What Can We Do Together To Understand DBA?
CULTURE OF DBA CELLS

- **Ficoll gradient**
- **Magnetic labeling of CD34+ cells**
- **Selection of CD34+ cells ~15,000**

Day 0-7
- SCF, TPO, IL-3, IL-6, EPO (0.5U)

Day 8-14
- SCF, TPO, IL-3, IL-6, EPO (3U)
CULTURE OF DBA CELLS

Graphs showing cell numbers over days of culture for different patient groups compared to controls.
DBA CELLS PROLIFERATE SLOWLY
STEROID RESPONSIVENESS IN A DBA PATIENT

[Graph showing cell numbers over days of culture for different conditions: Control, RPL35A patient pre-steroids, and RPL35A patient post-steroids.]
EPIGENETIC REGULATION OF GENE EXPRESSION

Chromatin Accessibility
- closed
- open

Methylation site

DNA Methylation
EPIGENETIC ANALYSIS OF DBA PATIENT CELLS

Goal: To identify genes or pathways that are altered in steroid responsive or remission DBA patient cells

Next Steps:

Establish a baseline of transfusion dependent DBA patients and controls.

Analyze steroid responsive DBA patients.

Analyze DBA patient in remission.

Correlate epigenetic changes with changes in transcriptional profiles.