Guidelines for your biophysical technique assignment:

RESEARCH OF TECHNIQUE

1. Find a historical reference for the technique. You should probably begin by searching Pubmed for the technique of interest. Sort the references by publish date and look for a few of the oldest documented journal articles. The original article(s) will be found in “techniques” journals. Look-up and read the paper. NOTE: most of the articles are quite old and will not be on the web or in the MIT library so I do not expect you to find them all. Read a few of the earlier abstracts and a paper if possible and then document the citation(s) on your written submission.

2. You also will want to locate a more user-friendly description of the technique. This may involve (but is not limited to) the use of textbooks or reputable web references from biologically-based websites. Any sources you use must be documented in your written submission.

ORAL PRESENTATION

1. You will be given 15 minutes total for your talk. Your presentation should only be 10 to 12 minutes long and we will leave about 3 to 5 minutes open for questions. I will keep track of time, so try to stay within the allowed length.

2. Introduce the technique by providing some historical background on how it was invented or discovered. This usually will involve providing information about the person(s) primarily responsible for the method and the year in which it was introduced to the scientific community.

3. Explain in detail how the technique works. In most cases this will involve the use of diagram and sketches. Using hand-outs or the board in the classroom is usually sufficient, but you may use a computer or overhead projector if you prefer. If you will need a computer or an overhead projector, please tell me in advance so I may make the necessary arrangements before class! Your description of the method should be at a very basic level. Remember that you are the expert in the class on this method and the presentation should be geared to an audience of novices on the subject.

WRITTEN SUBMISSION

1. Your technique write-up should consist of 1 to 2 pages (double spaced) of description. You can include diagrams, but it is not a requirement and they should be included in addition to your page requirement.

2. Your written submission must include references. You may use any acceptable scientific format that includes article titles, author names, journal title, volume, year, and page numbers.

REMEMBER your written technique descriptions will be either photocopied and distributed to the rest of the class OR posted on the private class website.