07.14.

Disturbed but happy

Today, the summer semester ends and the biological experiment comes. As we are green-hands in the field of biology, everyone feels very disturbed. Doctor Chen encourages us to cheer up and teaches us how to transform. After one and a half hour, we finally get it. We successfully finish the transformation of B0034!

07.15.

Sad but expecting

Today, we continue to do cell transformation. We get our medium of B0034 from incubator. Unfortunately, we find that there is nothing in the medium. I am very sad, but our captain encourages us to try again. We manage to do it with the rest B0034 in the kit. After one hour, the assignment today is completed. We wish that our effort wouldn't be in vain.

07.16.

Excited

We get it! The transformation of B0034 proves to be a success. Everyone here is excited and ready to finish the transformation of C0079, B0015, R0079, J23116 and J37034.At the same time, we contact Doctor Chen and tell him the exciting news. He congratulates us and promise to teach us the procedure of shaking bacteria.

07.17.

Stirring

Today, we learn how to pick the right colonies that we need and the protocol of shaking bacteria. After some practice, we learn the point of this step, and quickly finish our work (including B0034, C0079, B0015, R0079, J23116 and J37034) today.

07.18.

Damn difficult!

Today, Doctor Chen teaches us the protocol of plasmid extraction. Compared with the experiments we have done before, plasmid extraction is really a big problem. To finish plasmid extraction, there are eleven steps that we have to do. The work takes us more than one and a half hours. With the help of Doctor Chen, we finally finish the extraction of B0034,C0079,B0015,R0079,J23116 and J37034.

07.19.

That's easy!

Today, we finish the transformation of K145270,R0062,P0440 and E0420.

07.20.

In low spirit

Unluckily, we find that there is nothing in the medium of P0440 and R0062, but the transformation of K145270 and E0420 proves to be a success. We have a discussion about the protocol of transformation. After 10 minutes, we doubt that the failure of the transformation results in the incorrect operating of DH5. Then we carefully do the transformation of P0440 and R0062.

07.21.

Happy

The effort we took yesterday is not in vain. We successfully complete the transformation of P0440 and R0062. Then we begin to pick the right colonies from the medium. After that, we put all the tubes into the shaker and start to shake the bacteria.

07.22

Not easy

It is an awful day today, because we have to do the plasmid extraction of K145270, R0062, P0440 and E0420. Without the help of Doctor Chen, the steps of plasmid extraction are too hard for us to complete them without any mistakes. We waste many centrifuge tubes and pipet tips. However, we finally make it.

07.24.

Lazy

After our weekends, we come back to our lab. The task today is to finish the transformation of R0040, K081016.

07.25.

Lazy again

Today, we complete the transformation of I0500, K081009, E0430.

07.27.

Get confused

Today, we are surprised to find that the transformation of I0500 fails. We try to find the reason. After about 15 minutes, we don't find any mistakes in our procedure. As a result, we contact Doctor Chen. He promises us that he will come tomorrow.

07.28.

Rewarding

Today, we have a discussion about the failure of the transformation. Doctor Chen supposes that there is some problem with the Kan medium. So he writes down the medium formula and asks us to make up some Kan mediums. With his help, we learn the method to use the electronic balance. Finally we use our new Kan mediums to do the transformation of I0500.

07.29.

Damn!

We are very disappointed when we take out our mediums. The transformation fails again. Then we decide to find some information from the Internet. Maybe other IGEM teams face the same problem.

08.01.

Terrible day

After our weekend,we exchange our findings that searched from the Internet.We are very angry when we find that the plasmid doesn't work.Then,we tell the message to Doctor Chen and begin to find another plasmid to replace I0500.

08.02.

We make it!

Everyone works hard to find the new plasmid. Where there's a will, there's a way. We successfully outcrop a new plasmid named I13453 which proves to be a workable plasmid. Then we quickly complete the transformation of it.

08.03.

Ya-da!

We succeed to do the transformation of I13453.And then we pick the right colonies from the medium (including K081009,E0430 and I13453), and put the tubes into shaker.

08.04.

Another easy day.

Today, our task is to finish the plasmid extraction of K081009, E0430 and I13453. After the practice we have done before, we find that it is not too difficult to make it. We only spend one hour extracting the plasmid.

08.08.
New protocol

Today, Ms. Yang teaches us the protocol of agarose gel electrophoresis. Compared with plasmid extraction, electrophoresis is easier. But we need to make the gel and grasp the method to use microwave oven.

08.09.
A blue day.

Today, we do the agarose gel electrophoresis of B0034, C0079, B0015, R0079, J23116 and J37034. Unfortunately, we find that our plasmid extraction of C0079, R0079 and J23116 fails. It proves that our chosen colonies are not target bacteria colonies. Therefore, we take out our medium and repick the other colonies and put the tubes into shaker.

08.10.
As usual.

Today, we complete the plasmid extraction of C0079, R0079, J23116.

08.11.
More than exciting!

Ya-da, ya-da! The plasmid extraction is successful. We observe the plasmid in the agarose gel (including C0079, R0079, J23116). And then we do the agarose gel electrophoresis of K145270, R0062, P0440 and E0420. We find that we have to redo the plasmid extraction of K145270, R0062. Therefore, we take out our medium and repick the other colonies and put the tubes into shaker.

08.12.
Just a day.

Today, we complete the plasmid extraction of K145270 and R0062.

08.20.
Blissful!

Ya-da, ya-da! The plasmid extraction is successful. We observe the plasmid in the agarose gel (including C0079, R0079, J23116).But the plasmid strips are very strange. So we do the electrophoresis of C0079, R0079, J23116, K081009, E0430 and I13453.We find that we have to redo the plasmid extraction of K081009,C0079. Therefore, we take out our medium and repick the other colonies and put the tubes into shaker.

08.21.
Nothing special.

Today, we complete the plasmid extraction of K081009,C0079.

08.27.
cheerful

Ya-da, ya-da! The plasmid extraction is successful. All the plasmid we need have already been extracted. Then Ms. Yang shows us the method of digestion. At first, we learn the use of BioPhotometer. And then we need calculate the mole of the target plasmid. At last, we put the solution to target plasmid, corresponding digestion enzyme, double distilled water and BSA into a tube (including B0034, C0079, B0015).

08.28.

A tragedy

Unfortunately, we find that our digestion fails after the agarose gel electrophoresis. So we have to redo the digestion. Luckily, we make it and get our first gene--------B0034,C0079,B0015.

09.03.
Ongoing

Today, we do the digestion of R0079, J23116, J37034.

09.04.
Ongoing

Today, we do the digestion of K145270, R0062, P0440 and E0420.

09.05.
Ongoing

Today, we do the digestion of K081009, E0430 and I13453.

09.06.
Something new

Today, Ms. Yang shows the protocol of connection. Like digestion, the procedure of connection is not hard. But it takes 16 hours. So we do the connection of K081009,E0430.

09.07.
A hope

We do the transformation of our new plasmid, KE.

09.08.
If we do right?

We pick the right colonies from the medium, and put the tubes into shaker.

09.09.
Desperate

Today, we complete the plasmid extraction of KE. Unfortunately, we find that our connection fails after the agarose gel electrophoresis. Then we redo the transformation of KE.

09.10.
Fighting

We pick the right colonies from the medium, and put the tubes into shaker.

09.11.
Still fighting

We complete the plasmid extraction of KE. Ya-da! Our connection success! We got our first part, KE!

09.13.
Still fighting

We do the connection of R0040 and K081016, R0062 and P0440, R0062 and E0420.

09.14.
Still fighting

We do the transformation of our new plasmid-------RK, RP, RE.

09.15.
Still fighting

We pick the right colonies from the medium, and put the tubes into shaker.

09.16.
Still fighting

We complete the plasmid extraction of RK, RP, RE. The connection of RP and RE success! We got our next two parts-------RP and RE! However, the connection of RK fails. We have to do it again .But we believe that our project will be finished soon!

09.17.
No much time left.

We do the connection of B0015 and C0079, R0079 and J37034.

09.18.
Speed up

We do the transformation of our new plasmid-------CB, RJ.

09.19.
As usual

We pick the right colonies from the medium, and put the tubes into shaker (including RK).

09.20.
Sprinting

We complete the plasmid extraction of CB, RJ, RK. Ya-da! The connection of JC and RK success! We got our next two parts------- CB and RK. But the connection of RJ is not successful. Thus, we decide to use a plasmid of GFP instead of J37034.

09.21.
Sprinting

We find a new plasmid that can replace the part JC, so we use it instead of our new part JC and we name it “K”. We do the transformation of “K” and GFP. At the same time, we do the digestion of RK, RP, I13453, RP, RE, K145270, R0079. After the digestion, we do the connection of IKE, RPRE, KRP.

09.22.
Sprinting

We pick the right colonies from the medium, and put the tubes into shaker. And we do the transformation of our new plasmid-------IKE, RPRE, KRP.

09.23.
Sprinting

We pick the right colonies from the medium, and put the tubes into shaker. We complete the plasmid extraction of “K” and GFP. We do the digestion of “K” and GFP. After that, we do the connection of “K” and CB, R0079 and GFP.

09.24.
Sprinting

We complete the plasmid extraction of IKE, RPRE, KRP, we get our new parts-------IKE,RPRE and KRP. Then, we do the digestion of IKE, RPRE, KRP. After that, we do the connection of RKIKE, KRPRE. At last, we do the transformation of our new plasmid-------KCB,RG.

09.25.
Sprinting

We do the transformation of our new plasmid-------RKIKE, KRPRE. After that, we pick the right colonies from the medium, and put the tubes into shaker (including KCB and RG).

09.26.
Sprinting

We pick the right colonies from the medium, and put the tubes into shaker (including RKIKE, KRPRE). Then, we do the plasmid extraction of KCB and RG. Fortunately, we succeed. We get our new parts-------KCB and RG. We do the digestion of KCB, RG. After that, we do the connection of KCB and RG.

09.27.
Sprinting

We complete the plasmid extraction of RKIKE, KRPRE. we get our new parts-------RKIKE, KRPRE. We do the transformation of our new plasmid-------KCBRG.

09.28.
Sprinting

We pick the right colonies from the medium, and put the tubes into shaker (including KCBRG only).

09.29.
Yeah, we make it!

We complete the plasmid extraction of KCBRG, we get our new parts-------KCBRG. Till now, our project has been completed. We are so excited that we have a big dinner in the evening.