Boston University Biomedical Engineering Department Biointerface Technologies Core 44 Cummington Street Boston, MA02218

Molecular Devices SpectraMax M5 Plate Reader Protocol

- 1. Turn on the plate reader. The power switch is at the back on the right hand side. The plate reader will go through a self-testing routine. It takes a couple of minutes and will make a lot of clicking noise.
- 2. Turn on the computer if it is not already on. Open the *SoftMax Pro* program by double clicking the icon on the desk top.
- 3. Check the plate reader icon at the top left corner of the *SoftMax Pro* window.
 - If there is a question mark on it, it means the plate reader is not ready.
 - If there is a red cross on it, it means the computer and the plate reader are not communicating. Click on the icon and make sure the **Serial Port** is set at COM4 and the **Reader** is set at SpectraMax M5.
- 4. There are three ways to set up your experiment.
 - The SoftMax Pro has many commonly used assays stored. Go to *Protocols* and select the type of assay you are performing. Double check the settings and select the sample wells.
 - If you prefer to set up your own experiment, go to *Experiment-> New Plate* or *New CuvetteSet*, click the **Settings** button under the new plate or new cuvette window and set up your parameters.
 - If you want to use a saved experiment setting, go to *File->Open* and select your file to open.
- Put your plate in the tray and click **Read** button beside the plate reader icon. Remember to use the purple plate adaptor if you are using a 96 well plate or a 384 well plate top read. If you are using a cuvette, put in your reference (blank) click the **Reference** button then put in your sample and click **Read**.
- 6. If you want to save your experimental settings, go to *File-> Save*. If you only want to save your data, go to *File-> Import/Export-> Export* and save your data as **Text Files**. You can then import the text file into Excel.
- 7. Save all your files in folder c:\plate reader\your group name\your name. You can then transfer your file either through email or using a flash drive.
- 8. When you are done, close the drawer and the *SoftMax Pro* program. If it is early in the day, leave the plate reader on for other users. If it is late in the afternoon (~5pm), turn off the plate reader.
- 9. Wipe off any spill with wet paper towel. Empty any liquid in the sink before dispose the plate in regular trash. If your samples are of BL1 or BL2, disinfect with bleach before empty down the sink.
- 10. Sign the use log.
- For more detailed instructions on setting up the plate reader, see the User Manual.

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