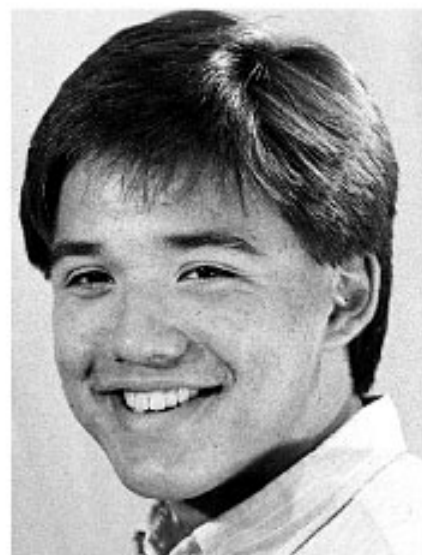
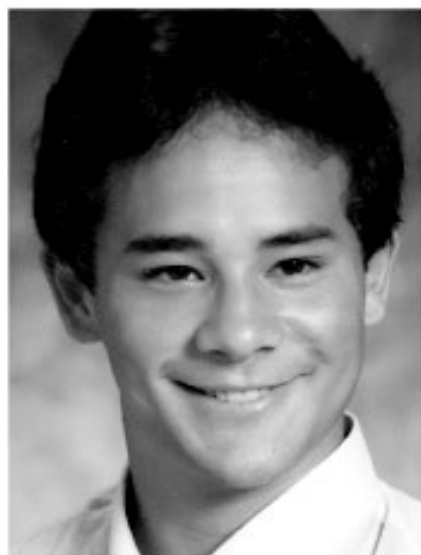


Molecular Evidence



Couple 1

Couple 2



**Who is more
closely
related?**

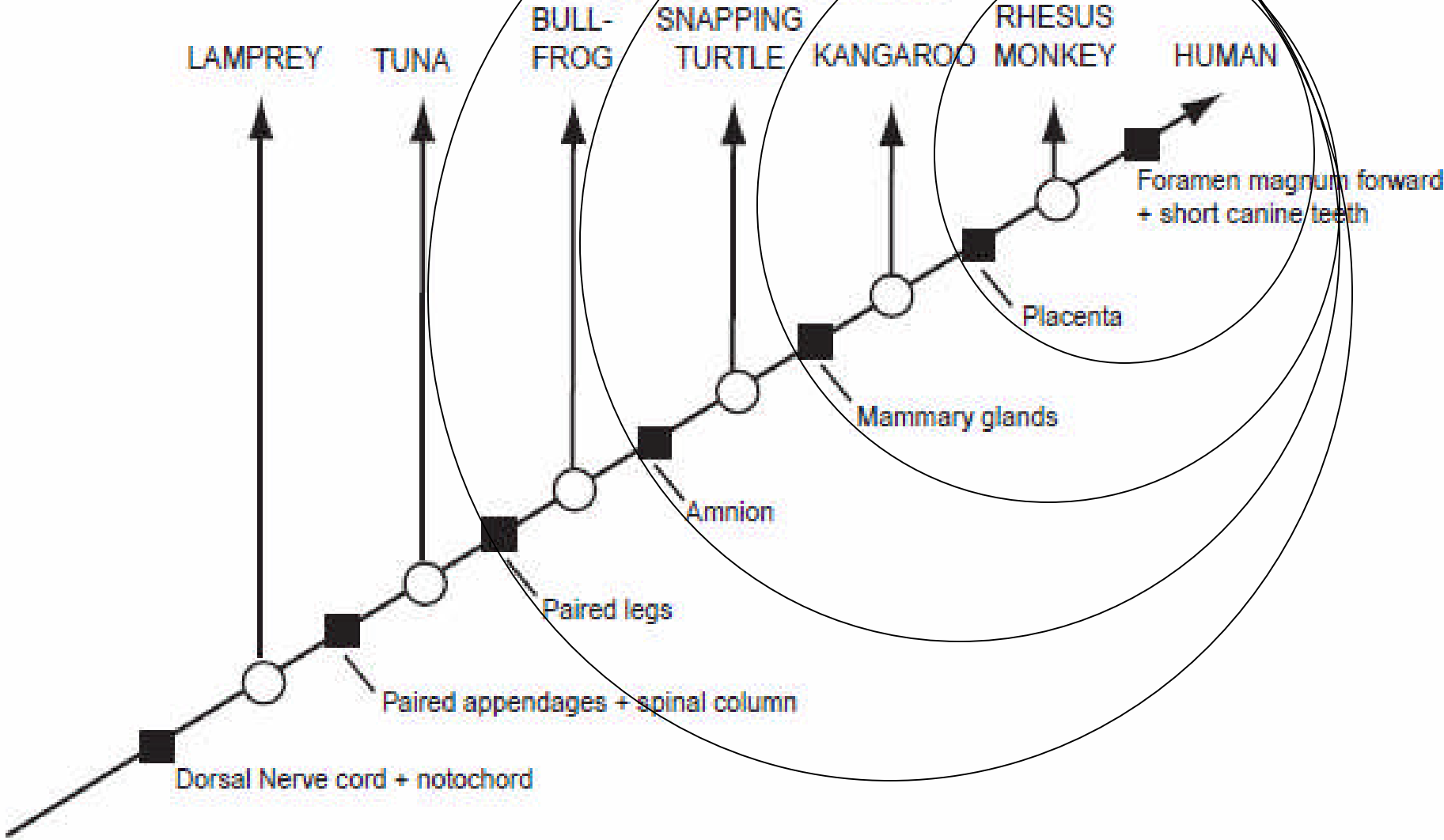


Traits/Characteristics

Traits	Shark	Whale	Mouse
Skeleton	Cartilage	Bone	Bone
Hair/Fur?	None	Yes	Yes
Milk?	No	Yes	Yes
Birth	Eggs	Live young	Live young
Breathing	Gills	Lungs	Lungs

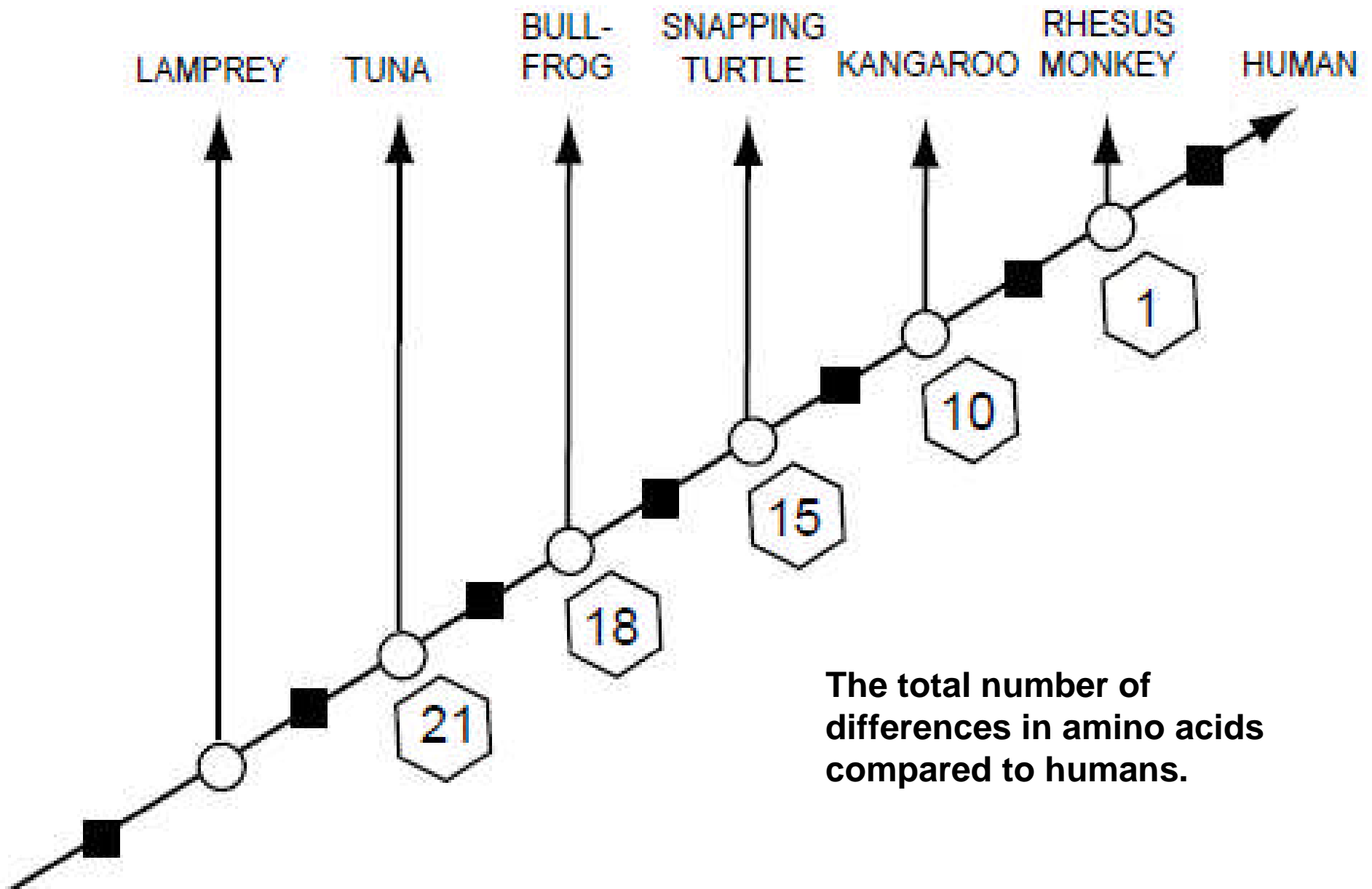
Family Tree

CLADOGRAM



Molecular Evidence

- **Hypothesis:** If all animals descended from a common ancestor, we would expect to find that closely related animals are more similar at the genetic level.



The total number of differences in amino acids compared to humans.

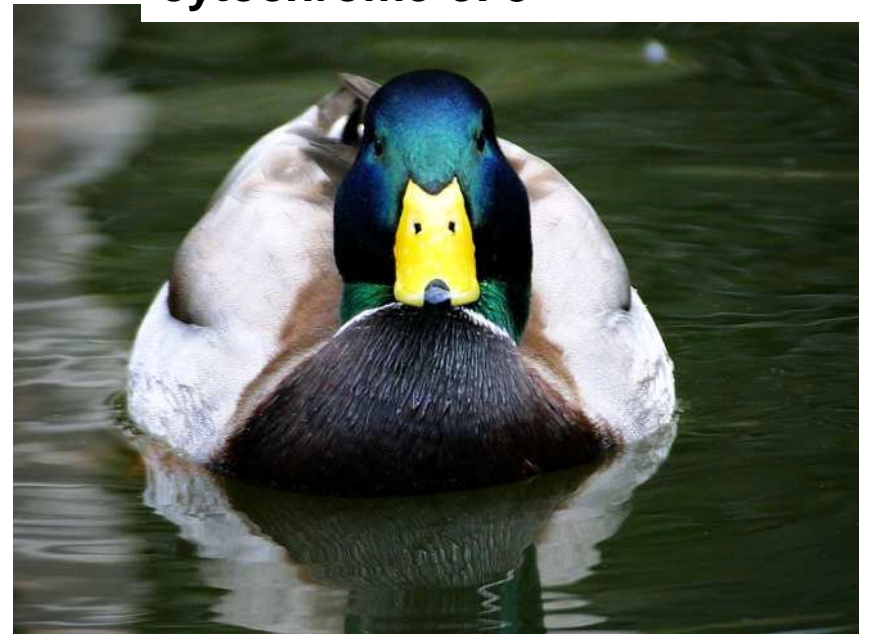
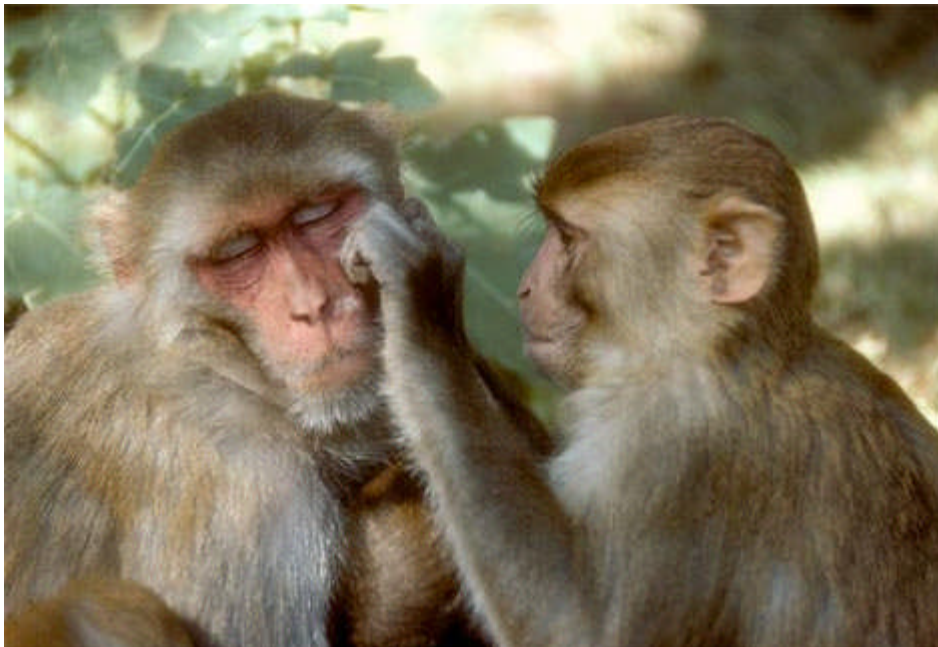


Who is more closely related?



Difference in amino acids for cytochrome-c: 1

Difference in amino acids for cytochrome-c: 3



Traits/Characteristics

Duck	Chicken	Turkey
Downy feathers	Normal feathers	Normal feathers
Webbed feet	Normal feet	Normal feet
Rounded beak	Pointed beak	Pointed beak