



Husband-and-Wife HIV Researchers Win Esteemed Lasker Award [VIDEOS]

Epidemiologists Salim Abdool Karim, PhD, and Quarraisha Abdool Karim, PhD, won “America’s Nobel” for their public health advocacy and HIV work, including PrEP.

October 11, 2024 By [Trent Straube](#)

The 2024 Lasker-Bloomberg Public Service Award, known to many as “America’s Nobel,” went to husband-and-wife [HIV](#) researchers Salim Abdool Karim, PhD, and Quarraisha Abdool Karim, PhD. The couple are professors at Columbia University as well as public health advocates. The prize carries a \$250,000 stipend.

The epidemiologists were honored “for illuminating key drivers of heterosexual HIV transmission; introducing lifesaving approaches to [prevent](#) and treat HIV; and statesmanship in public health policy and [advocacy](#),” according to the Lasker Foundation.

The Abdool Karims are also lead scientific researchers at CAPRISA, the Centre for the AIDS Programme of Research in [South Africa](#), where they grew up under apartheid before moving to the United States.

The couple’s research led to the understanding that teenage girls in Africa were contracting HIV not from other teenagers but from men more than 10 years older. In 2010, they showed that a tenofovir gel could protect women from HIV, which helped give rise to today’s use of antiretrovirals as pre-exposure prophylaxis (PrEP) to prevent HIV.

“The issue was that the gel was more expensive to make and didn’t have the same level of protection as the tablets of tenofovir,” Salim Abdool Karims [told NPR](#), which interviewed the couple after they received the Lasker Award. “So it turned out that taking tenofovir pills was as good and sometimes better than the gel and cheaper, and that’s what led eventually in 2015 to the World Health Organization recommendation that tenofovir-containing pre-exposure prophylaxis (PrEP) be offered to all individuals at high risk of infection.”

Founded in 1945 by Albert and Mary Lasker, who championed biomedical research, the Lasker Foundation supports scientific research through public education and advocacy as well as its esteemed Lasker awards. This year’s winners were announced September 15 and honored during a gala celebration in New York City on September 27, according to a [Lasker Foundation press release](#).

Two other Lasker Awards were announced:

The 2024 Albert Lasker Basic Medical Research Award

Zhijian “James” Chen (University of Texas Southwestern Medical Center)

For the discovery of the cGAS enzyme that senses foreign and self-DNA, solving the mystery of how DNA stimulates immune and inflammatory responses.

The 2024 Lasker-DeBakey Clinical Medical Research Award

Joel Habener (Massachusetts General Hospital)

Lotte Bjerre Knudsen (Novo Nordisk)

Svetlana Mojsov (The Rockefeller University)

For the discovery and development of GLP-1-based drugs that have revolutionized the treatment of obesity.

You can watch the Abdool Karims’ speech in the video at the top of this article and [on Vimeo](#).

During the Lasker Foundation Award presentation, Margaret Hamburg, MD, a former commissioner of the Food and Drug Administration, introduced the Abdool Karims. You can watch that video directly above or [on Vimeo](#). She said, in part:

“Their contributions to HIV prevention can in many respects be traced back to Quarraisha’s work in the early 1990s when she led South Africa’s initial efforts to understand community spread of HIV. It was a time when HIV prevalence was still relatively low in South Africa. She and her team found that infections were rising rapidly in teenage girls. Her interest in developing new ways to prevent infections in women led to her breakthrough collaboration with Salim.

“In 2010, they reported evidence from a CAPRISA clinical trial showing that a vaginal gel containing the antiretroviral drug tenofovir could prevent sexually acquired HIV. The study spurred one of the biggest breakthroughs of the HIV pandemic: the development of antiretrovirals as pre-exposure prophylaxis, or PrEP. The couple is now working on a long-acting version of PrEP. They also are leading the development of an HIV monoclonal antibody. They want to determine if it offers another way to provide long-lasting protection while also informing efforts to develop an HIV vaccine.

“Their groundbreaking work in the fight against HIV includes a major advance against a leading cause of death among HIV patients—coinfections with TB [tuberculosis]. They led a trial which showed that combining antiretroviral treatments with TB treatments greatly improves survival. This has now become a standard of care globally. In Africa, it’s credited

with averting more than one hundred thousand deaths a year.

“Few who knew of their work were surprised that the Abdool Karims were immediately front and center when the world was faced with a new pandemic: COVID-19. They were highly visible in mainstream media outlets in South Africa and across the region. They were effective communicators, pushing back against COVID falsehoods just as they had done earlier in their careers with HIV. In 2020, the John Maddox Prize for promoting sound science was split between two people: Anthony Fauci and Salim Abdool Karim.

“The Abdool Karims also published studies examining how the new COVID virus affected HIV and TB patients. And their interest in COVID-19 variants provided the first evidence of the dangers posed by the omicron variant.

“The couple is also leaving a lasting legacy of research capacity and talent. Twenty years ago, they led the creation of CAPRISA. It is now widely recognized as a global hub of innovation and discovery for HIV and other infectious diseases. They also created South Africa’s HIV Prevention and Vaccine Research Unit and Salim developed a biotech research center and a TB research institute in South Africa. Along the way, the couple has trained over 600 African infectious disease scientists. And they have been role models and inspirations to countless others.”

[During the NPR interview](#), the Abdool Karims were asked what they plan to do with the prize money and what lay ahead. “The prize money will be used for research and/or training of students,” Salim answered. “We are now working on an annual long-acting prevention technology so that women will only need to have it once a year. (This could be in the form of a matchstick-size implant that has enough tenofovir in it enough to release slowly over an entire year so that young girls don’t need to think about prophylaxis.)”