-UIUC Affiliate of (Institution)		

Please check here and attach a list of Additional Investigators, if applicable.

1.3 Please review the 6 categories of exemption listed below and indicate the category or categories that apply to your research. (Note: Exemptions do NOT apply for prisoners, or for research that specifically targets persons who are cognitively impaired or persons who are economically or educationally disadvantaged.)

1. Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as: research on regular and special education instructional strategies, *or* research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior, *unless*:

- information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; *and*
- any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. **Note:** This category does not apply to the following types of research involving children: surveys, interviews, and observations of public behavior when the investigator is a participant in the activities being observed.

3. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt in category 2 above if: human subjects are elected or appointed public officials or candidates for public office; or federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

4. Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are *publicly available* or if the information is recorded by the investigator in such a manner that *subjects cannot be identified*, directly or through identifiers linked to the subjects. **Note: In order to be eligible for this exemption, all data, documents, records or specimens must exist prior to IRB review and must have been collected for purposes other than the proposed research. (To qualify for an exemption in this category, the proposed research must be strictly retrospective.)**

5. Research and demonstration projects that are conducted by or subject to the approval of department or agency heads. The program under study must deliver a public benefit or service (e.g., Social Security Act or Older Americans Act). Such research or demonstration projects must be conducted pursuant to specific federal statutory authority; there must be no statutory requirement that the project be reviewed by an Institutional Review Board (IRB); and the project must not involve significant physical invasions or intrusions upon the privacy of participants.

6. Taste and food quality evaluation and consumer acceptance studies: if wholesome foods without additives are consumed; or if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe by the Food and Drug Administration (FDA) or approved by the Environmental Protection Agency (EPA) or the Food Safety and Inspection Service of the US Department of Agriculture (USDA).

If the proposed research does not qualify in any of these categories, please complete the IRB 1 application form at www.irb.uiuc.edu.

2. Research Summary. In layman's language, please summarize the objectives and significance of the research.

The objectives of this proposal are to evaluate the Training, Education, and Outreach Services (TEOS) in the National Science Foundation cyberinfrastructure program, XSEDE. XSEDE is the most advanced, powerful, and robust collection of integrated advanced digital resources and services in the world. It is a single virtual system that scientists can use to interactively share computing resources, data, and expertise. The program is designed to recruit, prepare, and support the scientific, academic, and industrial workforce through the application of computational science and engineering using XSEDE resources. These resources include:

- (1) data resources (e.g., files, directory trees, data access services, relational databases, instrument and sensor data streams and repositories, and community collections),
- (2) compute resources (e.g., clusters, clouds, servers, application gateways, desktops, queues, brokers, and virtual machine images),
- (3) security resources (e.g., credential and authorization services for access control, and Secure Token Services for group management), and
- (4) learning and workforce development resources for CIOs, VPs for research, researchers, faculty students, and IT staff.

These resources may be personal machines, databases, applications or resources located on campuses in department or centralized IT centers, or within research labs, or government, and academic settings.

XSEDE has 3 service branches: Coordination and Management Service (CMS), Advanced User Support Service (AUSS), and Training, Education and Outreach Service (TEOS). Of these three branches, we will only be evaluating TEOS. TEOS is designed to train and educate XSEDE users as well as reach out to potential nontraditional high performance computing (HPC) users to increase the diversity of the field. Users can be students, faculty, staff, or industry employees from any institution who have

voluntarily chosen to enroll in the project. XSEDE users are eligible to take advantage of XSEDE resources. These resources will be expanded throughout the lifetime of the project. Currently, XSEDE staff from other universities are determining what educational topics are to be covered in the developing undergraduate and graduate degree programs under the educational component. Certificate programs are also being developed for undergraduate and graduate level education. Institutional implementation of these programs will be done per request. Workshops are given to provide short, informal training and education for members of academia and industry. Workshops on specific topics are typically 1 day in length. Various workshops will be given together at XSEDE sponsored events such as the annual XSEDE conference. Topics covered in the workshops will be determined based on user feedback collected from XSEDE AUSS staff.

Ten primary services within TEOS will prepare participants to utilize XSEDE resources. Examples of these services include; working with campuses to incorporate undergraduate certificate and degree programs, campus bridging, and engaging under-represented communities. The evaluation activities are designed to provide formative information to guide learning and workforce program improvement as well as a summative assesment of the program effectiveness and impact. The ultimate goal of the evaluation is to validate and document the effectiveness of the new model training, education, and outreach services and disseminate this model through publication and presentation.

The XSEDE project started July 2011 with preliminary discussions and decision making. Research amendments will be filed as the project continues to develop and evaluation plans and protocols are finalized. We will submit all instruments, recruitment materials and other information as they are developed.

Please check here and attach additional Research Summary information, if applicable.

3. Participants. Describe who will participate in this research and how these persons will be recruited.

The evaluation will request the participation of TEOS users and staff between the ages of 18-64 in evaluation activities. TEOS participants are likely to be members of academia (students, faculty and staff) and industry. Participants voluntarily elect to participate in TEOS activities. Recruitment for the evaluation activities will occur through invitations via email, phone, standard mail, and directly at TEOS events. UIUC evaluators will request user participation in evaluation activities from all institutions involved. New institutions and users are expected to join regularly throughout the lifetime of the project.

Please check here and attach additional Participant information, if applicable.

4. Research Procedures. Specifically describe what the participants will do and where the activities will take place. Outline the approximate dates and durations for specific activities, including the total number of treatments, visits, or meetings required and the total time commitment. Please include a copy of each of your measures as attachments.

Evaluators will

1) Administer a web-based survey to track all TEOS participants over time. Results will be utilized to examine the value-added of TEOS participation by comparing key reported outcomes (e.g. involvement of under-represented groups, publications, presentations, awards, continued education, and satisfaction). 20 minutes every Fall and Spring semester for 5 years.

2) Conduct interviews with participating institutional leadership and key stakeholders to monitor program implementation, gain their perceptions of the quality of the program, and suggestions for improvement. Willingness to allow the interview to be audiotaped is a requirement for participation. 1 hour per year for 5 years.

3) Conduct focus groups with TEOS participants to gain their perceptions of the quality of the program and suggestions for improvement. Willingness to allow the focus group to be audiotaped is a requirement for participation. 1 hour per year for 5 years.

4) Conduct an annual review of curriculum and program development at participating institutions to examine the institutional changes that occur as a result of TEOS. Review of curriculum and program development will not require extra time for participants.

5) Directly administer surveys at predetermined TEOS events to users and staff in attendance. If evaluators are unable to attend, within one week of the event an invitation via email will be released to eligible TEOS users and staff who participated. The survey will ask participants about their experience at the event, reasons for attending, and satisfaction. 10 minutes after TEOS events. (Event schedules have yet to be finalized.)

Focus group, interview, and survey materials will be submitted to the IRB for review and approval as they are developed

Please check here and attach additional Research Procedures information, if applicable.

5. Data Collection. Please explain how confidentiality will be maintained during and after data collection. If appropriate, address confidentiality of data collected via e-mail, web interfaces, computer servers and other networked information.

Participants will be assigned an ID number upon entry into the program. This ID number will be kept in an electronic file with their name that only the investigators will have access to. When reporting tracking information online, participants will use this unique ID. Other members of the program will not know who is participating in the evaluation and who is not. All tracking web surveys will be confidential; participants will use their ID number to access online surveys. The UIUC Public Affairs Web Survey Builder will host the online surveys.

All face to face and event web surveys will be anonymous. Participants will not use their ID to complete face to face and event surveys.

Audiotapes will be destroyed after transcription. All transcriptions will be anonymous, no names or ID numbers will be included.

All data will be kept in secure, password protected files and only evaluation team members will have access to the UIUC web tools surveys and results. Signed consents will be stored in a locked file cabinet, separate from any printed research data. Only the PI will have access to consents.

Participants will incur the usual risks of confidentiality associated with the focus group method. Researchers will ask participants to respect confidentiality, but cannot guarantee that all participants will honor that request. Participants will be fully informed of this risk in the consent form and in the focus group protocol.

No names will be preserved in data collection. All results will be reported in aggregate. Subgroup results will be reported only for subgroups greater than 5.

Data will be kept for 5 years past project end then destroyed.

Please check here and attach additional Data Collection information, if applicable.

6. Consent Process Describe when and where voluntary consent will be obtained, how often, by whom, and from whom. Attach copies of all consent forms (as well as assent forms for those under age 18 if any).

A waiver of documentation is being requested for the collection of any online survey data. IRB approved consent letter will be included at the bottom of an email inviting participants over the age of 18 to participate in the online questionnaire. The bottom of the letter will read, "If you have read the consent information above and agree to participate in this study, please click on the 'next' button below to proceed." Participants will also be reminded that they can print a copy of that page for their records.

IRB-approved consent letter will be attached to emails inviting program participants to focus groups and individual interviews. The focus group or individual interview consent form will be verbally explained and collected at the start of each interview. Participants will sign and submit the consent prior to participating in the interview.

IRB-approved consent letter will be attached to surveys administered directly at TEOS events. The survey consent form will be verbally explained when administered to participants. Participants will sign and submit the consent form together with their completed survey.

Please check here and attach additional Consent Process information, if applicable.

7. Dissemination of Results. What is (are) the proposed form(s) of dissemination (e.g., journal article, thesis, academic paper, conference presentation, sharing within the industry or profession, etc.)?

In addition to regular, informal reporting, the evaluation team will produce an annual compilation of evaluation findings and work with the TEOS management to prepare the relevant sections of the annual report to the National Science Foundation. At project end, they will produce a final summative report of implementation and impact. The evaluators will also present the results of the evaluation at national conferences and in professional publications as a means of disseminating lessons learned and best practices.

Please check here and attach additional Dissemination of Results information, if applicable.

8. Individually identifiable information. Will any individually identifiable information, including images of subjects, be published, shared, or otherwise disseminated? Please mark the appropriate box below.

- Yes
 No

Note: If yes, subjects must provide explicit consent or assent for such dissemination. Provide appropriate options on the relevant consent documents.

9. Funding Information.

Is your research funded or is there a pending funding decision? Yes No

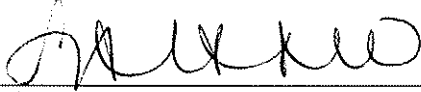
If "yes", please indicate the funding agency here: National Science Foundation (see attachment for funding official information)

Please submit a copy of the funding proposal.

10. Expected Completion Date: July 2021 (contingent upon decision to renew funding in 2016)

INVESTIGATOR ASSURANCES

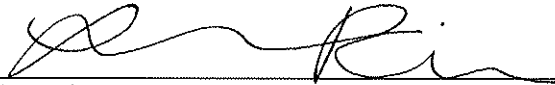
I certify that the project described above, to the best of my knowledge, qualifies as an exempt study. I agree that any changes to the project will be submitted to the Institutional Review Board for review prior to implementation. I realize that some changes may alter the exempt status of this project. **The original signature of the RPI is required before this application may be processed (scanned or faxed signatures are acceptable).**



Responsible Project Investigator

9-26-2011

Date



Investigator

9/26/2011

Date

This Section is for Office Use Only

UIUC IRB Protocol No. _____

Exempt under 45 CFR §46.101(b) (1) (2) (3) (4) (5) (6)

Reviewed by: _____

IRB Application for Exemption: Section 9 attachment

Funding Official

Last Name: Schneider	First Name: Barry	Salutation:	
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