Candidacy Study Guide:

1. Molecular Biology:
   1. Central Dogma
   2. Types of RNA
   3. Gene anatomy
   4. Transcription Factors
   5. Splicing
   6. SNPs, CNVs
   7. Post transcriptional Modification
2. Computer Science
   1. Clustering algorithms
      1. Kmeans
      2. Mixture Gaussians
      3. ME general algorithm
      4. Hierarchical
      5. Biclustering
      6. Etc…
   2. Information Theory
   3. Norms
   4. Dimensionality reduction
   5. Dynamic Programming
   6. Network Theory
3. Linear Algebra
   1. Terms: Rank, sparse, singular value, eigenvalue/vector,etc…
   2. PCA
   3. ICA
4. Single-Cell RNASeq
   1. Normalizations
   2. RPKM,FPKM,TMP,etc…
   3. UMIs
   4. Technologies
5. Papers:
   1. scLVM