Analysis of data from high-throughput molecular biology experiments
BB2490 (*KTH*)   **7.5 hp – spring 2013**

Project instructions

GENERAL INFORMATION
You will receive a real data set (you are also welcome – even encouraged – to bring your own data set). You should then analyze this data set with an appropriate set of bioinformatics tools. The analysis should aim at extracting and interpreting biologically relevant information. You are supposed to work in groups of (2 or) 3 students. You will be assigned a group.

PROJECT PROGRESS REPORT MEETING
There is one scheduled lecture during the project period: on Monday 18 Feb at 13:15-15:00 we meet in FD55 for a progress report meeting. At this occasion, each project group is expected to present (i) a **5 minutes overview** of their project plan, and (ii) **the first entry** for each group member on her/his individual diary. The goal with this meeting is that your fellow students should get an idea of what is going on in all the groups, and to capture any initial problems that you might have with your projects. *Please note: presence is mandatory*.

REQUIREMENT 1: POSTER AND POSTER PRESENTATION
[a] Each group should prepare a **poster** to be presented at the **poster session** on Friday 15 March 13:00-16:00, in the Kilsbergen conference room at Science for Life Laboratory (Tomtebodavägen 23a, Alpha building, floor 4).
[b] The poster should contain the results and conclusions from your data analysis, along with relevant information concerning how you analyzed your data and how you support your conclusions.

REQUIREMENT 2: PROJECT DIARY
[c] You should **maintain an individual diary** of what you do in the project, and where you also can keep figures etc. that you create during the work.
[d] You are required to use an **Internet-based** documentation system for the diary – *e.g.*, a wiki or a blogg). You must *not* use a handwritten document or a Word document. It *must* be Internet-accessible. Examples of blog services available for free on the Internet and that could be used for this course: http://wordpress.com/, http://www.blogger.com, https://www.tumblr.com/, https://posterous.com/. There are other services as well.
[e] Your diary must be **accessible for the examinators** (i.e., Lars Arvestad, Lukas Käll and Olof Emanuelsson) until one month after the poster presentation (i.e. 16 April).

COMPUTER RESOURCES
The *Uppmax project* g2012230 on the Kalkyl cluster, which you used for some of the computer exercises, will be available for the projects as well – you may use this *Uppmax project* or any other computing resource you deem suitable.
Important: the *Uppmax project* g2012230 will terminate 2013-07-31, and after that date, any data still in the /proj/g2012230 directory, or subdirectories, will be destroyed forever. So make sure you move your files before that date.

POSTER PREPARATION
The poster should at most be A0 format, but A1 might be more suitable. Use any kind of document processing program to make your poster (PowerPoint, OpenOffice, Illustrator, etc.). The poster may be printed at AlbaNova. The fee will be paid by KTH, but you must contact us before you submit it to the printers so that payment can be arranged.

GRADING
Each student will be graded individually according to the A/B/C/D/E/F scale. The grade will be based on (i) the poster, (ii) the poster presentation, and (iii) the project diary.

KEY DATES
Project progress report meeting: Monday 18 February (13:15-15:00) in FD55, AlbaNova.
Poster presentation: Friday 15 March, 2013 (13:00-16:00) at the room Kilsbergen, SciLifeLab.
Individual diary available for teachers: from now until 16 April, 2013.
Uppmax project g2012230 available until: 31 July 2013.