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Mini Review

Inspiring (Intelligent, Informative, Intelligible) Medical Physiology (I mp)

Part-03[§]: Nobel Prize in Medicine for 2023

S. Narasinga Rao^{1*} and R. Sambasiva Rao²

1. Dept. of General Medicine, Government medical College, Government General Hospital, Srikakulam, AP, **INDIA**

2. School of Chemistry, Andhra University, Visakhapatnam 530 003, **INDIA**

Email snrnaveen007@gmail.com (+91 ,9848136704) rsr.chem@gmail.com (+91 ,99 85 86 01 82)

https://en.wikipedia.org/wiki/List_of_Nobel_laureates_in_Physiology_or_Medicine

Conspectus

Alfred Nobel was born in Stockholm on 21st October, 1833. Dr. Alfred was a chemist, manufacturer of explosives, entrepreneur and self-sufficient man. Nobel was fluent in five languages, poet, drama writer and philanthropist. Alfred imbibed fascism and his views were criticized as radical. He has fascination for literature. His expertise and devotion for physics and chemistry resulted in professional growth to bag more than 350 patents of different nations. He had kind heart and donated huge funds for medical advancement and growth. He rose in industry and became one of the few richest persons of his time. Dr Nobel never married and had no biological children.

False obituary news and impact on Alfred's endeavours: Ludvig Nobel, one of Alfred Nobel's brothers, passed away in Cannes in the year 1888 and Alfred was in Paris at that time. A Persian journalist mistook Alfred for Ludvig and published it as Alfred Nobel's obituary event. The pungent comments and allegations (viz. "The merchant of death is dead", "Nobel was an arms merchant and became rich by finding ways to kill more people faster than ever before") by news-makers spread a black-shadow on his personality and integrity as a human. More strange was he could follow it all as was alive at that moment. It caused a stir in his brain. He decided to set apart all his personally acquired property, of course in explosives/armoury business, for an organization which should be remembered in serving for welfare of higher order for humankind. He legalized the institution of five awards called "Nobel prizes" after his family name. The disciplines selected were Medicine, Physics, Chemistry, Literature and peace and the prizes have been given since 1901.

[§]Part 1: Nobel Prize in "Physiology or Medicine" for 2021, S. Narasinga Rao* and R. Sambasiva Rao, Journal of Applicable Chemistry, 2021, 10 (6): 827-837.

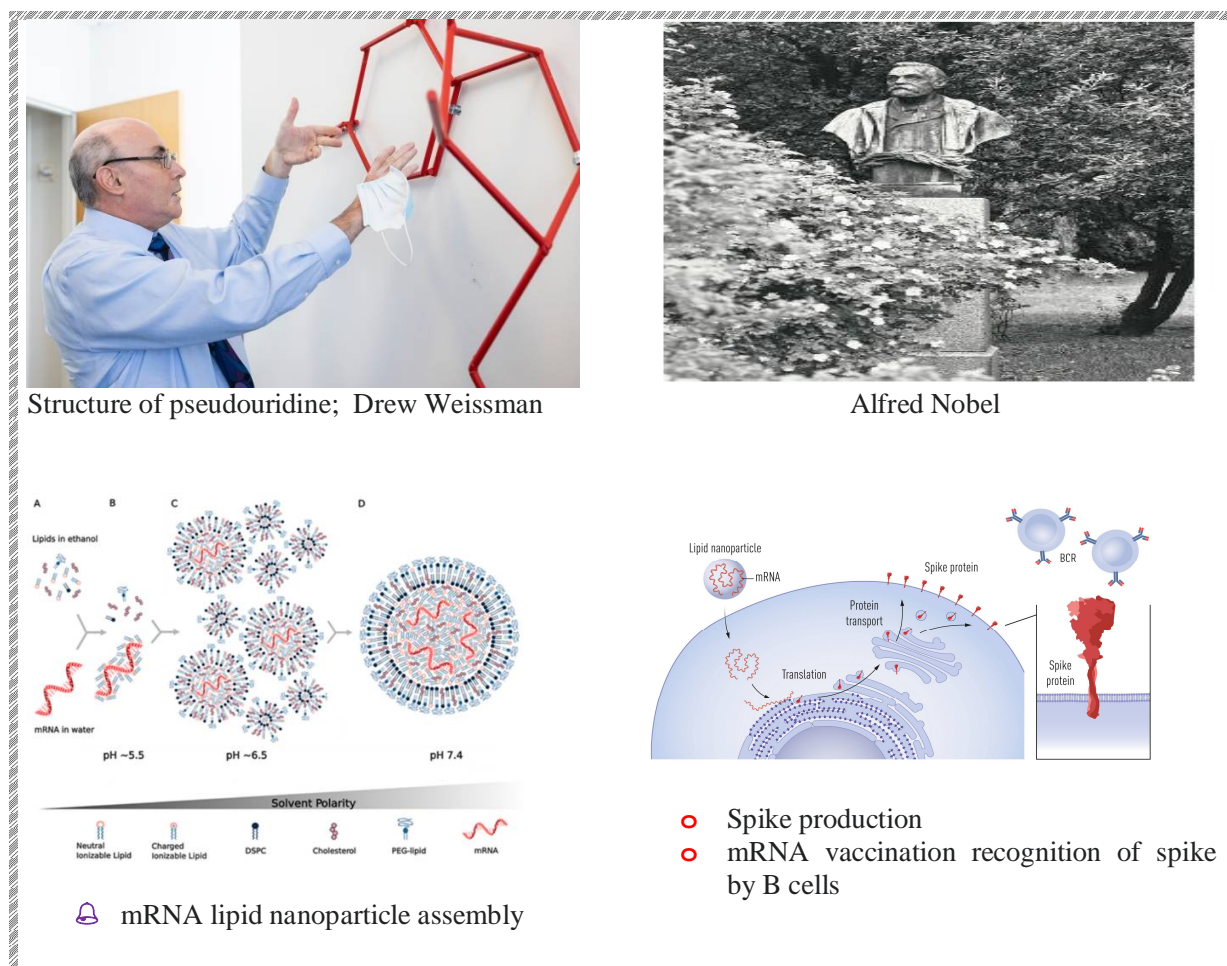
Part 2- Inspiring Medical Professionals (Imp) Maurice Hilleman, S. Narasinga Rao* and R. Sambasiva Rao, Journal of Applicable Chemistry, 2022, 11 (3): 331-343.

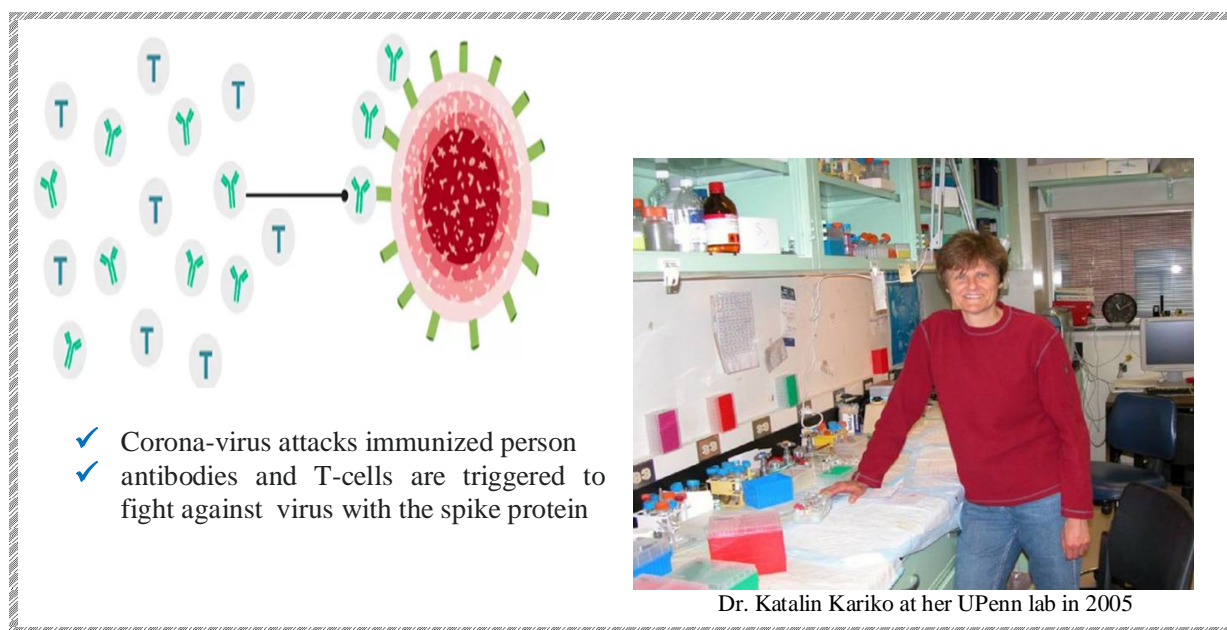
Nobel Prize in Physiology or Medicine: During the years 1901 to 2023, the numbers of annual Nobel prizes announced in medicine are 115. They are conferred on 228 scientists (who are referred popularly as Nobel Laureates from then on) among whom 13 are women. The prize amount is increased from SEK 10 in yesteryears to 11 million from this year (now equivalent to 1039K US-Dollars).

Nobel prize of 2023 in Medicine is shared by Katalin Karikó and Drew Weissman for their fundamental research in pure science which led to medical applications of m-RNA on vaccine preventing viral diseases. Their concerted efforts along with those of many other investigators resulted in synthetic m-RNA vaccine for SARS-Cov-2 virus. U.S. Food and Drug Administration (FDA) approval in August 2021, the vaccine manufactured by Pfizer-BioNTech. The Moderna COVID-19 (CORONA VIRUS Disease-19 or 2019) vaccine was authorized for emergency use. The covid-19 vaccine saved millions of human lives by preventing from infection putting a stop for catastrophe/pandemic.

Nobel Future prospects m-RNA as therapeutic drugs and vaccines: The astounding success, proved validity and safety already paving way for re-investigations for cancer. A new dimension is looking for therapeutic drugs for cure of diseases through protein machinery approach.

Graphical Abstract:





Keywords: Nobel Prize-2023-Physiology or Medicine; Katalin Karikó; Drew Weissman; FDA approved; Pfizer-BioNTech and Moderna's vaccines; prevent COVID-19 infection; Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2); Nucleoside base modifications (uridine (U) by pseudouridine) mRNA; Zika virus; Influenza; prevent herpes, end HIV defeat influenza; stop the next coronavirus and/like pandemic

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