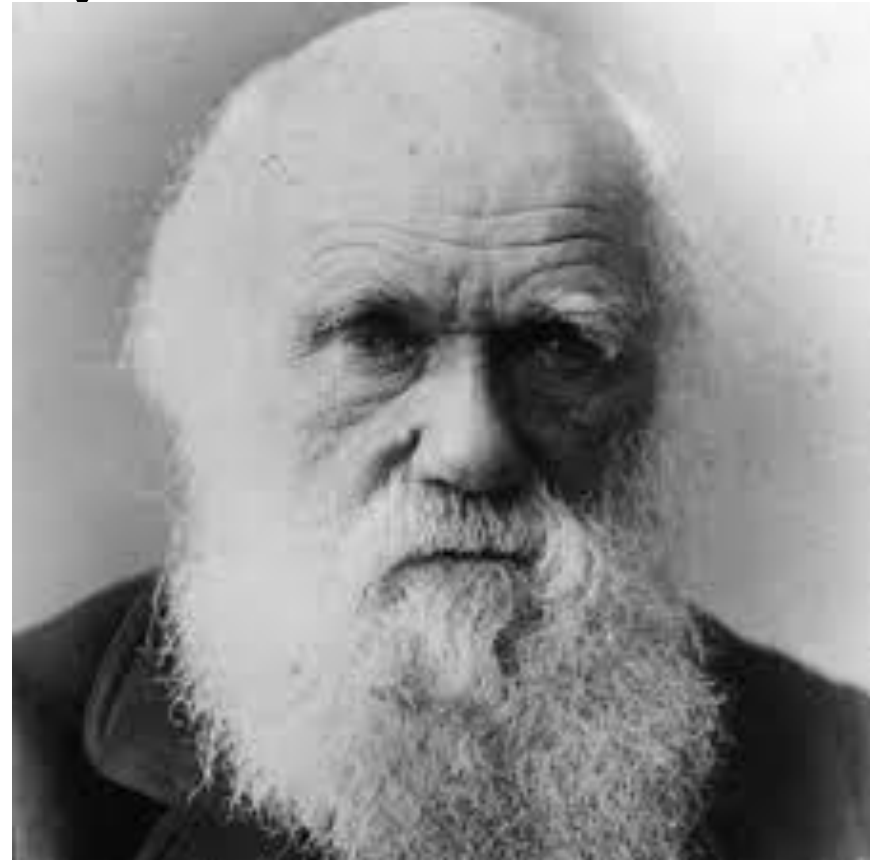


Ten scientists and their knowledge of DNA:

1859 - Charles Darwin

Charles Robert Darwin was an English Naturalist, he changed the way many people viewed the world. He discovered and proposed the Theory of Evolution.

Throughout his life he has been rewarded with plenty of medals such as : Copley Medal, Fellow of the Royal Society, Wollaston Medal, and the Royal Medal.



1866 - Gregor Mendel (Gregor Johann Mendel)

Mendel was a proud meteorologist, mathematician, and biologist.

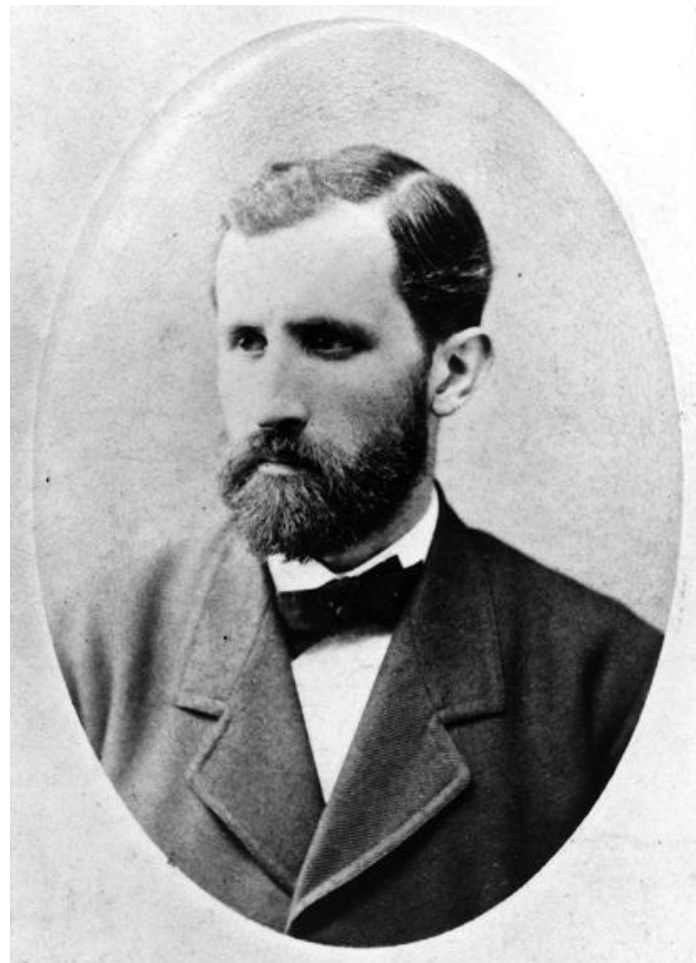
Gregor Mendel was one of the first to discover the basic principles of genetics back in 1866. In 1856-1863, mendel did experiments on pea plants in the attempt of crossbreeding “true” lines in specific combinations/categories.



***1869 - Friedrich Miescher (Johannes
Friedrich Miescher)***

Was the identifier of nuclein, he came across a liquid that had not normal chemical properties during one of his tasks.

He is now known as the first person to isolate nucleic acids.



Courtesy of Herm Courvoisier, Portralt-Sammlung, University of Basel.
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1902 - Sir Archibald Edward Garrod

He was an English physician, Sir Archibald Edward Garrod pioneered the large field of inborn errors of metabolism.

He was reworded Fellow of the Royal Society, and was a professional in the field of medicine.



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1944 - Oswald Avery

Oswald Avery was an Canadian-American physician, a large amount of his time and career was spent at the New York City Rockefeller Hospital.

He was awarded the Copley Medal, and Albert Lasker Award for Basic Medical Research.



1950 - Erwin Chargaff

Erwin Chargaff was an American biochemist, he studied at Vienna University of Technology from 1924 - 1928. Then he became an professor of biochemistry at the college of Columbia University.



1952 - Rosalind Franklin

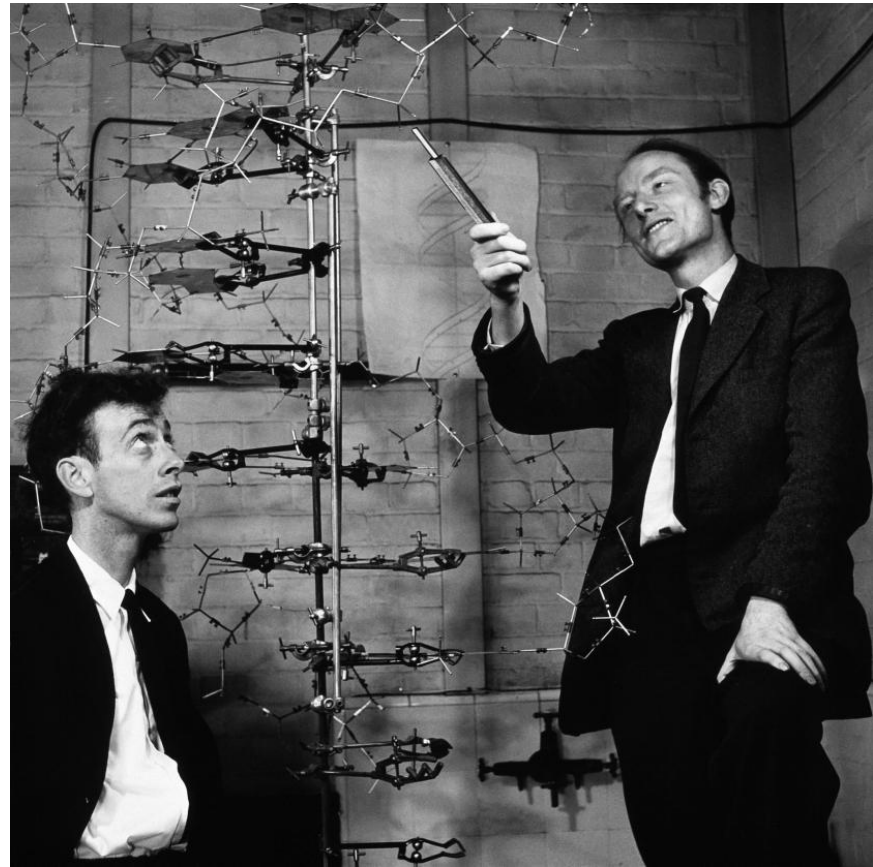
Rosalind was a Chemist who got an education at University of Cambridge in 1945. She went on to understanding molecule structures of DNA even RNA, and viruses.

She is known for discovering the structure of DNA, and Virus Structures.



1953 - James Watson and Francis Crick

*James Watson and Francis Crick
discovered the chemical structure of DNA. They
announced that they found the double helix of
DNA.*



1953 - George Gamow

George Gamow was an physicist, he was an developer of the Big Bang Theory and he was an cosmologist.

He was awarded the Kalinga Prize in 1956, and he is well known for Gamow Factor, Beta decay transition, etc.



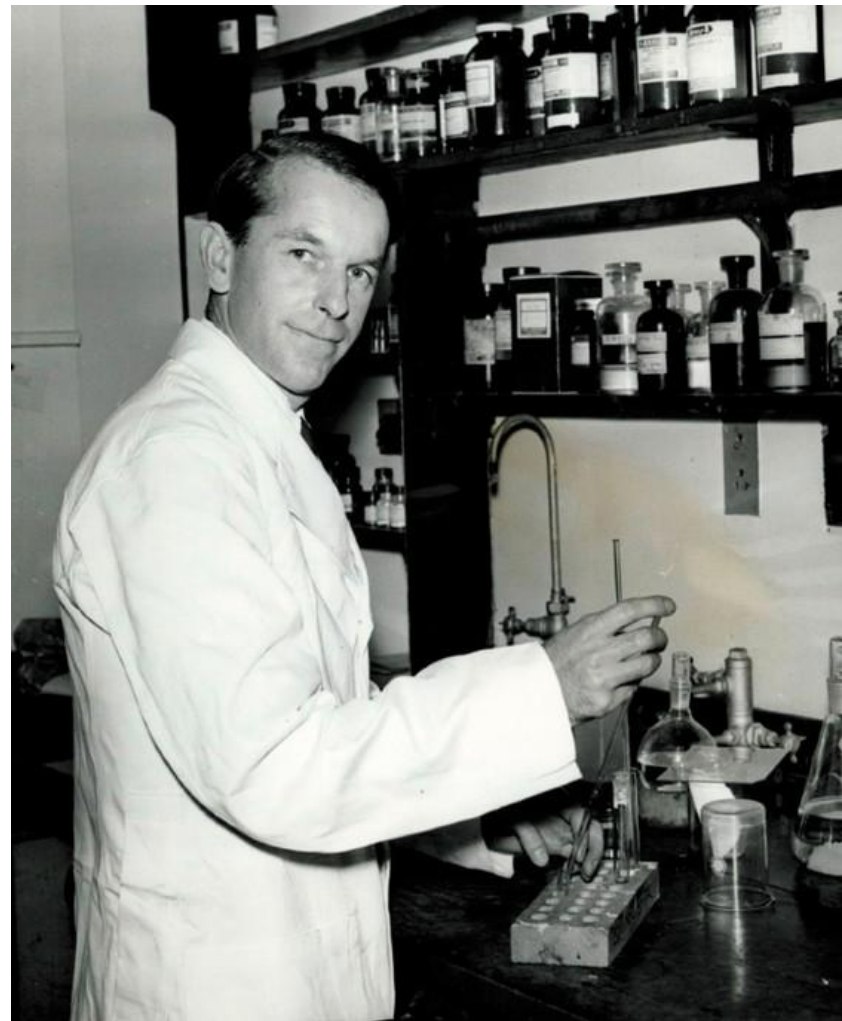
1965 - Marshall Nirenberg

Marshall Warren Nirenberg was an American geneticist, he is known for having a contribution in solving the genetic code. He was awarded the Nobel in Physiology or medicine.



1977 - Frederick Sanger

Frederick Sanger was an British biochemist, he got his education from multiple of different schools like Bryanston School, St John's College, and the University of Cambridge. He was awarded the Nobel Prize in Chemistry, Order of Merit, Royal Medal and more.



Diseases that are caused by DNA/chromosomes:

1. In 1959 an additional copy of chromosome 21 linked to Down syndrome
2. The human disorder alkaptonuria
3. Huntington's disease

The discovery of the Double Helix

Watson ended up staying at Cavendish and using the available X-ray and model building, both Dr. Francis Crick and Watson discovered/solved the structure of DNA.

Genes:

Genes are a genetic code that contributes to the making of a human's identity, for example genes make up the hair color, eye color and much much more.

Three Modern Techniques that use DNA sequencing:

1. Sanger sequencing
2. Capillary electrophoresis and fragment analysis
3. NGS which stands for Next-generation sequencing

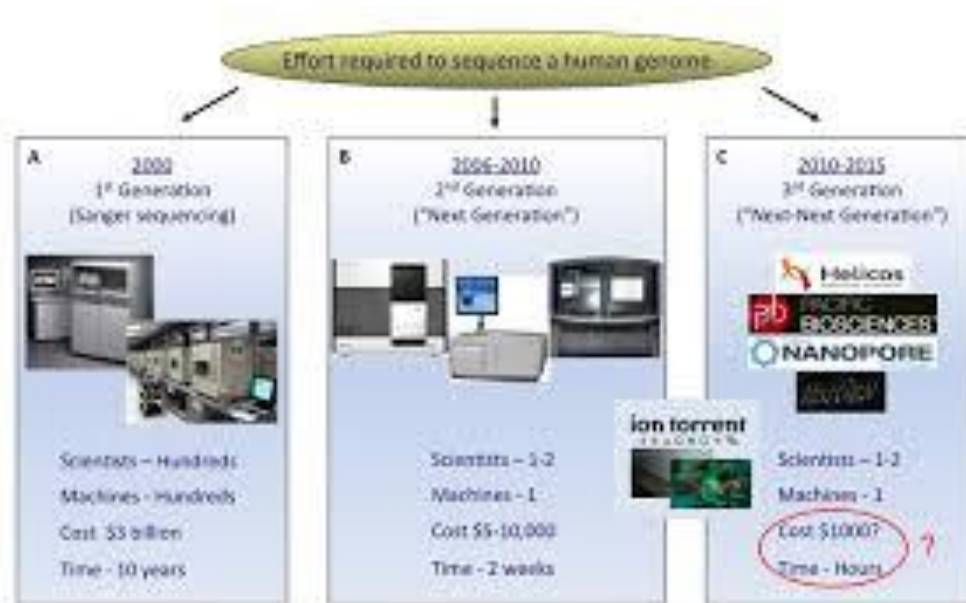
Future DNA application sequencing info:

DNA sequencing has come a long way these past few decades, I believe that somewhere in the future we won't have to deal with getting sick or dying. I believe future technology and DNA sequencing will be even greater than it is today. I think that there will be more advanced and larger technology and instead of having to use needles they will just need to scan the skin over a vein.

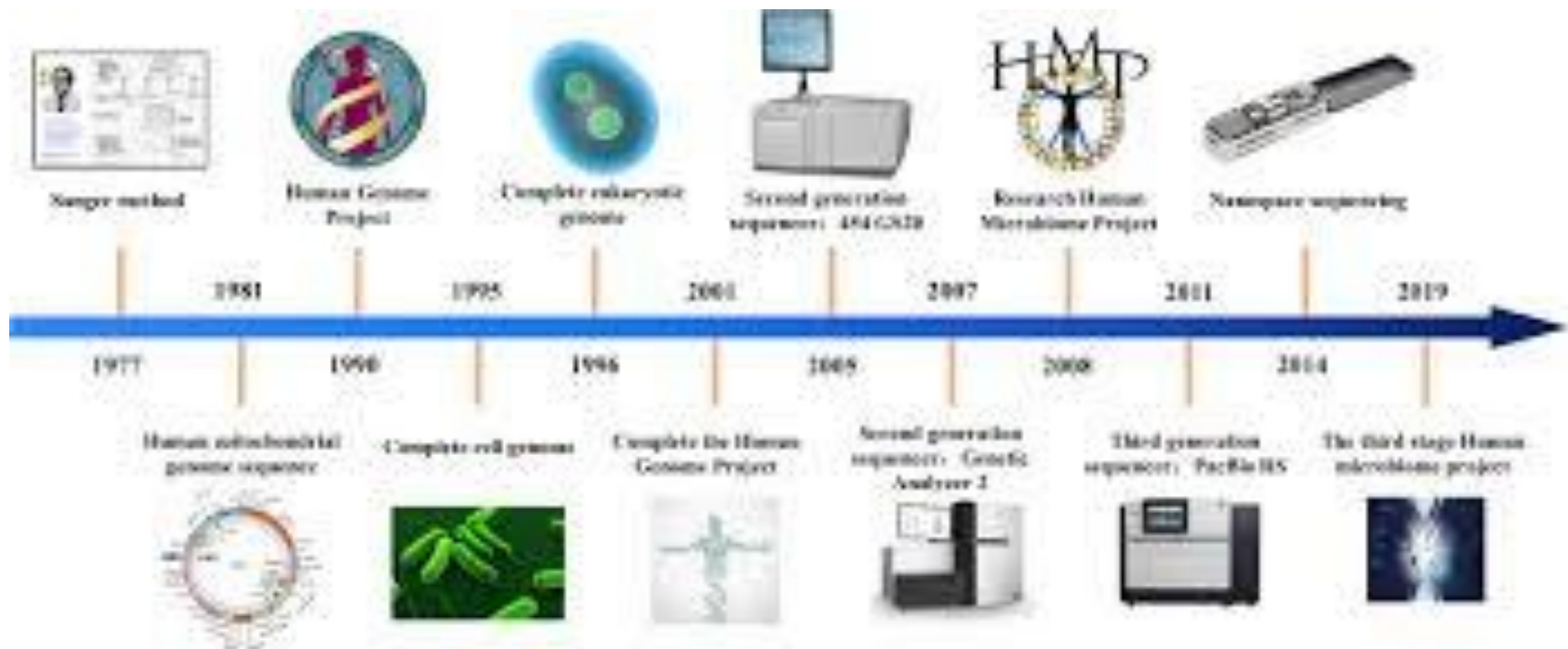
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Another picture:



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