

Dear parents/guardians of Upward Bound students,

We'd like to inform you of an upcoming in-class activity that is being done as a pilot study in cooperation with me and Dr. Katie Davis of the University of Washington. Among other things, Dr. Davis and I study possible ways of enhancing science education; Upward Bound students have an opportunity to help advance what we know in this area. Details are as follows.

Purpose: The purpose of the study is to explore a new approach to learning about protein structure. This new approach will consist of a musical sing-along exercise. The aspect of this that is considered "research," and for which we need your permission and the students' permission, is the recording and analysis of how the exercises go for possible use outside of the University of Washington's Upward Bound program.

Duration: The class activity will take about one 60-minute class period. An assessment of learning will be conducted the following day.

Description: Detailed step-by-step instructions will be provided at the time of the activity. The sing-along exercise will have a "call-and-response" format in which the instructor or teaching assistant sings a musical phrase and the rest of the class sings it back in unison. Students will then have an opportunity to create their own variations on the music. The assessment will measure understanding of protein structure, and the research will compare the assessment data from the two classes. The research may also involve making recordings of the sing-along so that other teachers and students can understand what was done.

Risks/Discomfort: There are no significant risks associated with letting students' data be used in this research. All student data associated with the research will be kept anonymous and will not be traceable to individuals.

Benefits: Allowing the researchers to use the students' data will not result in any direct benefits to you or the students. However, you are welcome to view the results of the study once it is finished. If you want to be notified of the study's results, please email me (crowther@uw.edu).

Questions: Questions about this study, either now or later, can be directed to me (crowther@uw.edu; 206-685-2857 [office], 206-290-8826 [text]) or to Upward Bound program coordinator Leny Valerio-Buford (lvalerio@uw.edu; 206-543-9288).

Voluntary participation: Participation in the research described above is VOLUNTARY. Although the exercises described above are part of the normal class curriculum, you and the students get to decide whether their data can be used for research purposes. We will be asking the students for permission to use these data. If you do not want your child's data to be used, please contact me or Leny Valerio-Buford. This decision will not affect the students' grade or any other aspect of their participation in this class.

This study has been reviewed and approved by the Human Subjects Division of the University of Washington to ensure fair treatment of subjects, including children under the age of 18.

Sincerely,
Greg

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