

## **Hedge Funder Jeffrey Epstein and the Elton John AIDS Foundation Fight HIV Resistance**

The New York science philanthropist, Jeffrey Epstein, has put his support behind the celebrated Elton John AIDS Foundation (EJAF) to combat HIV resistance to drugs. For more than a decade, scientists have applied a cocktail of inhibitors and other drugs to suppress the HIV virus. Viral resistance however is a persistent problem and the funding supports the new approach of tailoring treatment on an individual basis based on genotype, viral load and many other factors.

In 2003, Jeffrey Epstein established the Program for Evolutionary Dynamics at Harvard University which, over the past three years, collaborated with Johns Hopkins University to develop a database to predict the effect of drugs on the HIV virus and notably HIV resistance. Using data from thousands of blood tests on more than 20 anti-HIV drugs, the Program's model factors in different drug combinations and dosages, as well as blood type, viral genotype, viral load, HIV stage, treatment history, age, sex and a host of other variables to arrive at the most precisely engineered predictor of results for future patients.

Founded in 1993, the Elton John AIDS Foundation (EJAF) is one of the world's leading nonprofits in the field of HIV/AIDS. Since its inception, EJAF has raised more than \$300 million to fund worthy projects across the globe.

One of those programs is the outstanding HIV Drug Resistance Database at Stanford University's Clinical Virology Laboratory in California. The database provides the largest HIV drug resistance surveillance, interpreting HIV drug resistance tests, and new antiretroviral drugs. Obtained from nearly 40,000 patients, the database uses more than 90,000 HIV sequences from approximately 80,000 distinct virus isolations. When presented with an HIV sequence, the genotypic resistance interpretation algorithm considers hundreds of factors including: genotypic data, treatment history, in vitro drug susceptibility and clinical response to a new treatment regimen.

"The next great advance in HIV treatment will be the ability to foresee viral resistance and to avert it before it develops," Jeffrey Epstein remarked.

Since its discovery, AIDS has caused an estimated 36 million deaths. Today, approximately 35.3 million people live with HIV globally. AIDS is still considered a pandemic and is actively still spreading.

Jeffrey Epstein is the founder of the Program for Evolutionary Dynamics and a former member of the Mind, Brain and Behavior Committee at Harvard University. He is one of the largest sponsors of individual scientists including many Nobel Laureates. He is a former board member of Rockefeller University, the Trilateral Commission and the Council for Foreign Relations. His foundation, the Jeffrey Epstein VI Foundation was established in 2000 to support cutting edge science research around the world.