Weekly Report 11/10/14

Date: 11/10/14

Project Name: A Commercial Nocturnal Asthma Monitor

Group Number: 26

Group Members: William Padovano, Chris Beyer, David Kim

Current status of project:

A method to continuously analyze sound signals was developed in Matlab. Different options for pattern matching a recorded sound event to a template cough were tested. Currently, the best option seems to be a simple difference between the sound spectrograms. The Raspberry Pi was considered for use over the Arduino. It has 128,000 times more RAM than an Arduino and is a miniature Linux computer rather than simply a microcontroller. The Raspberry Pi can run an open source version of Matlab called Octave as well as Python.

Work planned for next week:

We will work to assemble the physical prototype and try to develop a way to constantly update the cough template over time.