

Milton W. Taylor

Milton Taylor was born in Glasgow, Scotland, was educated in a Scottish Grammar School but dropped out of high school early, and went to live in a commune in the South of England. He immigrated to Israel in 1951 and spent five years there, including 2.5 years in the Israeli army mostly on a kibbutz. He married his wife Mimi in 1957 and came to the United States shortly thereafter and lived for the first year in New York City. During the evenings he took classes at CCNY and worked at various jobs during the day. He then transferred to Cornell University and received an undergraduate degree studying agriculture, in particular poultry genetics. While at Cornell he became interested in microbiology and obtained a fellowship to graduate school at Stanford University studying viruses that infect bacteria in the laboratory of Prof. Charles Yanofsky, where he received a Ph.D. in Biology. Milton then went on to do research as a Postdoctoral Fellow at the University of California at Irvine in the laboratory of Prof. John Holland to pursue his growing interest in the study of animal viruses. He became an Assistant Professor of Microbiology at Indiana University in 1967 and a Full Professor in 1976.

Milton Taylor has had an enormous influence at Indiana University, both as a teacher and world-renowned research scientist. His research has continued to be productive and internationally recognized. Milton's dedication to teaching and research has affected the lives of many students, both undergraduates and graduate students, both majors and non-majors in biology. Milton started a virology program here at Indiana University with a new course in virology, M430 (lecture) and M435 (laboratory) for seniors and graduate students, and he also reached out to non-major biology undergraduate students by designing a course on the relationship between human history and viruses. Student reviews reflected the appreciation that the students had for Milton's teaching and for what they learned in his classes.

Here is a statement from a student in one of Milton' courses for non-majors (L104):

I just wanted to say thank you so much for a wonderful semester. Being in the Kelley School of Business I am not exposed to this type of information much and it was such a wonderful course to take. I think it makes for a better learning environment when the professor teaching the course is so enthusiastic about the topics they teach and relate it to the real life experiences they have had. I have benefited from this course in more ways then I had anticipated!

On a personal basis Milton's underlying philosophy has been one of recognizing gifted students, who at the time might not have been accepted in a graduate program. This includes student from other countries with difficulties in English or who came from backgrounds very different from the average US student. Milton's willingness to work with such student has produced a large number (approx 10) of master's students and most remarkably, and despite his relative late start in academia, 25 PhD students. A majority of these are now professors at major universities and another significant number have achieved successful careers in industry. Luck will have it that these students, who through the years Milton's influence has touched, come from extremely varied backgrounds with one commonality: most if not all were unlikely heroes. Milton has also worked with a large number of undergraduates who have gone on to become leaders in industry and business. One of these, Larry Blatt, VP for Research at Intermune has recognized this by setting up a Taylor fellowship in virology for graduate students in the department.

An undergraduate Pete Jozsi, writes:

"I had an amazing experience during my years as a Hoosier both in and outside the classroom, but working in Dr. Taylor's lab was probably the single most important. It provided me with invaluable insights into the practical methods used in research, but more importantly, it helped me refine analytical skills that would prove critical in every position I held after graduation. It was the practical experience (tissue culture specifically) I gained from working in the Taylor Lab that landed me my first jobs, but it was the less tangible skills that proved invaluable throughout my career. Recently the opportunity presented itself to collaborate with Milton on investigating the impact interferons have on miRNA expression. It was great to see him so excited about this emerging field and I was elated I could help in some way. Milton gave me so much. I just wish I could have given back more than the just the opportunity to work more!"

Milton's research, and what he has taught these students, has been incredibly broad and has had worldwide influence. One measure of the success of his research is that his laboratory has been funded continuously for 40 years! The funding has come mostly from the National Institutes of Health but also from the American Cancer Society, the Damon Runyon Fund, and from the biotech/pharmaceutical industry, including Amgen, National Genetics Institute, Intermune, and Schering Plough.

Milton's research has been multi-faceted and involves both basic research and clinical studies based upon research results in his laboratory. When Milton first came to Indiana University, he started his research studying nucleic acid chemistry as well as viruses. Milton and his students discovered that certain viruses could wipe out cancers in mice. Many years later this approach is being pursued industrially as a possible treatment of human cancers! Milton also pursued research studying mammalian cell genetics and gene therapy. Other areas of Milton's influential research include the study of a biological chemical called interferon as an anti-viral and an anticancer agent. More recently, Milton has been involved in clinical studies on hepatitis C, following treatment with interferon. This project has attempted to discover the basis of racial differences in treatment as well as why only 50 % of those treated do respond.

As one might expect from Milton's active career in research, he has a long list of fellowships and awards, including two Fogarty International fellowships, visiting fellowships at Rome University, and the Myerhoff Fellowship from the Weizmann Institute of Science, and The " Sword of Hope Award " from the Amer. Cancer Society. Dr. Taylor has published 182 papers over a period of 40 years, has edited a volume on purine metabolism and is preparing 3 more papers that will be submitted shortly. He was elected to the American Academy of Microbiology in 1997. So, he has not slowed down at all! The Biology Department at Indiana University, and the students who have graduated from that department, have been very fortunate that Milton Taylor decided to come here and remain here. We all thank Milton for his dedication and most importantly for his friendship.

David White, Colleague
Juan Alfonzo, Ex graduate Student

Milton Taylor retired from the IU Dept. of Biology in 2008.