

Enzyme study may lead to new SARS drugs

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Scientists at the University of Illinois say a study of an enzyme that causes severe acute respiratory syndrome may lead to new drugs.

"By unlocking the three-dimensional structure of this enzyme -- known as papain-like-protease -- we now have a molecular road map to design new drugs that could potentially treat SARS-infected patients, or perhaps patients suffering from other SARS-related illnesses such as the common cold, bronchitis or pneumonia," said Andrew Mesecar, Illinois associate professor of pharmaceutical biotechnology.

"We are attempting to use the same approach that has been accomplished in designing effective drugs against HIV protease, which has led to the development of new drugs to fight the AIDS virus," he added.

SARS was first reported in Asia in early 2003 and then spread to more than 29 countries in North and South America, Europe and Asia before it was contained.

According to the World Health Organization, 8,098 people worldwide were diagnosed with SARS during the 2003 outbreak; 774 died. There were 29 cases reported in the United States, with no fatalities.

The research appeared in the March 27 issue of the Proceedings of the National Academy of Sciences.

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