Overview of Analytic Approach for Pathway Enrichment and Network Analysis in Sarcoidosis

GSEA:
relative enrichment of ~ 1300 canonical pathways between control and sarcoidosis subjects statistically evaluated

Enrichment Map:
GSEA map displays relationships among enriched (up-regulated) pathways in sarcoidosis patients relative to controls

Network Analysis:
Connectivity between gene members of Proteasome, an enriched pathway in sarcoidosis, was determined based on previously published gene product interactions obtained from available resources including Ingenuity and STRING

Proteasome Network

- Oxidative phosphorylation
- Transcription & translation
- Cell cycle & protein degradation
- Cytokine-cytokine receptor interaction
- Adaptive immune system
- Cholesterol synthesis
- Graft vs. host disease
- NK pathway
- T cell signalling
- Enriched pathway in sarcoidosis

Control (N = 12)  |  Sarcoidosis (N = 15)