

## Meeting Minutes

**Tuesday, September 18, 2012 @ 11:30 am**

**Location: Armstrong**

### Met with Dr. Wagner

- Complete Safety Sheet
- Create a Gantt Chart (Can use either excel or MS Project)

#### Vishal:

##### Goals:

- Determine criteria for differentiated PC12 cells.
- Determine where we will be able to culture cells. Find someone that can assist you.
- Develop a step by step list of techniques and specifics
  - Culture media, etc.
- Determine how to marry the device and the cell.
  - Pressure deposition during electrospinning or after?
- Determine methods to test the PC12 after.
  - Biochemical: Cell proliferation, Histology, Section and look for cells, Kits for cell proliferation with dyes, spectrophotometrically measure, see if polymer doesn't interfere, actin stain + DAPI stain

##### Notes:

- Can just buy a bottle of media, can supplement (can add serum, GF, etc.)
- Can use 3T3 cells for practice.
- Where is the equipment/incubator/laminar flow hood/biological safety cabinets?
- Sterility!

#### Ritesh:

##### Goals:

- GFs tend to fall apart very easily; need to be carried by BSA, Hydration shells, etc.
- Figure out concentration of BSA, NGF, etc.
- Different parameters such as processing/solution parameters
- Figure out what is the right material to use in comparison to what can we work with safely?
  - PCL, PLA, PGA, variations

#### Rohit:

- Goals: Make the device more sealed to better control variables such as humidity
  - Flowing in dry nitrogen
- Work on prototype of coaxial component
- Determine boundaries [Ideal outputs with a range of acceptable values]

#### Lee:

- Goals: Models for controlled Drug Release
- Work on MATLAB
- Work on Labview

Update Website

Misc.:

Look up nerve factor gradients. Nerves grow directionally.

Nerve Conduction/ Voltage Differentials (If we complete the rest of the project)