**L2 – DNA Structure**

**James Watson and Francis Crick, 1959**

*won the 1962 Nobel Prize in Medicine for their discovery of the structure of DNA. This was one of the most significant scientific discoveries of the 20th century*

**ROSALIND FRANKLIN 1920-58**

* Gave an idea that the structure of DNA is a helical structure.
* Physical Chemistry & X-ray crystallography expert
* Died of ovarian cancer

**L3 – Replication**

Experimental evidence for semiconservative replication. Meselon-Stahl Experiment

1958 ( In Prokaryotes )

**Reiji Okazaki (1930 –1975)**

* was a pioneer Japanese [molecular biologist](https://en.wikipedia.org/wiki/Molecular_biologist), known for his research on [DNA replication](https://en.wikipedia.org/wiki/DNA_replication) and especially for describing the role of [Okazaki fragments](https://en.wikipedia.org/wiki/Okazaki_fragments) which he discovered working with his wife [Tsuneko](https://en.wikipedia.org/wiki/Tsuneko_Okazaki) in 1966.
* Okazaki was born in [Hiroshima](https://en.wikipedia.org/wiki/Hiroshima), [Japan](https://en.wikipedia.org/wiki/Japan). He graduated in 1953 from [Nagoya University](https://en.wikipedia.org/wiki/Nagoya_University), and worked as a professor there after 1963. He died of [leukemia](https://en.wikipedia.org/wiki/Leukemia) (due to  [Atomic bombings of Hiroshima](https://en.wikipedia.org/wiki/Atomic_bombings_of_Hiroshima_and_Nagasaki)) in 1975 at the age of 44; he had been heavily [irradiated](https://en.wikipedia.org/wiki/Radiation) in [Hiroshima](https://en.wikipedia.org/wiki/Hiroshima) when the [first atomic bomb](https://en.wikipedia.org/wiki/Little_Boy) was dropped. His wife, [Tsuneko](https://en.wikipedia.org/wiki/Tsuneko_Okazaki), won the [L'Oréal-UNESCO Awards for Women in Science](https://en.wikipedia.org/wiki/L'Or%C3%A9al-UNESCO_Awards_for_Women_in_Science) in 2000 for her work.

**L5 – Repair**

* The 2015 [Nobel Prize in Chemistry](https://en.wikipedia.org/wiki/Nobel_Prize_in_Chemistry) was awarded to [Tomas Lindahl](https://en.wikipedia.org/wiki/Tomas_Lindahl), [Paul Modrich](https://en.wikipedia.org/wiki/Paul_Modrich), and [Aziz Sancar](https://en.wikipedia.org/wiki/Aziz_Sancar) (Turkish-American in the field of genetics, was born in Mardin in 1946 ), for their work on the molecular mechanisms of DNA repair processes. There are two types: [nucleotide excision repair](https://en.wikipedia.org/wiki/Nucleotide_excision_repair) and [base excision repair](https://en.wikipedia.org/wiki/Base_excision_repair)

**L6- DNA Recombination**

**Barbara McClintock, (1902–1992)**An American scientist and [cytogeneticist](https://en.wikipedia.org/wiki/Cytogenetics) who was awarded the 1983 [Nobel Prize in Physiology](https://en.wikipedia.org/wiki/Nobel_Prize_in_Physiology_or_Medicine)

**Jumping genes by Barbara in 1940**

**Robin Holliday  
(1932-2014)**

A British [molecular biologist](https://en.wikipedia.org/wiki/Molecular_biology). Holliday described a mechanism of DNA-strand exchange that attempted to explain gene-conversion events that occur during meiosis in fungi.

**L8- RNA Types**

The unit is named after the [Swedish](https://en.wikipedia.org/wiki/Sweden) [chemist](https://en.wikipedia.org/wiki/Chemist) [Theodor Svedberg](https://en.wikipedia.org/wiki/Theodor_Svedberg) (1884–1971), winner of the 1926 [Nobel Prize](https://en.wikipedia.org/wiki/Nobel_Prize)[[2]](https://en.wikipedia.org/wiki/Svedberg) in [chemistry](https://en.wikipedia.org/wiki/Chemistry) for his work on disperse systems, [colloids](https://en.wikipedia.org/wiki/Colloid) and his invention of the [ultracentrifuge](https://en.wikipedia.org/wiki/Ultracentrifuge).

**L10- Transcription Part 2**

[Phillip Sharp](https://en.wikipedia.org/wiki/Phillip_Allen_Sharp) and [Richard J. Roberts](https://en.wikipedia.org/wiki/Richard_J._Roberts) were awarded the 1993 [Nobel Prize in Physiology or Medicine](https://en.wikipedia.org/wiki/Nobel_Prize_in_Physiology_or_Medicine) for their discovery of introns and the splicing process .