
In Memoriam



**Joseph R. Robinson
(1939–2006)
A Life for Science**

The scientific world mourns the death of one of its giants, Professor Joseph R. Robinson of the University of Wisconsin. Professor Joseph (Joe) Robinson passed away on Monday, September 5, 2006 at the age of 67. Joe Robinson was the Kremers Professor of Pharmacy in the School of Pharmacy and Professor of Ophthalmology in the Medical School of the University of Wisconsin-Madison. He received his B.S. and M.S. degrees from Columbia University in New York in 1961 and 1963, respectively, and his Ph.D. from the University of Wisconsin in 1966, working under the supervision of another giant of the field, Professor Takeru Higuchi.

Joe Robinson was a giant of the field of pharmaceutical sciences, probably the most recognized world pharmaceutical scientist of our generation. Tak Higuchi and Joe Robinson were the most influential figures in pharmaceuticals in the past 40 years. Their leadership and vision changed the broader pharmaceutical field. Indeed, in the last 30 years, Joe Robinson became the most vocal supporter of *the physicochemical approach* in the pharmaceutical field while stressing also the importance of biology integration in the curriculum and in pharmaceutical sciences in general. He was an inspiring

speaker and an exceptional role model for all generations. Joe was well recognized as an eloquent spokesman of the field and his plenary lectures at various recent meetings became legendary.

Professor Robinson's contributions were in several areas of pharmaceutical sciences, notably ocular and vaginal drug delivery, protein transport, bioadhesion and controlled release formulations. Joe was the first to *rationally develop mucoadhesive formulations for buccal and oral drug delivery* and the first who showed how mucoadhesion occurred at the polymer/mucosa interface. His classic 1984 publication on *Bioadhesive Polymers as Platforms for Oral-Controlled Drug Delivery—Method to Study Bioadhesion* (co-authored with Kinam Park and published in the *International Journal of Pharmaceutics*, 19(2):107–127 1984) became his most cited publication with 320 citations and established the rational design of modern bioadhesive drug delivery systems. He was also a pioneer in *vaginal and ocular drug delivery systems* and developed several new formulations (systems) in these fields. He had 35 years experience in forming new companies and consulting with the pharmaceutical industry. He was founder

or co-founder of three successful public companies, InSite Vision, Columbia Labs and Macromed, and his research and development of bioadhesive polymers was utilized and commercialized widely.

One of the most important contributions of Professor Robinson was also his mentorship of over 90 graduate students and postdoctoral fellows. Many of them have become leaders in the industrial and academic pharmaceutical sciences, including the two chief editors of the two premier pharmaceutical journals, Professors Vincent Lee (of *Pharmaceutical Research*) and Kinam Park (of the *Journal of Controlled Release*). Robinson himself was an editor of the critically acclaimed French journal *STP Pharma Sciences* (now the *Journal of Drug Delivery Science and Technology*). He was also the author or co-author of a number of great textbook and monographs, including the pioneering 1978 book *Sustained and Controlled Release Drug Delivery Systems*, (Dekker), the 1980 *Ocular Drug Delivery (APhA)*, the classic *Controlled Drug Delivery: Fundamentals and Applications* (with Vincent Lee, Dekker, second edition, 1987), and numerous others. He was the author of 340 publications and had given more than 800 presentations.

Professor Robinson was the recipient of the 1989 *Ebert Prize* from the Journal of Pharmaceutical Sciences, the 1989 *Maurice-Marie Janot Medal*, the only US scientist to have received this highest European scientific recognition in pharmaceutical sciences awarded biannually by APGI, the 1991 *Nagai Foundation Award* (Tokyo, Japan), the 1991 *American Association of Pharmaceutical Scientists Research Achievement Award*, the 1993 *Controlled Release Society (CRS) Founders Award*, the 1996 *Dale E. Wurster Pharmaceutical Research Award* from AAPS, the 1997 *Takeru Higuchi*

Research Prize from APhA, and the 1999 *American Association of Pharmaceutical Scientists Distinguished Pharmaceutical Scientist Award*, the highest recognition in our field.

He was internationally known and beloved for his leadership, scientific integrity, character and unending enthusiasm. He had widely taught and was loved by scientists in France, Germany, England, Spain, Italy, Turkey, Japan, India, Korea, Singapore, Argentina and many other countries throughout the world. He was awarded honorary doctorates from the Royal Danish School of Pharmacy in 1992 and the University of Sciences in Philadelphia in 2003. He served as a Distinguished Lecturer of numerous institutions.

Professor Robinson was also an inspiring leader of leading international organizations. He served as a *President* of both the *Controlled Release Society (CRS, 1991–1992)* and the *American Association of Pharmaceutical Scientists (AAPS, 1992–1993)*.

In mourning his untimely death, the whole scientific world pays tribute to the most inspiring scientist of the last quarter of the twentieth century whose seminal contributions shaped the field and led to the drug delivery explosion of the last ten years. His vision, advice, leadership but also enthusiasm and wit will be missed dearly!

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