

Evidence for Evolution

Biology

The independent lines of evidence, and why convergence matters.

Independent evidence types.

Evidence	Shows
Fossil record	Change over time; transitional forms
Comparative anatomy	Homologous structures from common ancestry
Vestigial structures	Reduced remnants of ancestral features
Embryology	Shared developmental patterns
Molecular	DNA and protein similarity tracks relatedness
Biogeography	Distribution matches geological history
Observed evolution	Resistance, peppered moth, Galápagos finches

Molecular phylogenies built from DNA independently reproduce trees built from anatomy a century earlier. That convergence is the argument.