**Bioinformatics Homework 3**

**Style 1: Literature Project**

Choose **one** of the papers below:

1. Matsen et al. (2010) **pplacer:** **linear time maximum-likelihood and Bayesian phylogenetic placement of sequences onto a fixed reference tree**, BMC Bioinformatics 11:538
2. Li et al. (2012) **Ultrafast clustering algorithms for metagenomic sequence analysis**, Brief Bioinform. 2012 Nov;13(6):656-68
3. Broman et al (2012) **Mapping Quantitative Trait Loci onto a Phylogenetic Tree**, Genetics 192:267
4. KY Yeung et.al.(2001) **Principal component analysis for clustering gene expression data**, Bioinformatics,Sep;17(9):763-74
5. AP Gasch (2002) **Exploring the conditional coregulation of yeast gene expression through fuzzy k-means clustering** Genome Biol,Oct 10;3(11)

These papers extend or provide additional background on the course notes covering “bioinformatics”, “molecular biology”, and “sequence analysis”.

Read the paper and summarize it. Clearly specify its objectives, summarize methods used or explained, and discuss its content, by looking into additional resources on the web.

Do not copy the paper, but show you have understood the main ideas of the paper and “discuss” the paper. Such a discussion could include thoughts on what was the key idea, strengths or weaknesses of the methods/experiments, comments on the writing, ways to extend the work, flaws in the argument/data/experiments, etc. Anything is fine, as long as it demonstrates some real thought.

All literature projects will be presented and discussed in the class of Dec 10th 2013. Hence, make sure you prepare a 10-15 minutes presentation!

**Due date of complete report: 8th Jan 2014 (before midnight)**