

2011-J2807

LEGISLATIVE RESOLUTION mourning the death of Wilson Greatbatch, the eclectic inventor, engineer and industrialist known worldwide for creating the first heart pacemaker successfully implanted in a human

WHEREAS, It is the custom of this Legislative Body to pay tribute to citizens of the State of New York whose lifework and civic endeavor served to enhance the quality of life in their communities and the great State of New York; and

WHEREAS, The inventor of the first practical implantable pacemaker and the lithium battery responsible for keeping it running, Wilson Greatbatch of Clarence, New York, died on Tuesday, September 27, 2011, at the age of 92; and

WHEREAS, Today, his little machine continues to rank as one of the great inventions of medical science, but Wilson Greatbatch did not truly understand what his implantable pacemaker meant to the world until he saw the faces of the people it saved; and

WHEREAS, One of his first and most gratifying realizations of what his vital invention could do was when he had the pleasure of observing the positive reactions of elderly people to their grandchildren; people ill with heart disease generally do not have enough blood supply to their brains; subsequently, they could not successfully respond to the banter of children; and

WHEREAS, A quiet man who wore a trademark bow tie, Wilson Greatbatch had an amazing mind and made an indelible impression; in 1945, he married his wife, Eleanor, who often served as his laboratory assistant and was the primary maker of his bow ties; she died in January at the age of 90; and

WHEREAS, In 1984, his implantable cardiac pacemaker was named one of the 10 outstanding U.S. engineering achievements of the last 50 years by

the National Society of Professional Engineers; and

WHEREAS, Wilson Greatbatch was a member of the prestigious National Inventors Hall of Fame and held a National Medal of Technology that he received in 1990 from then-President George H.W. Bush at the White House; and

WHEREAS, Even in his advanced years, this gifted man, who held more than 350 U.S. and foreign patents, was still tinkering with new inventions and discoveries, from a cure for AIDS using genetic engineering to a nuclear-powered spaceship to send people to Mars; and

WHEREAS, Born in Buffalo, New York, on September 6, 1919, Wilson, affectionately known as Bill to family and friends, became interested in electronics while working as a Boy Scout in the small amateur radio station on a Sea Scouts ship; this fascination continued through his years at West Seneca High School, and in the United States Navy during World War II, when he was a radio operator; and

WHEREAS, In 1950, Wilson Greatbatch graduated with a bachelor's degree in electrical engineering from Cornell University; while at the school, he discussed heart block, a problem that occurs with the heart's electrical system, with two visiting surgeons, as he fit lab animals with blood pressure and heart rate monitors; this planted the seed for his future work; and

WHEREAS, Wilson Greatbatch would later join the faculty at the University of Buffalo, where he was working on new transistors at the Chronic Disease Research Institute recording high-frequency heart sounds; and

WHEREAS, In the late 1950s, while building an oscillator to record heart sounds, Wilson Greatbatch made a fortuitous mistake; after he grabbed the wrong resistor from a box and plugged it in, the unit gave off a startlingly familiar, uneven electrical pulse; staring at it in

disbelief, it was then he realized this was exactly what was needed to drive a heart according to his 2000 memoir "The Making of the Pacemaker"; and

WHEREAS, In his spare time, Wilson Greatbatch experimented with his idea of an implantable pacemaker, working upstairs in an old, cedar-sided barn on his property and using his savings to build 50 handmade pacemakers of various designs; and

WHEREAS, He had to solve the problem of how to reduce an electronic apparatus in the size of a kitchen cabinet to the size of a baby's hand; at first, he had difficulty interesting physicians in his invention; but two local Veterans Administration Hospital researchers and surgeons not only helped him develop and perfect his implantable pacemaker, but also tried the device in animals; and

WHEREAS, In the late 1950s, a European friend of Wilson implanted the pacemaker, unsuccessfully, in a human; then, in 1960, the local surgeons performed the first successful cardiac pacemaker implant in a human, 77 year-old Henry Hennafeld; this implant successfully worked for 18 months without any problems; remarkably, five of the first 15 patients given implanted pacemakers were alive 19 years later; and

WHEREAS, Wilson Greatbatch filed for a U.S. patent on the cardiac pacemaker July 22, 1960; today, an estimated one million people worldwide have a pacemaker implanted each year; and

WHEREAS, Wilson Greatbatch had an enormous impact on the lives of countless people; his influence was felt not only by those who knew him personally, but also by those who never met the man but continue to lead fulfilling lives as a result of his work as the co-inventor of the first successful implanted pacemaker; and

WHEREAS, In 1962, Wilson Greatbatch and local researcher, Herbert Mennen, formed Mennen-Greatbatch Electronics Inc.; their company, based in Clarence, New York, made medical equipment including hospital heart monitoring units and parts for pacemakers; and

WHEREAS, Eight years later, he left and founded another company, Wilson Greatbatch Ltd., for the manufacture of the lithium batteries he had developed for his pacemaker, long-life batteries used to replace the conventional mercury batteries that had to be replaced every two to

three years; and

WHEREAS, Wilson Greatbatch Ltd., also known over the years as Greatbatch Enterprises, also began making batteries for industrial and commercial uses, but he left in 1985 to develop new inventions and pursue other interests; and

WHEREAS, His main hobby was vegetable gardening; he easily learned languages and played the piano by ear; furthermore, he enjoyed sailing and canoeing; on his 72nd birthday, Wilson Greatbatch rigged a solar-powered canoe and traveled 130 miles on one of the Finger Lakes; recently, he was concentrating on developing alternative fuels; and

WHEREAS, Wilson was also a philanthropist; he donated land to his Town of Clarence, awarded community grants and provided free tuition and books to his employees and their children; and

WHEREAS, He and his wife founded the Eleanor and Wilson Greatbatch Foundation, currently the East Hill Foundation; the family-run charitable organization awards community grants; and

WHEREAS, In addition, Wilson Greatbatch was an elder at Clarence Presbyterian Church, where he sang in the choir and taught Sunday school; and

WHEREAS, The message "The good Lord does not care whether you succeed or fail, he just wants you to try hard" became one of Wilson Greatbatch's signature themes throughout his life, one he often passed along as advice to the younger generation; and

WHEREAS, He truly believed to never avoid doing anything out of fear that it would not work; people should not look only for success or peer approval, they should just do the work because it is a good thing to do; and

WHEREAS, Predeceased by his wife of 66 years, Eleanor and one son, Peter, Wilson Greatbatch is survived by three sons, Warren, John and Ken, and a daughter, Anne Maciariello, as well as 12 grandchildren and eight great-grandchildren; and

WHEREAS, Armed with a humanistic spirit and imbued with a sense of compassion, Wilson Greatbatch leaves behind a legacy which will long endure the passage of time and will remain as a comforting memory to all he served and befriended; now, therefore, be it

RESOLVED, That this Legislative Body pause in its deliberations to mourn the death of Wilson Greatbatch, inventor of the first practical implantable pacemaker, distinguished citizen and devoted member of his community; and be it further

RESOLVED, That a copy of this Resolution; suitably engrossed, be transmitted to the family of Wilson Greatbatch.