

# Noble Laurets Related to Paediatrics

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Abstract

Alfred Nobel was born on 21 October 1833 in Stockholm, Sweden, into a family of engineers. He was a chemist, engineer, and inventor. In 1894, Nobel purchased the Bofors iron and steel mill, which he made into a major armaments manufacturer. Nobel also invented ballistite. This invention was a precursor to many smokeless military explosives, especially the British smokeless powder cordite. As a consequence of his patent claims, Nobel was eventually involved in a patent infringement lawsuit over cordite. Nobel amassed a fortune during his lifetime, with most of his wealth from his 355 inventions, of which dynamite is the most famous.

In 1888, Nobel was astonished to read his own obituary, titled *The merchant of death is dead*, in a French newspaper. As it was Alfred's brother Ludvig who had died, the obituary was eight years premature. The article disconcerted Nobel and made him apprehensive about how he would be remembered. This inspired him to change his will. On 10 December 1896, Alfred Nobel died in his villa in San Remo, Italy, from a cerebral haemorrhage. He was 63 years old.

Nobel wrote several wills during his lifetime. He composed the last over a year before he died, signing it at the Swedish–Norwegian Club in Paris on 27 November 1895. To widespread astonishment, Nobel's last will specified that his fortune be used to create a series of prizes for those who confer the "greatest benefit on mankind" in physics, chemistry, peace, physiology or medicine, and literature. Nobel bequeathed 94% of his total assets, 31 million SEK (c. US\$186 million, €150 million in 2008), to establish the five Nobel Prizes.Because of scepticism surrounding the will, it was not until 26 April 1897 that it was approved by the Storting in Norway. The executors of Nobel's will, Ragnar Sohlman and Rudolf Lilljequist, formed the Nobel Foundation to take care of Nobel's fortune and organise the award of prizes.

Nobel's instructions named a Norwegian Nobel Committee to award the Peace Prize, the members of whom were appointed shortly after the will was approved in April 1897. Soon thereafter, the other prizeawarding organisations were designated or established. These were the Karolinska Institutet on 7 June, the Swedish Academy on 9 June, and the Royal Swedish Academy of Sciences on 11 June. Nobel Foundation's newly created statutes were promulgated by King Oscar II.In 1905, the personal union between Sweden and Norway was dissolved. Thereafter, Norway's Nobel Committee was responsible for awarding the Nobel Peace Prize and the Swedish institutions retained responsibility for the other prizes.

**Keywords:** Noble Laurets; Paediatrics; Frederick C. Robbins; Aaron Ciechanover; Stanleycohen; Gerty cori; John Franklin Enders; Daniel Carleton Gajdusek.

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# Frederick C. Robbins

During military service he was assigned to the Fifteenth Medical General Laboratory as Chief of the Virus and Rickettsial Disease Section. In 1945 he received the Bronze Star for Distinguished Service and hold the rank of Major [1].

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In 1948, he was appointed as a Senior Fellowship in Virus Diseases of the National Research Council and worked with Dr. John F. Enders in the Research Division of Infectious Diseases, Children's Hospital Medical Center. He was also a member of the Faculty of the Harvard Medical School. He made invention of the cultivation of poliomyelitis virus in tissue culture and also investigated the viruses of mumps, herpes simplex and vaccinia.



Frederick C. Robbins was born on 25 August 1916 in Auburn, USA. 1940, he was graduated from Harvard Medical School and was appointed as resident physician in bacteriology at The Children's Hospital Medical Center in Boston, Massachusetts

# Positions

- Associate in Pediatrics on the Faculty of the Harvard Medical School,.
- Associate Director of the Isolation Service at the Children's Hospital Medical Center.
- Research Fellow in Pediatrics at The Boston Lying-in Hospital.
- Assistant to the Children's Medical Service, Massachusetts General Hospital.
- Professor of Pediatrics at Western Reserve University School of Medicine and Director of the Department of Pediatrics and Contagious Diseases, Cleveland Metropolitan General Hospital (1952)
- Associate member of the Commission on Viral Diseases of the Armed Forces Epidemiological Board, United States Department of Defense, of

the Board of Scientific Counselors of the Division of Biologics Standards, Public Health Service, United States Department of Health, Education and Welfare, of the Physician's Council, the Scientific Research Advisory Board of the National Association for Retarded Children.

- Chairman of District V of the Committee on Medical Education of the American Academy of Pediatrics, and of the Awards Committee of this Academy, and served on the Public Health Council of the Ohio State Department of Health. Sunil Mhaske *et al* / Noble Laurets Related To Pediatrics
- Consultant to the Infectious Diseases and Tropical Medicine Training Grant Award Committee of the National Institute of Allergy and Infectious Diseases, and to the Oregon Primate Research Center [2].

## Honours

- John Carroll University of Cleveland conferred honorary degree of Doctor of Science. (1955)
- University of Missouri conferred honorary degree of Doctor of Science.
- Nobel Prize in Physiology or Medicine in 1954 for his work in isolation and growth of the polio virus.

Frederick c. Robbins died on 4 August 2003 in Cleveland, USA [3].

## **Aaron Ciechanover**



**Aaron Ciechanover** was born on 01<sup>st</sup> October 1947 in Haifa, Israel. He was qualified with M.D., D.Sc. degrees.

He was Visiting professor of pediatrics at Washington University School of Medicine in St. Louis and Research Distinguished Professor of Biochemistry at Technion-Israel Institute of Technology, Haifa, Israel. He was regularly visiting the Pediatrics in the School of Medicine.

In 2004, he received Nobel Prize in Chemistry for the discovery that the destruction of proteins is as important as their synthesis for the maintenance of protein homeostasis in cells and the unraveling of the ubiquitin system that targets proteins for degradation [4].

# Stanley Cohen



He was appointed with the University of Colorado in the Department of Pediatrics and Biochemistry where he was involved in the metabolic studies of premature infants. In 1952, he joined to the Department of Radiology, at Washington University, as a postdoctoral fellow of the American Cancer Society.

He went then to Vanderbilt University as an Assistant Professor in the Biochemistry Department in1959. In 1975, he was appointed as an American Cancer Society Research Professor and in 1986, he became a Distinguished Professor.

Awards

 Research Career Development Award of National Institutes of Health. (1959)

- National Paraplegia Foundation's Second Annual William Thomson Wakeman Award. (1974)
- American Cancer Society Research Professor of Biochemistry. (1976)
- Earl Sutherland Prize for Achievement in Research, Vanderbilt University. (1977)
- Albion O. Bernstein, M.D. Award, Medical Society of the State of New York, (1978)
- H.P. Robertson Memorial Award of National Academy of Science. (1981)
- Lewis S. Rosenstiel Award of Brandeis University. (1982)
- General Motors Cancer Research Foundation's Alfred P. Sloan Award. (1982)
- Louisa Gross Horwitz Prize of Columbia University. (1983)
- Distinguished Achievement Award of the UCLA Laboratory of Biomedical and Environmental Sciences. (1983)
- Lila Gruber Memorial Cancer Research Award of American Academy of Dermatology. (1983)
- Bertner Award of M.D. Anderson Hospital, University of Texas. (1983)
- Honorary Doctor of Science, University of Chicago. (1985)
- Gairdner Foundation International Award. (1985)
- National Medal of Science. (1986)
- Fred Conrad Koch Award of The Endocrine Society. (1986)
- Albert Lasker Basic Medical Research Award of Albert and Mary Lasker Foundation. (1986)
- Nobel Prize in Physiology or Medicine, with Rita Levi-Montalcini for their discoveries of growth factors (1986).

#### GERTY CORI

She was graduated from medical school of the Karl-Ferdinands-University in Prague in 1914 and Doctorate in Medicine in 1920. In Vienna, she joined the pediatrics unit and conducted experiments in temperature regulation, comparing temperatures before and after thyroid treatment and published papers on blood disorders.

With her husband Carl, she received the Nobel Prize in 1947 for the discovery of the mechanism by which glycogen-a derivative of glucose-is broken down in muscle tissue into lactic acid and then resynthesized in the body and stored as a source of energy (known as the Cori cycle). She was the third woman and first American woman to win a Nobel Prize in science and the first woman to be awarded the Nobel Prize in Physiology or Medicine.



Republic. She was an American biochemist.

Cori was honored by the release of a US Postal Service stamp in April, 2008. She was also awarded the Garvan-Olin Medal (1948).

She was appointed by President Harry S. Truman as board member of the National Science Foundation and was elected to the National Academy of Sciences, the fourth woman so honored.

She died in 26th October1957 (5,6)

# John Franklin Enders

## (Father of Modern Vaccines)

In 1949, Enders, Thomas Huckle Weller, and Frederick Chapman Robbins received Nobel Prize in Physiology or Medicine (1954)-for their discovery of the ability of poliomyelitis viruses to grow in cultures of various types of tissue. Also in 1954, along with Peebles, he isolated measles virus from an 11-year-old boy [7,8].



**Enders** was born on 10<sup>th</sup> February 1897 in West Hartford, Connecticut. In 1918, he joined the United States Army Air Corps as a flight instructor and a lieutenant. But later on he entered in biomedical field with a focus on infectious diseases and received a Ph.D. degree at Harvard in 1930. He later joined the faculty at Children's Hospital Boston.

## Honors

- 1946: Fellow of the American Academy of Arts and Sciences.
- 1955: Kyle Award from the U.S. Public Health ServiceSunil Mhaske *et al* / Noble Laurets Related To Pediatrics
- 1963: Presidential Medal of Freedom
- 1963: Science Achievement Award from the American Medical Association
- 1967: Foreign Member, Royal Society of London.
- Honorary doctoral degrees from thirteen universities.
- Enders died on 08<sup>th</sup> September 1985 in Waterford, Connecticut [9].

# **Daniel Carleton Gajdusek**

Gajdusek became head of the laboratories for



virological and neurological research at the National Institutes of Health in 1958 and was inducted to the National Academy of Sciences in 1974 in the discipline of microbial biology.

Gajdusek had brought 56 mostly male children from South Pacific in the United States and provided them with the opportunity to receive high school and college education.

He was co-recipient of Nobel Prize in Physiology or Medicine with Baruch S. Blumberg in 1976 for works on kuru, the first human prion that disease was demonstrated to be infectious. Gajdusek died 12th December 2008 in Tromso, Norway [11,12].

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