

BCG vaccine effects in DO mice

## Study design

- ▶ Nearly 1000 DO mice
- ▶ Vaccinated and unvaccinated are challenged with Mtb
- ▶ Measured lung CFU, spleen CFU, lung histopathology, and body weight
- ▶ In nearly 100 vaccinated mice, obtained blood samples (pre- and post-vaccination) for RNA seq analysis

# Plans for RNA seq analysis

- ▶ Align reads to individual DO genomes
- ▶ Quantify reads and calculate quantitative traits for QTL mapping
- ▶ Compare and integrate results with CC QTL mapping
  - ▶ Do RNAseq peaks overlap with peaks in CC?
  - ▶ Can we infer allelic series at QTL in DO cohort and detect similar QTL in CC?