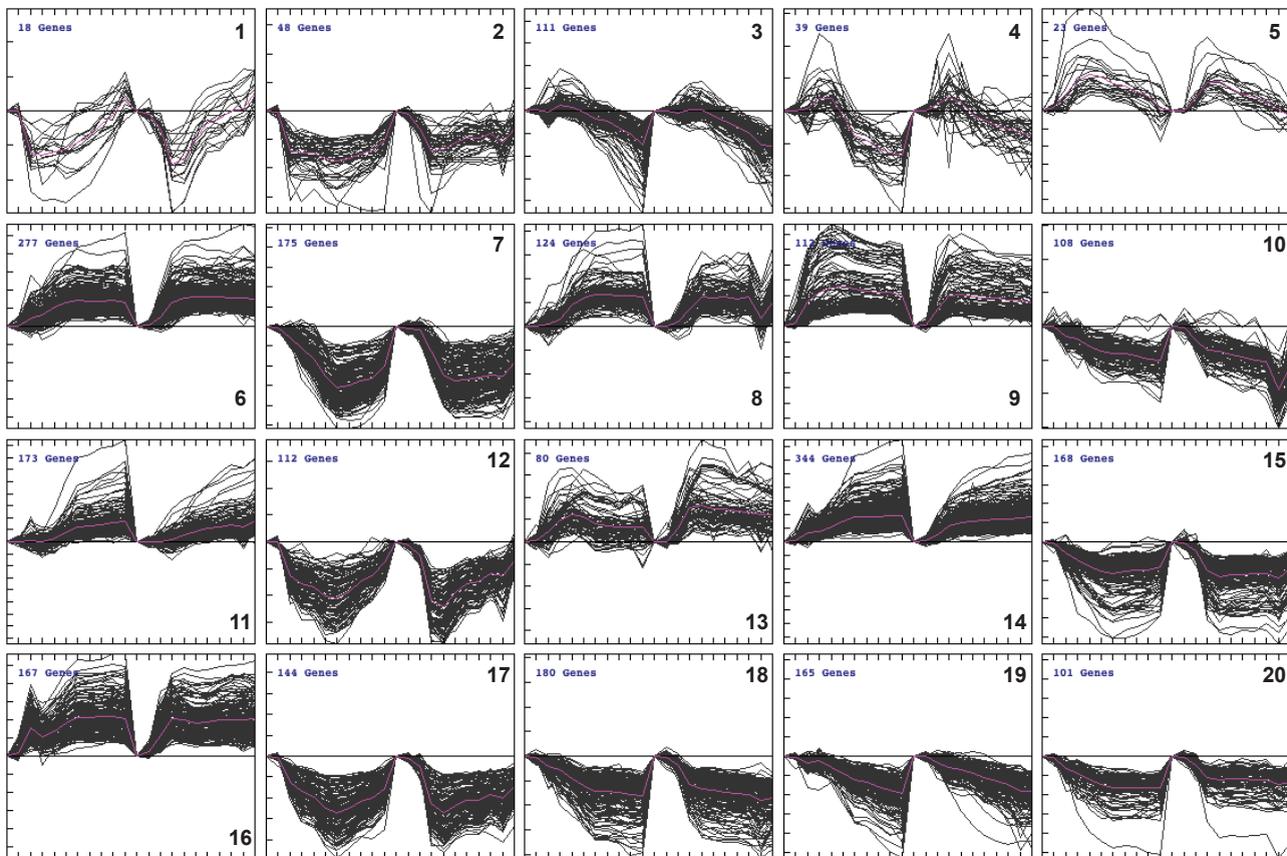


A.**B.****Cluster 3**

Cell cycle; S phase; Cell wall organization; M phase; Interphase; Cytokinesis. TF binding sites: Ndd1, Fkh1, Fkh2, Mbp, Tec1, Swi5, Swi4, Swi6, Ste1, Ash1

Cluster 4

Nucleosome assembly; Chromatin assembly; Histidine biosynthesis; Rho signal transduction; Methionine biosynthesis; Histone methylation; Establishment of cellular polarity. TF binding sites: Swi4, Swi6, Gcn4

Cluster 5

Pheromone response; Translational elongation; Serine family amino acid biosynthesis; Sulfur metabolism. TF binding sites: Ste12, Dig1

Cluster 6

Response to stress; Response to pH; Response to heat; Fatty acid metabolism; Regulation of Ras GTPase activity; Response to toxin; Autophagy.

Cluster 9

Sulfur amino acid metabolism; Methionine metabolism; Aspartate family metabolism; Serine family metabolism; Cysteine metabolism; Response to hydrogen peroxide; Response to cadmium; Oxidation-reduction; Response to oxidative stress; Autophagy. TF binding sites: Fkh1, Gcn4, Cbf1, Met31, Met32

Cluster 10

DNA packaging; Chromosome condensation; DNA replication; Mitochondrial translation; Chromatin modification; Histone methylation.

Cluster 11

Protein folding; Generation of precursor metabolites and energy (TCA cycle); Glucose metabolism; Oxidation-reduction; ATP synthesis-coupled electron transport; Iron-sulfur cluster assembly; Electron transport chain. TF binding sites: Msn2, Msn4, Hap4.

Cluster 13

Amino acid biosynthesis; Pheromone response; GPCR signaling. TF binding sites: Ste12, Gcn4.

Cluster 14

Autophagy; Response to heat; Mitochondrion degradation; Negative regulation of gluconeogenesis; Sporulation; Lactate metabolism.

Cluster 16

Response to heat; Metabolism of energy reserves; Glycogen biosynthesis; Glucose metabolism; Generation of precursor metabolites and energy; Trehalose metabolism; Oxidation-reduction; Autophagy; Phosphate metabolism; Response to oxidative stress. TF binding sites: Msn2, Msn4.

Cluster 19

Cell cycle; Mitosis; DNA replication; Chromosome segregation; Cell polarity; DNA repair. TF binding sites: Mbp1, Swi4, Swi6, Stb1.

Cluster 20

Amino acid catabolism; Divalent metal ion transport; Electron transport (cytochrome c to oxygen); Mitosis; DNA synthesis during DNA repair; fermentation.