

Legal notice for Bioelectricity labs

This Bioelectricity course involves working with both electrocardiogram and surface-EMG data. Specifically, our labs involve running both those tests on your own body. For this reason, several patient-confidentiality considerations are legally relevant.

Both electrocardiogram and surface-EMG readings are legally considered to be confidential medical data. Licensed medical doctors routinely run these tests for the diagnosis of various medical conditions. When interpreted by a qualified person, these tests can be invaluable for medical diagnosis.

It is possible that you have a known medical condition that you would prefer to keep private, and that ECG or surface-EMG would disclose. This course will in no way require that you disclose any such information. Thus, you *are not required to collect or turn in your readings from your own body*.

If you choose not to turn in your own readings, you have two choices. First, remember that you are working in groups, and your group need turn in only one joint lab report. You may thus simply turn in the readings from any group member that does not mind turning in readings from their own body. Furthermore, you do not need to specify in your report whose data is being turned in; it can thus be semi-anonymous.

If none of the people in your group feel comfortable turning in their own readings, even semi-anonymously, we provide sample data (which, in fact, is typically the instructor's own readings!). Your group is free to turn in the sample data as your own without any penalty.

When you see your ECG or surface-EMG readings, you may think they seem abnormal and feel worried. If so, then two considerations apply. First, neither the instructor, nor in most cases any of the students is a licensed medical professional trained or certified in diagnosis. If you have concerns, then by all means consult your doctor. Your primary-care doctor can steer you to the correct professional (typically a neurologist for surface-EMG readings or a cardiologist for an ECG).

Furthermore, remember that due to financial reasons, the medical equipment we use is hobbyist grade rather than professional grade. Our readouts will thus typically be noisier than what you might see in a medical office, which will compound our own lack of skill in diagnosis. Any seeming irregularities may well be due to these reasons. Nonetheless, we say it again:

- You are not required to turn in any personal data that you would prefer to keep confidential.
- If you believe your data is showing any medical condition, the proper person to follow up with is your doctor or other trained medical professional.