

$$P(\text{genetic sequences} \mid \text{genealogy} \text{ demographic model} \text{ substitution model} \text{ molecular clock model}) = \frac{P(\text{genealogy} \mid \text{genetic sequences} \text{ demographic model} \text{ substitution model} \text{ molecular clock model}) P(\text{genetic sequences} \mid \text{substitution model}) P(\text{demographic model}) P(\text{substitution model}) P(\text{molecular clock model})}{P(\text{genealogy})}$$

Tree prior Prior information


genetic
sequences


genealogy


demographic
model


substitution
model


molecular clock
model