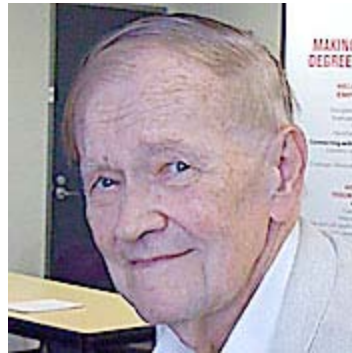


RALPH GORDON STANTON



RALPH GORDON STANTON (October 21, 1923 - April 21, 2010) Ralph Gordon Stanton passed away quietly April 21, 2010, in St. Boniface Hospital, at the age of 86, of cardiac arrest. Ralph always preferred an uncomplicated life, and asked for little more than a shelf of good books, his stamp collection, a tasty meal, and congenial company. His 64 year academic career was marked by many achievements and honours, and he will long be remembered for his teaching, mentorship and supervisory skills, and for his philanthropic generosity. Ralph Stanton, Canadian mathematician, teacher, scholar and pioneer in mathematics and computing education, was born in 1923 in Lambeth, Ontario. Eldest of four, Ralph was followed by his sister Elsie, who passed away a few years ago. He is survived by a sister Marion, and a brother Frank. Ralph's impressive curriculum vitae speaks for his integrity, patience, perseverance, and loyalty. He started at the University of Western Ontario (BA in Math and Physics, 1944) and went on to study at the University of Toronto (MA, PhD, 1945 and 1948), where he taught from 1946 to 1957. In 1957, Ralph chose to move to Kitchener-Waterloo to work on a planned expansion of Waterloo College that would include co-operative education. A man of great foresight, he realized the potential of such a development at a time when it was belittled by most. The expansion soon became the fledgling University of Waterloo, now regarded as one of the best institutions in Canada, and Ralph's energy and efforts played a significant role in the early development that led to future success. A man of wide interests and knowledge, Ralph made contributions to other departments as well as the department of mathematics. It is both unwise and impossible to describe his many significant accomplishments adequately; but among his greatest accomplishments, the following stand out. Being an outstanding teacher and excellent administrator, Ralph realized the fundamental importance of good teaching, and introduced measures that led to the University's current Center for Teaching Excellence. As the first Dean of Graduate Studies he encouraged all departments to develop graduate and research programs, in addition to the undergraduate courses which had to be developed at the time. Ralph was indeed ahead of his time, when he recognized the importance of computers and computing and decided to include what is now called Computer Science in the Mathematics Department. With his uncanny skill for identifying talent, he brought in a brilliant person, Wesley Graham, to develop this area. However, Ralph's most important achievement was to create a Faculty of Mathematics from a Department of Mathematics, the only one of its kind today. This development was instrumental in bringing about the potential for the international recognition that Mathematics at Waterloo has achieved; all of this and more in only a decade. At Waterloo, Ralph was legendary for wearing gaudy ties, and this later inspired students to drape a gigantic tie over the MC

building on its opening in 1968, which became the un-official mascot of the faculty. As of 2006, the faculty had 5,300 students, with 200 full-time professors, and offered 180 courses in Mathematics, Statistics, and Computer Science. The Faculty now houses the David R. Cheriton School of Computer Science, formerly the faculty's computer science department. In 1967 Ralph moved to start a Graduate Program in Mathematics at York University. In 1970 he moved to the Department of Computer Science at the University of Manitoba, serving as Head for several terms, Professor, and since 1984, as Distinguished Professor. During his time there, he strived to build up the Computing Science Department with an emphasis on applied computer science. Ralph's scientific research and scholarly contributions spanned many areas including algebra, applied statistics, mathematical biology, combinatorial design, graph theory, graph models of networks, algorithms and theoretical constructions of covering designs, packing designs, and pair-wise balanced designs. A search on Mathscinet hits 321 publications, and several more await publication. He was an incredibly productive researcher who stayed mathematically active all of his life. He received honorary degrees from the University of Queensland (D.Sc., hon. causa, 1989), the University of Natal (D.Sc., hon. causa, 1997) and the University of Waterloo (D.Math, hon. causa, 1997). In 1985 he was awarded the Killam prize in Mathematics. Ralph Stanton's impact on mathematical education, particularly in computer science, has been substantial. He introduced computing in the classroom at the University of Waterloo in 1960, and introduced co-operative programs in Applied Mathematics and in Computer Science. He encouraged teaching of computing science and mathematics at the secondary school level, serving as editor of two high school mathematical journals, as well as on provincial (Ontario) curriculum committees, and was actively involved in developing what is now the Canadian Mathematics Competition. Ralph held the opinion that the future of the world lies in its young people, and he was always keenly enthusiastic when he found a student who expressed curiosity and ability in Mathematics and research. Like his longtime friend Paul Erdos, he was happiest when he was collaborating on a research project, and found great fulfillment in guiding bright new researchers in their careers. Ralph was always willing to provide an honest appraisal and sincere flattery when it came time for promotions and grant applications. He saw it as a duty to help active researchers grow in their chosen areas. Through the years, Ralph was asked to serve on many grant evaluation committees and review panels, including NSERC, and this experience gave him invaluable insight into how he might counsel serious career-minded academics in navigating the dangerous waters of research grant proposals. For this lost wisdom, he will be sorely missed. One could say that Ralph was a Renaissance man; not only did he have a keen interest and demonstrated ability in scientific areas, but he was very well-read in world history, law, philosophy, and literature. He spoke English, French, some Spanish, read a little Russian, and got along well enough to give lectures in German. As a young man Ralph spent a year in Brazil, returning with both a teaching certificate in Portuguese and love of Portuguese literature. Over the years this developed into a superb library, the body of which was donated to the Fisher Rare Book Library at the University of Toronto in the 1990s, with additional material a few years later. Since his move to Winnipeg, Ralph's philanthropic activities were primarily focused on three non-profit corporations that he founded and continued to administer until his death. The first, Utilitas Mathematica Publishing, was started in the early 1970s publishing conference proceedings in Mathematics and scientific computing. Success with UMPI was followed shortly by the foundation of Charles Babbage Research Centre, to promote conferences and encourage the publication of research. CBRC is currently a registered charitable organization. Ralph's ultimate project is The Institute of Combinatorics and Its Applications. Modelled after the IMA,

the ICA is focused more tightly on the area of Designs and Combinatorial Mathematics. Begun in 1990, the ICA is internationally recognized, with membership the world over, and annually presents awards recognizing leadership and ongoing research in Combinatorics and related areas of Mathematics. A tribute to Ralph's foresight and organizational skill, the ICA, CBRC, and UMPI have all seen remarkable success, and with their continuing operation assured, his dream will continue to flourish. Ralph never stopped working; only hours before passing, one of his last executive orders was Make sure the reports get in on time. An exemplar of dedication, Ralph Gordon Stanton will be remembered by many as a pillar of the scientific community, an inspiration, and a dear friend. doubt thou stars are fire, doubt that the sun doth move, doubt truth to be a liar, but never doubt that I love... (Shakespeare)