

IRB# _____

Informed Consent to Participate in Research

The University of Texas at Austin

You are being asked to participate in a research study. This form provides you with information about the study. The Principal Investigator (the person in charge of this research) or his/her representative will also describe this study to you and answer all of your questions. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part. Your participation is entirely voluntary and you can refuse to participate without penalty or loss of benefits to which you are otherwise entitled.

Title of Research Study:

Evaluating the Effectiveness of Evidence-Based Teaching Strategies in BME 301: Biotechnology and World Health

Principal Investigator(s) (include faculty sponsor), UT affiliation, and Telephone Number(s):

Rebecca Richards-Kortum, Ph.D. Professor of Biomedical Engineering 512-471-2104

Funding source:

Howard Hughes Medical Institute

What is the purpose of this study?

The purpose of the study is to investigate the effectiveness of learner-centered, open-ended problem-solving and cooperative learning strategies in BME 301. The total number of students registered for BME 301 is approximately 70 and it is hoped that most students will participate.

What will be done if you take part in this research study?

From this group of 70 undergraduate students, we request volunteers for two activities. (1) First, we will set up a video camera to record participants during each regular class period to determine which learning activities promote the most student engagement. No additional coursework will be requested for participating in the first part of the study. (2) Second, we will ask participants to volunteer to take part in a few out-of-class activities in which they are given a newspaper article related to the course material and asked to critically discuss it. Participant responses will be videotaped. Students can earn up to 5% extra credit toward their grade for participating in the

second part of the study. Students who want to earn up to 5% extra credit toward their grade but do not wish to be videotaped can make arrangements for the assignment without the videotape for the same credit.

What are the possible discomforts and risks?

There are no physical risks or discomforts that apply with this research. However, if you wish to discuss the information above or any other risks you may experience, you may ask questions now or call the Principal Investigator listed on the front page of this form. Some participants may be uncomfortable with being videotaped initially. Your participation in this study will not change any of the learning activities or experiences associated with the class. If you feel uncomfortable you may discontinue participation at any time. The only treatment for participating in this research that differs from those not participating is your agreement to being videotaped.

What are the possible benefits to you or to others?

Your participation in this study will provide data which will permit researchers to identify learning behaviors that are positively associated with content mastery in this course when comparing various instructional techniques. This study will result in a deeper understanding of learner centered environments and the effect of this on learning. The study may result in the development of reliable and valid instruments which can measure learning in more effective ways than are currently used. This will improve the knowledge base for the science of learning and ultimately the knowledge disseminated from the study could improve the teaching of undergraduate curricula beyond the University of Texas at Austin.

If you choose to take part in this study, will it cost you anything?

There are no costs associated with participating in this study.

Will you receive compensation for your participation in this study?

What if you are injured because of the study?

There is no compensation for your participation in this study. There are no physical risks associated with this research. University students may be treated at the usual level of care with the usual cost for services at the Student Health Center for any injury, related or not, but no payment can be provided in the event of a medical problem.

If you do not want to take part in this study, what other options are available to you?

Participation in this study is entirely voluntary. You are free to refuse to be in the study, and your refusal will not influence current or future relationships with The University of Texas at Austin

or your grade in this course. Your decision to participate will not bestow any competitive academic or occupational advantage over any other University of Texas at Austin students who do not volunteer, and the researchers will not impose any academic or occupational penalty on those University of Texas at Austin students who do not volunteer.

How can you withdraw from this research study and who should you call if you have questions?

If you wish to stop your participation in this research study for any reason, you should contact: Deanna Buckley at (512)-471-3068 or Richard Schwarz at (512) 471-3068. You are free to withdraw your consent and stop participation in this research study at any time without penalty or loss of benefits for which you may be entitled. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

In addition, if you have questions about your rights as a research participant, please contact Clarke A. Burnham, Ph.D., Chair, and The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects, 512-232-4383.

How will your privacy and the confidentiality of your research records be protected?

Authorized persons from The University of Texas at Austin and the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. If the research project is sponsored, then the sponsor also has the legal right to review your research records. Otherwise, your research records will not be released without your consent unless required by law or a court order.

If the results of this research are published or presented at scientific meetings, your identity will not be disclosed.

Because these studies will use video recordings, you should know that the cassettes will be: (a) coded so that no personally identifying information is visible on them; (b) kept in a secure locked location in the co-investigator's office (Deanna Buckley); (c) heard or viewed only for research purposes by the investigator and his or her associates; (d) possibly retained for future research analysis. Dr. Richards-Kortum will not have access to the video tapes until the final course grades have been turned in.

Will the researchers benefit from your participation in this study?

Your participation will allow researchers to collect objective data to be analyzed for publications in educational and scientific research journals and presentations to other scientific researchers and educators. No other benefits are expected at this time.

Signatures:

As a representative of this study, I have explained the purpose, the procedures, the benefits, and the risks that are involved in this research study.

Signature and printed name of person obtaining consent

Date

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

Printed Name of Subject

Date

Signature of Subject

Date

Signature of Principal Investigator

Date

We may wish to present some of the tapes from this study at scientific conventions or as demonstrations in classrooms. Please sign below if you are willing to allow us to do so with the tape of your performance.

Signature of Subject

Date

I hereby give permission for the video tape made for this research study to be also used for educational purposes.

Signature of Subject

Date