

## Nobel Prize for Medicine

On October 2, 2023 the Nobel Prize winner's announcement started. On December 10 prizes will be distributed.

### Winners:

- **Katalin Karikó** - Hungarian - American biochemist
- **Drew Weissman** – American Physician & Scientist

### Awarded for:

For their discoveries concerning **nucleoside base modifications** that enabled the development of effective **mRNA vaccines** against COVID-19.

### Announced by:

The Royal Swedish Academy of Science

### Cash prize:

11 million Swedish kronor (approximately Rs. **8.33 crore**)

### mRNA Technology:

mRNA - Messenger RNA, a type of molecule that carries instructions from **DNA** to a cell's **cytoplasm**, where those messages are 'read' to produce various **proteins**.

- mRNA – the **basis** for a new kind of vaccine.

This technology sends messages to our cells to make protein which fight against virus, bacteria when it attacks our body.

### Significance mRNA technology – Covid 19 vaccines:

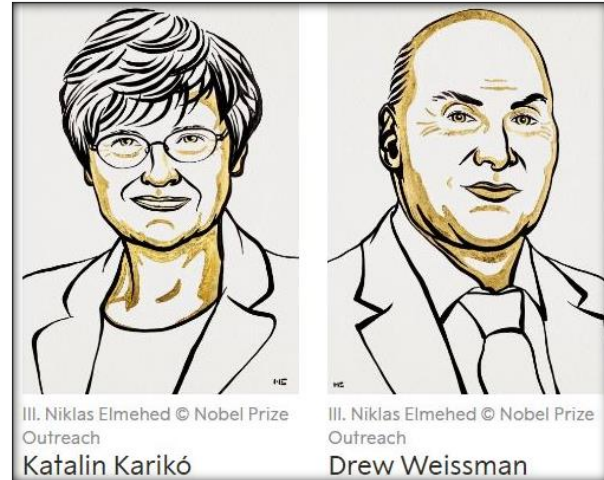
- ✓ Through this technology, vaccine development is **quicker** than conventional vaccine
- ✓ **Immunity** of body – strengthened
- ✓ Lowering death roll.
- ✓ Eg: **Moderna**, **Pfizer** vaccines used this technology.

### Current studies:

Exploring its uses against – **Influenza**, **dengue**, some **cancers** & **autoimmune diseases**.

### More to know:

**Katalin Karikó** - 13<sup>th</sup> women to win the prize.



### Nobel Prize

Established by the will of **Alfred Nobel**

**Awarded to** – Contributor of greatest benefit to humankind

1<sup>st</sup> Award – **1901**

### Categories:

1. **PHYSICS**
2. **CHEMISTRY**
3. **MEDICINE**
4. **LITERATURE**
5. **PEACE**
6. **ECONOMIC SCIENCE (1986 created)**

Prize ceremony - **Stockholm, Sweden** in December every year.

For Peace prize - Presented annually in **Oslo, Norway**

**Award:** A gold medal, A diploma, A monetary award

Maximum sharing's – 3 people

Cannot be given **posthumously**

1<sup>ST</sup> Indian Nobel Laureate: **Rabindranath Tagore (Literature), 1913**

1<sup>ST</sup> Indian Woman Nobel Laureate: **Mother Teresa (Peace), 1979**

