

# Paper review: Evidence of Positive Selection in Mitochondrial Complexes I and V of the African Elephant\*

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\* - <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0092587>

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# Outline

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- Introduction to evolutionary biology

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- Methods of research

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- Introduction to evolutionary biology
- Methods of research
- Summary

# Paper

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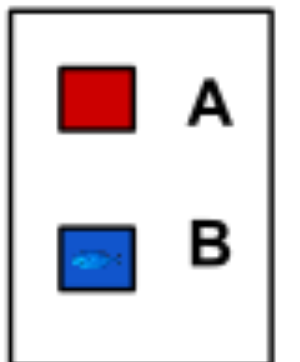
## Evidence of Positive Selection in Mitochondrial Complexes I and V of the African Elephant

**Tabitha M. Finch<sup>1\*</sup>, Nan Zhao<sup>2</sup>, Dmitry Korkin<sup>3</sup>, Katy H. Frederick<sup>1</sup>, Lori S. Eggert<sup>1\*</sup>**

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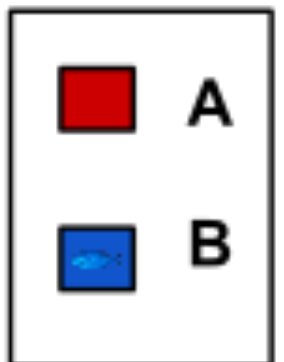
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# Types of genetic selection



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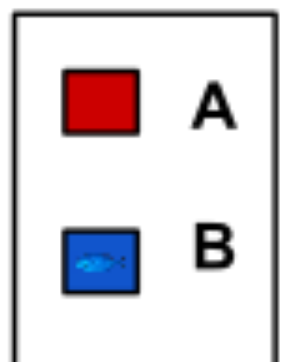
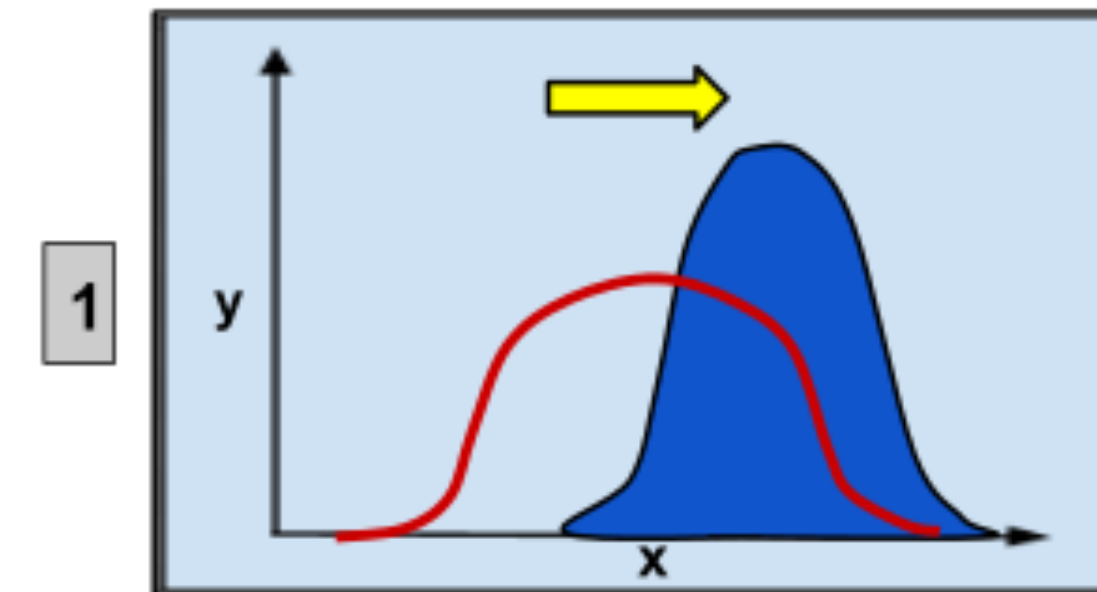
- Directional selection





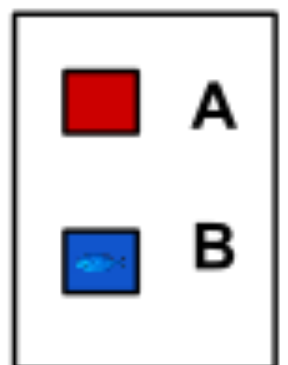
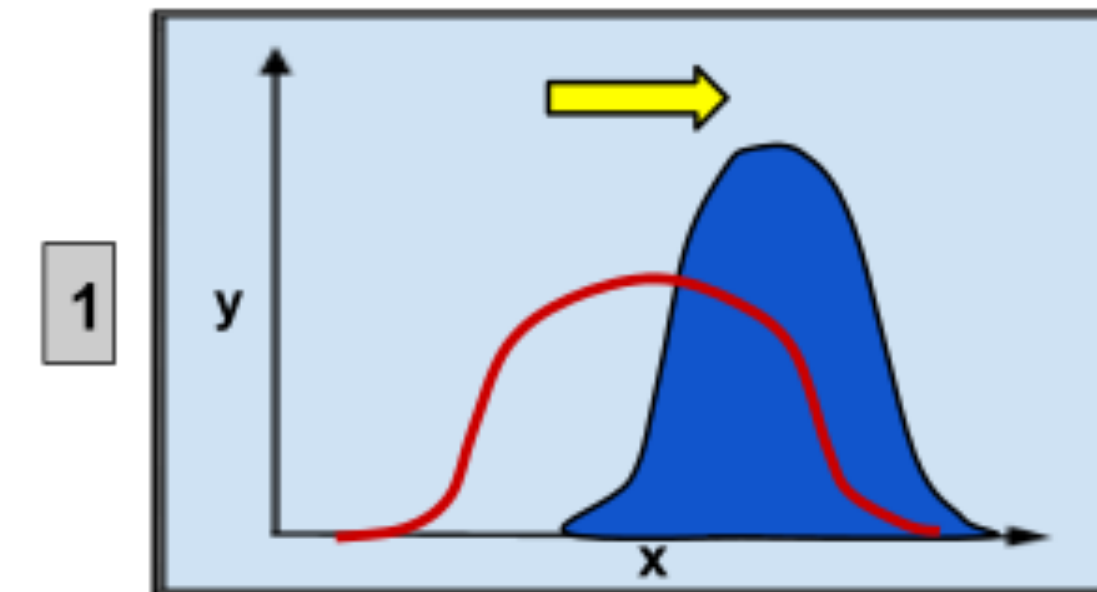
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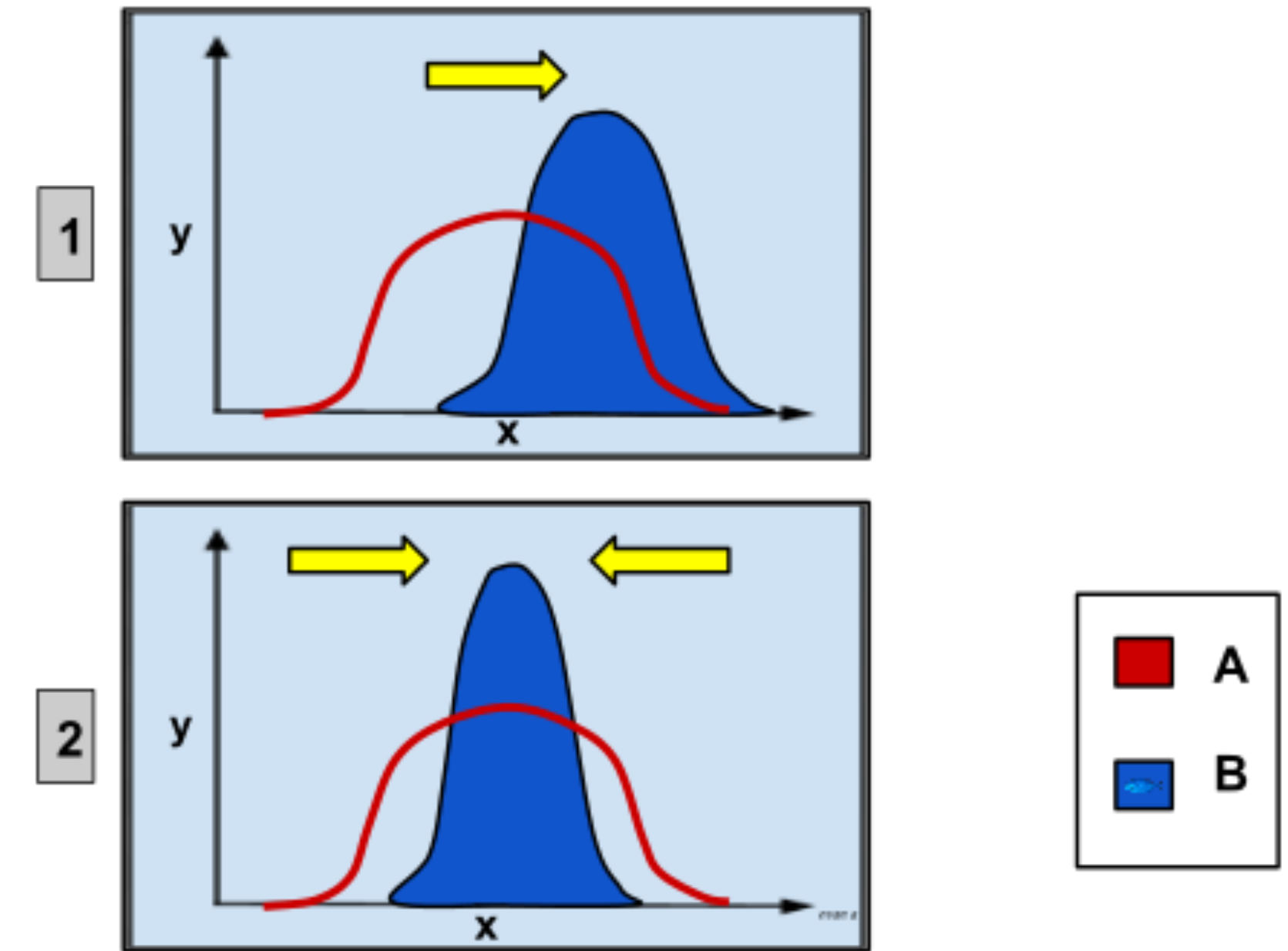
# Types of genetic selection

- Directional selection
- Stabilizing selection



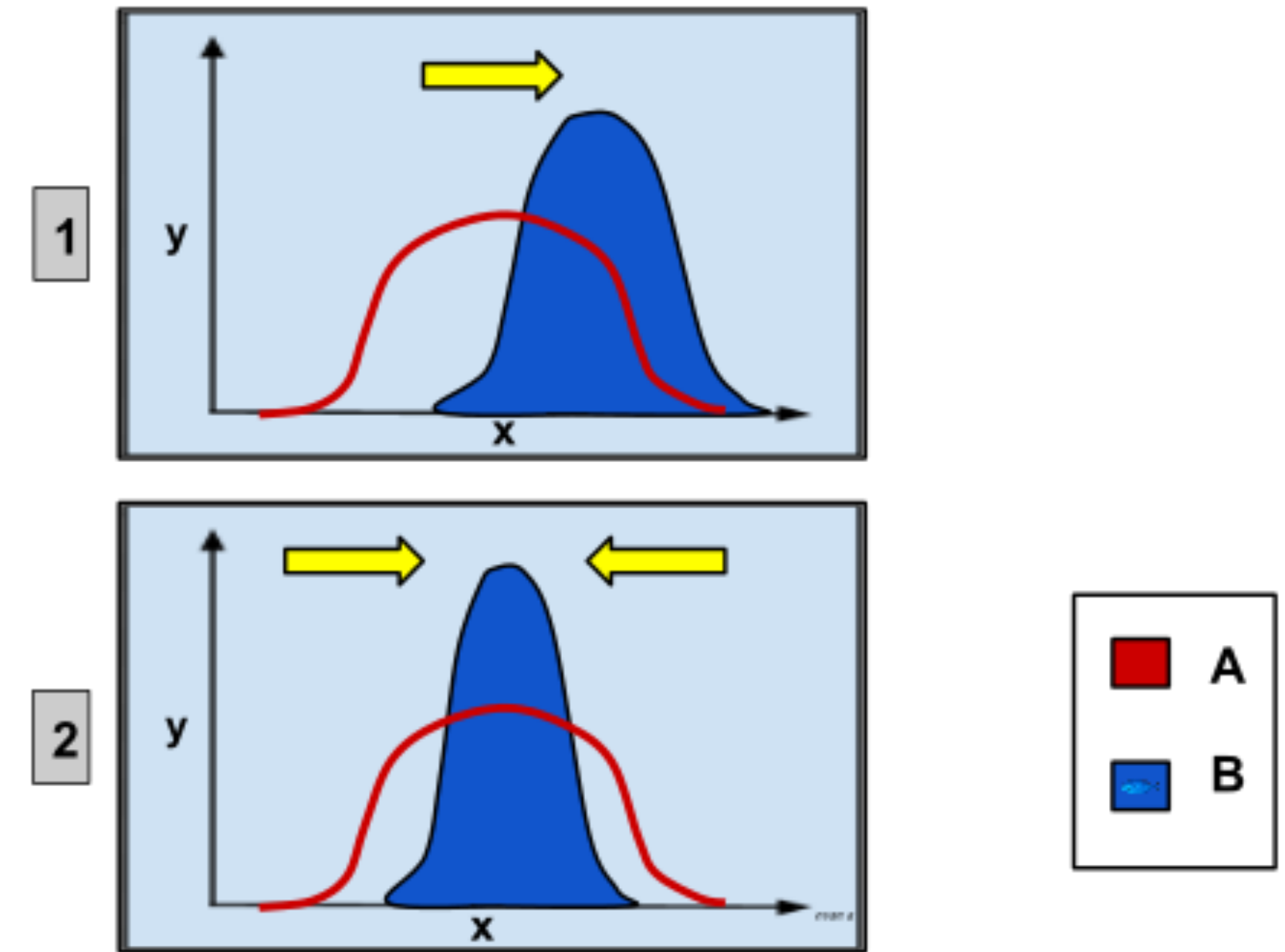
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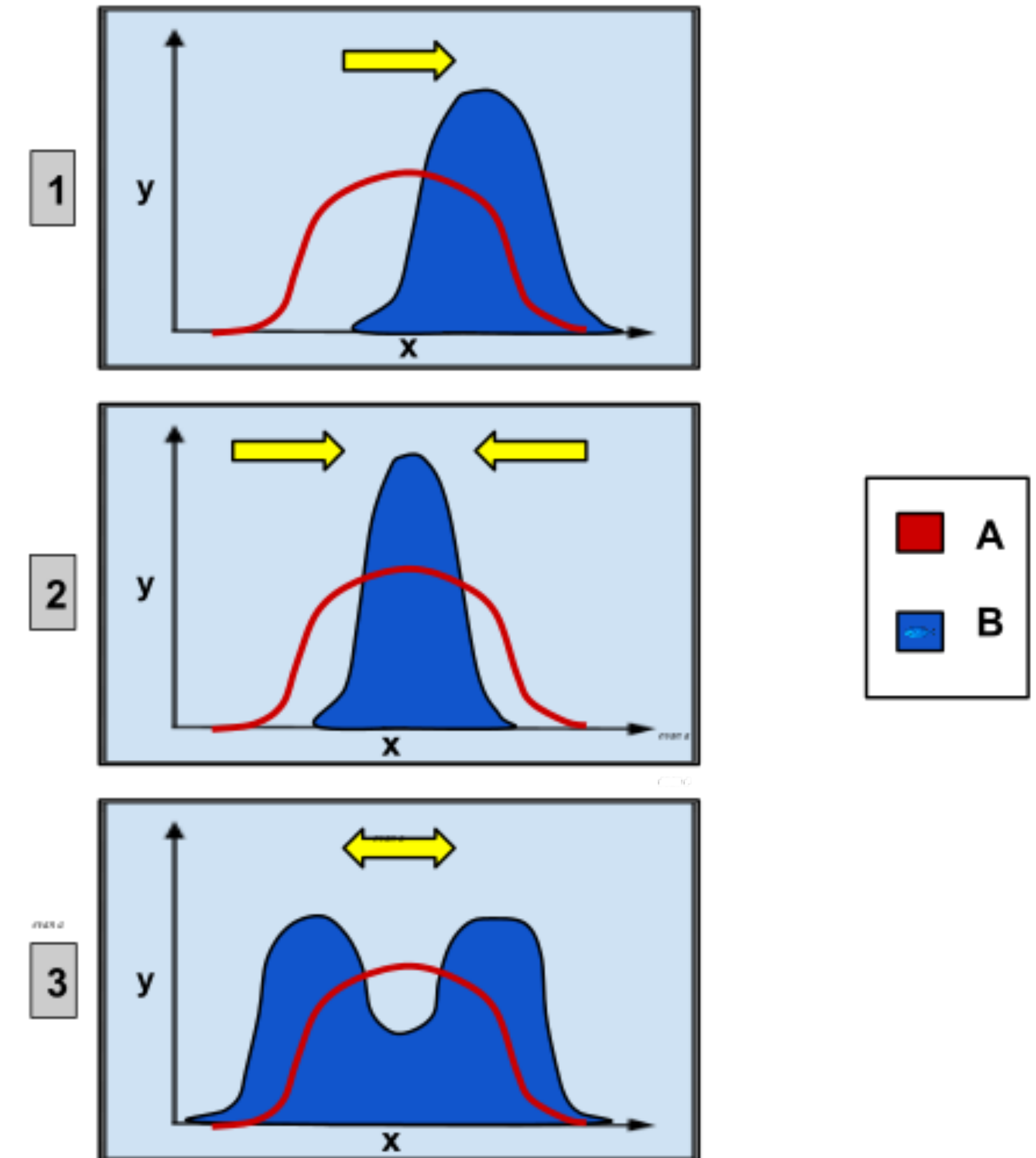
# Types of genetic selection

- Directional selection
- Stabilizing selection
- Disruptive selection

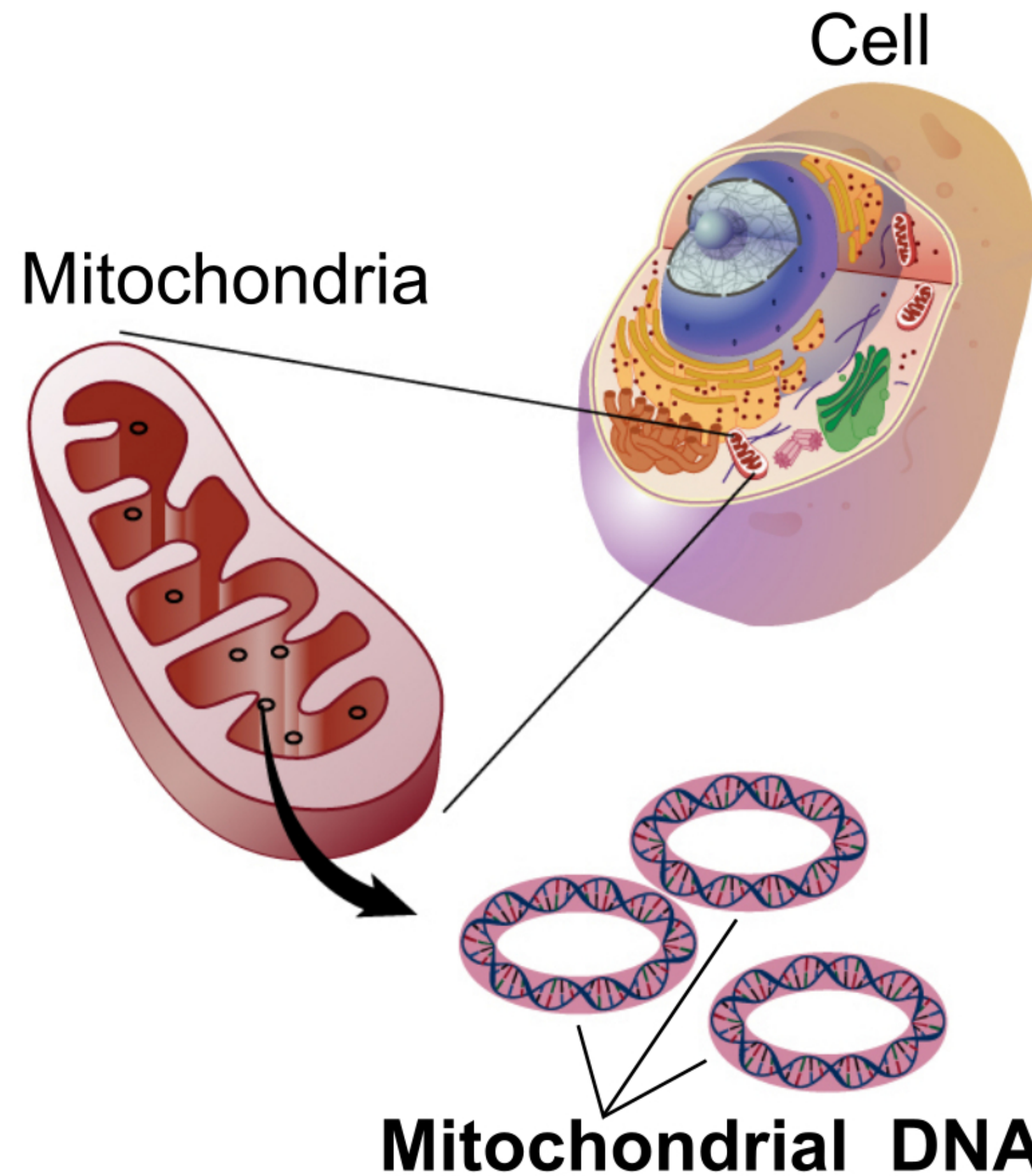


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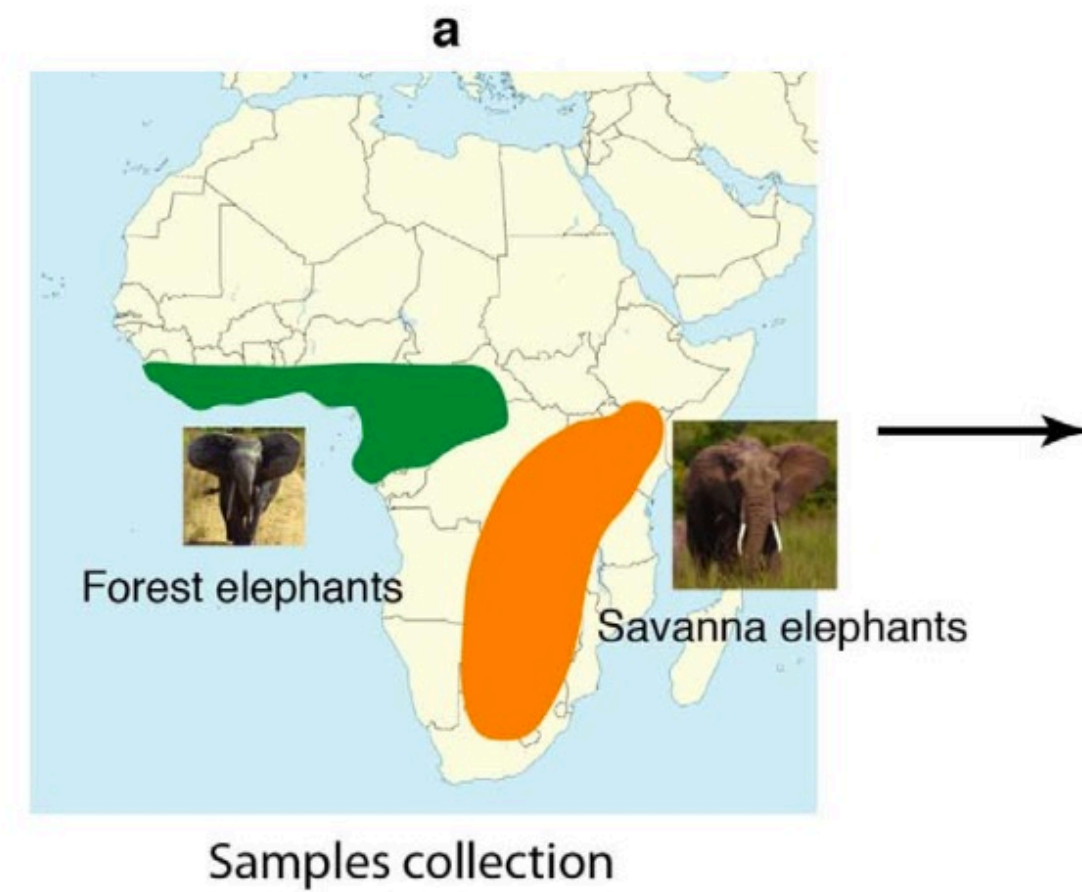
# Mitochondrial DNA



# Analysis of mitochondrial genome in African elephant

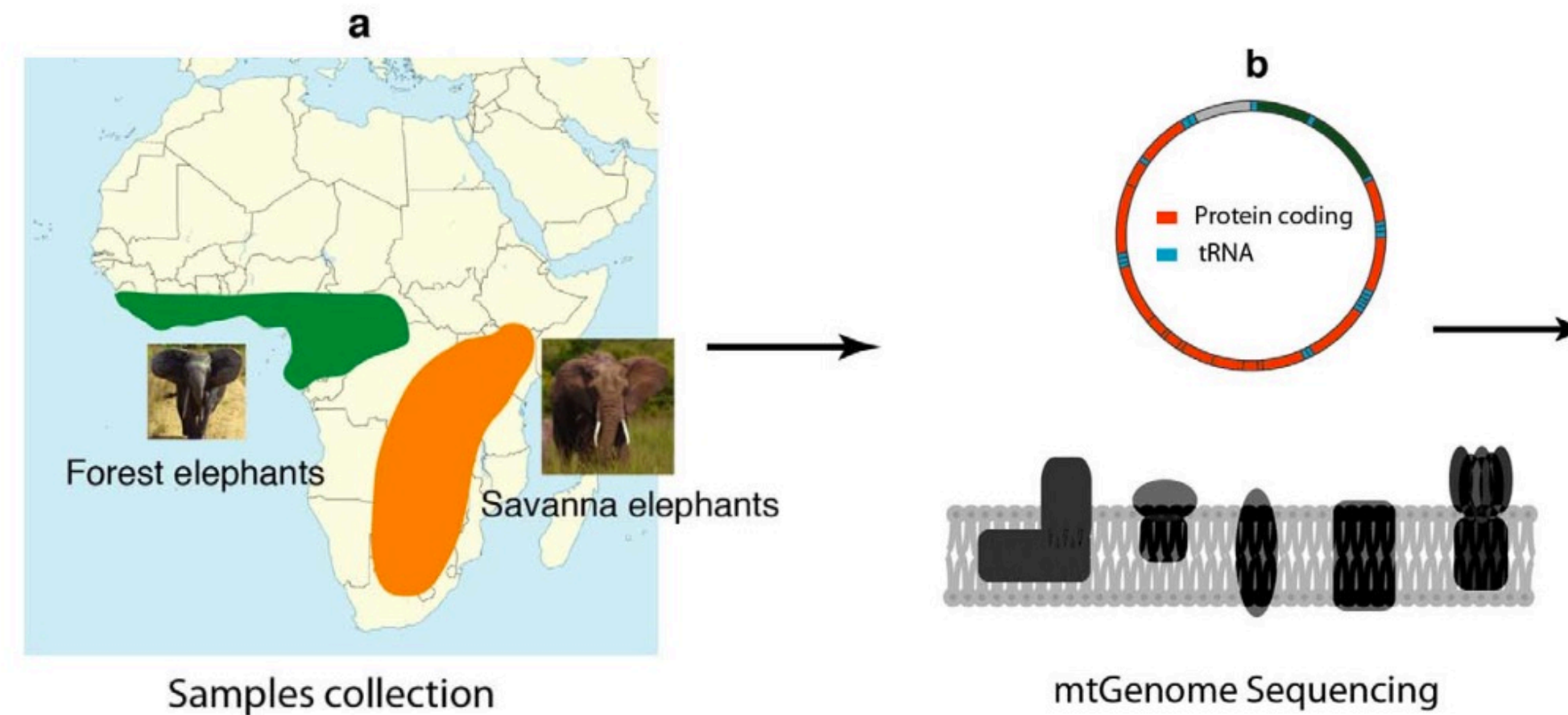


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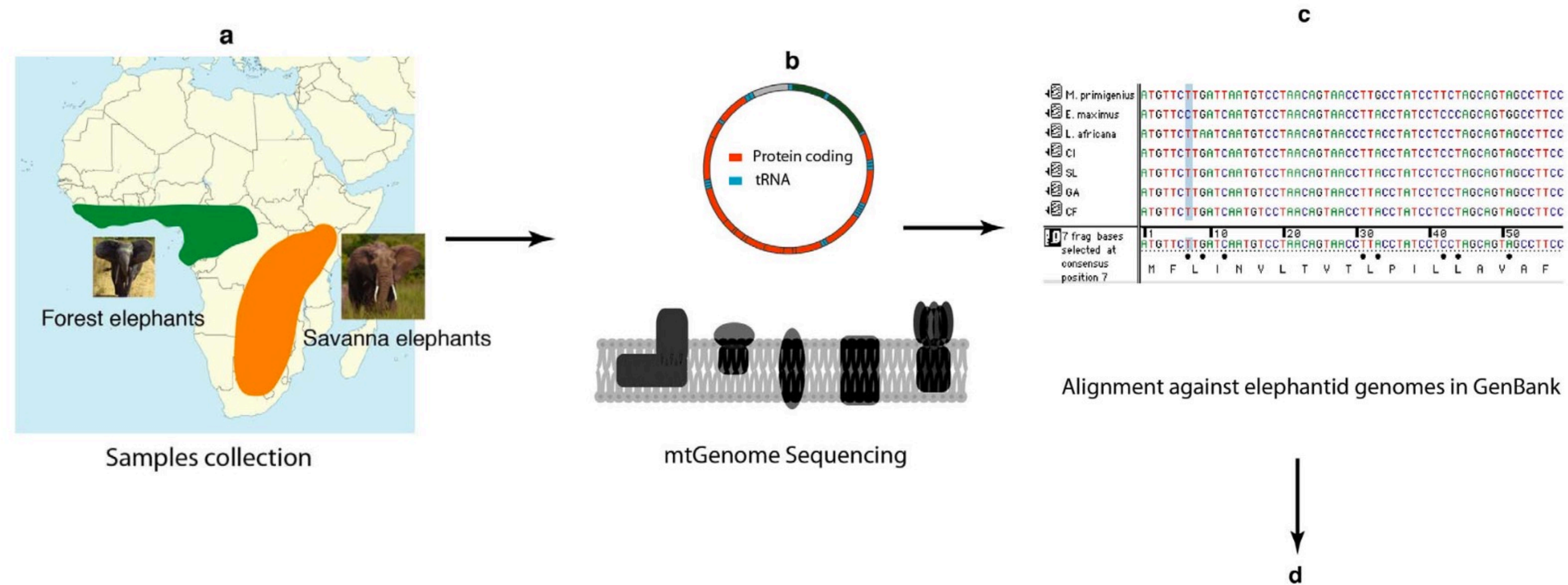




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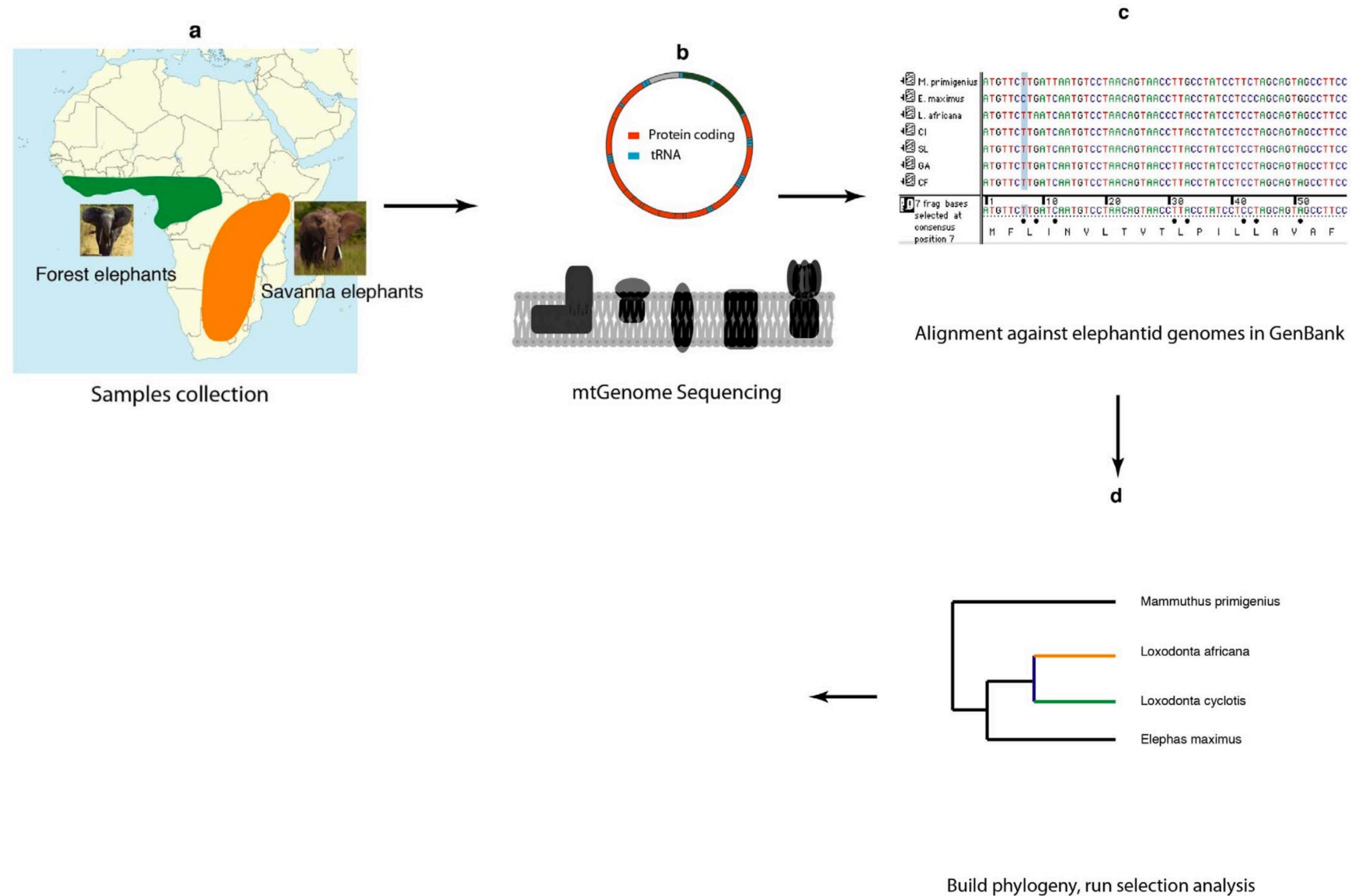


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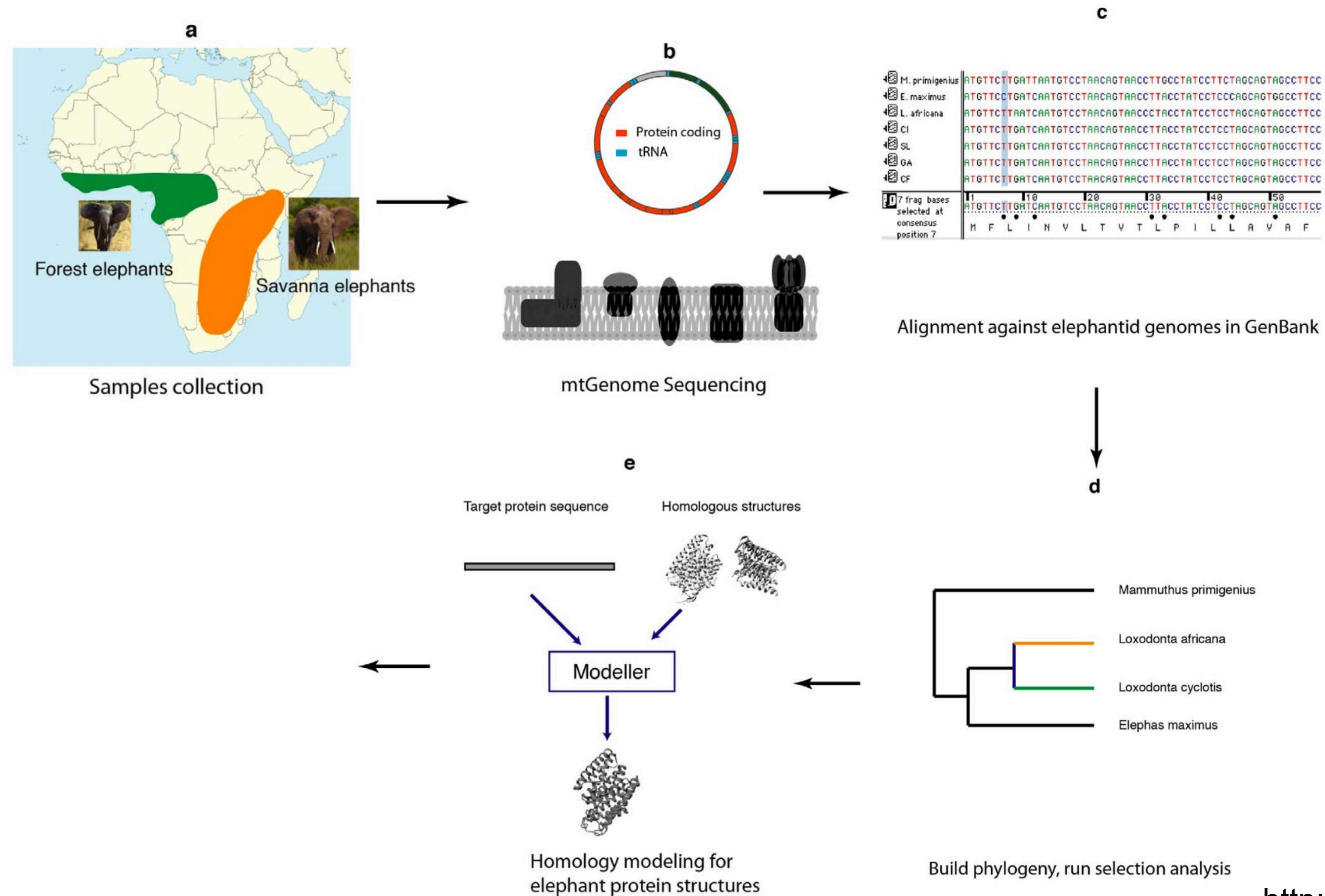




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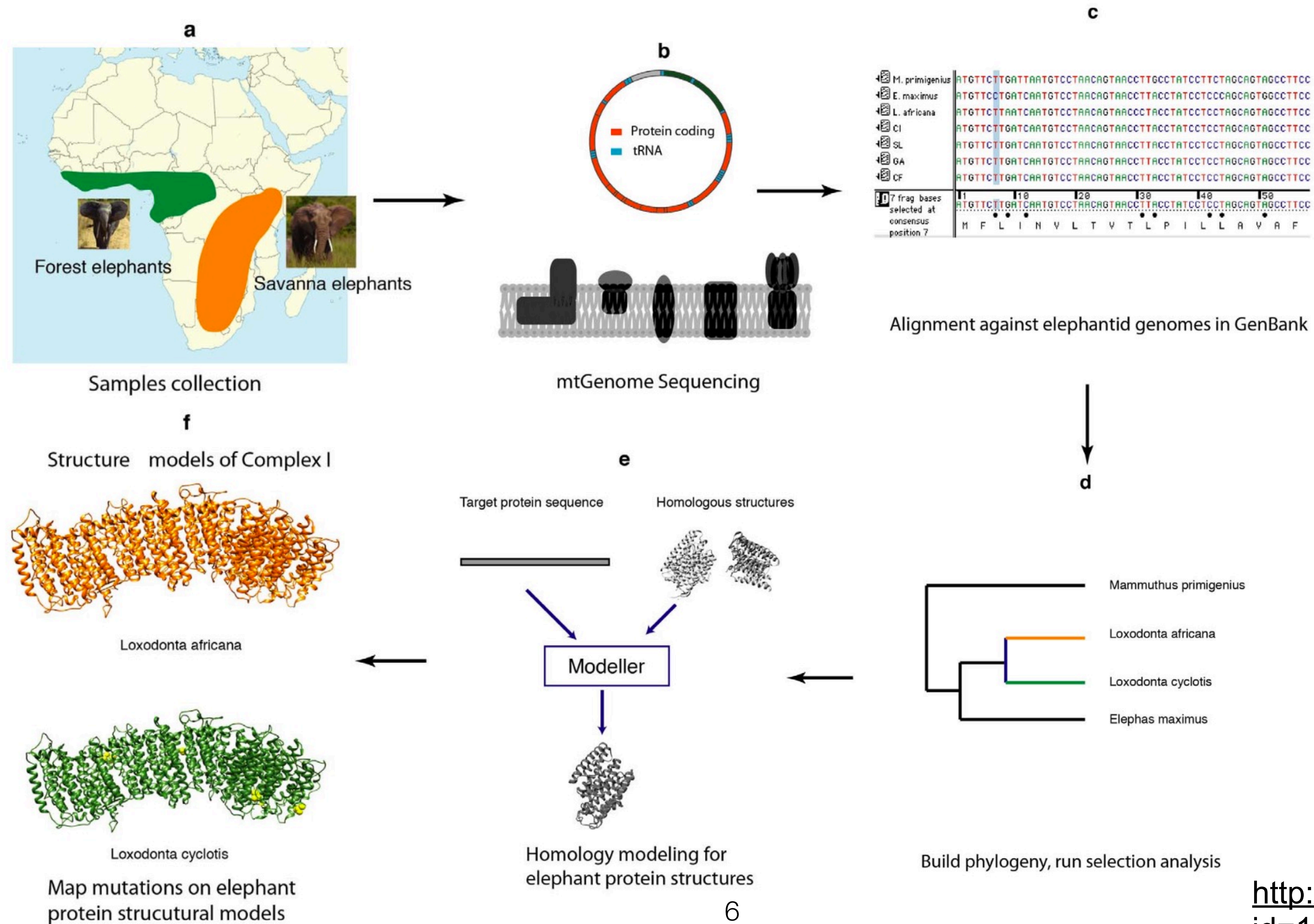


# Analysis of mitochondrial genome in African elephant





# Analysis of mitochondrial genome in African elephant



# Summary

- Gave a short introduction to evolutionary biology
- Explained the proposed method
- Briefly reported the work's results

Questions?