

Howard Gest

Professor Howard Gest was born in London, England, and emigrated with his family to America when he was a child. He spent his earlier years in Philadelphia and Los Angeles, where after two years at Los Angeles City College, he enrolled as an undergraduate bacteriology major at the University of California. During his summers as a young student he traveled to Cold Spring Harbor in New York and did bacterial virus research in the laboratory of Max Delbruck and Salvatore Luria. Both these scientists were pioneers in the modern era of molecular biology and subsequently were awarded Nobel Prizes. After graduating from the University of California, Professor Gest chose to do his graduate studies in the laboratory of Max Delbruck at Vanderbilt University in Tennessee in order to continue his research on bacterial virus multiplication.

The outbreak of World War II interrupted his studies, and in the fall of 1942 he accepted a position to work on the Manhattan project at the University of Chicago with the eminent physical chemist Charles Coryell, whom Professor Gest had known earlier when he was an undergraduate student at the University of California. In Chicago, and later at the Oak Ridge National Laboratory in Tennessee, Professor Gest was a researcher in inorganic nuclear chemistry. When the war ended, he followed the advice of Coryell and went to the laboratory of Martin Kamen at Washington University to complete his graduate studies in microbiology. Kamen was best known as the co-discoverer of the isotope carbon-14 and an important investigator of photosynthesis. The collaboration with Kamen proved to be extremely important because it led to several highly significant discoveries including that of nitrogen fixation by photosynthetic bacteria. It also embarked Professor Gest on his long and successful research career in bacterial photosynthesis. After receiving his Ph.D. in microbiology from Washington University in 1949, Professor Gest accepted a position at the Case Western Reserve University School of Medicine, where he stayed for ten years. He then joined the faculty at Washington University as professor of microbiology, where he later became chairman of the Interdepartmental Committee on Molecular Biology. In 1966 Professor Gest came to Indiana University as chairman of the Department of Bacteriology; he served in that capacity for four years.

For many years Professor Gest administered a large research laboratory which was an international center for bacterial photosynthesis research. Postdoctoral students from many countries came here to do research with Professor Gest. As a result, there was always an air of excitement and active discussion, as well as many seminars on photosynthesis. Both graduate students and faculty in biology benefited from this influx of enthusiastic scientific activity. His zest for research has not abated, even now when he is about to retire officially. Just three years ago he and his laboratory assistant, Jeffrey Favinger, discovered a new group of photosynthetic bacteria with unusual chemical properties and only distantly related to the photosynthetic bacteria known at that time. This new organism has stimulated discussion both in this country and abroad regarding bacterial evolution and the origins of photosynthetic organelles in algae. When a similar organism was later isolated in a laboratory in Oslo, Norway, Professor Gest was honored by having the new organism named after him. It is called *Heliospirillum gestii*. During his career Professor Gest has been the recipient of numerous honors, including two Guggenheim Fellowships. In 1978 he was appointed distinguished professor of microbiology.

Professor Gest's contribution to the microbiology program at Indiana University cannot be measured solely on the basis of his research. There is also an intangible aspect. He is a kind and thoughtful man, always supportive of younger faculty and graduate students, and a patient teacher. He has been most generous with his time and resources. Many of the graduate students and postdoctorals who came here to study with Professor Gest are now important researchers carrying on his tradition of teaching young people how to do research by being actively involved in all of the research projects in the laboratory, and by encouraging discussion and speculation about the experimental results. He truly loves science and has imparted this enthusiasm to a younger generation of scientists. He has thus been a successful teacher as well as a productive researcher.

Professor Gest's interests in microbiology have not been restricted to the laboratory. He has had for some time a deep interest in history, especially the history of microbiology and biochemistry. His involvement in this area resulted in his recently being appointed adjunct professor in the History and Philosophy of Science Department, where he frequently visits for discussions and seminars. Recently he has found the time, despite his busy schedule, to complete a new book on microbiology which emphasizes both the historical aspects of the subject and the impact that the science has on everyday life.

Professor Gest's avocations include reading (he is a voracious reader) and music. He and his wife, Jan, attend many of the concerts on the campus. The Gests enjoy traveling and have traveled extensively both in this country and abroad. They are particularly fond of England and return there for a visit generally once a year. The traveling gives Howard the opportunity to visit with his many colleagues and former students who have laboratories in other countries.

Mrs. Gest is no less an active person than her husband. She participates in many Bloomington community organizations, including the League of Women Voters and Meals on Wheels. She is also a volunteer for UNICEF and organizes the sale of UNICEF greeting cards every year. The Gests have three sons, Ted, Michael, and Donald, and one grandson, David, who was born to Ted and his wife Kathy five years ago.

It will not surprise anyone who knows Howard Gest that he is not really retiring. He plans to spend his "retirement" years not too differently from his "non-retirement" years, and that includes remaining in the biology department and continuing his research. Thus we can look forward to his continued wise counsel, companionship, and friendship.

David White