

*Resolution on the Retirement of*

**N. BRUCE HANES**

*Professor of Civil Engineering*

*Adopted by the Faculty of Arts and Sciences of  
Tufts University  
May 11, 1992*

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*Norman Bruce Hanes, or Bruce as we know him, was born in Minot, North Dakota in January of 1933. He graduated from North Dakota State University in 1954 with his BS in Civil Engineering. Coming from a farming background, his interest in civil engineering was directed toward the environment. In the Fall of 1954 he received a University Fellowship and enrolled in a Masters program in civil engineering at the University of Wisconsin-Madison. The Wisconsin faculty liked what they saw and hired him as a full time instructor while he completed his Masters. He then took a teaching position Montana State College in Bozeman, where during the summer he worked at the State Department of Health as a Sanitary Engineer (now called Environmental Engineer). This experience kindled an interest in water microbiology and public health, spurring him to return to Madison in 1959 to pursue a Ph. D. Degree, which he obtained in 1961.*

*In the summer of that year, he and his family set out to find their fortune "out East", which to a mid-westerner means anywhere east of Chicago! With his wife Lorri driving the station wagon filled with children and suitcases, and Bruce at the wheel of a rented moving truck, they arrived at Tufts in the summer of 1961 full of expectation and adventure. Tufts and the Medford, Somerville, Winchester area was to become their home for the next 31 years.*

*Bruce's charge when he arrived at Tufts was to develop a graduate program in environmental engineering. True to expectation he was successful. In 1963 he secured one of the first graduate traineeship grants from the Federal Water Pollution Control Administration (a predecessor organization to the US Environmental Protection Agency). That award was followed by a similar training grant from the US Public Health Service in 1966. He was appointed Chair of the Civil Engineering Department in 1969, and served in that capacity for 12 years.*

*His research and professional activities have left an impressive mark. His pioneering investigations on the incidence and occurrence of microbial indicator organisms that are used to evaluate drinking and bathing water quality, formed the basis for USEPA standards and regulations that were to follow. His interest in environmental problems at the local level lead him to initiate the formation of the Aberjona River Commission, which sponsored some of the first studies that raised environmental concerns over contamination from various industrial sites in the basin. On a professional level, Bruce has been an active lobbyist for the engineering training grant programs of the Federal government, an endeavor that lead to his election as President of Association of Environmental Engineering Professors.*

*After stepping down from the Chair, Bruce focussed his career on two primary activities. One was a return to mentoring his students (which as we all know suffers when serving as Chair), and the other was a renewed effort toward encouraging increased professional participation in engineering education. His work with the Accreditation Board for Engineering and Technology, has had a number of direct impacts on the criteria now used to evaluate engineering programs, including; the incorporation of health and safety topics into engineering design courses, and the establishment of a national Civil Engineering Departments Heads Council within ASCE to address matters of accreditation.*

*We shall remember Bruce in many ways, but in particular for the following:*

*For his attention to students. His devotion to students through teaching and advising is of the highest order. His open door policy and ready availability to undergraduates and graduate students alike has won him praise and admiration. This year he was a co-recipient of the Seymour Simches Award for a career of distinguished teaching and advising.*

*For his mentoring of faculty. One of the hallmarks of Bruce's style has been his ability to nurture the growth of young faculty by defining the balance between challenge and encouragement.*

*For his leadership. Bruce's three decade long academic career is replete with vision and leadership. He advocated environmental and interdisciplinary educational programs long before it was fashionable to do so. His pioneering initiatives brought to Tufts joint Master's degree programs in engineering and public policy, fostered inclusion of public health issues in engineering education, and nurtured interdisciplinary environmental studies programs for Tufts undergraduates. He is largely responsible for laying the foundations of many of the successful environmental programs we enjoy at Tufts today.*

*His legacy to us is simple and clear: to see the best in people, to view change as opportunity, and to take risks by investing in people and programs. We know of no more fitting a tribute to an educator than to have the academic programs he initiated be institutionalized and to see his students assume professional careers as leaders in the environmental field.*

*We are much richer for our years with Bruce and we wish him well for a long and productive retirement, trusting that it will often include time with us at Tufts.*

*For the Civil Engineering Department*

*Linfield C. Brown, Chair*

*Mr. President, I move that this resolution be spread upon the permanent record of this Faculty and that a copy be sent to Professor Hanes.*