#### Coalescent inference of HIV transmission history

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T-6: Theoretical Biology and Biophysics
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20 July 2022



### Why this project?

Wowie!

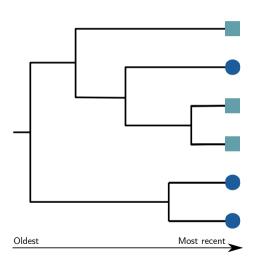
- \* Prevalence of HIV
- \* Supplementing existing tracing methods
  - Interviews
  - Contact tracing
- \* Finding signal in genome sequences

This text sure

does exist...

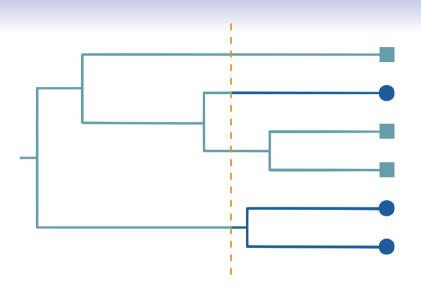


### Inferring information from a tree

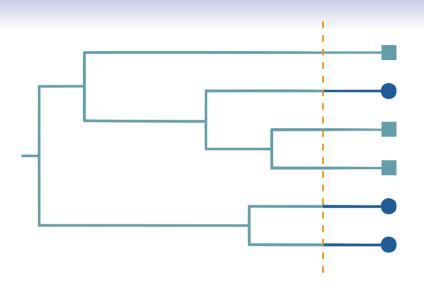


- \* Tips represent individual viral sequences
- \* Shows the evolutionary distance between individuals
- \* What can we infer about a single transmission time?

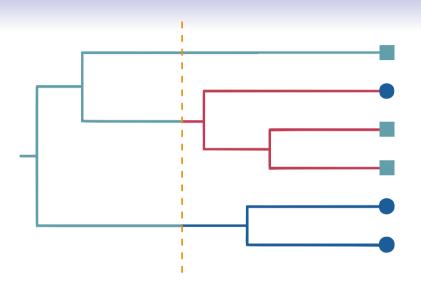






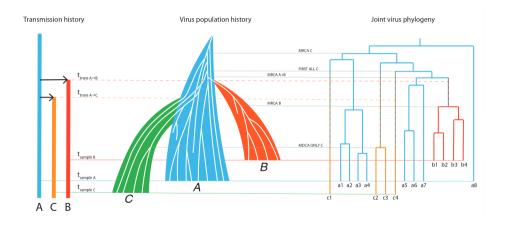








# Linear population growth (IDK where this should go)





# **Coalescent modeling**

#### Main findings:

- \* First
- \* Second



# **Coalescent modeling**

Need a good example of text on here...



### Predictions on a changing population

This is where I plan to put my stuff about expanding everything up to a linear model, and how it should allow us to make inferences based on how the times are changing.



## **Results**

What I did...



## **Conclusion**

Parting thoughts...

