



**Figure 2. Cyclic trends in Lake Mendota.** Cyclic trends with a 12 hour phase were detected in the top 20,000 most expressed genes in each lake using RAIN. Here, we present an example of these cyclic trends in genes related to photosynthesis in Lake Mendota. The percentage of genes in each functional category with significant cyclic trends is reported in Tables 2-4. Read counts were z-score normalized for the purpose of visualization. Each gene trend is color-coded by its time of maximal expression in the first 24 hour period.