IPRO 331
Non-invasive Blood Glucose Monitoring Systems

Objective

The goal of IPRO 331 was to continue develop the non-invasive methodology for continuous blood glucose monitoring that had been undertaken in the previous two semesters. More specifically our goals turned to refining the current design, developing methodologies for testing its accuracy and reliability, taking steps towards bringing it to market, and protecting our intellectual property.

Basic Organization and Tasks

IPRO 331 delegated responsibility to small groups. These small groups took charge of a particular objective set by the group. The tasks the groups worked on were: patent research, prototype design, website design, and research design. Every member of the group was also assigned a company or non-profit organization from which to solicit for grant monies.

Accomplishments

Accomplishing our goals to a high degree, IPRO 331 made significant progress building on the work of the previous semesters. A working prototype of the device was created to highlight its main features. Two research methodologies were developed as a means to test and quantify the advantage of our device over existing devices. In the interest of funding these two experiments, ten grant proposals were written and sent to varying companies and non-profit institutions with interests in non-invasive blood glucose monitoring. We also did significant patent research leading us to the conclusion that although our design is built on other existing technologies, our combination of these technologies is new, novel, and useful enough to be patentable.

Critical barriers and obstacles

Funding has become the main obstacle to this project. That is, until this project receives adequate monies from either interested companies or non-profit public interest groups, the necessary experiments to prove the reliability, safety, and accuracy of the methodology cannot be undertaken.

Conclusion

IPRO 331 took significant steps building on the work of the previous semesters. These steps have put the project in a position where an independent research team lead by Dr. Opara, contingent on sufficient funding, can hopefully perform the necessary lab work and eventually bring this product to market.

Next steps

IPRO 331 will be waiting until mid-summer for responses to their grant proposals. Hopefully, with sufficient funding, an independent paid undergraduate research team will be created from former group members with the interest of bringing this project to the laboratory and eventually to market.

Faculty & Advisors

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