

Biography

Ragnar Arthur Granit was born in the parish of Helsinge, Finland, on October 30th, 1900, eldest son of the Crown forester Arthur Wilhelm Granit and his wife Albertina Helena Malmberg. The family then moved to the neighbourhood of Helsingfors where his father opened a firm dealing with sylviculture and forest produce and the son became a pupil of the Swedish Normallyceum belonging, as he did, to the Swedish population of his native country, to a sea-faring family from the island of Korpo in the Baltic waters separating Sweden and Finland. He still spends his summers on this island.

Granit matriculated at Helsingfors University in 1919. While still at school, he took part in Finland's War of Liberation 1918 (the Svidja corps) and was decorated with the Cross of Freedom IV Cl. «with sword».

During a preliminary Summer Course at the Åbo Academy in 1919 he decided to take up experimental psychology, which as an academic subject fell within the humanities, but was well advised by his uncle, Dr. Lars Ringbom, to add a full medical degree to these studies. His teacher in experimental psychology at Helsingfors was Eino Kaila, later Professor of Philosophy. Granit became Mag. Phil. in 1923. During his medical studies he arrived at the conclusion that physiology would prove a better starting point than psychology for the visual work that he had undertaken almost from the beginning of his career and so he eagerly accepted the post of demonstrator (assistant) at the Physiological Institute, offered him in 1926 by Professor Carl Tigerstedt. He took his M.D. in December 1927 and became «Docent» in Physiology in 1929.

In 1928 he spent half a year at Sir Charles Sherrington's laboratory at Oxford and returned there as a Fellow of the Rockefeller Foundation in 1932-1933. The years 1929-1931 he spent as Fellow in Medical Physics at the Johnson Foundation of the University of Pennsylvania on the invitation of Dr. D. W. Bronk, then engaged in setting up this institute. Returning to Helsingfors Granit held the office of Professor of Physiology from 1935 and was formally appointed in 1937, his chair being at about the same time transformed into one assigned for teaching in the Swedish language. During the so-called Winter War between Finland and Russia, Granit was district physician for the three Swedish-speaking island parishes of Korpo, Houtskär and Iniö in the Baltic, simultaneously charged with the duty as physician to the forts within this region.

In 1940 he was called to Harvard University and to the <u>Royal Caroline Institute</u> of Stockholm, in the end deciding in favour of the latter. The appointment was based on a grant from the Foundation «Knut och Alice Wallenbergs Stiftelse» and also supported by the Rockefeller Foundation. In 1945 the Caroline Institute made his laboratory a department of the <u>Medical Nobel Institute</u> for which new buildings were to be erected. In 1946 he received a personal research chair in Neurophysiology from the Ministry of

Education. The new building was ready in 1947. He retired as Professor Emeritus in July, 1967.

Ragnar Granit was a Member of the Medical Research Council (1949-1955), President of the Royal Swedish Academy of Sciences (1963-1965), Vice President (1965-1969). Between 1956 and 1966 he was Visiting Professor at the Rockefeller Institute (since Rockefeller University), New York; in 1967 in a similar capacity at St. Catherine's College, Oxford for the Michaelmas Term, and at the University of the Pacific, San Francisco, 1969; Fogarty Scholar, N.I.H., Bethesda, 1971-1972. Some of his major lectures are: The Thomas Young Oration of the Physical Society, London, 1945; The Silliman Lectures of Yale University, 1954; The Sherrington Memorial Lecture of the Royal Society of Medicine, London, 1967; The Sherrington Lectures, Liverpool, 1970.

Granit has honorary degrees from Oslo University, M.D., 1951; Oxford University, D. Sc., 1956; Hong Kong University, D. Sc., 1961; Loyola University, Chicago, 1969; Pisa University, 1970; Catedrático hon. from San Marco University, Lima, University of Santiago de Chile and the National University, Bogotá, all in 1958. He is a Member or Foreign Member of the Soc. Scient. Fenn., 1937; Royal Swedish Acad. Sci., 1944; Soc. Philomatique, Paris, 1947; Acad. Sci., Bologna, 1948; Amer. Philos. Soc., 1954; Royal Danish Acad. Sci., 1956; Royal Society, London, 1960; Natl. Acad. Sci., Washington, 1968; an Honorary Member of the Accad. di Medicina, Turin, 1961; Indian Acad. Sci., 1964; Amer. Acad. of Arts and Sciences, 1971; and honorary member of the following professional societies: the Swedish Societies for Neurology, for Ophthalmology and for Clinical Neurophysiology, the International Society for Clinical Electroretinography, the Biological Societies of Montevideo, Santiago de Chile and Argentina, the Finnish Society for Ophthalmology, the American Physiological Society, the American Neurological Association, the Physiological Society of England, the Finnish Society of Physicians, the Swedish Society of Physicians, the Swedish Society of Physicians, the Swedish and the Finnish Societies of Physiology.

Among the many awards Ragnar Granit has received the following may be mentioned here: Hans Cronstedt's Prize, 1926; Jubilee Medal of the Swedish Society of Physicians, 1947; Anders Retzius Gold Medal, Stockholm, 1957; F. C. Donders Medal, Utrecht, 1957; Sherrington Memorial Gold Medal, London, 1967; Purkinje Gold Medal, Prague, 1969.

From 1920 to around 1947 Ragnar Granit's main research was in the field of vision, beginning with psychophysics in the twenties and ending up with electrophysiological work from the early thirties onwards, as briefly reported in the Nobel Lecture. He next took up muscular afferents, in particular the muscle spindles and their motor control; passing over to the spinal cord, he studied the projection of these affarents and separated tonic and phasic motoneurons, established algebraical summation of excitation and inhibition upon these cells, finally also making use of the intracellular approach for the investigation of these and several other problems of motor control. In 1965 he initiated the series of international Nobel Symposia as contributor to, and as Chairman and Editor of Nobel Symposium I, Muscular Afferents and Motor Control.

Ragnar Granit married in 1929 Baroness Marguerite (Daisy) Emma Bruun, daughter of the State Councillor, Baron Theodor Bruun and Mary Edith Henley. The son in this marriage, Michael W. Th. Granit has been Chief Architect of the Communications of Greater Stockholm since 1967. Michael Granit married Elisabet Stolpe in 1957, and they have two sons and one daughter.

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