

EXPLORING BIOTECHNOLOGY - PARENT PERMISSION FORM

Dear Parents,

During the week of Dec 12th, I will be doing a mini-unit exploring the various fields relating to biotechnology. The purpose of the unit is twofold: first to show students one of the ways in which physics interacts with biology and medicine, and second, to show students the many areas of study and career fields related to biotechnology. During a recent orientation for freshmen entering UF, the admissions officer stated that nationwide over 70% of incoming freshmen state that they want to go into medicine. Of those, only 1% will actually go to medical school. I want to show students with obvious skills in science that they can still go into medicine, but as creators of cures instead administrators of cures.

The unit will start with a description of research currently being done at UF on glycogen processing syndroms. One of these syndromes was the subject of a 2010 movie, Extraordinary Measures, which I intend to show in its entirety. The movie is rated PG and the trailer can be viewed at <http://extraordinarymeasuresthemovie.com/>. The movie is important to the unit because it describes how treatment of an illness can be approached in many different ways. The treatment that eventually becomes available may not be the most efficacious, but rather the most cost effective. It also shows the relationship between university research and corporate research, production and development. A description of the movie from the above website follows:

In the tradition of great inspirational dramas like the Academy Award nominated film "Erin Brockovich" and "The Pursuit of Happyness," "Extraordinary Measures" is inspired by the true story of John Crowley, a man who defied conventional wisdom and great odds, and risked his family's future to pursue a cure for his children's life threatening disease. From his working class roots, John Crowley (Brendan Fraser) has finally begun to taste success in corporate America. Supported by his beautiful wife Aileen (Keri Russell) and their three children, John is on the fast track. But just as his career is taking off, Crowley walks away from it all when his two youngest children, Megan and Patrick, are diagnosed with a fatal disease. With Aileen by his side, harnessing all of his skill and determination, Crowley teams up with a brilliant, but unappreciated and unconventional scientist, Dr. Robert Stonehill (Harrison Ford).

Together they form a bio-tech company focused on developing a life-saving drug. One driven to prove himself and his theories, the other by a chance to save his children, this unlikely alliance eventually develops into mutual respect as they battle the medical and business establishments in a fight against the system and time. But, at the last minute, when it appears that a solution has been found, the relationship between the two men faces a final test - the outcome of which will affect the fate of John's children.

The second phase of the project is for students to explore biotechnology career fields and areas of study. This project will be done over the winter break. I am asking students to join LinkedIn, a professional networking site on the internet. LinkedIn is similar to FaceBook, but is used to discuss issues relating to a person's profession rather than their personal life. As an introduction, go to <http://www.linkedin.com/>. In the section labeled "Search for someone by name" and type in "Kyle Smith". Scroll through the profiles of all the individuals (I am the 25th Kyle Smith listed) and you will see that the site is focused on occupations. The tasks that the students will be asked to perform are:

II. LinkedIn Exercise

- A. Obtain parent permission to join LinkedIn
- B. Students register/join LinkedIn
- C. Students research and join at least 10 groups related to some discipline of biotechnology
- D. Students find at least 10 different discussions to "follow"
- E. Students make at least 2 meaningful contributions to two different discussions.
- F. Students start at least 2 meaningful discussions in two different groups.
- G. Students find at least 5 different job opportunities that appeal to them in a field related to biotechnology.
 - 1. For each job, the student is required to ask the person who posted the position at least one meaningful question about the job.
 - 2. Students must also relate how the study of physics will assist them in the chosen job.
- H. Students will prepare a report documenting all of their activities in this exercise.

In order to complete this exercise I need your permission for your son/daughter to watch the movie and participate in the LinkedIn exercise. Students who are not given permission to watch the movie will be sent to the library to research glycogen processing syndromes. Students not given permission to participate in the LinkedIn exercise will be given an alternative internet research assignment.

I hereby give my permission for _____ (print student name)

(initial) _____ to watch the movie Extraordinary Measures

(initial) _____ to participate in the LinkedIn exercise

Parent Signature