



How Will These 6 HIV Scientists Use Their \$150K amfAR Grants?

A cure and a vaccine are topics of research supported by the 2016 Mathilde Krim Fellowships.

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Six HIV/AIDS researchers were awarded Mathilde Krim Fellowships in Basic Biomedical Research—each about \$150,000 over two years—for their innovative work in the field of HIV/AIDS, [announced amfAR](#), The Foundation for AIDS Research, which awards the annual grants.

Most of the fellows' research focuses on two areas: harnessing the power of antibodies and targeting roadblocks to a cure. According to the press release, the six Krim Fellows are:

- Amy Chung, PhD, of the University of Melbourne, Australia. Chung will study the mechanisms by which different types of antibodies interact, with the aim of producing an effective HIV vaccine.
- Daniela Fera, PhD, of Boston Children's Hospital. Fera will study the structure of a small number of antibodies that are able to "see" through HIV's defensive shield via holes in its sugar, or glycan, coat by using long, fingerlike extensions called CDR3. Fera will assess the significance of CDR3 in targeting HIV as a potential tool in designing a better vaccine.
- Marit van Gils, PhD, of Academic Medical Center of the University of Amsterdam, the Netherlands. Using a tool she developed in the laboratory, Van Gils aims to determine whether B cells can be manipulated to produce more effective and broadly neutralizing antibodies against HIV, which could further the pursuit of a vaccine and a cure for HIV.
- Judd Hultquist, PhD, of the J. David Gladstone Institute in San Francisco. Hultquist will investigate the role of a host protein called LEDGF in determining whether HIV becomes active

or falls into a “sleeping,” or latent, state. His research will increase our understanding of how latency is maintained and reversed in an effort to cure HIV.

- Anand Pai, PhD, of the J. David Gladstone Institute in San Francisco. Pai’s work aims to inform future efforts to cure HIV through a “shock and kill” strategy. Specifically, he will investigate how the location of the integrated provirus along the human DNA strand contributes to the reluctance of the virus to reawaken in response to latency reversing agents (LRAs), the drugs used to “shock” HIV out of its dormant state.
- Daniel Rosenbloom, PhD, of Columbia University. Rosenbloom will use an algorithm he developed to understand the relative contribution of various mechanisms HIV uses to persist in the body. Understanding the importance of these processes will help scientists determine which mechanisms must be interrupted to get to a cure.

“This is an exceptionally talented group of young investigators,” said amfAR chief executive officer Kevin Robert Frost in the press release. “At a time when research funding for young scientists is flatlining, we’re delighted to be able to support and advance the fresh and imaginative ideas they bring to the table.”

The grants are named after amfAR’s founding chairman, Mathilde Krim, PhD.