



Journal Articles for Class discussion



Journal Article for Class Discussion January 13

Attached Files: [Pleasance_2010_supp.pdf](#) (313.508 KB)
 [Pleasance_2010.pdf](#) (1,023.624 KB)

Pleasance et al., 2010
A small-cell lung cancer genome with complex signatures of tobacco exposure.

[Nature Jan 14, 2010](#)



Journal Article for Class Discussion January 27

Attached Files: [Deng_2014.pdf](#) (371.459 KB)
 [Deng_2014_supp.pdf](#) (5.608 MB)

Single-cell RNA-seq reveals dynamic, random monoallelic gene expression in mammalian cells.

Deng et al., 2014. Science. 2014 Jan 10;343(6167):193-6. [PMID: 24408435](#).



Journal Article for Class Discussion February 3

Attached Files: [Boisvert_2012.pdf](#) (3.782 MB)
 [Boisvert_2012_supp.pdf](#) (892.704 KB)

A quantitative spatial proteomics analysis of proteome turnover in human cells. Boisvert FM, Ahmad Y, Gierliński M, Charrière F, Lamont D, Scott M, Barton G, Lamond AI. Mol Cell Proteomics. 2012 Mar;11(3):M111.011429. doi: 10.1074/mcp.M111.011429. Epub 2011 Sep 21. [PMID: 21937730](#)



Journal Article for Class Discussion February 10

Attached Files: [Olsen_2010 phosphoproteomics mitosis.pdf](#) (2.987 MB)
 [Olsen_2010 phosphoproteomics mitosis.pdf](#) (2.987 MB)

[Olsen et al., 2010.](#)

Quantitative phosphoproteomics reveals widespread full phosphorylation site occupancy during mitosis.
Science Signaling Jan 2010.





Journal Article for Class Discussion February 17

Attached Files: [Sakai_2011 supp.pdf](#) (8.104 MB)
 [Sakai_2011 autism network.pdf](#) (1,002.021 KB)

Sakai et al., 2011. Protein interactome reveals converging molecular pathways among autism disorders.

Science Translational Medicine. 2011 Jun 8;3(86):86ra49. [PMID: 21653829](#)



Journal Article for Class Discussion Feb 24

Attached Files: [Havugimana_2012 human protein complexes.pdf](#) (4.211 MB)

Havugimana et al., 2012. A census of human soluble protein complexes.

Cell. 2012 Aug 31;150(5):1068–81. [PMID: 22939629](#)



Journal Article for Class Discussion March 3

Attached Files: [Neph_2012 with Supp.pdf](#) (3.247 MB)

Neph 2012. Circuitry and dynamics of human transcription factor regulatory networks. Cell. 2012 Sep 14;150(6):1274–86. [\[PMID: 22959076\]](#).

AND

Neph 2012. An expansive human regulatory lexicon encoded in transcription factor footprints. Nature. 2012 Sep 6;489(7414):83–90. [PMID: 22955618](#)



Journal Article(s) for Class Discussion March 17

Attached Files: [Degner_2012.pdf](#) (632.968 KB)
 [Degner_2012_supp.pdf](#) (3.029 MB)
 [McVicker_2013.pdf](#) (1.388 MB)
 [McVicker_2013_supp.pdf](#) (5.925 MB)

Two articles:

Degner et al., 2012. DNase I sensitivity QTLs are a major determinant of human expression variation. Nature. 2012 Feb 5;482(7385):390–4. [PMID: 22307276](#)

AND

McVicker et al., 2013. Identification of genetic variants that affect histone modifications in human cells. Science. 2013 Nov 8;342(6159):747–9. [PMID: 24136359](#)



Journal Article for Class Discussion March 24

There are two articles. Read both. Half the class will discuss one and the other half of the class will discuss the other.

Students from Dubaisi – Kadam will discuss:

Schlabach 2008

Cancer Proliferation Gene Discovery Through Functional Genomics.
Science. 2008 Feb 1;319(5863):620–624. PMID: 1823912

Student from Kalita – Yang will discuss

Luo 2008

Highly parallel identification of essential genes in cancer cells.

Proc Natl Acad Sci U S A. 2008 Dec 23;105(51):20380–5. PMID: 19091943



Journal Article for Class Discussion March 31

Attached Files: [Roguev_2013 mammlian GI.pdf](#) (1.625 MB)
 [Roguev_2013 S1.pdf](#) (12.869 MB)

Quantitative genetic–interaction mapping in mammalian cells.

Roguev et al., Nat Methods. 2013 May;10(5):432–7. [PMID: 23407553](#)



Journal Article for Class Discussion April 7

Attached Files: [Yosef_2013 Th17 cell differentiation.pdf](#) (1.176 MB)
 [Yosef_2013 Supp.pdf](#) (1.781 MB)

Yosef et al., 2013. Dynamic regulatory network controlling TH17 cell differentiation.
Nature 2013 Mar 6. [\[PMID: 23467089\]](#)



Journal Article for Class Discussion April 14

Attached Files: [Sachs_2005.pdf](#) (341.979 KB)
 [Sachs_2005 Supp.pdf](#) (412.561 KB)

Sachs et al., 2005. Causal protein–signaling networks derived from multiparameter single–cell data. Science Apr 22;308(5721):523–9. [\[PMID: 15845847\]](#)



Journal Article for Critique Due April 21

Attached Files: [Toettcher_2013 optogenetics.pdf](#) (1.145 MB)

Using optogenetics to interrogate the dynamic control of signal transmission by the Ras/Erk module.

Toettcher et al., Cell 2013 Dec 5;155(6):1422–34. [PMID: 24315106](#)