



A Biotechnologist Explains His Faith

In 1978, Dr. Hans Kristian Kotlar's first job in scientific research was at the Norwegian Radium Hospital, where he studied cancer and the human immune system. At that time, he also became interested in the origin of life. *Awake!* asked him about his research and his religious faith.

What stirred your interest in the origin and meaning of life?

My father was Catholic and my mother was Protestant. That said, they did not view religion as important. As for me, during my teens, I wondered about the meaning of life, and I read books about Buddhism, Hinduism, and Islam. I even asked God to reveal the truth to me.

By the 1970's, the field of molecular biology had made some amazing advances, and

I wondered if it might reveal how life began. The mechanisms within living cells intrigued me, so I chose to study biotechnology. I might add that most of my professors said that life evolved by natural processes, and I believed them.

Why did you take an interest in the Bible?

Two of Jehovah's Witnesses visited our home. Although they were pleasant, I reacted rudely and told them I was

not interested. My wife overheard me. "That was not kind, Hans Kristian," she said. "You have always been interested in the meaning of life." She was right, and I felt ashamed. So I ran after the Witnesses. During our conversation, I told them that I wanted to know if the Bible is in harmony with science.

How did they respond to that?

They showed me what the Bible says about the Source of the energy manifest in the universe. The scripture they read states: "Lift up your eyes to heaven and see. Who has created these things? . . . Because of his vast dynamic energy and his awe-inspiring power, not one of them is missing."¹ This statement

My research led me to conclude that life is a product of an intelligent Creator

intrigued me. It also seemed reasonable that only an intelligent Source of energy could account for the order in the universe.

Did your view of evolution change?

I gradually realized that the various theories of evolution lacked rigorous scientific proof. In fact, they are basically stories invented to explain how the remarkable designs found within living things, such as the immune system, could originate in a mindless manner. The more I studied the immune system, the more I realized just how complex and effective it is. Thus, my research led me to conclude that life is a product of an intelligent Creator.

Can you give us some evidence of design?

The immune system is actually an astonishing array of structures and mechanisms designed to defend us from a wide variety of agents, including bacteria and viruses. The mechanisms, in turn, can be grouped into two complementary systems. The first mobilizes an attack on invading microbes within hours. The second takes several days to

respond but targets the invaders like a well-aimed arrow. This second system also has a good memory, so that if a specific invader returns years later, this enemy will be met with a rapid response. The whole system works so well that often you do not even realize that you have been infected and effectively defended. Also amazing is the way the immune system distinguishes between foreign substances and the hundreds of cell types that make up our body.

Tell us, what happens when a microbe enters our body?

Microbes sneak in through our breath, our food, our urogenital tract, or breaks in our skin. When the immune system detects intruders, it sets in motion a cascade of reactions involving dozens of precisely designed proteins. Each component in this cascade activates the next to amplify the counterattack. The process is mind-boggling!

Could we say, then, that your knowledge of science has strengthened your faith in God?

Absolutely! The power and sophistication of our immune

system points to a wise and loving Creator. I might add that science has also strengthened my faith in the Bible. For example, Proverbs 17:22 tells us that “a joyful heart is good medicine.” Researchers have discovered that our state of mind can influence our immune system. Stress, for instance, can weaken our immune response.

Many of your peers don't believe in God. Why is that?

The reasons vary. Some, as was true of me, simply accept what they were taught. Perhaps they assume that evolution is backed up by good science. Others give little thought to how life began. That's a pity. I think they should ask more questions.

Why did you become one of Jehovah Witnesses?

I was attracted by their hospitality and their faith in the Creator's promise of a better future.² And that faith rests on research and sound reasoning, not myths or speculation.³ ■

1. Isaiah 40:26.

2. Revelation 21:3, 4.

3. Hebrews 11:1.