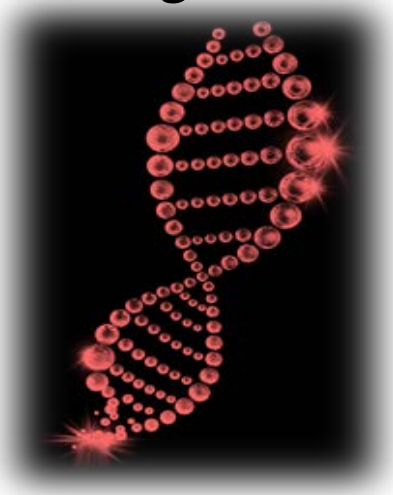
FH explained for patients

HF Canada
Hypercholestérolémie Familiale

FH Canada
Familial Hypercholesterolemia

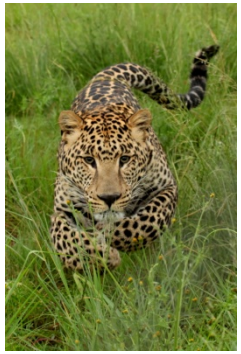
What is DNA?

- Deoxyribonucleic acid
- DNA are very long molecules that are present in every cell of the human body.
- DNA is double stranded
- DNA is constituted of genes which code for every single trait of the human body (ex: eye colour)
- Research done on DNA is one of the most sought after and invested fields in today's sciences



What are genes and why are they important?

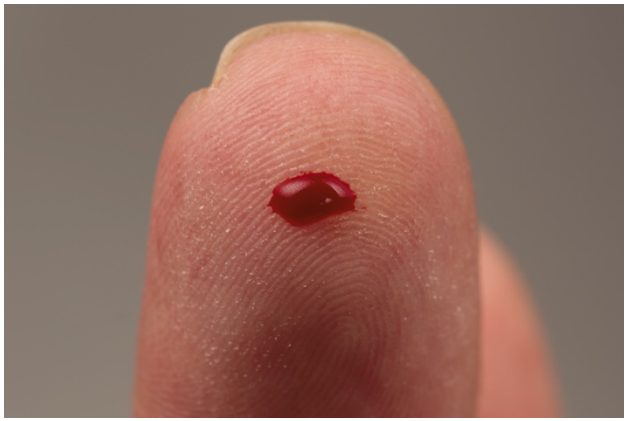
- Contains the information necessary for the body to express specific traits
- This information is stored in “genetic code”
- Every person has two “versions” of the same gene: one from their mother and the other from their father
- This explains why every person looks like a mix of their parents
- Every living organism has DNA in their cells



- There are approximately 20 000 genes in the human body!

Why are genes important?

- Studies done on patients' DNA help scientists learn more about these diseases and how to treat them in future patients
- In order for scientists to get access to a patients' DNA, a certain amount of cells of this person are needed.
- Usually, the cells needed for this research are taken from the patients' blood.

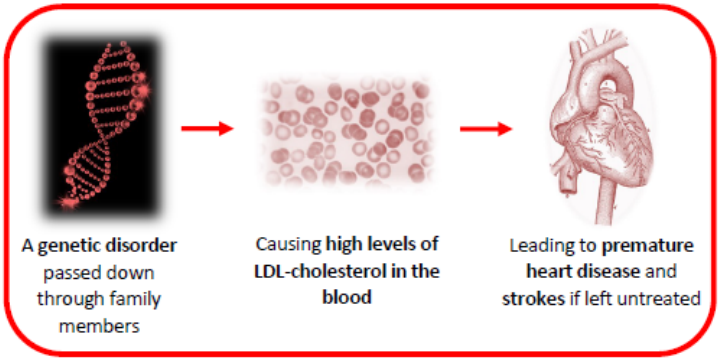


Dominant and recessive genes

- In order for a child to present the trait of a “dominant gene”, he or she must receive a copy of the "dominant gene" from at least one parent
- In order for a child to present the trait of a "recessive" gene, he or she must receive the recessive gene from both parents
- In other words, if a person receives a dominant version of a gene from their dad and a recessive version of a gene from their mom, the person will possess the traits of the dominant gene.
- This process is done for every single of the 20000 gene pairs in the human body.

What is FH?

- Familial Hypercholesterolemia
- Characterized by an excess of cholesterol in the blood stream
- FH patients have increased risks of heart disease and stroke
- This excess in cholesterol is caused by an inherited condition, meaning that genes being passed down from one generation to another that causes this condition
- The gene for this disorder is considered "dominant" therefore siblings of a person who is affected are at a high risk (50%) of also having this disease



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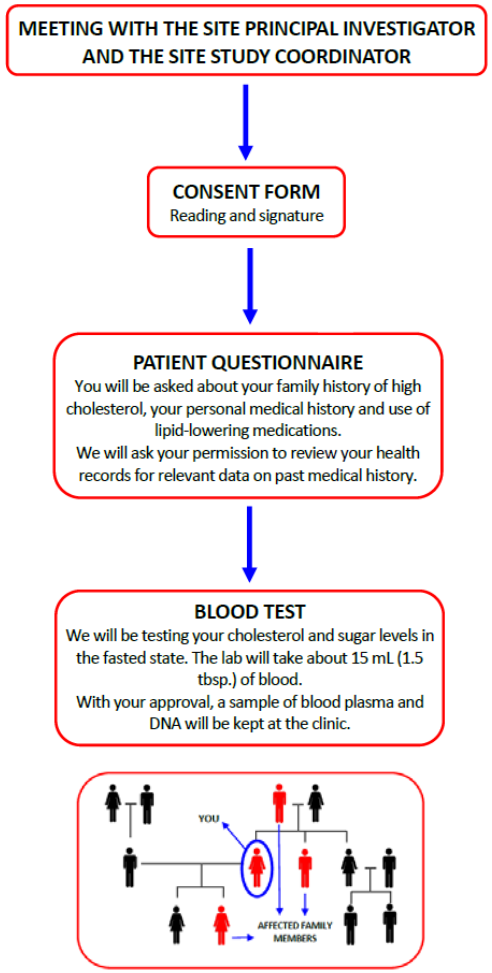
Goals of FH Canada

- The primary goal of this registry is to promote a healthy lifestyle to the FH subjects!
- We want to help improve the detection and treatment of FH across Canada
- We want to help lower the subjects' LDL cholesterol levels in order to decrease their risks of heart attack and stroke
- When necessary, we also want to help facilitate their access to proper medication
- Finally, we want to identify affected individuals by contacting family members of our FH subjects after their approval in order to provide them with the proper diagnosis and treatment



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