

RESOLUTION ON THE RETIREMENT OF ROBERT GREIF
May 14, 2008

**Adopted by the Faculty of Arts, Sciences and Engineering and placed in the Archives of
Tufts University**

Robert Greif was born in New York City in January 1938. Bob was raised in the Bronx, living with his parents and two brothers. Ralph is now Professor of Mechanical Engineering at Berkeley and Marty is an accountant in New York City. Bob inherited his passion for baseball from his father. He travelled by subway to Yankee Stadium where he would watch the great Joe DiMaggio play center field. Bob attended New York University and received his BSME *cum laude* at the age of 20.

Bob then travelled north, telling his family that he was doing so to study at Harvard University. In reality he was yearning to be closer to Fenway Park and his beloved Red Sox. Bob studied at Harvard under Prof. Lyell Sanders and was awarded a MA and a Ph.D. in Applied Mechanics in 1959 and 1963, respectively. Bob's teaching acumen was apparent to the Harvard faculty who appointed him a Teaching Fellow. Bob's dissertation research yielded fundamental insights into the mechanical behavior and dynamic response of shell-shaped structures, such as the prediction of crack formation and propagation in airplane wings and fuselages. Bob also gained practical experience with summer employment at the Boeing Corp. in Seattle and the Avco Corp. and Minneapolis-Honeywell Corp., both in the Boston area. The Avco Corp. was so impressed with this young research engineer that they hired him after graduation. Bob spent about four years at Avco where he held the rank of Senior Scientist at the time of his departure.

Though Bob enjoyed his work at Avco, he began to feel that university teaching and research were a better use of his talents. He was recruited to Tufts as a part-time Lecturer and then full-time tenure-track Assistant Professor by then Mechanical Engineering Chairman Lloyd Trefethen in 1967, receiving a 35% pay cut from his Avco salary. Prof. Greif's contributions to the mechanical engineering curriculum and his research activity were recognized early with his promotion with tenure to the rank of Associate Professor in 1970, after only three years in rank. This was one of the earliest promotion cases in Tufts history. Bob spent his sabbatical leave in 1974 as a Research Fellow at the University of Sussex in England. During this period of his career, Bob made critical contributions to understanding the dynamics of structures subjected to complex loads. He was a consultant in this area to major corporations such as Stone and Webster and diversified his professional interests in applying his analysis acumen to structural problems associated with orthodontics in collaboration with the Tufts School of Dental Medicine.

The 1970's saw the evolution of two of the most distinguishing features of Bob's academic persona – a friendly and entertaining teaching style and his willingness and skill as a university citizen. Bob remains one of the most beloved teachers and advisors in the department. Students over the years remark on his approachable style, his humor in the classroom, and his mentorship. From 1970 to 1977, Bob served as a chair of the Engineering Curriculum Committee, as a member of the Programs and Policy Committee of the Graduate School, the Education Policy Committee, the Library Committee and also several special review committees.

Bob was promoted to full Professor in 1978. In 1980, he was a member of the search committee that selected Mechanical Engineering Chair Frederick Nelson as the Dean of Engineering. An

outcome of Fred Nelson's elevation to dean was Bob's appointment as the new ME Chair. Bob held the position of Chair from 1981 to 1989. His terms as Chair were marked by department growth in terms of students and faculty, facilities, and research activity including Tufts first forays into manufacturing engineering, which was a critical national need of the 1980's. Bob also introduced the very popular and informal, if not terribly healthy, tradition of individual Chinese food lunch outings with the Chairman. As chair, Bob introduced the radical idea of each professor having their own computer in their office at a time when there was only one computer in the entire department. With the able assistance of Engineering Coordinator Vincent Miraglia, Bob led the effort to renovate Bray Laboratory from an outdated machining facility to a modern research lab. Bob was the driving force behind the selection and hiring of several of the current senior faculty including Professors Kachanov, Manno, Rogers and Saigal. Hence, it is clear to several of us that Bob is a particularly insightful judge of faculty talent. Bob's good judgment in searches also carried into the university realm as he sat on the committee that appointed Sol Gittleman as Provost of Tufts University and he hired Ioannis Miaoulis, who would go onto to be Dean of Engineering, Associate Provost, University Trustee, and President of the Boston Museum of Science.

Bob's reputation in area of vibrations and the dynamic response of complex materials and systems of which they are constructed continued to grow. He authored or co-authored over 80 refereed publications and has a long list of technical reports. His research has been supported by government and industry. He became chair of the Shock and Vibration Committee of the American Society of Mechanical Engineers, known as the ASME. He continued to serve in various ASME capacities and was named an ASME Fellow in 1997. He also started the first student section of the American Institute of Aeronautics and Astronautics and was named as Associate Fellow of that organization in 1985. During the 1970's, Bob began and has maintained a long term professional relationship with the U.S. Department of Transportation Volpe National Transportation Research Center in Cambridge, MA. He has involved numerous graduate students in DOT's research projects through this relationship and contributed to many significant developments related to air and high speed rail travel safety.

Bob spent a sabbatical leave in 1988 as a Senior Research Associate at NASA's Langley Research Center in Virginia. It was during this appointment that Bob initiated work in the emerging area of composite materials. He developed a new graduate level course on this topic when he returned. The course continues to be taught today as composite materials are now the major structural component of everything from the new Boeing Dreamliner to green housing materials. Bob's teaching and research into developing analytical tools to model the behavior of composite materials has had a substantial impact on the field and a large number of our students have specialized in this area in their professional careers.

Bob stepped down a department chair in 1990 and immediately resumed his avocations of teacher, researcher, and citizen. In particular, he willingly took on important service roles including chairing the department's graduate committee for the past fifteen years and chairing the AS&E Faculty Board on Administration. He also spent considerable time mentoring his successors as chair including Behrouz Abedian, Vin Manno, Anil Saigal and Rich Wlezien. Those of us in this group express our sincere appreciation for his counsel.

Returning to his personal life, apparently Bob did not only pursue his education and baseball interests while he was at Harvard. During this time, he also attended what were called "mixers".

At one such event at Simmons College, he met Joyce and as they say, the rest is history. Joyce and Bob married in June 1963. They settled in Lexington, MA where they prospered and produced two baseball fanatics and future Tufts alumni, Jessica (Class of 1989) and Andrew (Class of 1991). Jessica is now a successful financial professional in Florida where she lives with her husband and provides her father with an excuse to attend spring training games. Andrew headed to Los Angeles to pursue a career in the entertainment industry but has now become a counseling psychologist. Andrew also unofficially scouts West Coast talent for the Red Sox. Bob's obvious pride and love of his children and his devotion to Joyce have been constants in his life.

Professor Robert Greif has been and continues to be an extraordinary member of the Tufts community. Bob remains as dedicated to Tufts students and the university itself as the day he first arrived. He is an exemplar of the faculty cadre who have helped propel Tufts to the recognition that it now enjoys. It is with the greatest respect and friendship, and a dose of bittersweet emotion, that we salute his career and offer him our gratitude and best wishes for a long, healthy, and joyful next stage in his life. We are happy that Bob and Joyce, as they approach their 45th wedding anniversary this June, will continue to be active members of the Tufts Mechanical Engineering family for years to come.

On behalf of the Department of Mechanical Engineering, we request that this resolution be spread upon the minutes of this faculty and that a copy of this resolution be provided to Professor Robert Greif.

Presented by Vincent P. Manno