Minutes of the twenty seventh iGeM meeting

14 September 2010

Participants:

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

Supervisors:

Andy Oates, Marco Storch.

Organization:

1. Next meeting is on 17 September 2010 at 12.30 p.m. at MPI.
2. The issue of staying in Boston a week longer after the Jamboree was discussed and the invitation letter is to be arranged for the remaining week's stay and Andy offered to talk to his friend in order to request an invitation letter for the entire group. The invitation needs to be from 9th November until 14th November. Svea also offered to contact her friends in Boston for the same.
3. The ordering of shirts for our team was discussed and the team would pay for them.
4. In order to clear up the doubt of how much budget the team still is left with for the ordering of lab chemicals, it was suggested to invite Susan for the next meeting.

Project updates:

1. Jon updated the Red team's current scenario:

    - When the primers for their group were ordered, as a result of addition of two nucleotides, the entire sequence was shifted by two nucleotides and hence, out of frame.

    - Also; the insert was cloned into the wrong plasmid.

    - After the talk with Mike and David from the protein purification facility, it was found that two copies of domain A was needed in the fusion protein whereas only one domain was present in the current fusion protein.

- Considering all these factors into account, it was decided to order the entire sequence as repeating the entire cycle of cloning experiments would take atleast two weeks.

2. Mareike found one MrGene website where a 50% offer was given for iGeM participants and the offer was valid only until 15 September 2010.

3. Svea and Lucas presented their results:

    - Results from both a tecan reader and a usual spectrophotometer was compared and calibrated.

    - The optical density for the samples (GFP and YFP) with and without induction of HHL was tabulated. The OD was determined in comparison with a standard reference sample in order to differentiate the background fluorescence. YFP provided more stable results than GFP.

    - It was seen that the cells may have degraded before they fluoresce. It is important to find out the possible reasons by which the fluorescence would have been lost. In this respect, details on the copy number of the plasmid used may help.

    - One suggestion was to take the cells as such and see them under the microscope. When the concentration of HHL was low, cell growth was high. In other cases, higher HHL proved toxic to the cell.

    - A different approach of setting up the standard reference would be tried out in future experiments.

    - A control sample would determine to estimate the actual fluorescence. In addition, Marco suggested trying the experiments in transgenic bacteria.

4. Charanya and Rahul had some minor problems with the cloning experiments for the parts assembly and would talk to Marco about it. In addition, the miniprep from the parts assembly by approach two (direct cloning of part into plasmid backbone containing RBS) would be given for sequencing; although this method of cloning had really low efficiency.

Official Wiki updates:

1. The idea and opinion of including Susan Fischer and Marco Storch on our official iGeM wiki page was discussed. The point to be noted was that the attendance fee had to be paid for any participant who is to be included in the wiki page.
2. Sarah's camera yet again helped us take an instant picture of Marco and he would soon give us a write – up of himself so that it could be updated on the wiki page.
3. It was decided to write protocols and abstracts for each individual sub group and that a standard format had to be followed for all the protocols.