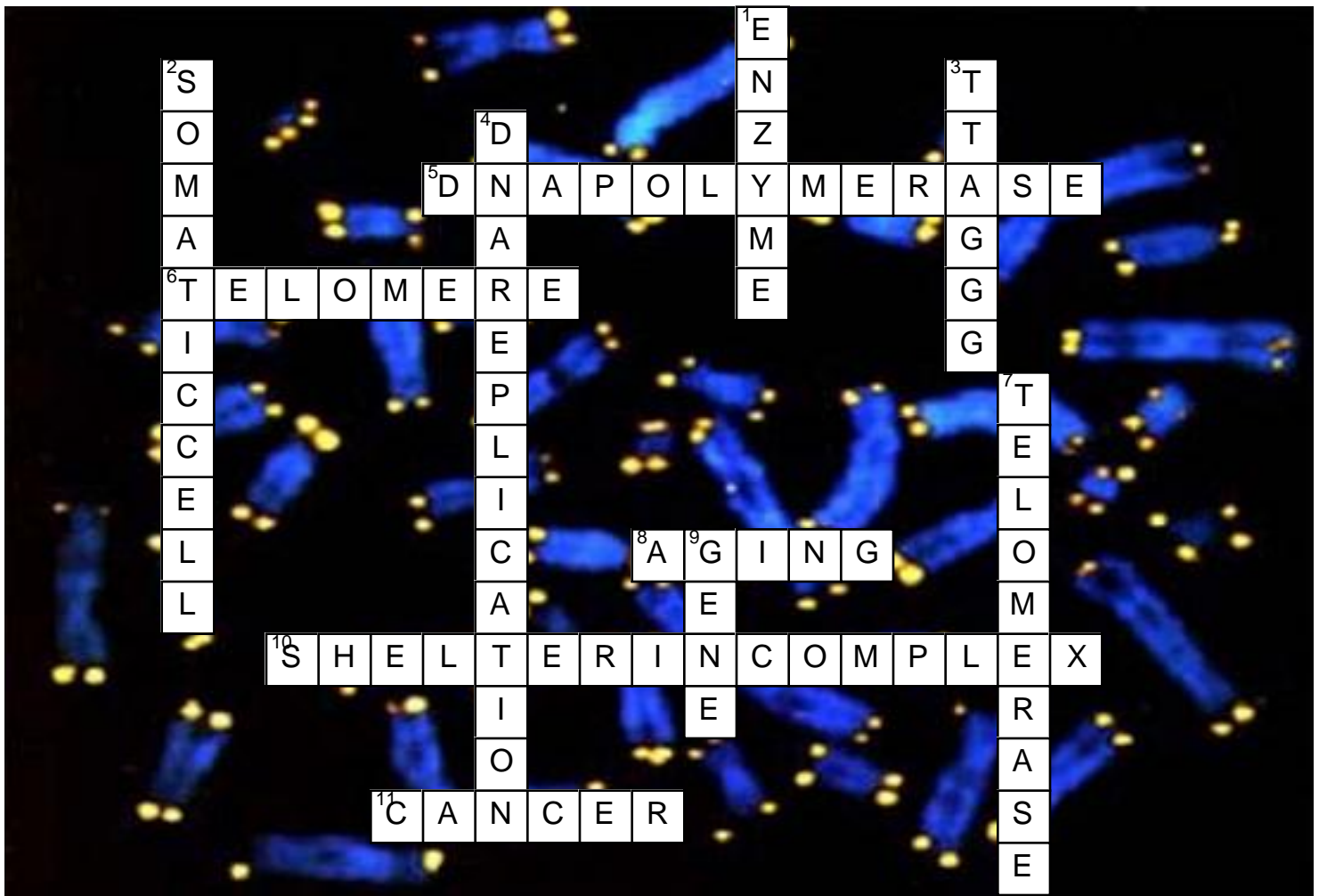


Telomere Attrition



Across

5. Enzymes that create DNA molecules by assembling nucleotides, essential to DNA replication. [DNAPOLYMERASE]
6. A region of repetitive nucleotide sequences at each end of a chromosome and protects this from deterioration. [TELOMERE]
8. A process of growing old or developing the appearance and characteristics of old age. [AGING]
10. A complex of six proteins that safeguard the integrity of telomeres and regulate telomerase activity. [SHELTERIN COMPLEX]
11. A group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. [CANCER]

Down

1. A macromolecule which catalyzes chemical reactions. [ENZYME]
2. Any biological cell forming the body of an organism. [SOMATIC CELL]
3. The sequence of nucleotides in telomeres repeated approximately 2500 times in humans. [TTAGGG]
4. Creation of two identical DNA strands from a single original DNA molecule. [DNAREPLICATION]
7. An enzyme that adds repeated DNA sequences to the 3' end of DNA strands in the telomere regions. [TELOMERASE]
9. A specific sequence of DNA that provides the coded instructions for the production of RNA which, when translated into proteins, controls development and growth. [GENE]