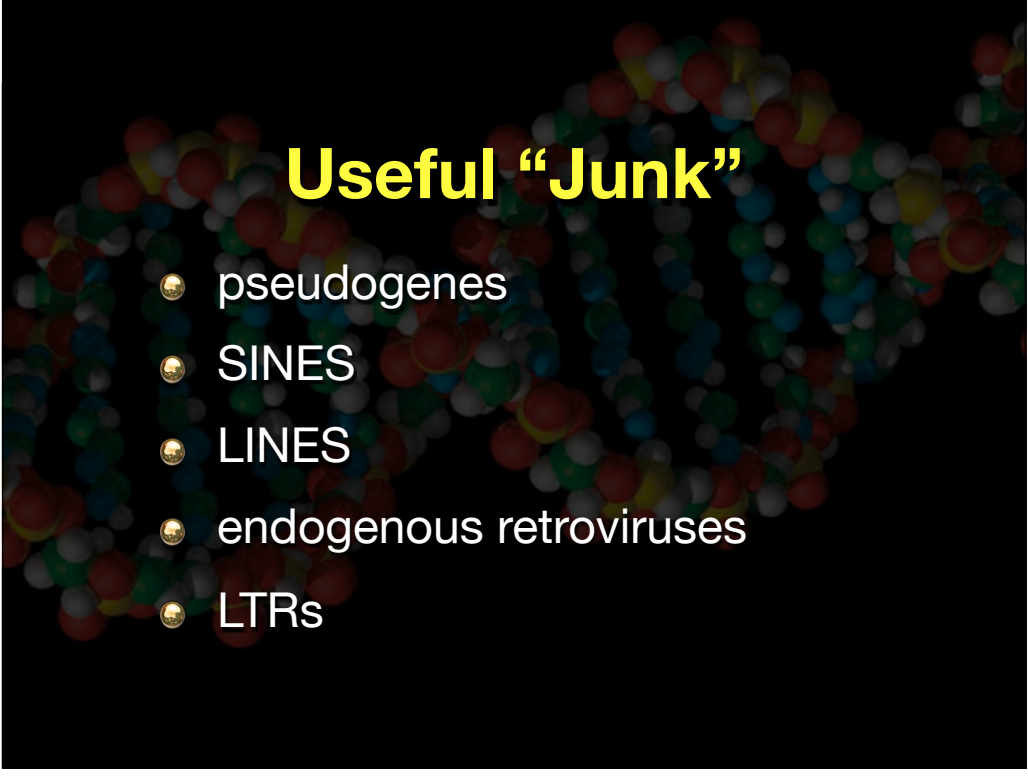




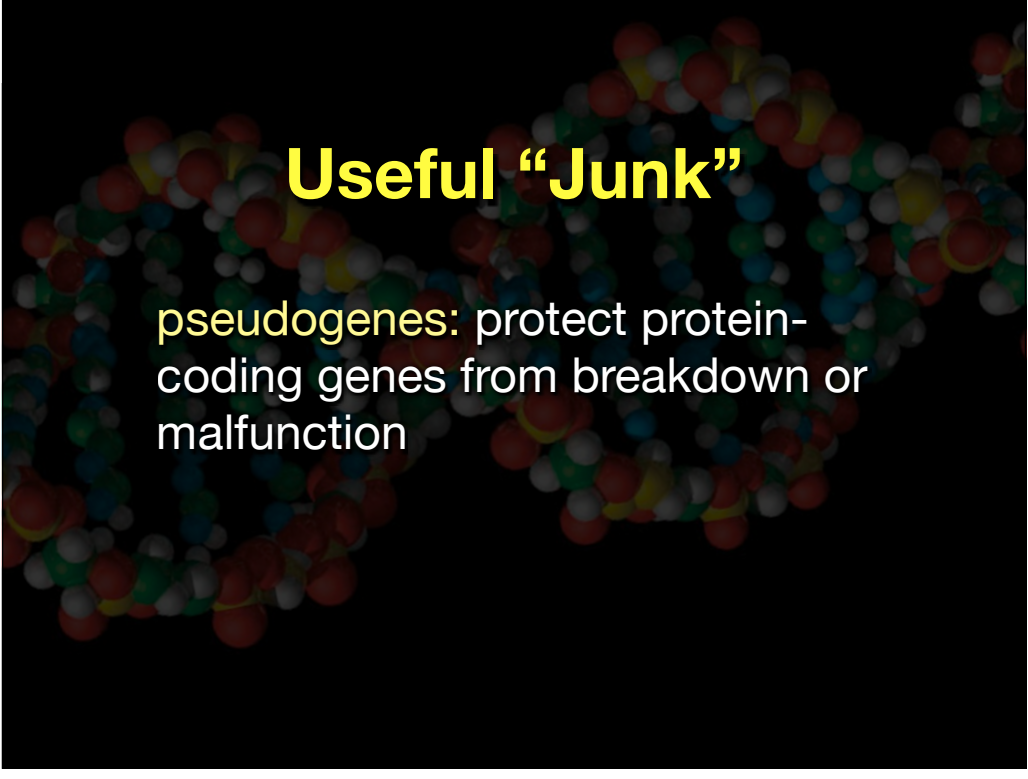
Junk DNA?

Only 2% of the human genome codes for proteins. Is the other 98% the accumulated junk from hundreds of millions of years of evolution?



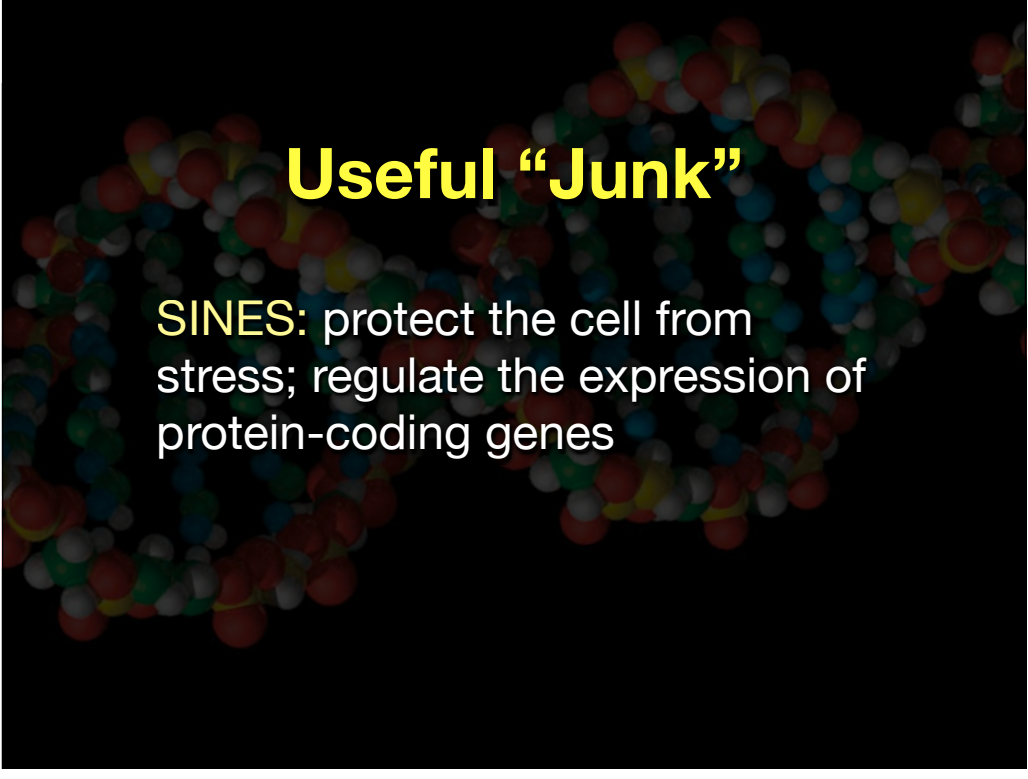
Useful “Junk”

- pseudogenes
- SINES
- LINES
- endogenous retroviruses
- LTRs



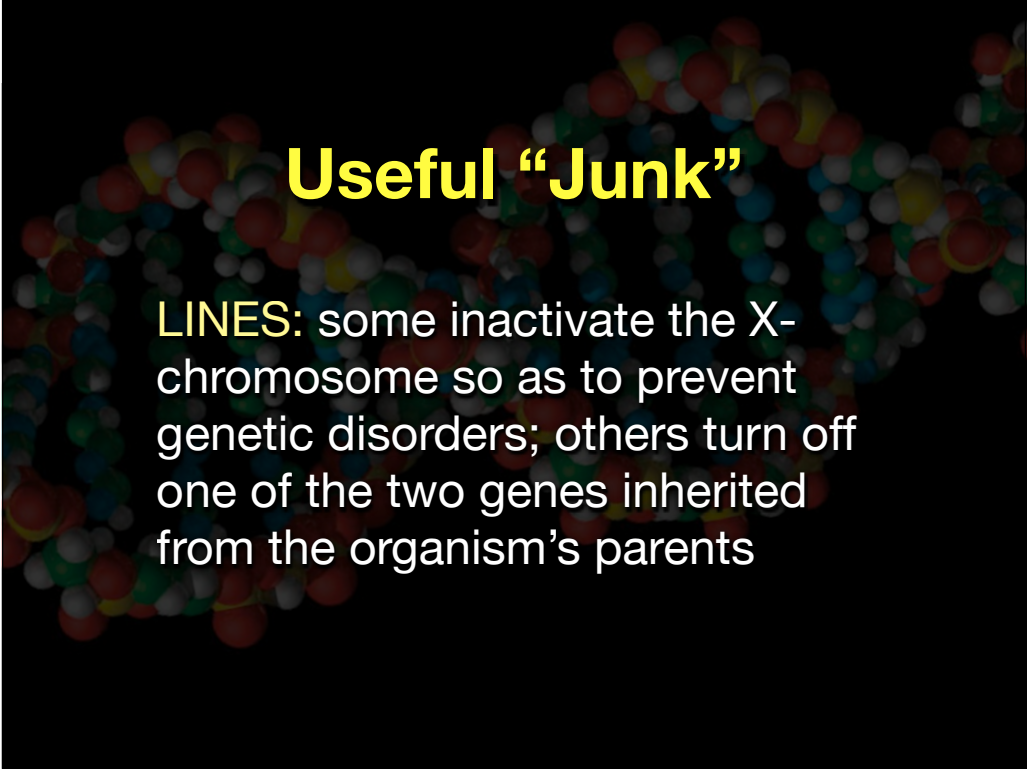
Useful “Junk”

pseudogenes: protect protein-coding genes from breakdown or malfunction



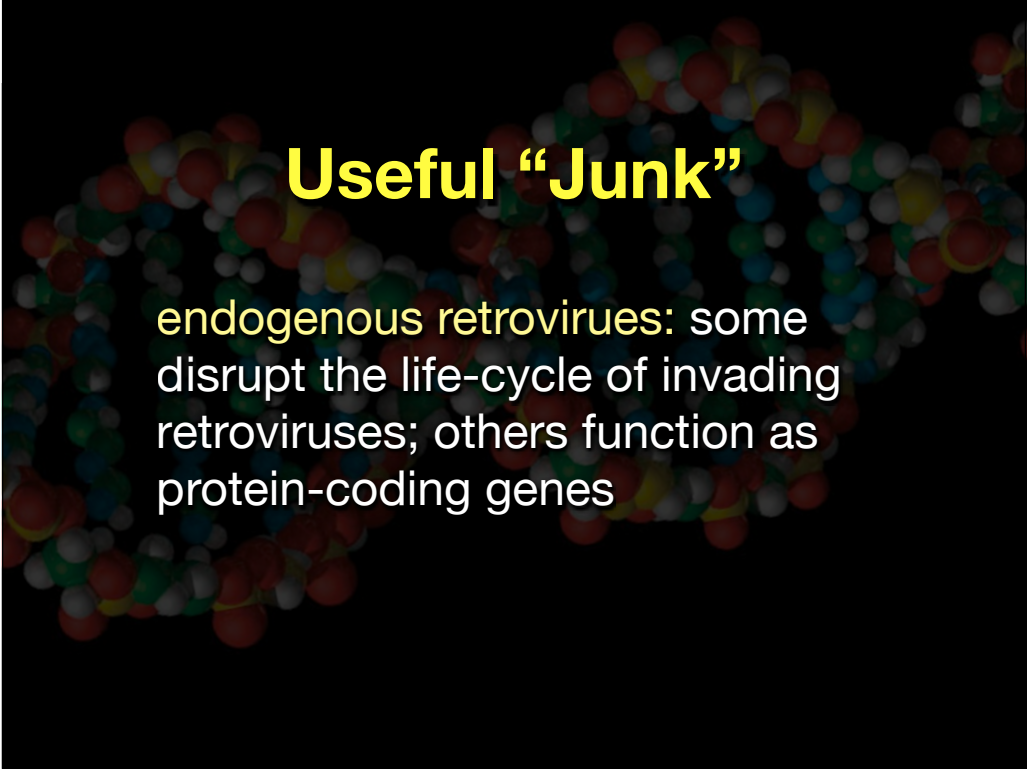
Useful “Junk”

SINES: protect the cell from stress; regulate the expression of protein-coding genes



Useful “Junk”

LINES: some inactivate the X-chromosome so as to prevent genetic disorders; others turn off one of the two genes inherited from the organism's parents



Useful “Junk”

endogenous retroviruses: some disrupt the life-cycle of invading retroviruses; others function as protein-coding genes



Useful “Junk”

LTRs: some protect the organism from retroviral attacks; others regulate the expression of certain protein-coding genes



DNA Tests for the Garden of Eden Hypothesis



Mitochondrial DNA

- descent from one/a few females
- lived near juncture of Africa, Asia, and Europe
- lived ~150,000 BP (with heteroplasmy, ~50,000 BP)
- insignificant mDNA evolution



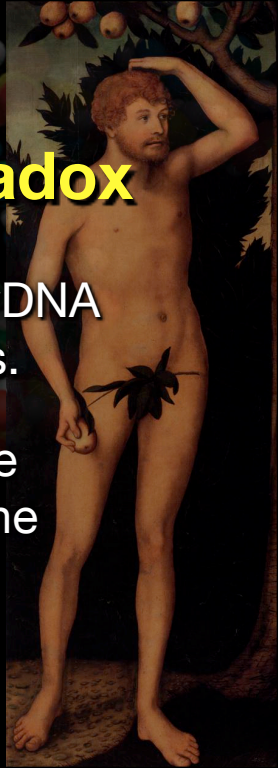
Y-Chromosome DNA

- descent from one/a few males
- lived near juncture of Africa, Asia, and Europe
- lived 42,000 - 56,000 BP
- insignificant yDNA evolution

younger Adam paradox

Stable kiths show mDNA - yDNA
date = a few thousand years.

How can the first woman live
thousands of years before the
first man?



Noah resolution



A painting depicting Noah's Ark. Noah, an elderly man with a long white beard, stands in the center, gesturing towards a large rainbow arching over the scene. He is surrounded by people, including women and children, who are looking up at the rainbow. The background shows the ark and a body of water under a dark, stormy sky.

Noah resolution

The yDNA stops at **Noah**,
while the mDNA could
extend back to **Eve**.

A man and a woman are sitting on a grassy mountain slope. The man is on the left, wearing a blue jacket, and the woman is on the right, wearing a light-colored jacket. They are both smiling at the camera. In the background, there are steep, rocky mountains with patches of snow under a clear blue sky with some light clouds.

I am fearfully and
wonderfully made.

—Psalm 139:14