**Literature Informatics: **

* Which proteins are related to Alzheimer’s disease?
* Where/who are the leading centers and scientists for liver transplantation?
* Where is the main research done for dengue and leprosy?
* Who are the Principle Investigators for NIH funded research projects on the study of BCL2 gene in the state of Tennessee?

**Gene-centric Information:**

* Your favorite gene -OR-
* BRCA1 / BAD / brokenheart / superman / primonine-1 / Ken and Barbie
  + How many splice variants have been reported?
  + What is its intron-exon architecture?
  + What are its neighboring genes?
  + What percentage of sequence similarity its human gene shares with its mouse homolog?
  + Find a siRNA sequence which has been reported to be used in gene silencing experiment.
  + What are its upstream regulators?
  + What is its promoter sequence and what transcription factors have been reported to bind to its regulatory region?

**Bioinformatics Resources:**

* Locate database(s) on
  + Natural antisense
  + UTR
  + copy number variation
* Find a suitable protocol for experiments:
  + RNA isolation
  + Real time PCR / methylation PCR /CGH array
  + Multiple sequence alignment / BLAST search