

# The joint graphical lasso for inverse covariance estimation across multiple classes.

**Supplementary Materials: complete list of gene expression subnetworks from analysis of lung cancer dataset.**

Patrick Danaher

*Department of Biostatistics, University of Washington, USA*

Pei Wang †

*Public Health Sciences Division, Fred Hutchinson Cancer Research Center, USA*

Daniela M. Witten

*Department of Biostatistics, University of Washington, USA*

The elements of the subnetworks uncovered in Figure 3 are as follows. Subnetwork membership is given without regard to subnetwork structure. Each unindented line begins a new subnetwork; each indented line continues a subnetwork. Note that many subnetworks contain multiple probes for the same gene.

## Subnetworks in healthy samples

Membership of genes in healthy subnetworks is listed below.

RPL6,RPS7P11,RPL5  
RPL10A,RPL15  
RHOA,TM9SF2  
PRKAR1A,CALM3  
EEF1G,EEF1G  
NACA,EEF1A1,EEF1A1,BTF3,NACA,RPL3,BTF3  
GNAS,GNAS,GNAS,GNAS,GNAS,CD9  
LDHB,LDHB  
RPLP0,RPLP0  
TUBA1B,TUBA1C,TUBA1B,TUBA1B,TUBA1C,TUBA1B,TUBA1B  
RPL4,RPL4  
PPIA,PPIA,PPIA,PPIA,PPIA  
COPB1,PSMA3,MMADHC  
ACTG1,ACTG1,ACTG1,ACTG1,ACTG1,ACTG1  
ANXA2,ANXA2,ANXA2  
PSMA1,PSMA1  
EIF1,EIF1,EIF1  
CYP1B1,CYP1B1

†Corresponding Author. Email: [pwang@fhcrc.org](mailto:pwang@fhcrc.org). Address: 1100 Fairview Avenue N., M2-B230, Seattle WA 98101.



HINT1,HNRNPA2B1,HNRNPK,HSP90AB1,HSP90AB1,  
HSPA8,ITM2B,LOC100133775,MARCKS,MATR3,  
MDH1,MMADHC,MYL12B,NACA,NACA,NAP1L1,  
NAP1L1,NARS,NPTN,PPIA,PPIA,PPIA,PPIA,  
PPIA,PPP2CB,PSMA2,PSMA3,PSMD6,PTGES3,  
RAB11A,RAB1A,RAN,RHOA,RPL10A,RPL14P1,  
RPL17,RPL17,RPL17,RPL3,RPL30,RPL31,RPL5,  
RPL6,RPLP0P6,RPS23,RPS24,RPS7P11,RPS8,  
SCP2,SEPT2,SF3B1,SF3B1,SPCS1,SRP14,  
SRP9L1,SSBP1,TM9SF2,TMCO1,TMED10,TMEM14B,  
TOMM20,TPT1,TSG101,UBXN4,UGP2,YWHAZ  
RPL15,RPL15,ACTR10,SET  
RPL24,RPL35A  
PRKAR1A,CALM3  
EEF1G,EEF1G  
DAZAP2,TCP1  
EIF4A2,RTN4  
LDHB,LDHB  
RPLP0,RPLP0,RPLP0  
BCLAF1,SERBP1  
TUBA1B,TUBA1C,TUBA1B,TUBA1B,TUBA1C,TUBA1B,TUBA1B  
RPL4,RPL4  
NQO1,NQO1  
ACTG1,ACTG1,ACTG1,ACTG1,ACTG1,ACTG1  
ANXA2,ANXA2P2,ANXA2,ANXA2  
PSMA1,PSMA1  
TWF1,CHMP5  
EIF1,EIF1,EIF1  
PCMI,TSPAN6,CALM3,HIPK1,AZIN1,C16orf80  
DBI,DBI,DBI  
CYP1B1,CYP1B1  
RPS2,RPS2  
HBA2,HBA2,HBA2,HBA2,HBA2  
AKR1C1,AKR1C2  
HBG2,HBG2,HBG2  
UGT1A1,UGT1A1  
NPIP,LOC339047,LOC100132540  
LOC100133811,HLA-DRB1,LOC100133811,LOC100133811  
HLA-F,HLA-F  
DBT,PDE4C,NM\_017618,ZNF160,PGF,FBXW12,AK023783,AK021514,  
AF222691,HAUS2,POLR1B,SLC35E1  
TPSB2,TPSB2  
SLC27A2,SLC27A2  
ZC3H7B,AK022213,FAM128B  
OPHN1,RECK  
PFDN5,PFDN5  
DDR1,DDR1

4 *Danaher et al.*

MSMB,MSMB  
ATP5L,ATP5L,ATP5L  
NM\_017932,AI683552  
CYB5A,CYB5A  
PABPC3,PABPC1,LOC652607  
HLA-B,HLA-G,HLA-G,HLA-B  
LOC440926,LOC440926,LOC440926  
RPL22,RPL22  
HLA-C,HLA-C  
HLA-DRA,HLA-DRA  
TUBB2C,TUBB3  
HBB,HBB,HBB  
IGL@,IGL@  
TUSC3,TUSC3  
SERPINB3,SERPINB4  
CD24,CD24  
FN1,FN1,FN1,FN1  
RPL13A,RPL13A  
ACTG1,ACTG1