

**Table S3.** List of enriched pathways in circulating mononuclear cells of subjects during partial sleep restriction. False Discovery Rate (FDR) cutoff of < 0.15 was used to designate significance\*.

<b>Gene Sets Up-regulated in Acute Sleep Restriction</b>	<b>Number of member genes</b>	<b>FDR</b>
BIOCARTA_HUMAN_CMV_PATHWAY	16	0.004
PID_IL6_7PATHWAY	46	0.01
BIOCARTA_TOLL_PATHWAY	36	0.04
PID_BCR_5PATHWAY	65	0.055
REACTOME_MRNA_3_END_PROCESSING	31	0.107
REACTOME_TOLL_RECEPTOR_CASCADES	112	0.115
REACTOME_INFLAMMASOMES	15	0.115
REACTOME_CLEAVAGE_OF_GROWING_TRANSCRIPT	40	0.118
PID_MYC_PATHWAY	25	0.119
REACTOME_IL_6_SIGNALING	10	0.121
BIOCARTA_IL3_PATHWAY	15	0.126
BIOCARTA_IL6_PATHWAY	22	0.127
BIOCARTA_BLYMPHOCYTE_PATHWAY	11	0.127
BIOCARTA_GLEEVEC_PATHWAY	23	0.129
BIOCARTA_VIP_PATHWAY	24	0.13
REACTOME_SIGNAL_REGULATORY_PROTEIN_SIRP_FAMILY_INTERACTIONS	12	0.133
BIOCARTA_PPARA_PATHWAY	56	0.134
REACTOME_TRAF6_MEDIATED_INDUCTION_OF_TAK1_COMPLEX	13	0.139
REACTOME_INTERFERON_ALPHA_BETA_SIGNALING	62	0.142
<b>Gene Sets Down-regulated in Acute Sleep Restriction</b>	<b>Number of member genes</b>	<b>FDR</b>
KEGG_GRAFT_VERSUS_HOST_DISEASE	37	0.084
KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	81	0.099
KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	130	0.104

\*Microarray data from Aho V, Ollila HM, Rantanen V, et al. PLoS One 2013;8:e77184.