

CS2220 Introduction to Computational Biology Student Presentations on 28/10/10 and 4/11/10

This presentation contributes 15% to the course grade

You may choose to earn up to 15% of the course grade by picking a paper below and making a presentation on 28/10/10 or 4/11/10.

You will be graded according to:

- the quality of your ppt (readability, organization, attractiveness)
- the quality of your presentation (organization, delivery, Q&A)
- the level of understanding of what you are presenting
- inputs from your fellow students

Prediction of microRNAs and their targets

[meister-nature04 .pdf] Meister & Tuschl. "Mechanisms of gene silencing by double-stranded RNA". *Nature*, 431:343-349, 2004.

[burge-cell03.pdf, **targetscan**] Lewis et al. "Prediction of mammalian miRNA targets". *Cell*, 115:787-798, 2003.

[namhai-gb04.pdf] Wang et al. "Prediction and identification of *A. thaliana* microRNAs and their mRNA targets". *Genome Biology*, 5:R65, 2004.

[hatzi-genedev04.pdf, **DIANA-microT**] Kiriakidou et al. "A combined computational-experimental approach predicts human microRNA targets". *Genes & Development*, 18:1167-1178, 2004.

[krek-rajewsky-natgenet05.pdf, **PicTar**] Krek et al. "Combinatorial microRNA target predictions", *Nature Genetics*, 37:495-500, 2005.

[margalit-science07.pdf, **RepTar**] Stern-Ginossar et al. "Host immune system gene targeting by a viral miRNA". *Science*, 317:376-381, 2007.

[mirDeep-natbiotech08.pdf, **mirDeep**] Friedlander et al. "Discovering microRNAs from deep sequencing data using miRDeep", *Nature Biotechnology*, 26:407-415, 2008.

[helvik-cabios07.pdf] Helvik et al. "Reliable prediction of Drosha processing sites improves microRNA gene prediction". *Bioinformatics*, 23:142-149, 2007.

Grading Scheme

You will be graded according to:

- the quality of your ppt (readability, organization, attractiveness)
- the quality of your presentation (organization, delivery, Q&A)
- the level of understanding of what you are presenting

Your marks for the presentation will be the average of the inputs from your classmates and myself using the distribution scheme below:

	poor	ok	super	remarks
quality of ppt	10	20	30	
quality of presentation	10	20	30	
level of understanding	10	20	30	
gone beyond the paper assigned	0	0	10	

A computational biologist often has to communicate with biologists or computer scientists who either do not have sufficient background in computing, mathematics, or biology. The inputs from your classmates are especially important for assessing whether your presentation is sufficiently clear and easily understood by such non-experts.

Presenter: _____

Grader: _____

	poor	ok	super	remarks
quality of ppt	10	20	30	
quality of presentation	10	20	30	
level of understanding	10	20	30	
gone beyond the paper assigned	0	0	10	

Presenter: _____

Grader: _____

	poor	ok	super	remarks
quality of ppt	10	20	30	
quality of presentation	10	20	30	
level of understanding	10	20	30	
gone beyond the paper assigned	0	0	10	

Presenter: _____

Grader: _____

	poor	ok	super	remarks
quality of ppt	10	20	30	
quality of presentation	10	20	30	
level of understanding	10	20	30	
gone beyond the paper assigned	0	0	10	