

Wilson Greatbatch Biography

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Biography

Wilson Greatbatch was born in Buffalo, New York, in 1919. When the United States entered World War II, Greatbatch left his studies at Buffalo State Teachers College and adapted his skills as an amateur radio operator to become a military radioman. After the war, the GI Bill gave Greatbatch the opportunity to study for an engineering degree at Cornell University, where he was distinguished for having the most children (five) of anyone in his class. While working part-time at Cornell's animal behavior farm, Greatbatch chatted with visiting brain surgeons during lunch breaks and learned about complete heart block. In this disease, the electric impulse sent by the heart's sinus node to the heart muscles, causing them to contract and pump blood, is disrupted. Greatbatch immediately thought of designing an artificial pacemaker that could be implanted in the chest and deliver shocks that would cause the heart to beat. At the time, though, in the early 1950s, no components small enough to build such a device were available. After receiving his bachelor's degree in electrical engineering from Cornell, Greatbatch earned a master's degree from the State University of New York at Buffalo in 1957. In 1958, Greatbatch met Dr. William Chardack of Buffalo's Veterans Administration Hospital and told him about the pacemaker idea. Chardack responded that Greatbatch could save 10,000 lives a year with such a device, which now could be made feasibly small because transistors were available. Within two weeks, Greatbatch had built a workable pacemaker; within two years he had built fifty pacemakers and the first ones were implanted successfully in humans. In the 1970s, after more than 10 years of successful pacemaker use, Greatbatch turned to improved battery design. He found the long, reliable life pacemakers needed in the lithium battery, which his company began to manufacture. Next, Greatbatch delved into a biomass energy project, planting thousands of acres of poplar trees. This in turn aroused Greatbatch's interest in cloning plants and working with tissue culture and gene synthesis. His company, Greatbatch Gen-Aid, then went on to attempt the synthesis of genes that can block retroviral diseases like AIDS and T-cell leukemia. Greatbatch preferred to describe himself as an engineering executive or entrepreneur rather than an inventor, but his more than 150 patents certainly qualified him for the latter title. In 1986 Greatbatch was made a member of the National Inventors Hall of Fame.