HOMEWORK 8

Due Thursday, April 10th

1. Summarize item 5.3.2, tissue damage. Write one paragraph on what you understand from it – please be concise, but cite main points.

2. **(a)** Find the electric field between the two electrodes of figure below where +1V is applied to. Assume conductivity of 0.2 S/m, distance of 10mm. Assume there is no "horizontal" potential applied (that is, we turned the +2V power supply off).   **(b)** Draw three equipotential lines between the two electrodes, and label them with the right potential.

3. Given three media (a, b, and c) with resistivities 50 Ω.cm, 150 Ω.cm, and 500 Ω.cm, plot the electric field for the configuration of potentials applied to each one of the media through four electrodes as in the figure below. The distance between two gray electrodes on the x axis is dh=5mm, and the distance between the two electrodes (orange) along the y axis is dv=4mm. (I expect you to write a script or program to plot any e-field. Please print (1) your results; (2) program you wrote.