

Exam I review

- 5-6 questions for exam
- need to understand experiments, how results are interpreted

Assays for protein-DNA interactions, protein-protein interactions

- strengths and weaknesses
- which are *in vitro* vs *in vivo*
- throughput

Blots

- southern
- northern
- western

ChIP

- PCR to confirm
- ChIP-chip
- ChIP-seq
- CoIP, pulldown

λ phage infection

lysis vs lysogeny

σ factor interactions with DNA

- T_{-12} interacts with W dyad (no specificity); R237, K241
- A_{-11} interacts with hydrophobic pocket in σ factor
- $T_{-10}A_{-9}A_{-8}$ stack interacts with σ factor through backbone interactions
- T_{-7} interacts with hydrophilic pocket in σ factor