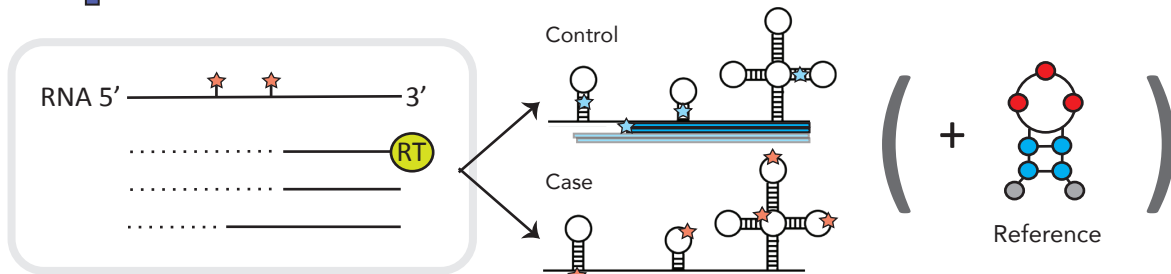


### Input

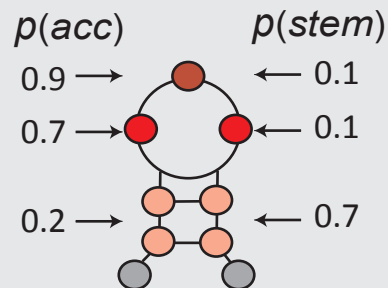
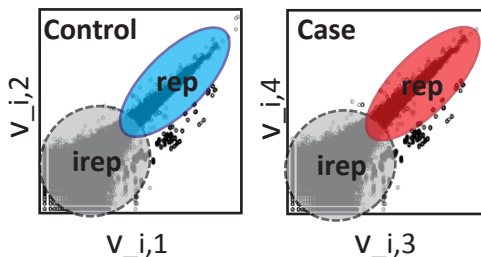


### IDR+HMM



### Output

- 3 latent classes  $h$
1. *accessible* case rep x cont irep
  2. *stem* case irep x cont rep
  3. *unmappable* case irep x cont irep



$$Q(\theta|\theta') = \sum_{h \in H} P(h|\theta, \theta') \log \left( P(h_0|\theta) \prod_{i=0}^{L-1} \frac{P(h_{i+1}|h_i, \theta)}{\text{Transition}} \prod_{i=1}^L \frac{P(v_i|h_i, \theta)}{\text{Emission}} \right)$$

+ Correlation strength  $\rho$   
+ Ratio of true signal  $q$