

Senior Design 491 Weekly Report 5

Date : 10/13/2017

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 concludes two major problems we are facing. One is how to keep the cells alive and how to catch them. The other is the problems about setting up the complex circuit.

Past Week Accomplishments

Member name	Accomplishments
Chenhang Xu	start seeking correct parts for the circuit setup according to the experimental theory
Daiyuan Ding	Regular meeting with advisor and graduate student. Improving the understanding of our project and the problems we are facing.
Li Qian	Meet with graduate student, and see the major equipment of this project
Junhua Hu	Reading the Lab policy and documents about how to use the equipments. Getting first look of equipments in lab. Thinking about the design circuit.
Ningyuan Zhang	Regular meeting with advisor, meet graduate student who will provide help during our development.
Yigao Li	Help design the draft of circuit and continuing be familiar with equipment

Pending issues

Member name	Accomplishments
Chenhang Xu	Read the user menu of patch clamp and learn how to use this to catch cell, which will use in our future experiment.
Daiyuan Ding	Better understanding about the problems, we might need solutions for our two major problems.
Li Qian	Read the document of Patch Clamp, and learn how to use it.
Junhua Hu	Lack background of other field, need to read more research about those parts.
Ningyuan Zhang	Read documents about materials and equipments we will need. Get more information needed according to the patch-clamp circuit setup.
Yigao Li	Communicate with graduate students to get some advice and knowledge of this project which can help our team in process.

Individual contribute

Name	Individual Contributions	Hours this week	Hours Cumulative
Chenhang Xu	Regular group meeting Read the document about how to use the equipment and find the way how to catch the cell.	6	17
Daiyuan Ding	Regular group meeting. Understanding the problems we are facing and think about possible solutions.	5	14
Li Qian	Regular group meeting. Read the document of Patch Clamp, and the begin to learn how to use the Patch Clamp.	5	15
Junhua Hu	Regular group meeting. Meeting	4	13

	with co-work graduate student. Discuss the design circuit, getting more information about what should we do.		
Ningyuan Zhang	Regular group meeting. Seeking useful documents and articles according to the project. Starting prototype pre-setup.	5	5
Yigao Li	Regular group meeting Make the presentation in front of other groups and answer questions.	3	3

Comments and Extended Discussion

Get the user menu of patch clamp. We held the meeting to separate our group into 2 small group. One will learn how to use the patch clamp and the other will try to set up the circuit and figure out how to keep the cell alive while we are testing on the cell.

Plan for Coming Week

Talk about the basic concept and our understanding of patch clamp with the graduate and advisor.

Read the user menu of patch clamp and learn how the patch clamp works.

Try to figure out how to keep the cell alive when we are doing the tests.

Summary of Weekly Advisor Meeting

Advisor gave us some advices about team management and following plans, which includes time line changes, responsibilities of each team members and the work with our graduate student advisor. We also setup new schedule for advisor meeting to make time more efficient.