

ITEST Member Spotlight

Dr. Mary Lou Caspers

From first grade through my BS degree in Chemistry, I attended Catholic schools. At Mercy High School in Farmington, MI, Sister Renee - who taught Chemistry - introduced us to Pierre Teilhard de Chardin. Later, at the University of Detroit (now, the University of Detroit Mercy), I took a course on his theological writings as they related to science. It became apparent to me that science and theology are intertwined.

The professor who taught this course introduced us to ITEST and later I became a member. Over the years, I have read the articles in the ITEST Bulletins and attended one of the ITEST meetings in St. Louis. Now that I am a professor at the University of Detroit Mercy, I have had the opportunity to discuss my studies in biochemistry with my colleagues in our science and theology departments. Through these discussions, once again it has become obvious to me that these areas go well together. As a scientist, I can study the laws of nature that God created in all its splendor and detail.

Some time ago, I was reading an article about the discovery of the humanoids who proceeded humans in evolution, and a student saw the article. She asked if I believed in God and how I could reconcile evolution with a belief in God and in the teachings in Genesis regarding creation. I responded that evolution is a natural process that occurs over a long period of time. Because God created time and all the other laws of nature, God also created evolution. I explained that the Bible contains religious truths, but it is not a science textbook and that the “days” of creation could have happened over millions of years.

Here in the Department of Chemistry and Biochemistry, I helped to develop and have taught a course for our senior chemistry and biochemistry students that looks at the new findings in chemistry/biochemistry and how these technical advances impact all organisms on earth. Particular emphasis is placed on the ethics of these technological advances. In addition to reading articles from the major science journals, the students form teams and write an essay on the topic of their choice. In this essay, they explore the ethical considerations of the research in addition to the technical advances. They then give an oral presentation on their topic to the rest of the class and lead a discussion of their topic. Some of the topics have included: “Are there benefits/dangers for the consumption of genetically engineered rice or wheat?”; “What are the prospects for eliminating malaria in the wild?”; “What are ethical considerations for experimenting with human brain tissue?”; “Discuss the ethics of some of the DNA editing studies that may be applied to human illnesses and embryos in the near future.”

Here at the University of Detroit Mercy, we prepare many undergraduate students for acceptance into medical and dental schools, and these science/ethical studies will influence them as they discuss treatments of their patients' illnesses.