

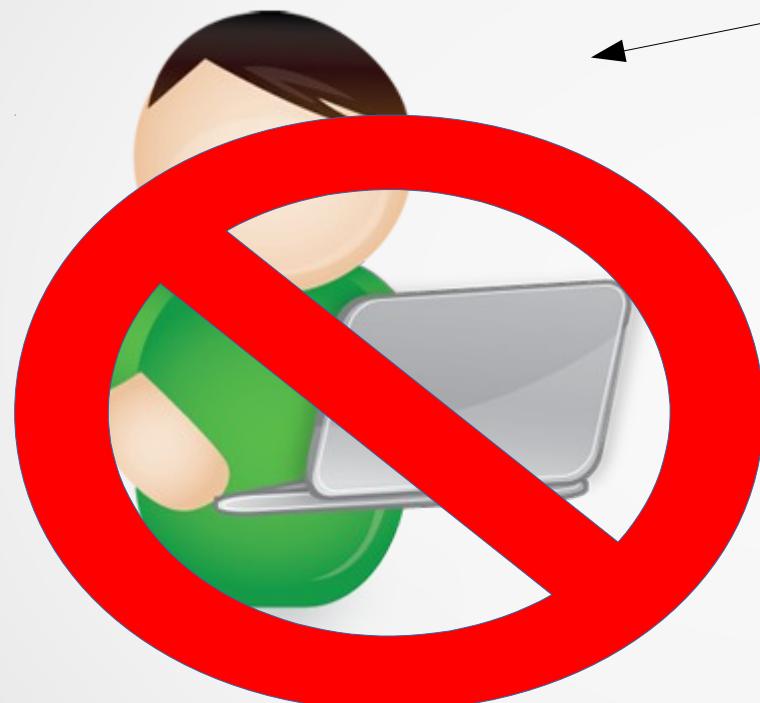
NonCoding RNAs and Ebola

Nelly F. Mostajo B.

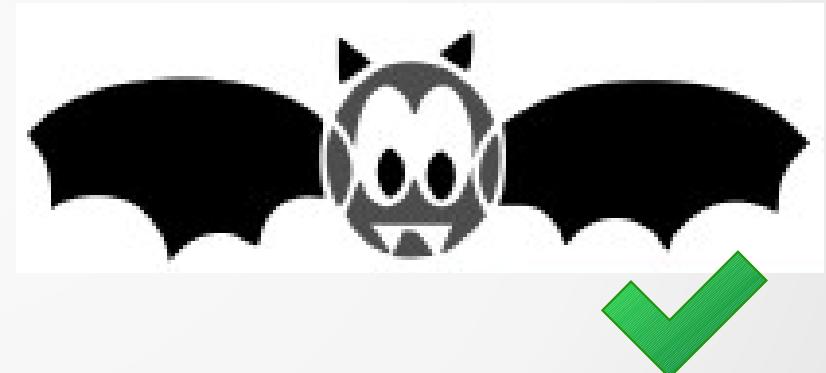
Faculty of Mathematics and Computer Science
RNA Bioinformatics and High Throughput Analysis
Friedrich-Schiller University Jena

TBI-Winter Seminar 2015

Background

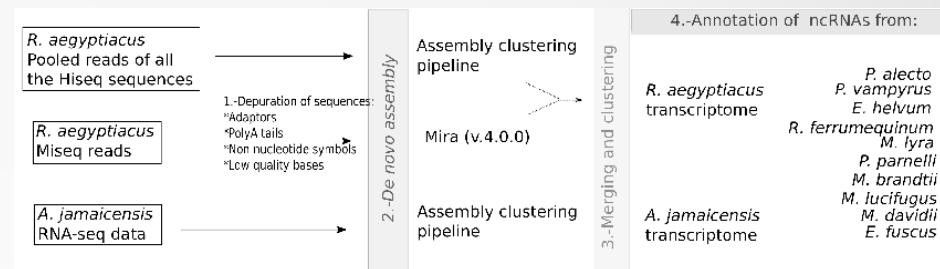
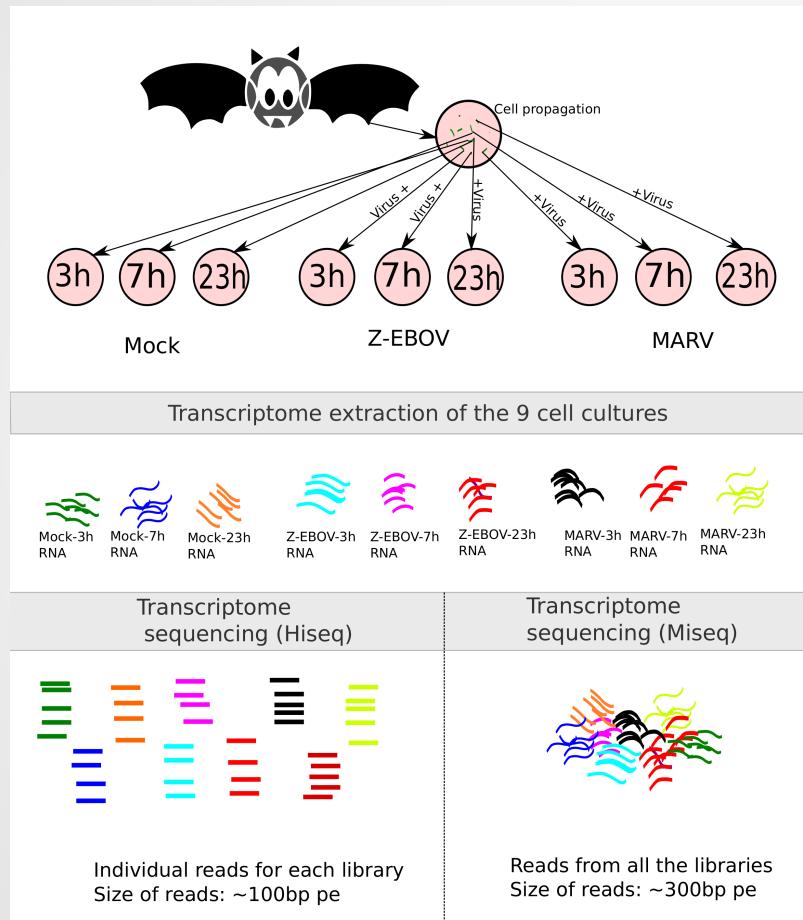


Zaire ebolavirus (Z-Ebov)



NcRNAs??... Do they play a role in infection?

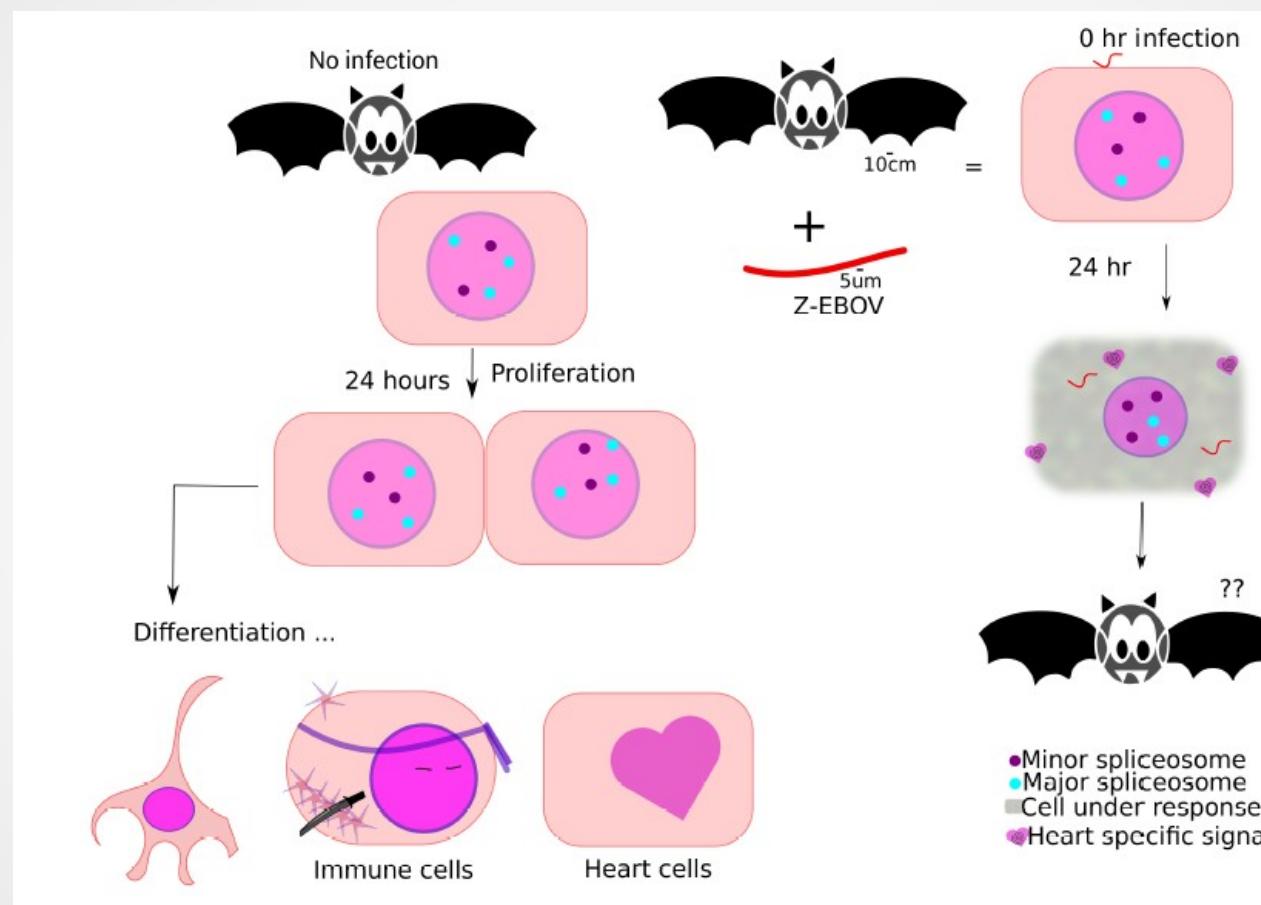
Master thesis overview



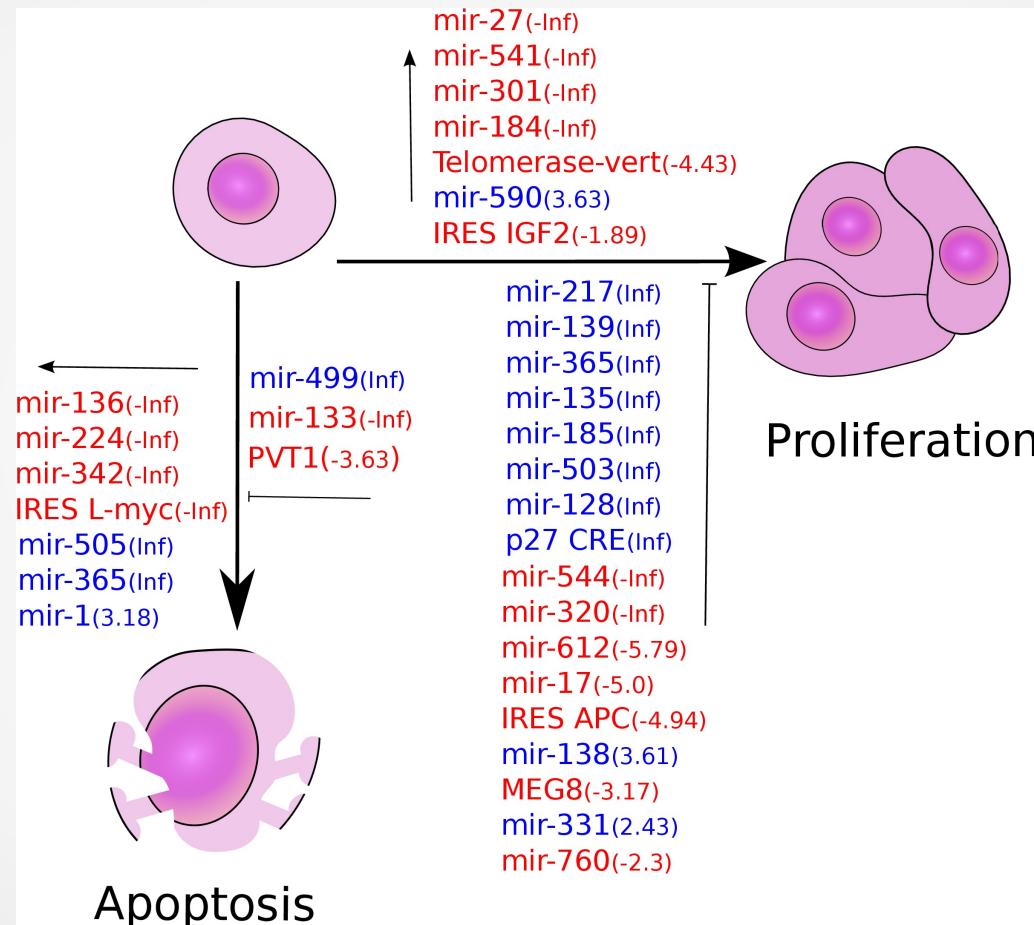
Differential Expression Analysis:

- TopHat
- Cufflinks
- FPKM
- CyberT

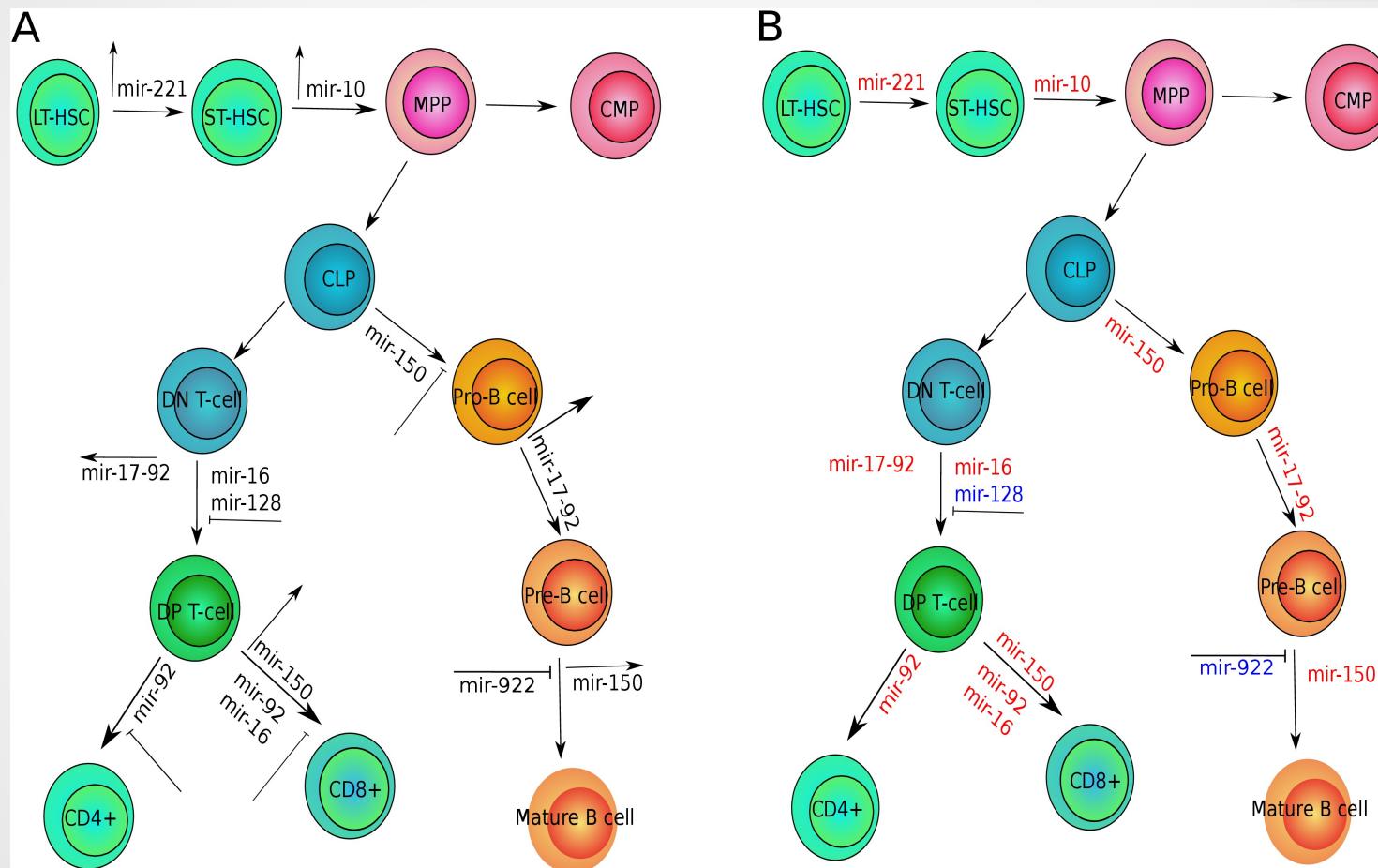
Results



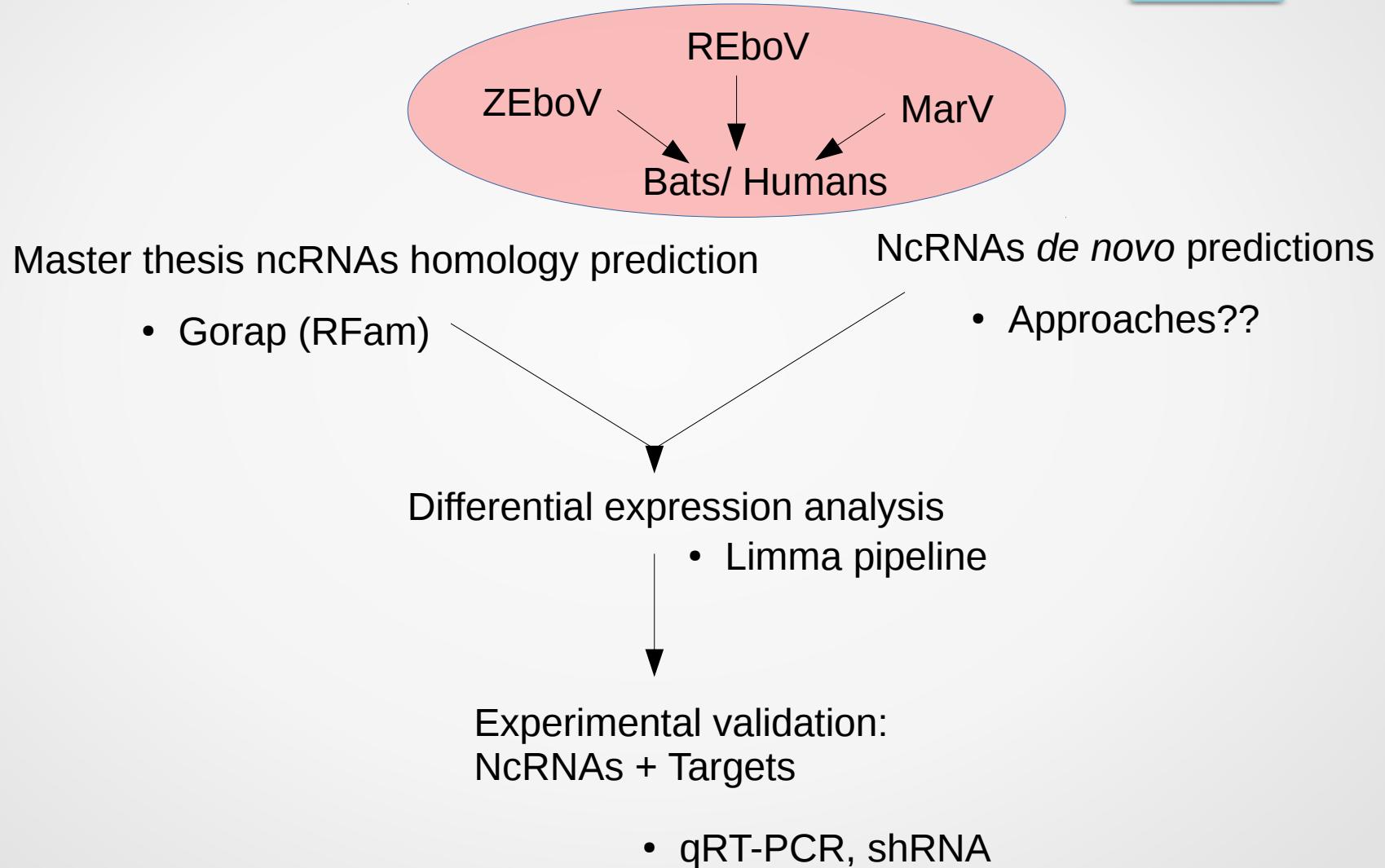
Results → ncRNAs and cell proliferation



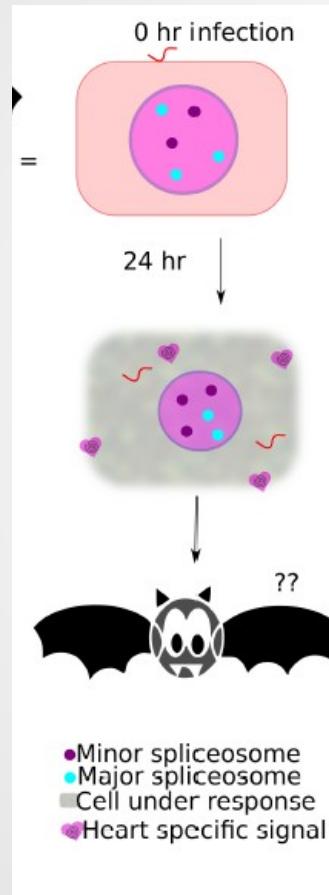
Results → miRNAs and immune response



PhD plan



Expected results



+ ZEBOV

B-cell production

Proliferation

Heart specific signals

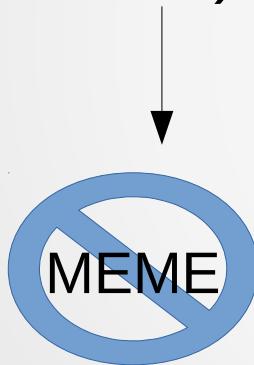
...Pathways
which cause
pathogenesis
being decipher

↑ ↓ ...more

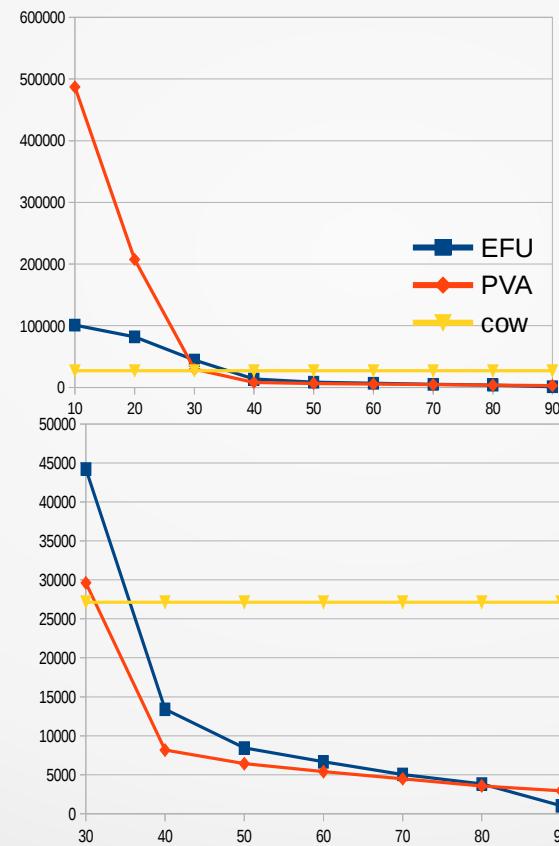
... Status

- Pol III

TATA box (MRP,
Vault, 7SK,
U6atac)??



- NonCode



- RNAz

→ Multiple genome alignment:
NcDNAAlign (not over)
~2Gb