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SEQUENCE APPLICATION IN GENERATION DNA & ITS CHEMICAL COMPOUND

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Abstract: The Fibonacci sequence is **a set of numbers that starts with a one or a zero, followed by a one**, and proceeds based on the rule that each number (called a Fibonacci number) is equal to the sum of the preceding two numbers. Fibonacci sequence is applied in rabbit reproductive, honey bee hierarchical pattern. This paper presents how to sequential pattern in human generation DNA representing Fibonacci sequence and Constant sequence Pattern in DNA Chemical compound. We take one human generation to represent like this pattern. First we consider a Great grandparent DNA is a Initial one to develop a further generation like Fibonacci sequence.

Objective:

- Our DNA Pattern is transformed from one generation to next generation. DNA Pattern is depends on previous pattern, that means our DNA pattern is got from our grandparents DNA pattern.
- It looks like Fibonacci pattern ie.,1,1,2,3,5,8,…… the consequent term Is comes from adding previous two numbers, that process also applied in genetic transformation.

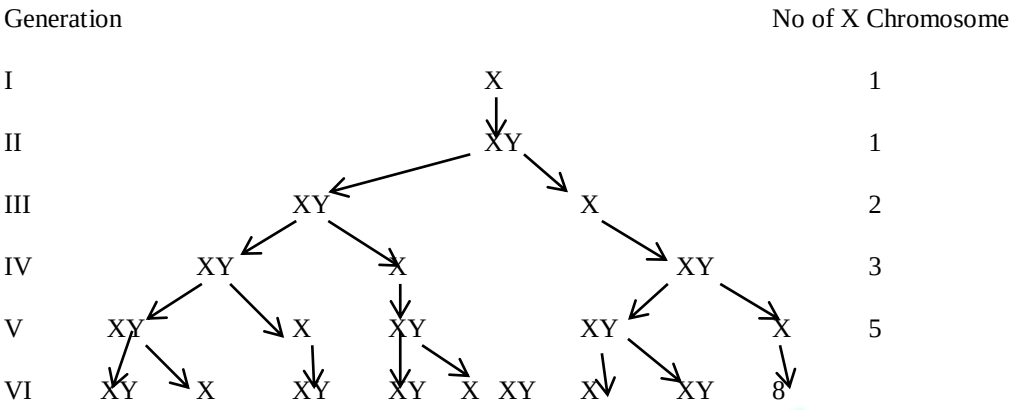
INTRODUCTION:

While many examples of Fibonacci numbers are found in phenotypic structures of plants and animals, the dynamic processes that generate these structures have not been fully elucidated. This raises the question: What biologic rules and mathematical laws that control the growth and renewal of tissues in multi-cellular organisms give rise to these patterns of Fibonacci numbers? In nature, the growth and self-renewal of cell populations leads to the generation of hierarchical patterns in tissues that resemble the pattern of population growth in human, which is explained by the classic Fibonacci sequence.

EXPLANATION:

Noticed that a number of possible ancestors on the X chromosome inheritance line at a given ancestral generation follow the Fibonacci sequence. A male individual has an X chromosome, which he received from his mother, and a Y chromosome, which he received from his father. The male counts as the "origin" of his own X chromosome $F_1 = 1$, and at his parents' generation, his X chromosome came from a single parent $F_2 = 1$. The male's mother received one X chromosome from her mother (the son's maternal grandmother), and one from her father (the son's maternal grandfather), so two grandparents contributed to the male descendant's X chromosome = 2 $F_3 = 2$. The maternal grandfather received his X chromosome from his mother, and the maternal grandmother received X chromosomes from both of her parents, so three great-grandparents contributed to the male descendant's X chromosome $F_4 = 3$. Five great-great-grandparents contributed to the male descendant's X chromosome $F_5 = 5$ etc.

Dynamical growth of human population and Fibonacci Series



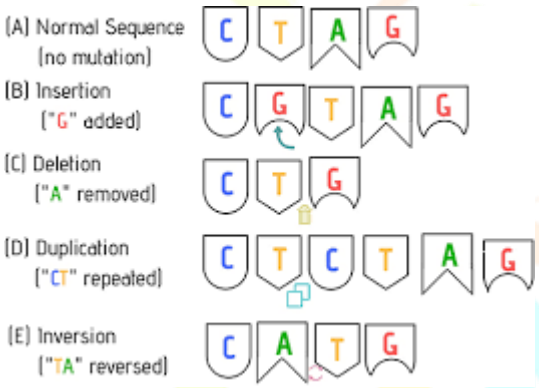
X: Female Contributed Chromosome

Y: Male Contributed Chromosome

From the Definition of Constant Sequence are sequences for which all terms are the same. In DNA Chemical Compound also Represent a Constant Sequence Such As C, T ,A, G, C,T, A, G….. this pattern is repeated. We Will Use some insert and Deleted component to repair DNA if it is muted from other environment agents

What Is DNA Mutation?

A gene variant is a permanent change in the DNA sequence that makes up a gene. This type of genetic change used to be known as a gene mutation, but because changes in DNA do not always cause disease, it is thought that gene variant is a more accurate term.



Is DNA Mutations is possible?

Yes it is possible, The DNA Mutation and Repair there are three types of DNA Mutation such as, Base Substitutions, deletions, and insertions.

ATGC Represents **Adenine,Thymine, Guanine, Cytosine**.

Conclusion:

This Paper Shows How to sequential pattern is applied in Generation DNA and its Chemical Compound.If modify the origin parent DNA using DNA Mutation that means compare to origin term of the Fibonacci sequence then it will break the genetic disorder like Diabetes, cancer.

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