## Deep Learning in Medicine

BMSC-GA 4493. BMIN-GA 3007

## Lab 1: PyTorch and Packages Setup

In this lab, we will be walking through the steps to setting up the environment for the course. We would mainly be using PyTorch, a deep learning package for Python, for this class. Please step through the following guidelines.

- Install Anaconda from <a href="https://www.anaconda.com/download/">https://www.anaconda.com/download/</a>. Select the version for your operating system.
- 2. For macOS and Linux, open up terminal. For Windows, open Anaconda Prompt from Start.
- 3. Create a conda environment by (may take a while)

```
>> conda create -n py35 python=3.5 anaconda
```

4. Activate the environment

```
>> conda activate py35
```

5. Install the required packages using the command:

```
>> conda install <package name>
```

For the purpose of this course, please install the following packages:

- numpy
- pandas
- scikit-learn
- scipy
- matplotlib
- pytorch
  - **macOS/Linux:** follow the guidelines on <a href="http://pytorch.org/">http://pytorch.org/</a>. Select your OS, conda, and python version 3.5. Leave the cuda option as 8.
  - Windows 10:

```
>> conda install -c peterjc123 pytorch
```

- Previous Windows versions:

```
>> conda install -c peterjc123 pytorch legacy
```

6. Open up Jupyter notebook using the command

```
>> jupyter notebook
```

from either your terminal or Anaconda Prompt. Note that Jupyter notebook uses the current directory as the root directory. If you want to specify a root directory, you can use

```
>> jupyter notebook --notebook-dir path/to/directory
```

7. Demo on Jupyter notebook