Renowned Researcher Outlines AIDS Advances

By Veru Narula
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Time Magazine’s 1996 Man of the Year told a group of Columbia students Tuesday evening that a vaccine is the only way to eradicate AIDS fully and that President Clinton’s 2007 deadline for its discovery is not unreasonable.

Students had the opportunity to discuss the latest breakthroughs in AIDS research, the spread of the disease, and the realities of a vaccine with Dr. David Ho at a McBain Hall informal dinner discussion. Ho is globally known for his work on protease inhibitors, which are drugs that reduce the number of infectious copies of HIV made inside the cell. He is currently the
Scientific Director and CEO of the Aaron Diamond AIDS Research Center in New York.

Elizabeth Viriya, SEAS '02, who is studying biomedical engineering, said, “Dr. Ho’s work reaffirms the fact that I want to do research to help people.”

Ho’s Diamond laboratory is working on three vaccine prototypes, one of which is designed specifically for Southeast Asia. Roughly one dozen other labs are also working on a vaccine. However, safety to the body and immune response are still major factors for those developing the vaccine.

Under Ho’s direction, researchers at the Center have published groundbreaking studies examining the details of both HIV replication in an infected person as well as the reduction of the virus to undetectable levels in a patient’s blood and semen.

According to Ho, one of the major problems facing AIDS treatment is cost. In the United States, it costs $10,000 to treat one person for one year. However, due to economic disparities preventing the distribution of high-priced pharmaceuticals, treatment in the Sudan averages four dollars per person, per year.

Another problem with treating the disease is the body’s possible rejection of up to 14 drugs currently on the market. These treatments, known as “drug cocktails,” are combinations of several drugs aimed to suppress the virus’s replication in the early stages of the disease.

The AIDS epidemic affects 50 million people worldwide, 35 million of which are citizens of poor and under-developed countries. In
Third World nations, Ho regrets that a “large percent [of AIDS victims] are doomed to die a slow, miserable death.” Ho pointed out that Americans are complacent about the disease’s impact “beyond our borders” because here, as opposed to the rest of the world, AIDS cases are on a decline due to increased prevention.

Anjali Ganda, CC ’00, was curious as to why countries such as India and China have a cultural stigma placed on sex education. Ho cited the cultural perception of AIDS as a disease that affects the “fringe” population.

He said that after the disease’s rampant spread in places such as Africa, the virus can no longer be attributed only to homosexuality and needle-sharing.

Ho said that the praise bestowed to him comes with a responsibility to educate people on the AIDS disease and current research.

Michael Greenfield, CC ’00, said that after hearing stories from other professionals in the field of AIDS research, it is comforting to know that advances are being made toward the disease’s defeat.