

Senior Design 491 Weekly Report 8

Date : 11/8/2017

sdmay18-10: Patch-clamp microchip testing circuit interface

Client & advisor : Que Long

Team member & Roles :

---- Chenhang Xu - team communication leader

---- Daiyuan Ding - team webmaster

---- Li Qian - team leader & time keeper

---- Junhua Hu - Team designer

---- Ningyuan Zhang - team programmer

---- Yigao Li - team test leader

Weekly summary :

Regular meeting with advisor and testing the PC-ONE patch-clamp with several different settings to test and collect silicon DMEM data.

Past Week Accomplishments

| Member name | Accomplishments |
|----------------|--|
| Chenhang Xu | Meet with professor and give the presentation. Finish the pc-one set up and start to do the test. |
| Daiyuan Ding | Regular meeting with advisor. Start the speed-test module and measurement. |
| Li Qian | Working on the testing of the PC-ONE and collect testing data. Meeting with advisor. |
| Junhua Hu | Preparing to use PC-ONE. |
| Ningyuan Zhang | Continuing testing the interface prototype and collecting data. Meeting with advisor. |
| Yigao Li | start to use the pc-one to do the test after presenting the steps to professor and get his admission |

Pending issues

| Member name | Accomplishments |
|--------------|--|
| Chenhang Xu | Do the test and find the raw data, which need to compare the given data. |
| Daiyuan Ding | Need to solve the measurement noise. |

| | |
|----------------|---|
| Li Qian | Try to find out the setting that fit the test. |
| Junhua Hu | Need more time investigate PC-ONE to work. |
| Ningyuan Zhang | Still trying to find the most stable setting to start the test on neurons. |
| Yigao Li | be familiar with the testing process and find the stable way to get accurate data |

Individual contribute

| Name | Individual Contributions | Hours this week | Hours Cumulative |
|----------------|--|-----------------|------------------|
| Chenhang Xu | We need to do the serval test and get the average data for our final data. In this case, I will do one of them. Meet with the professor. | 6 | 17 |
| Daiyuan Ding | Finshing setting up equipments and do the test on the speed-test module. List the problems we are facing. | 5 | 28 |
| Li Qian | Testing the PC-ONE and get testing data. Regular meeting. Draft weekly report. | 4 | 28 |
| Junhua Hu | Getting power generator to run the PC-ONE, but only run the speed-test. Need more understanding to work with other modes. | 4 | 26 |
| Ningyuan Zhang | drafted the weekly report, kept testing the interface, met with advisor. | 5 | 34 |
| Yigao Li | Do some parts of the test and record the data. Meanwhile, meeting with professor to report our data. | 5 | 15 |

Comments and Extended Discussion

This week we did not start anything new according to our project, because we are entering the phrase with numeric tests to get the reliable data.

Plan for Coming Week

We are planning to continue test the prototype until we find the suitable setting.

Summary of Weekly Advisor Meeting

In this meeting, we showed advisor the plan that we were making to prepare for the final presentation. And he gave us several advises of improving the quality of our presentation and ppt slides.