

IN MEMORIAM

RICHARD C. STARR

Dr. Richard C. Starr came to the University of Texas in 1976 as Professor of Botany. He remained an active scholar and teacher in this same department until his untimely death on February 3, 1998.

Richard Cawthon Starr was born in Greensboro, Georgia on August 24, 1924. He received a B.S. degree from Georgia Teacher's College, then a M.A. degree from George Peabody College in Nashville, Tennessee. He enrolled in the graduate program of the Botany Department at Vanderbilt University in 1947, where he began a lifelong friendship with his Ph.D. mentor, Professor Harold C. Bold. There he was introduced to the world of algae, developing a keen interest especially in the green algae that reside on soil and in bodies of freshwater. He was awarded a Fulbright Fellowship for 1950-51, which he used to study at Cambridge University, U.K. There he learned algal laboratory culture technique under Prof. E. G. Pringsheim and became familiar with the Cambridge Collection, then the largest assemblage of living algae in the world.

Dr. Starr accepted a faculty position at Indiana University in 1952, where he rose through the ranks to Professor of Botany. There he developed an international reputation as an authority on the biology of unicellular green algae. His research interests gradually shifted to more complex green algae, especially *Volvox* and related colonial forms. He described developmental features and characterized sexual differentiation in these algae. Most importantly, he discovered the first sexual pheromone in green plants. This seminal work on algal development and differentiation led to various honors, including his election to the U.S. National Academy of Sciences in 1976. He accepted various editorial and executive responsibilities in the algae research community, serving as president of the Phycological Society of America and as executive officer in the International

Phycological Society. He also actively participated in the broader botanical community, serving as president of the Botanical Society of America.

Shortly after beginning his career at Indiana University, Dr. Starr began to accumulate a collection of living algae in his research laboratory. At first it consisted primarily of algal strains his students and associates described and studied in the course of their research. The Indiana University Culture Collection (IUCC) was formally named and greatly expanded by his acquisition of hundreds of cultures from the Cambridge Collection. Dr. Starr obtained short-term support for the Collection from the Eli Lilly Corporation, followed by continuous funding from the National Science Foundation.

When Professor Starr moved to the Botany Department at U.T. Austin in 1976, he brought along his 2,000 strains of algae. Professor Bold had moved to the Botany Department from Vanderbilt some years earlier, and was instrumental in recruiting Professor Starr. The offices and laboratory space of Professors Bold and Starr were in close proximity, thus synergistically energizing the work of the former mentor and student.

Professor Starr's early years at U.T. Austin were among the most productive in his career. By then he had begun a collaboration with Professor Lothar Jaenicke, a chemist at the University of Cologne, Germany. During the late 1970s Professor Starr perfected methods to accumulate and concentrate the vanishingly small amounts of sex attractant produced by *Volvox*, while Professor Jaenicke purified and fully characterized the attractant compound chemically. This pioneering collaboration has guided subsequent work by others in understanding and characterizing sexual communication in algae. Dr. Starr continued his research on freshwater green algae at U.T. Austin right up until his death. His joy in his research was evident, and he could often be found in his culture room in the Biological Laboratories Building at 6:30 a.m., performing *Volvox* mating

experiments while whistling along with a classical musical composition playing on the radio. In addition to his international recognition among fellow botanists and phycologists, Professor Starr's research accomplishments were widely recognized across Texas and at U.T. Austin. The Texas Academy of Sciences recognized him as Distinguished Texas Scientist. He was named the Ashbel Smith Professor of Botany shortly after arriving at U.T. Austin, to which was later added the Harold C. and Mary D. Bold Centennial Professor of Cryptogamic Botany (Phycology). These titles he held until his death.

Dr. Starr's algae collection was renamed the UTEX Culture Collection of Algae after its relocation to U.T. Austin. UTEX continued to expand under his direction, and is now generally recognized as the largest assembly of living algae in the world. During his Directorship of UTEX, Professor Starr sent thousands of algal cultures worldwide to be used for research and teaching. He also hosted visitors from around the world who wanted to study the algae in the UTEX Collection or collaborate with him in research.

Richard Starr was widely known among undergraduate students as an excellent teacher. Even medically-oriented students frequently enrolled in his phycology course, which often was filled to the capacity of the room. He was an enthusiastic botanist, and always enjoyed using cryptogamic plants in his teaching and leisure study. His general botany course was also very popular and he developed friendships with some students that lasted for decades. His concern for undergraduate students was documented by his active service for many years as undergraduate advisor to botany majors. Although preferring few graduate students at any one time, in order to allow time for his own research, Professor Starr trained over 30 graduate students at Indiana University and at U.T. Austin, several of whom have themselves developed international reputations in phycology.

Professor Starr cast a long shadow in the Department of Botany at U.T. Austin. His absence is sorely felt by his many friends, colleagues, and students.

Larry R. Faulkner, President
The University of Texas at Austin

John R. Durbin, Secretary
The General Faculty

This Memorial Resolution was prepared by a special committee consisting of Professors Jerry J. Brand (Chair), John W. La Claire, and Beryl B. Simpson