



Gene Splash

If unwound and linked together the DNA from one cell would stretch 6 feet but would only be 50 trillionths of an inch wide. DNA from the entire body would reach to the sun and back 600 times

<http://www.sanger.ac.uk/about/history/hgp/>

Do you Know... When to refer for cancer genetic counseling ?

The human genome has approximately 25,000 genes. Almost all (99.9%) of the DNA building blocks in the human genome are exactly the same in all people.

http://ornl.gov/sci/techresources/Human_Genome/project/info.shtml



IT'S ALL IN THE FAMILY

Taking a family history at **every** clinical encounter is **the first step** in identifying people at risk for a hereditary cancer syndrome

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The same mutated gene can be the cause of many types of cancer

20% of breast cancer is thought to be due to a hereditary syndrome

80% of breast cancer cases are due to spontaneous mutations - not inherited

http://www.ornl.gov/sci/techresources/Human_Genome/home.shtml

CLINICAL IMPLICATIONS

Refer for cancer risk assessment / genetic counseling any patient diagnosed with cancer under the age of 50 **or** any patient with a family history of 2 or more close family members with the same site cancer

Call SSH/DFCI at (781) 624-4545 to make an appointment for genetic counseling to review your family history