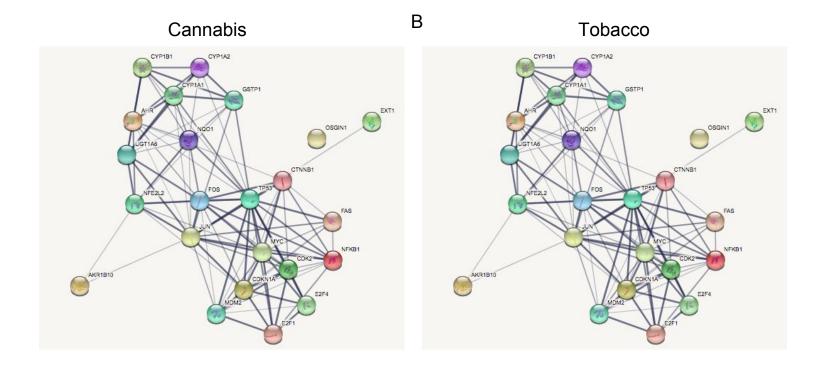


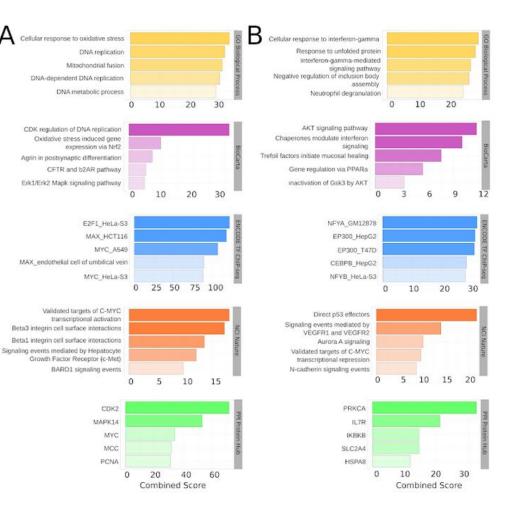
Change 13L

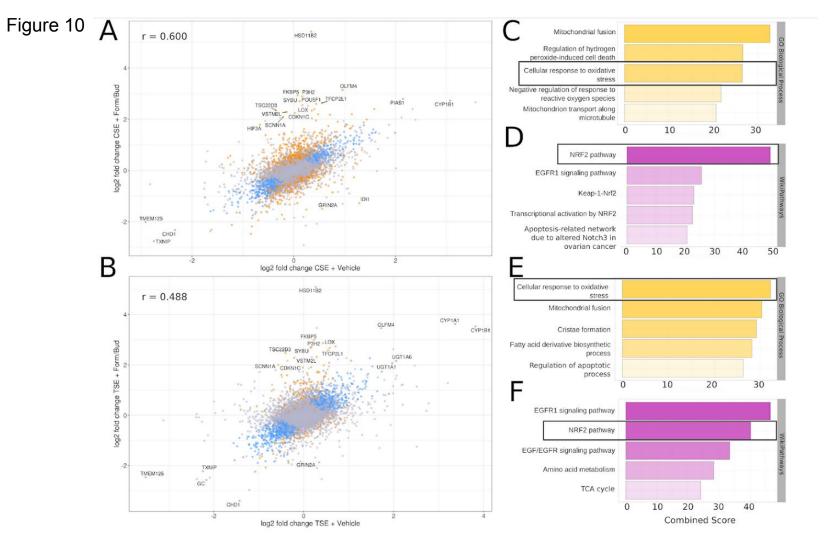
Figure X (Omitted in BioRxiv Preprint)

Α

- Define network based on B[a]p signature genes
- Color nodes by log2 fold change
- Point of figure can be that B[a]p induced genes form an interconnected network and that the network responds almost identically between both smoke exposures, implicating B[a]p as the main driver of the response







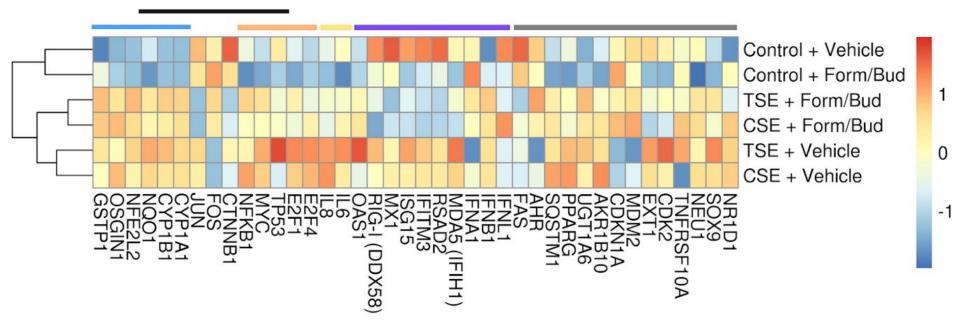


Figure 12

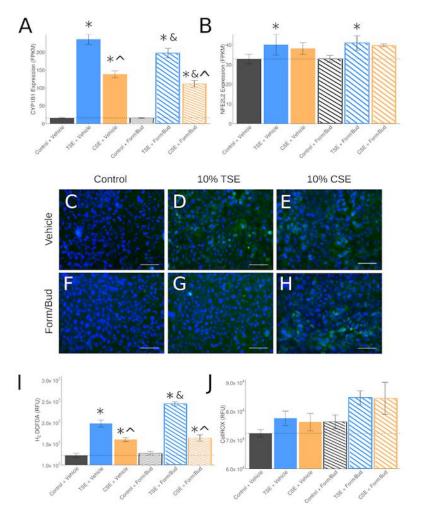
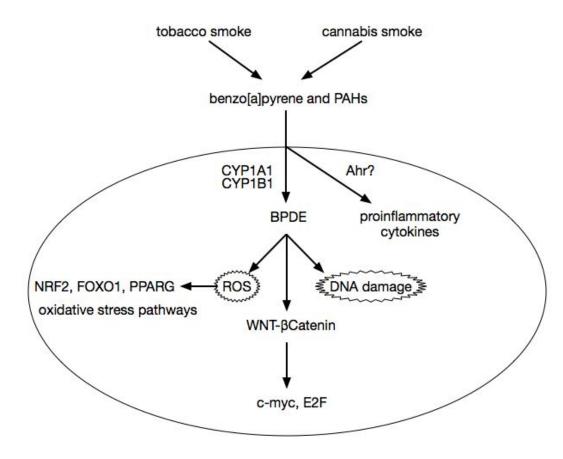
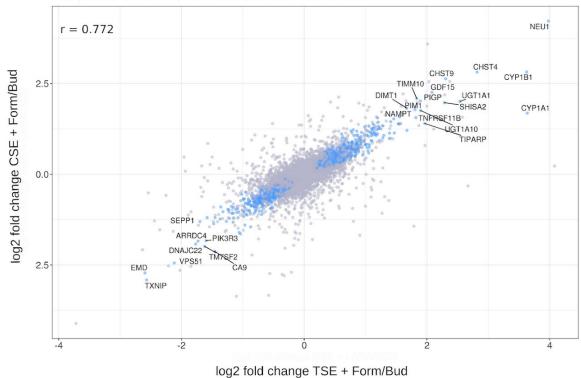


Figure X (Omitted from BioRxiv Preprint)



Supplement Figure 1



Comparison of CSE + LABA/GCS and MSE + LABA/GCS

EXTRA SLIDES/ NOTES

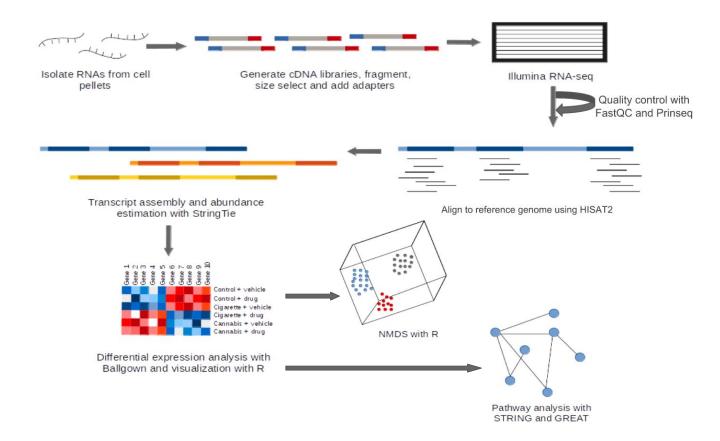


Figure 9 (Sketch)

CSE+MSE (up-regulated gene set)

Oxidative stress

"Cyclin E/CDK2 prevents oxidative stress-mediated Ras-induced senescence by phosphorylating MYC. Involved in G1-S phase DNA damage checkpoint that prevents cells with damaged DNA from initiating mitosis"

Ontologies

GO Biological Process 2018



Cell types

Human Gene Atlas



Pathways

BioCarta 2016

CDK Regulation of DNA Replication_Homo sapiens_h_mcmPathway	
Oxidative Stress Induced Gene Expression Via Nrf2_Homo sapiens_h_arenrf2Pathway	<hr/>
Agrin in Postsynap <mark>t</mark> ic Differentiation_Homo sapiens_h_agrPathway	$\langle \rangle$
Cycling of Ran in nucleocytoplasmic transport_Homo sapiens_h_ranPathway	
Prion Pathway_Homo sapiens_h_prionPathway	

NCI-Nature 2016

ated targets of C-MYC transcriptional activation_Homo sapiens_61d3b115-6196-11e5-8ac5-0660 3 integrin cell surface interactions_Homo sapiens_c2800165-618d-11e5-8ac5-06603eb71303 1 integrin cell surface interactions_Homo sapiens_2/d0bc63-618d-11e5-8ac5-06603eb71303

gevents mediated by Hepatocyte Growth Factor Receptor (c-Met)_Homo sapiens_ac39d2b9-6195-11e5-8 signaling events Homo sapiens 75b04491-618c-11e5-8ac5-06603eb7f303

PPI Hub Proteins

CDK2

Drug Response

RNA-Seq Disease Gene and Drug Signatures from GEO

Erlotinib_11-18_GSE65420_down PB5-1086_8_Erlotinib_11-18_GSE65420_down PB5-1086_11-18_GSE65420_down Panobinostat__IN3_24hr-10nM_GSE56623_down Panobinostat_+5_Axacytdine_JIN3_24hr-10nM_GSE56623_down

Drug Perturbations from GEO down

cetuximab DB00002 human GSE61495 sample 3133 decitabine DB01262 human GSE20077 sample 2539 Curcumin 969516 human GSE16160 sample 3425 decitabine DB01262 human GSE20477 sample 2540 imatinib DB00191 human GSE24493 sample 2764

Transcription

ChEA 2016

E2F7_22180533_ChIP-Seq_HELA_Human EKLF 21900194 ChIP-Seq_ERYTHROCYTE Mouse

EKLF_21900194_ChIP-Seq_ERYTHROCYTE_Mot

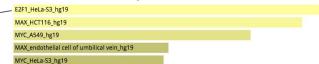
MYC_18555785_ChIP-Seq_MESCs_Mouse AR_21909140_ChIP-Seq_LNCAP_Human

NUCKS1_24931609_ChIP-Seq_HEPATOCYTES_Mouse

ENCODE and ChEA Consensus TFs from ChIP-X

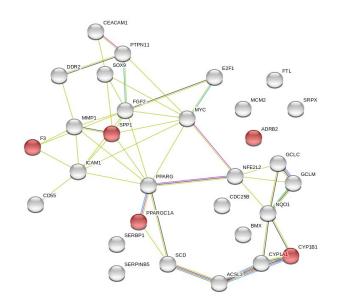


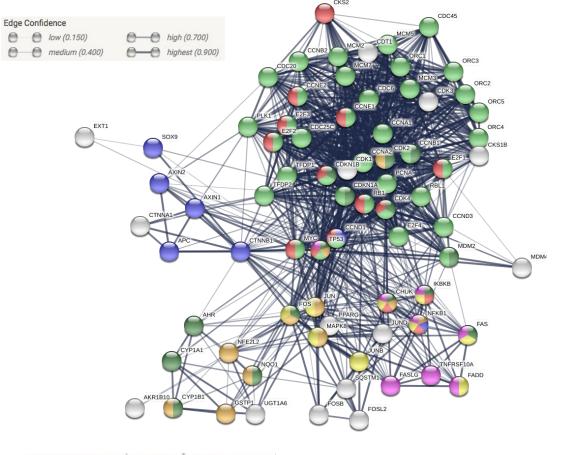
ENCODE TF ChIP-seq 2015



Cyclin E/CDK2 phosphorylates retinoblastoma protein

Figure 10?





	GO:0009636	response to toxic substance	
0	GO:0006979	response to oxidative stress	
0	GO:0030111	regulation of Wnt signaling pathway	
	04110	Cell cycle	

05222	Small cell lung cancer	
04668	TNF signaling pathway	
04210	Apoptosis	