

# AdaCore President Robert B. K. Dewar (1945-2015)



Robert Dewar, AdaCore President and one of the luminaries in the Ada community, succumbed to cancer on June 30, 2015. He had a distinguished career as a Professor of Computer Science at New York University (NYU), played a key role in the design and implementation of the Ada programming language, and founded AdaCore, along with four colleagues, in 1994. He served as its CEO until 2012 and as its President until his death.

At AdaCore, Dr. Dewar was active in all phases of the company's business, going well beyond the typical duties of his office. He was the principal architect of the GNAT compiler technology, a member of several product development teams, tracked problem reports to make sure they were handled properly, wrote numerous journal articles and opinion pieces on topical events in the industry, and served as company spokesman to customers and the trade press. He was an outspoken advocate of Freely Licensed Open Source Software, gave many talks on the subject, and was instrumental in establishing a cooperative relationship between AdaCore and the Free Software Foundation.

During his time as CEO, Dr. Dewar guided AdaCore's strategic decisions that allowed the company to achieve and sustain steady growth and profitability, and he put in place by example an egoless corporate culture based on technical excellence and mutual respect. What he created is still very much a part of the AdaCore team and guides its current management.

"Robert made a difference," said AdaCore CEO and co-founder Franco Gasperoni. "In Africa there is a saying that you die when you are forgotten. All of us at AdaCore will keep Robert's

memory alive, and we will continue the technical and business heritage that Robert has left us with.”

Dr. Dewar was born in Oxford, England, on June 21, 1945. After moving to the US, he attended the University of Chicago, receiving a BS in 1964 and a PhD in Chemistry in 1968. While a graduate student, he started working with computers to analyze x-ray crystallography and soon shifted careers. He joined the Computer Science faculty at NYU in 1975, became Full Professor in 1976, and later served as the Chair of the Department.

Specializing in programming language design and implementation, he participated in the SETL project and became involved with Ada from the outset, first as a consultant to one of the language design teams and subsequently as a Distinguished Reviewer. He was one of the architects of the Ada/Ed compiler at NYU, which was written in SETL and served as an operational definition of the Ada 83 language. He was actively involved with Ada throughout the language’s history, as a member of the Ada Rapporteur Group that maintains the language standard and as a designer and implementor of AdaCore’s GNAT Ada technology.

Dr. Dewar was involved in the design of Algol 68, a member of IFIP WG2.1 on Algorithmic Languages and Calculi, and served as that group’s chair from 1978 to 1983. He was an expert in all aspects of language technology and co-developed compilers for SPITBOL (SNOBOL), Realia COBOL for the PC, and Alsys Ada. He also designed and implemented several real-time operating systems for Honeywell Inc.

He co-authored several books and wrote dozens of articles and technical papers. His talents as an articulate and knowledgeable expert on topics ranging from computers and the law to software safety and security certification made him a sought-after speaker at conferences. He was a recognized expert in copyright and patent law for software and testified as such in many well-known cases.

“Robert was at the same time a brilliant computer scientist always ready to engage in intellectual debates over technical topics, and an open and friendly human being always ready to show kindness and support in personal or social matters,” said AdaCore Managing Director and co-founder Cyrille Comar. “His intensity in technical debate was matched by his gentility in personal relationships, and I owe Robert a great debt in his helping me find and set a path toward my goals in life.”

“Robert was a genius in software design, certainly one of the best of his generation,” said Edmond Schonberg, AdaCore co-founder. “In addition, he was a tireless teacher and an exemplary stylist in all he wrote, and we learned immensely from his example, his lucid prose, and his elegant code. The best way to honor his memory will be for all of us at AdaCore to apply all he taught us about our craft, and about the core values that he stated so forcefully, and that animate all our work.”

Outside of his professional life, Dr. Dewar was superb baritone, a bassoon and recorder player, a conductor, and a member of the North American Heckelphone Society. He was the lifeblood of the Village Light Opera Group (VLOG) in New York, serving for 35 years in numerous

capacities from producer to president, from fly master to music director. He was a major benefactor and performed in a myriad of productions with the group. VLOG's Dewar Center for the Performing Arts is named in recognition of Robert and Karin Dewar's contributions.

Dr. Dewar was in many ways a "Renaissance Man" with deep expertise in fields ranging from Intellectual Property law to Gilbert and Sullivan operettas, and he was equally at ease discussing fine points of compiler optimization technology and the origins of English language usage of "shall" versus "will". But beyond his keen intellect and many talents he was a witty, entertaining, and engaging gentleman who enriched the lives of all who knew him.

"In the 40 years I was working with him in various capacities, Robert was always a source of great stories and wisdom in fields far beyond computing," said Richard Kenner, AdaCore co-founder. "He has taught all of us much in those fields as well as in computing, and those lessons will remain with us always."

Dr. Dewar is survived by two children, Jennifer and Keith Dewar, and two grandchildren. His wife Karin predeceased him in 2013.