

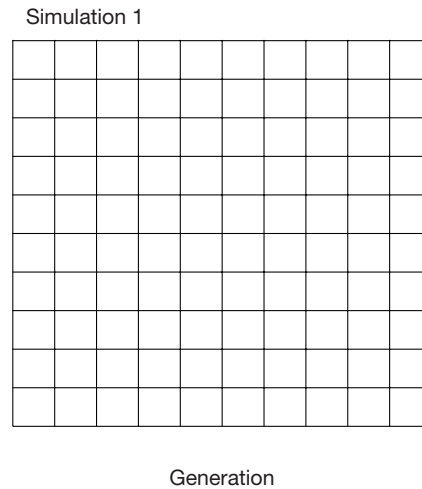
ForensicEA Lite Tutorial: Did the surgeon give hepatitis C to his patient? (Parts 1 & 2)

Part 1: Evolution within individual patients

1. Record your data and draw your graphs below:

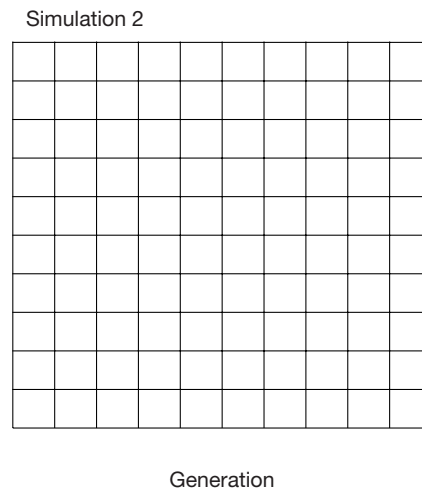
Generation	Differences between present sequence versus first sequence

Number of
sequence
differences



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Number of
sequence
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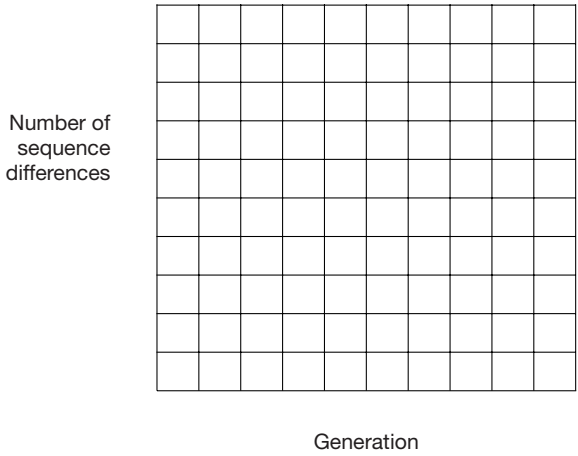


2. What generalizations can you make about how populations evolve in this simulation? Why might an evolutionary biologist think of your graphs as molecular clocks?

Part 2: Population divergence among patients

3. Record your data on the divergence between a pair of populations in the table. Plot your data on the graph:

Generations since Patient One became infected	Differences between a randomly chosen sequence from Patient Zero and a randomly chosen sequence from Patient One



4. If you had nucleotide sequences from virus particles from two infected hosts, could you estimate how long it has been since the virus populations in the hosts shared a common ancestor? Explain.