### Step 1: Identify Genes of Interest

## Team 1 – Identify Known Genes of Interest

- Compiling genes of interest by...
  - Mining harmonizome database
  - Genes associated with chronic illness and viral infection

# Team 2 – Identify Genetic Differences Between Diseases

 Common/Distinct differentially expressed genes from diseased (Strep B, RSV, Sepsis, T1D, HSV1) and control genes via Differential Expression



### Step 2: Pool Genes of Interest

- Determine overlap between Team 1 and Team 2 genes
- Diagnostic Potential: Predict virus from differentially expressed genes



#### Step 3: Report Genes of Interest

- Translate genes of interest into an accessible nomenclature
- Transcribe genetic nomenclature into Electronic Medical Records (EMR)