



Lily, Aziz and Rose

Current Position: Sarah Graham Kenan Professor of Biochemistry and Biophysics at University of North Carolina School of Medicine

Education: M.D. (1969) from the University of Istanbul School of Medicine; Ph.D. in Molecular Biology (1977) from the University of Texas at Dallas

Non-scientific Interests: Ottoman history; spending time with godchildren Kota Wharton, Lily McCormick, and Rose Peifer; UNC Women's soccer and basketball

I was born and raised in Turkey. I obtained an M.D. degree from the University of Istanbul School of Medicine and practiced general medicine for about two years. I came to the United States on a NATO fellowship and worked in the laboratory of Roger M. Herriott at Johns Hopkins University where photolyase was discovered years earlier by C. S. Rupert, S. H. Goodgal, and R. M. Herriott. I was intrigued by the concept of DNA repair and by this unique enzyme that uses light as a substrate. Also, I was greatly impressed by the quantitative work Dr. Rupert (who had since moved to the University of Texas at Dallas) was conducting on the enzyme. I joined Dr. Rupert's laboratory in 1974 where I obtained my Ph.D. in Molecular Biology for cloning the photolyase gene in 1976.

I have worked on photolyase for 35 years, with only a brief interruption during my postdoctoral work at Yale University. I have been very fortunate to have Dr. Rupert as a Ph.D. advisor and to have collaborated with some of the leading scientists in the areas of molecular genetics, analytical biochemistry, photophysics, crystallography, and ultra fast spectroscopy in my studies on photolyase.

The minireview in this issue, which summarizes our current understanding of the enzyme, is also a celebration of the 50th anniversary of the (official) discovery of photolyase that also marks the birth of the DNA repair field. Finally, the minireview is a tribute to my Ph.D. mentor, Dr. C. S. Rupert, to my collaborator and wife, Gwendolyn B. Sancar, and to my students, fellows, and collaborators who have contributed to my education over the years and who have made photolyase one of the best understood repair enzymes.

Read Dr. Sancar's article entitled: Structure and Function of Photolyase and *in Vivo* Enzymology, 50th Anniversary

<http://www.jbc.org/cgi/content/full/283/47/32153>