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

SINES: short interspersed nuclear elements
LINES: long interspersed nuclear elements
LTRs: long terminal repeats
Useful “Junk”

pseudogenes: protect protein-coding genes from breakdown or malfunction

Some actually code for functional proteins.
Useful “Junk”

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

short interspersed nuclear elements
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

long interspersed nuclear elements
Useful “Junk”

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

NOT retroviral DNA incorporated into the host’s genome
Useful “Junk”

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

long terminal repeats
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
This new model for human origins is termed the Garden of Eden hypothesis in the scientific literature because of closely it matches what the Bible has taught for millennia.
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
Noah resolution

The yDNA stops at Noah, while the mDNA could extend back to Eve.
I am fearfully and wonderfully made.
—Psalm 139:14