Gene Expression					
Summary Category	**Day**	**Direction in OA Treatment**	**Name**	**Delta Rank**	**P (adj)**
BP	9	Down regulated	signal transduction	-192	0.0058
BP	9	Up regulated	biosynthetic process	235	0.0058
BP	9	Up regulated	**cellular nitrogen compound metabolic process**	164	0.0315
BP	9	Down regulated	G protein-coupled receptor signaling pathway	-227	0.0315
BP	9	Up regulated	**DNA metabolic process**	336	0.0334
BP	80	Down regulated	macromolecule modification	-374	<0.0001
BP	80	Down regulated	dephosphorylation	-523	<0.0001
BP	80	Down regulated	phosphorus metabolic process	-288	<0.0001
BP	80	Up regulated	**DNA metabolic process**	421	0.0008
BP	80	Down regulated	protein metabolic process	-200	0.0012
BP	80	Up regulated	**cellular nitrogen compound metabolic process**	178	0.0054
BP	80	Up regulated	DNA recombination	532	0.0211
BP	80	Up regulated	glutamine family amino acid metabolic process	535	0.0281
BP	80	Up regulated	glutamate biosynthetic process	1676	0.0443
BP	80	Up regulated	dicarboxylic acid biosynthetic process	1237	0.0443
BP	80	Up regulated	macromolecule biosynthetic process	263	0.0474
CC	9	Down regulated	**transcription factor complex**	-147	0.0170
CC	9	Up regulated	ribosome	169	0.0431
CC	9	Up regulated	intracellular non-membrane-bounded organelle	139	0.0454
CC	80	Down regulated	**transcription factor complex**	-159	0.0045
CC	80	Down regulated	protein-containing complex	-105	0.0154
MF	80	Up regulated	DNA binding	352	0.0245
MF	80	Up regulated	RNA-DNA hybrid ribonuclease activity	1320	0.0245
MF	80	Up regulated	oxidoreductase activity	219	0.0245
MF	80	Up regulated	oxidoreductase activity *	321	0.0245
MF	80	Up regulated	double-stranded DNA binding	905	0.0487
DNA Methylation					
BP	80	Hypomethylated	cellular modified amino acid biosynthetic process	-4437	0.0333
CC	9	Hypomethylated	glutamyl-tRNA(Gln) amidotransferase complex	-8528	0.0179