Weekly Report #6

Date: 10/14/2013

Project Name: Bloodless Glucose Testing

Group Number: 20

Group Members: Nelson Wu, Cong Zhang, Tianyi Zhou

Current status of project: We have met with Dr. Zhiguang Xu and Dr. Mikhail Berezin to discuss the implementation of a portable Raman spectroscopy device. Dr. Xu believes that the idea of using Raman spectroscopy is sound and recommends several websites for purchasing parts and the use of a cage optics system. Dr. Berezin asks us to consider signal strength and errors that may occur due to improper alignment of optical elements. Additionally, Dr. Berezin recommends an expensive optical system, the Superhead, which resolves the issue of optical alignment.

Work planned for next week: We will begin a cost analysis of our potential prototype versus the finger-prick glucometer and other potential glucose monitoring alternatives. We will also ask Dr. Singamaneni’s lab if we may use his lab for prototype testing.

Anything needed from client or TA or instructor to continue work: Nothing yet