Minutes of the fifteenth iGeM meeting

28th of June 2010

Participants: Rahul Akkineni, Lucas Schirmer, Charanya Sampathkumar, Mareike Roth, Sarah Mansour, Adithya Nagarakodige, Habib Bukhari, Svea Grieb, Victor Gordeev, Jonathan Tam

Supervisors: Johnson Madrid, Annelie Oswald

Organization:

1. The labs at the MPI would be free starting from Wednesday the 30th of June

2. Habib and Adithya would meet with a FRET expert from Schwille's lab the next day the 29th to speak about the feasibility of PoPs

3. Mareike filled us in on the rules of games for the Bio-olympics taking place in the following weekend. Svea arranges for the BBQ.

4. The team will get ready for the Bio-olympics by practising in the Grosser Garten on Friday the 2nd of July at 6 PM

5. Choices for the final project narrowed down to two projects: PoPs and Sensor Bricks. PoPs is still awaiting the meetings with the experts from Schwille's lab as well as Mike Lorenz from the MPI who Johnson would contact

6. Lucas and Rahul met with Michal Surma from Kai Simon's lab, MPI, concerning Sensor Bricks , they updated us about the meeting and the feasibility of the project and Lucas gave a short presentation about how the final project should be like.

7. The team got two positive responses from Michal Surma and Raik Gruenberg concerning the feasibility and the approaches of Sensor Bricks

8. The team would do some literature reading concerning some questions raised during the meeting which need more details

9. The next meeting would take place on Thursday the 1st of July at 5 PM to discuss the progress of both projects, and to share the information gathered about Sensor Bricks.

Lucas's presentation included the following:

The most important approach is to use a Protein A-LuxI enzyme as a kind of artificial alternate for a secondary antibody in an ELISA system. The main idea of the system is to couple an extracellular signal to a genetic circuit. In the circuit the signal could be amplified and processed The system should be highly modular by the use of different primary antibodys. By expressing the whole fusion protein in E.coli the use of S.cerevisiae disappears. In the talk with Michal Surma he explained a lot about protein overexpression in yeast and which strains and plasmids we should use. He also noticed that we could use the Protein A or anti-IgG rom the previous approach as an immunoaffinity tag for purification.