Plasma Metabolite Sets Enrichment Overview **Metabolite Sets Enrichment Overview** (Pathway Associated Metabolite Sets) (Location Based Metabolite Sets) PROTEIN BIOSYNTHESIS SPERM GALACTOSE METABOLISM NEURON BIOTIN METABOLISM GLUCOSE-ALANINE CYCLE P value NERVE CELLS P value 2e-02 2e-01 PHENYLALANINE AND TYROSINE METABOLISM **EPIDERMIS** LYSINE DEGRADATION BRAIN STARCH AND SUCROSE METABOLISM 2e-01 6e-01 FRUCTOSE AND MANNOSE DEGRADATION SPLEEN PHOSPHOLIPID BIOSYNTHESIS MITOCHONDRIA INSULIN SIGNALLING 4e-01 1e+00 GLYCOLYSIS PLATELET METHIONINE METABOLISM INTESTINE GLUCONEOGENESIS LIVER TRYPTOPHAN METABOLISM 10 15 Fold Enrichment Fold Enrichment **Enrichment Overview (top 50)** (Disease-Associated Metabolite Sets, Blood) FRUCTOSE INTOLERANCE, HEREDITARY MAPLE SYRUP URINE DISEASE PYRUVATE CARBOXYLASE DEFICIENCY REFRACTORY LOCALIZATION-RELATED EPILEPSY DIABETES, FETAL EFFECTS FROM MATERNAL |... HYPERPHENYLALANIEMA DUE TO GUANOSINE... 2-HYDROXYGLUTARIC ACIDEMIA (L) 2-KETOGLUTARATE DEHYDROGENASE COMPLEX... BECKWITH-WIEDEMANN SYNDROME... DICARBOYYLIC AMINOACIDURIA.... GLUCOCORTICOID DEFICIENCY, FAMILIAL... GLYCEROL KINASE DEFICIENCY HYPERLYSINEMIA I, FAMILIAL J... P value INFLAMMATORY DISEASES INFLAMMATORY DISEASES KETOTIC HYPOGLYCEMIA NEONATAL HEMOCHROMATOSIS REYE SYNDROME REYE SYNDROME LIKE MANIFESTATIONS 2.4-DIENOYL-COA REDUCTASE DEFICIENCY 3-METHYLGLUTACONIC ACIDURIA (TYPE I) CARNITINE DEFICIENCY, MYOPATHIC CHRONIC PROGRESSIVE EXTERNAL... DENGLIE EFVER 4e-03 PENGUE FEVER FAMILIAL HYPERINSULINEMIA AND... GLYCEROL INTOLERANCE SYNDROM GLYCOGEN SYNTHETASE DEFICIENCY GLYCOGENOSIS, TYPE III. CORI DISEASE... HYPERLYSINEMIA II OR SACCHAROPINURIA MALONYI.-COA DECARBOXYLASE DEFICIENCY PERSISTANT HYPERINSULINEMIC HYPOGLYCEMIA... 3-HYDROXY-3-METHYLGLUTARYI.-COA LYASE... ACTH DEFICIENCY, ISOLATED J ADRENAL... CARNITINE TRANSPORTER DEFECT. PRIMARY... CARNITINE-ACYLCARNITINE TRANSLOCASE... CYSTIC FIBROSIS (CF) GROWTH HORMONE DEFICIENCY HYPERORNITHINEMIA WITH GYRATE ATROPHY (HOGA) METHYLMALONIC ACIDURIA, CBLA TYPE MYOCARDIAL INFARCTION RESPIRATORY CHAIN DEFICIENCES SHORT CHAIN ACYL-COA DEHYDROGENASE... CARNITINE PALMITOYL TRANSFERASE... DIABETES MELLITUS, INSULIN-DEPENDENT FRUCTOSE-1,6-DIPHOSPHATASE DEFICIENCY GLYCOGENOSIS (TYPE IA, IB, IC) |... LONG CHAIN ACYL-COA DEHYDROGENASE... PHOSPHOENOLPYRUVATE CARBOXYKINASE... PHOSPHOENOLPYRUVATE CARBOXYKINASE... TYROSINEMIA I METABOLITES AFFECTED BY EXFERIENT DENGUE FEVER FAMILIAL HYPERINSULINEMIA AND.. 6e-02 1e-01 METABOLITES AFFECTED BY EXERCISE

Supplemental Figure 4. o 10 20 30 40 Fold Enrichment