amfAR*

MAKING AIDS HISTORY

INNOVATIONS

OCTOBER 2020



Cure Trial Launches

amfAR Institute to Test Landmark Combination

Also Inside:

First Grants Awarded Through amfAR Fund to Fight COVID-19

Cure Research Highlights from AIDS 2020

UNAIDS Warns 2020 Targets Out of Reach

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The biannual newsletter of amfAR,
The Foundation for AIDS Research

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amfAR meets the BBB Wise Giving Alliance's Standards for Charity Accountability

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Photo: Evan Rummel

Reasons to Be Hopeful

For individuals, families, and organizations worldwide, COVID-19 has caused immeasurable disruption. The field of HIV research is no exception, as scientific priorities shifted overnight and the expertise of infectious disease researchers became central to the fight against this deadly new virus.

However, as you'll read in this newsletter, HIV research continues to progress on many fronts and there are good reasons to be hopeful. While the International AIDS Conference in July had to be held virtually, it showcased the continued vibrancy of the field, particularly in the area of cure research (see page 6).

Naturally, I'm especially excited about the clinical trial that is now underway at the amfAR Institute for HIV Cure Research at the University of California, San Francisco—our cover story (see pages 8-9). The trial is the culmination of a vast amount of work over the past four years by teams of dedicated researchers. It's ambitious, complex, and the

first of its kind. And we have every reason to think it will move us closer to a cure.

We are deeply grateful to all of the generous donors like you who have made this work possible. And we owe an immense debt of gratitude to the courageous study participants, who continue to step up whenever the need arises and to make significant personal sacrifices in the service of research progress and the greater good.

Thank you for your generosity. As someone who is passionately devoted to this cause and has been for the past 30 years, I am gratified to do this rewarding work and personally grateful to you for your continued support.

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Millett Delivers AIDS 2020 Opening Plenary

amfAR well represented at virtual International AIDS Conference



Greg Millett contextualized 40 years of disparities throughout the HIV pandemic.

The biennial International AIDS Conference—the premier global meeting for the HIV field—"convened" its 23rd edition July 6-10. Due to the COVID-19 pandemic, this year delegates came together virtually to hear about and discuss the latest HIV research findings and policy issues, and intersections with the coronavirus.

amfAR featured prominently at the conference. Public Policy Director Greg Millett delivered an opening plenary talk that contextualized 40 years of disparities throughout the HIV pandemic, and

The conference featured many talks on the intersection of HIV and COVID-19.

joined a live Q&A session with Dr. Linda-Gail Bekker of the Desmond Tutu HIV Centre at the University of Cape Town, former president of the International AIDS Society.

amfAR's Deputy Director of Public Policy Brian Honermann presented at a virtual community workshop that focused on the effective use of

data tools to drive impactful change in the HIV response. And Policy Associate Jennifer Sherwood gave a symposium talk on whether current approaches to collecting data capture the full impact of HIV on women.

Dr. Annette Sohn, director of amfAR's TREAT Asia program, moderated a prime session Q&A on pediatric HIV along with Martina Penazzato of the World Health Organization. Dr. Sohn also spoke at a workshop addressing the essential skill for early-career HIV researchers of writing and successfully submitting scientific papers to peerreviewed journals. Numerous TREAT Asia partner investigators and affiliates also gave poster presentations at the conference.

The conference featured many talks on the intersection of HIV and COVID-19. Greg Millett joined Merck Vice President of Social Innovation Carmen Villar for a "fireside chat" to discuss a paper Millett co-authored assessing the differential impacts of COVID-19 on black communities.

Millett also joined Chris Collins of Friends of the Global Fight and others in a session titled How did they do it? What successful communities can teach all of us about making dramatic progress against HIV epidemics and what this means in the age of COVID. The session was a one-year follow-up to a report co-authored by amfAR, AVAC and Friends of the Global Fight titled Translating Progress into Success to End the AIDS Epidemic.

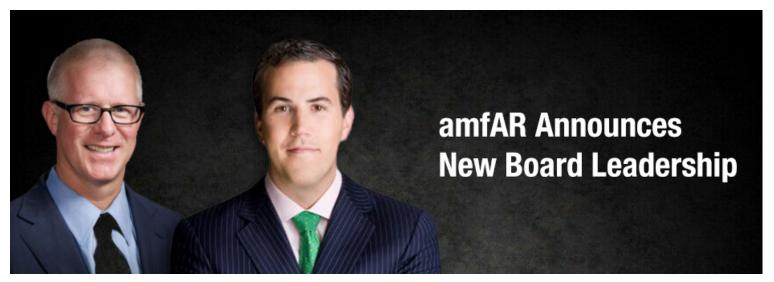
For more information on the conference, visit www.aids2020.org.



Dr. Annette Sohn

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Leadership



Kevin McClatchy (left) and T. Ryan Greenawalt

In June, amfAR announced the election of T. Ryan Greenawalt and Kevin McClatchy as Co-Chairs of the Foundation at a meeting of its Board of Trustees via teleconference. They jointly succeed outgoing Chairman William H. Roedy.

Mr. Greenawalt first joined the amfAR board in February 2011, the year he founded amfAR's generationCURE, a committee of young people dedicated to raising funds to support amfAR's efforts to develop a cure for HIV. Managing director at Ramirez & Co., Inc., a major global securities and investment banking group, Greenawalt is also president and founder of Harrison Street Productions, a film production company.

"I am grateful and excited by the election of both Ryan and Kevin to lead the organization."

Mr. McClatchy was named Chairman of the Board of The McClatchy Company, the national newspaper publishing company, in March 2012. He is the former owner of the Pittsburgh Pirates, where he was Chief Executive Officer and Managing General Partner from 1996 to 2007. He also serves

as a board member for organizations including the University of Pittsburgh Cancer Institute, the Extra Mile Education Foundation, and the McClatchy Newspapers. McClatchy joined the amfAR Board in October 2012.

"We are immensely grateful to Bill Roedy and Cindy Rachofsky, amfAR's Chairman and Vice Chairman over the last two and a half years. Their years of dedicated service to amfAR and our mission have made the organization stronger

and better prepared for the challenges that lie ahead," said amfAR Chief Executive Officer Kevin Robert Frost. "And I am grateful and excited by the election of both Ryan and Kevin to lead the organization in the face of those challenges. They bring experience, integrity, and business acumen to Board deliberations and are well positioned and well qualified to lead amfAR through, and out of, this difficult chapter in our nation's history."

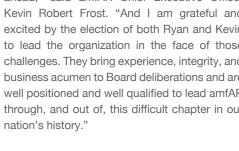
amfAR Welcomes Kyle Clifford

In June 2020, Kyle Clifford joined amfAR as Chief Development Officer. Clifford comes to amfAR with more than 20 years' experience across both the private and nonprofit sectors in senior business management, fundraising, and strategic donor development roles.

Prior to joining amfAR, he served as Vice President of Development at the Ireland Funds, a global philanthropic network

that has raised over \$650 million benefitting more than 3,200 organizations in Ireland and beyond. Previously, he was Director of Corporate Partnerships and Development at City Harvest in New York.

"I am thrilled and honored to be joining the staff of one of the most respected HIV/AIDS organizations in America," said Clifford. "I look forward to engaging with our generous network of supporters and finding creative ways to generate the funds amfAR needs to accomplish its mission."





Cure Research Highlights at AIDS 2020

By Rowena Johnston, Ph.D.

The theme of this year's International AIDS Conference was "Resilience," which seemed fitting given the challenges of COVID-19 and convening the conference online.

The "London patient"

It was also epitomized in the experience of Adam Castillejo, the "London patient," who shared the story of his HIV diagnosis, cancer treatment, and cure of both by stem cell transplantation. Mr. Castillejo described his journey from skepticism to hope as he recounted the challenges of undergoing a stem cell transplant and the rigors of participating as a research subject. But his main message to everyone living with HIV and in this time of COVID-19 was, "Don't be afraid. Don't despair. Don't give up hope."

The diversity of approaches to an HIV cure and the encouraging advances being made on many fronts were on full display at AIDS 2020.

amfAR Institute

Indeed, the cure-focused pre-conference included notes of hope in the summaries of recent research advances provided by Drs. Lillian Cohn and Katherine Bar. Among the top 10 advances were two stemming from the amfAR Institute for HIV Cure Research. First, the discovery of a marker in the blood that can predict that virus is about to re-emerge after antiretroviral therapy (ART) has been stopped. And second, the design of a new type of CART cell that kills HIV reservoir cells.

amfAR-supported research featured prominently in the top clinical advances too, including the development at the amfAR Institute of whole-body PET imaging of the reservoir (see page 7), and the ability to conduct the complex

ROADMAP study that tested a shock-and-kill approach using romidepsin plus antibodies.

Understanding the reservoir

Accurately measuring the reservoir, and changes occurring naturally or as a result of interventions, was widely discussed at the conference. In particular, a new assay called IPDA (Intact Proviral DNA Assay) developed in the lab of Dr. Robert Siliciano appears to give a more accurate picture of reservoir size than previous, more labor-intensive tests. It has revealed that intact proviruses, the ones most likely to cause viral rebound when ART is stopped, appear to decay faster than defective proviruses.

Dr. Michael Peluso from the amfAR Institute used the assay to differentiate those who naturally control their HIV infection from those who don't. And, as described by Dr. Doug Nixon, amfAR grantee Dr. Brad Jones has optimized the IPDA assay so that it can be used to assess the reservoir in a wider range of HIV subtypes.

In an approach that gets at the nature of the reservoir, amfAR grantee Dr. Nicolas Chomont provided one explanation for expansions and contractions of the reservoir over time. Each infected CD4 T cell is specialized to fight a specific infectious pathogen, such as influenza, cytomegalovirus, Epstein-Barr virus, etc. When those HIV-infected CD4 T cells encounter the



Dr. Nicolas Chomont

pathogen they are designed to fight, they expand in number, and thus the number of reservoir cells expands. Once the infection is cleared, the number of CD4 T cells contracts again, as does the size of that fraction of the reservoir.



Dr. Joachim Hauber

Gene therapy and the future

Looking towards the future of cure research, "Pushing the boundaries: new approaches to a cure" focused largely on gene therapy approaches. amfAR grantee Dr. Joachim Hauber described a gene-editing tool developed by his team in Germany that directly excises the HIV provirus from infected cells. Others described ways to engineer cells to become factories for potent neutralizing antibodies, or to protect cells from infection.

The diversity of approaches to an HIV cure and the encouraging advances being made on many fronts were on full display at AIDS 2020. They give us every reason to sustain our momentum, keep pushing forward, and to heed Mr. Castillejo's exhortation: Don't give up hope.

Dr. Johnston is amfAR vice president and director of research.

Illuminating the Reservoir

By Rowena Johnston, Ph.D.

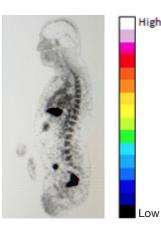
Sun Tzu told his readers 2,500 years ago that in order to win a war, we must know our enemy. But the HIV reservoir—the collection of infected cells that persists even with antiretroviral therapy—has been remarkably coy in revealing its essential nature. Understanding how much of it persists, and where in the body, are fundamental challenges for researchers hoping to eliminate the reservoir and thereby cure HIV.

The machine produces images that are approximately 40-fold more sensitive than current technology, and in a fraction of the time.

While taking blood samples from people living with HIV is fairly easy, the reservoir in the blood is only a tiny fraction of the total, and is probably not representative of reservoir in tissues. Meanwhile, taking tissue samples is far more difficult and does not solve two crucial questions: Have the right pieces of tissue been taken? And does the reservoir behave the same way in a petri dish in the lab as it does in a person's body?







EXPLORER Imaging: (Left to right) CT scan, PET overlaid on CT, and PET image. Scale at right shows virus signal intensity.

To answer these questions, Dr. Tim Henrich and colleagues at amfAR's Institute for HIV Cure Research have turned to high-sensitivity PET imaging. They have forged a collaboration with researchers at the University of California, Davis, to produce full-body images of people living with HIV, using the only EXPLORER scanner that is up and running in the United States. The machine produces images that are approximately 40-fold more sensitive than current technology, and in a fraction of the time.

Dr. Johnston is amfAR vice president and director of research.

Case of São Paulo Patient Sparks Interest, Skepticism

At the virtual International AIDS Conference in July (see page 6), Dr. Ricardo Diaz of the Federal University of São Paulo in Brazil described the case of a 35-year-old HIV-infected man who appears to show no signs of HIV after being enrolled in a small clinical study. While it is far too early to draw conclusions from this single case, it has aroused interest among the scientific community and in the media.

The case involves a man—one of five enrolled in the study—who was treated by a "shock-and-kill" approach to curing HIV, which draws latent virus out of hiding and then kills it. Following 48 weeks of intensified antiretroviral treatment (ART) and the use of a latency-reversing agent, all five participants resumed their usual ART regimens.



Roughly 2.5 years later, ART was stopped entirely. In four study participants, HIV returned. This was not unexpected, as all previous attempts at intensifying ART or using various agents to "shock" the virus have failed to induce a cure. But the São Paulo patient has maintained normal CD4 counts, undetectable HIV, and a

decrease in HIV-specific antibodies over the past 15 months.

As with the cures of the Berlin and London patients, a more rigorous understanding of this case will emerge when the researchers as well as independent labs conduct additional analyses of samples from the patient, and more time has elapsed.

This case is as yet an interesting anecdote that has raised some important questions. Given other potential cures reported in the past in which HIV ultimately and unfortunately returned, the only certainty at the moment is that this patient will be the subject of intense scientific scrutiny.

Pioneering Clinical Trial Gets Underway

amfAR-funded study will test combination cure strategy



Dr. Steven Deeks

A unique and potentially groundbreaking clinical trial led by researchers at the amfAR Institute for HIV Cure Research is underway. The first participant received the first injection on August 13. The study will test a combination of agents in an effort to induce post-treatment control in people living with HIV.

The complex, multi-stage trial is the culmination of four years of work by teams

of researchers at the Institute, which amfAR launched in 2016 with a five-year \$20 million grant to the University of California, San Francisco (UCSF).

A Combination of Agents

"The Institute will leverage three highly complementary strategies that appeared to induce remission in previous studies," said Dr. Rowena Johnston, amfAR Vice President and Director of Research.

"It's by far the most complex cure trial that anyone has undertaken to date and it reflects our expectation that, like the drug cocktails we use to treat HIV, a cure or post-treatment control of the virus is most likely to result from a combination of agents."

Led by veteran HIV researcher Dr. Steven Deeks, the trial will enroll up to 20 people living with HIV who have been on stable, continuous antiretroviral therapy (ART) for at least one year. The investigators plan to include 15 participants who started ART during the early stage of infection, and five who started after a longer period of infection, to assess differences in the immune response between the two groups.

"It's by far the most complex cure trial that anyone has undertaken to date."

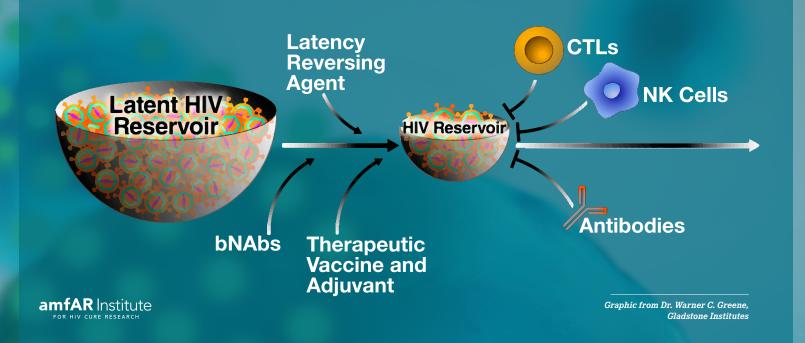
The centerpiece of the strategy is to boost the immune response, with a focus on CD8 T cells, or killer T cells. "The advantage of CD8 T cells is they can recognize infected cells specifically, and they can actually kill them," said Dr. Rachel Rutishauser, an immunologist and researcher at UCSF. "The purpose of the first few stages [of the trial] is to elicit that initial CD8 T cell response."

Stages 1-2: Vaccine and Boos

In the first two stages of the trial, lasting 24 weeks, participants will receive a therapeutic vaccine with a boost. The DNA plasmid vaccine is effective against almost all subtypes of HIV seen around the world. "The strategy here is to go after regions of the virus that can't escape from the immune system," said Dr. Rutishauser.

Reduce | On ART

Control | Off ART



The boost, along with an additional adjuvant—both commonly used in vaccine trials—will help to enhance the immune response.

Stage 3: Coax and Activate

The third stage will involve the administration of two additional agents. The first is a TLR9 agonist, which the researchers hope will coax the virus out of latently infected reservoir cells so that it can be detected by the immune system. As an immune adjuvant, it will also further boost the immune system, and researchers think that it will help natural killer cells of the innate immune response kill infected cells.

Participants will also receive broadly neutralizing antibodies that can inactivate diverse types of HIV and reduce the size of the viral reservoir. There is also compelling evidence from animal studies that these specialized antibodies enhance the CD8 T cell response.

Stage 4: Interrupt Treatment

In the fourth and final stage of the trial, at 34 weeks, participants will undergo an analytic treatment interruption to test the efficacy of the combination approach. At the same time they stop taking ART, participants will be given a second round of broadly neutralizing antibodies. As the initial dose of antibodies wears off, this step is meant to help the immune response outpace the virus as it emerges from latency.

Researchers will assess whether post-treatment control has been achieved by measuring the proportion of participants that show sustained viral suppression after treatment interruption. The safety

of the combination approach will be gauged by closely monitoring for adverse events.

There will also be a behavioral component to the trial. Members of amfAR's Community Advisory Board are making active contributions, which include assessing participants' understanding of the study, their comfort level with the combination of interventions, and their experience throughout the process.

"Naturally we hope this trial succeeds in achieving post-treatment control," said Kevin Robert Frost, amfAR's Chief Executive Officer. "But whatever the outcome, the trial will generate invaluable new knowledge that is sure to advance our search for a cure for HIV."



Dr. Rachel Rutishauser outlines the clinical trial at amfAR's HIV Cure Summit

First Grants Awarded Through amfAR Fund to Fight COVID-19

After taking a strategic decision to temporarily expand its efforts to include research on COVID-19, in April amfAR launched the amfAR Fund to Fight COVID-19. Within just a few weeks, the Foundation orchestrated two virtual international fundraising events—a fashion show with CR Runway and an art auction with Christie's—to support the Fund, and in July it announced its first grants for research on the novel coronavirus.

"We pride ourselves on our ability to quickly pivot to answer critical new scientific questions or respond to emerging opportunities in the field of HIV research," said Kevin Robert Frost, amfAR's Chief Executive Officer. "So we're pleased to apply that same grant-making speed and flexibility to COVID-19 and to lend our experience, expertise, and resources to the effort to halt this deadly new pandemic."

A common and often deadly consequence of advanced COVID-19 disease is acute kidney injury. Cells in the kidney express the ACE2 protein, which serves as a receptor for the virus and may underlie the kidney damage.



Dr. Matthias Kretzler

Dr. Matthias Kretzler of the University of Michigan, Ann Arbor, was awarded \$155,650 to use a clever technique to understand what happens in the kidney of those with COVID-19. By studying kidney cells that are excreted in the urine, Dr. Kretzler aims to understand changes that occur in the kidney while the disease is getting worse, and to understand the signs that indicate that patients are on the mend. By comparing patients receiving anti-inflammatory treatment to those who are not, he will develop a tool that can predict who would most benefit from this kind of treatment.

A second grant of \$192,000 was awarded to Dr. Daniel Kaufmann of the University of Montreal, Quebec, for a study of antibody responses to COVID-19. This grant allows amfAR to tap into the Quebec COVID-19 Biobank, established at the beginning of the pandemic to collect biological samples from patients admitted to the hospital. These banked samples, collected from the time of admission through several months of follow-up, will allow Dr. Kaufmann and his team to answer why some people develop antibodies and others do not, how we can predict whether those antibodies will protect against reinfection, and how long the protection will last. The results will inform the design of preventive COVID-19 vaccines.

"While SARS-CoV-2 has yielded some of its answers much faster than HIV, there are pressing scientific questions that still need answering," said Dr. Rowena Johnston, amfAR Vice President and Director of Research. "These two grants launch an effort to broaden the range of effective treatments for COVID-19, and to prevent the disease from occurring in the first place."

Black Americans Bear Brunt of COVID-19

amfAR study among the first to show disproportionate impact of COVID-19 in black counties

A study led by researchers at amfAR and Emory University Rollins School of Public Health illustrates how black Americans are bearing the brunt of the COVID-19 pandemic. The authors report that while disproportionately black counties constitute about one in five U.S. counties, they account for 52% and 58% of COVID-19 cases and deaths, respectively.

The study was covered widely in the media and was featured on CNN and in *The Washington Post, Politico, The Hill,* and other outlets.

Among its findings, the study found that 97% of disproportionately black counties had at least one COVID-19 diagnosis compared to

only 80% of all other counties and that 49% of black counties had at least one COVID-19 death compared to 28% of all other counties. COVID-19 diagnoses were found to be greater in disproportionately black counties, whether urban or rural and irrespective of size. Ninety-one percent of disproportionately black counties are located in the Southern U.S.

The authors also found that people in disproportionately black counties with high levels of uninsured people and crowded households were at increased risk for acquiring COVID-19. Underlying health problems such as diabetes, hypertension, and heart disease that may interact with COVID-19 acquisition

and death tended to be more prevalent in disproportionately black counties.

"Many people have observed large and consistent disparities in COVID-19 cases and deaths among black Americans, but these observations have largely been anecdotal or have relied on incomplete data," said amfAR VP and Director of Public Policy Greg Millett, the study's lead investigator. "This analysis proves that county-level data can be used to gauge COVID-19 impact on black communities to inform immediate policy actions."

Data from the study can be found at ehe.amfar.org/inequity.

Victory for AIDS Activists Over Vaccine Trial Exclusion

After sustained pressure from advocates, Moderna Therapeutics announced that its COVID-19 vaccine trial would no longer exclude people living with HIV. On August 5, the biotechnology company stated that it had heard the community and would now include "people living with controlled HIV who are not otherwise immunosuppressed."



Lynda Dee at the 2017 amfAR Institute Cure Summit

A major victory for the HIV community, the reversal comes just as Moderna is beginning a Phase III clinical trial to test the effectiveness of its coronavirus vaccine in 30,000 participants. Bowing to pressure from activists, Pfizer is also expected to abandon a similar exclusion clause in its own COVID-19 vaccine trial.

"This should never have happened," said Lynda Dee, the AIDS Action Baltimore Executive Director and former member of the Community

Advisory Board for the amfAR HIV Cure Research Institute, who led the advocacy campaign. "The trial was opening on July 27 and we found out about it about three days before. So that's really not optimal. We need to make sure they get community engagement in protocol development."

The moment they learned that people living with HIV would be excluded from participation, Dee and a group of veteran AIDS activists swung into action. Dee co-signed a letter with Mark Harrington and Richard Jefferys of Treatment Action Group—with the support of several advocacy organizations—urging U.S. National Institutes of Health Director Francis Collins to ensure that sponsors of COVID-19 clinical trials did not exclude people living with HIV.

"It was like an octopus with tentacles everywhere: the FDA, NIH, Congress, the drug companies, inside of different institutes—NIAID," said Dee, describing the advocacy effort. "It was a huge amount of work, but it was really a concerted effort and we did it together. It was very successful and done at lightning speed."

"Our gang, we don't beat up easily. We might be beat up for an hour or so, but we always come rattling right back."

The pressure worked, as it has many times before when the activist community has worked in concert to make sure people living with HIV were included in clinical trials and had access to potentially lifesaving treatments.

"It's really helpful to have a positive result so quickly and for people to feel empowered, especially at this point in time because everybody's pretty beat up," said Dee. "But our gang, we don't beat up easily. We might be beat up for an hour or so, but we always come rattling right back."



Study Shows Latinos at High Risk for COVID-19

Crowded housing, dirty air, and occupational factors may help spread the virus among Latinos in the United States

A study published by a multi-institutional team led by researchers at The George Washington University found that factors linked to structural racism put Latino communities nationwide at high risk of COVID-19. amfAR Vice President and Director of Public Policy, Greg Millett, was senior author on the study.

The researchers detailed contributing factors including crowded housing, air pollution, and jobs in the meatpacking and poultry industry. The study also found that Latino communities in the Midwestern and Northeastern United States are at particularly high risk of COVID-19.

This study, the first national analysis of COVID deaths and cases among this group, confirms previous reports that Latinos have been particularly hard hit by the virus. The authors include interventions that could help save lives among Latinos and other people of color.

Published in the *Annals of Epidemiology*, the full study can be read at bit.ly/2Xs28Fw.

UNAIDS Warns 2020 Targets Out of Reach

Unequal access to treatment, COVID-19 pandemic hindering HIV response

UNAIDS has issued a report showing highly unequal progress in the global fight against AIDS, and warning that service disruptions due to the COVID-19 pandemic could set the response back by at least ten years.

According to the new report, Seizing the Moment, only 14 countries have achieved 2020 targets. Missed targets have resulted in 3.5 million more HIV infections and 820,000 more AIDS-related deaths since 2015 than if the global response was on track.

The "90-90-90" targets call for 90% of all people living with HIV to know their status, 90% of all diagnosed individuals to be on treatment, and 90% of those on treatment to be virally suppressed.

"The progress made by many needs to be shared • In 2019, nearly 59% of people living with HIV by all communities in all countries."

"Every day in the next decade decisive action is needed to get the world back on track to end the AIDS epidemic by 2030," said Winnie Byanyima, executive director of UNAIDS. "Millions of lives have been saved, particularly the lives of women in Africa. The progress made by many needs to be shared by all communities in all countries."

Among the report's findings:

- ◆ In 2019, there were 1.7 million new HIV infections-more than three times the global target.
- ◆ There is some cause for optimism: in Eastern and Southern Africa, the number of new infections decreased by 38% since 2010.
- But Eastern Europe and Central Asia saw an increase of 72% in new infections during the same period.

- HIV testing and treatment have been an area of progress. Of the 38 million people globally living with HIV at the end of 2019, 81% knew their status.
- More than two in three people living with HIV (25.4 million) were on antiretroviral therapy (ART)-three times as many people as in 2010. Increased access to ART has averted an estimated 12.1 million AIDS-related deaths since 2010.



- AIDS-related deaths (690,000)continued to decline - 39% since 2010 - but not fast enough to reach the 2020 target of fewer than 500,000.
- worldwide had suppressed viral loads. While this marked a 44% increase since 2015, it is well below the target.
- Gay men and other men who have sex with men, people who inject drugs, and other marginalized populations such as sex workers were among those at highest risk of acquiring HIV.
- Despite making up 10% of the population of sub-Saharan Africa in 2019, young women and adolescent girls accounted for about one in four new infections.
- Stigma and discrimination continue to prevent young people, people living with HIV, and key populations from accessing HIV prevention, treatment, and other sexual and reproductive health services.
- ◆ From 2017 to 2019, funding for HIV decreased 7% to \$18.6 billion-30% below the \$26.2 billion needed for an effective global response.

The report and supporting materials are available at aids2020.unaids.org/report.

Global Anti-HIV **Drug Supplies Running Low**

More than 70 countries are at risk of running out of antiretroviral drugs due to COVID-19related service disruptions, according to a World Health Organization (WHO) survey. Twenty-four countries reported critically low supplies or service disruptions preventing access to lifesaving treatment.

The survey follows a joint WHO-UNAIDS modeling exercise conducted in May that made a grim forecast: A six-month disruption in access to antiretroviral treatment could lead to 500,000 additional deaths in sub-Saharan Africa alone in the next year.

> Twenty-four countries reported critically low supplies or service disruptions.

Of the 38 million people living with HIV in 2019, approximately one in three were not on antiretroviral treatment. According to the WHO, in the 24 countries that cited "critically low" supplies or service disruptions, about 8.3 million people were on antiretroviral treatment in 2019.

"The findings of this survey are deeply concerning," said Dr. Tedros Adhanom Ghebreyesus, WHO Director-General. "Countries and their development partners must do all they can to ensure that people who need HIV treatment continue to access it."

"People Helping People"

Hector Hugo Gonzalez is a longtime supporter of amfAR. Among many distinctions, he was the first Mexican-American registered nurse to earn a doctorate in the United States, and he served as president of the National Association of Hispanic Nurses. Gonzalez is professor and chairman emeritus at San Antonio College. We spoke with him about nursing and why he is hopeful that researchers will prevail against HIV.



How did you find your way to the nursing profession?

Shortly after I finished high school, I found work as an elevator operator in a hospital. In the old days, you needed an operator. All kinds of people got in the elevator: patients, family, doctors, nurses. After about two years observing all these people, I thought, "Nurses seem to be the happiest in this bunch, and the patients like them." So, I looked into nursing schools, and I was able to go with the generous help of a friend.

"People helping people" has been a theme throughout your life and nursing career. Can you elaborate?

When I was young, I had no idea that I had the potential to go places. But I always worked hard. As a kid I used to shine shoes, and I shined the best shoes you ever saw. Regardless of what I was

doing, when I worked hard people helped me. That has been especially true in my nursing career: helping patients and colleagues, and others helping me. Over the years, so many people have helped me and I've developed quite a love for the nursing profession.

Can you describe your experience with the first known case of HIV in San Antonio, Texas?

I was director of the nursing program at San Antonio College and I was asked to go to a local hospital to help referee a case—the first patient here with HIV. The assigned nurse had refused to take care of him. That was the only time I saw a nurse refuse care to someone with HIV. Our nursing license says we put our personal wellbeing aside and take care of people. Now with the COVID-19 pandemic, nurses still go out and take care of people. Nobody refuses. It's a duty.

As a longtime supporter of amfAR, what drives you to continue giving?

I am motivated by the hope that a vaccine or a cure will be developed in the near future and that this hope is being kept alive by amfAR.

Are you optimistic that we'll achieve a cure for HIV in the foreseeable future?

I am optimistic. I've seen things that were impossible at the start of my career in the 1960s that are common today. For example, I saw the creation of mouth-to-mouth resuscitation. Before then, if someone stopped breathing that was it. Now we have respirators and they breathe for you. And for HIV, people all over the world are looking at the virus. With all the good work that amfAR and other organizations do, somebody's going to say, "Bingo, we've done it."

From the Studio

On July 15, amfAR partnered with Christie's on *From the Studio*, a first-of-its-kind relay-style auction of contemporary artworks. Conducted virtually in real time across Hong Kong, London, and New York, the event offered a selection of 17 works generously donated by leading contemporary artists to benefit amfAR's newly launched Fund to Fight COVID-19. Highlights from the sale included Cecily Brown's "The Wanton Boy" and Richard Serra's "Untitled," which sold for \$250,000 and \$200,000, respectively, and George Condo's "Multiple Personalities," fetching \$190,000. In addition, there were works by artists including Rashid Johnson, Michael Kagan, Leelee Kimmel, Eddie Martinez, Erik Parker, Raymond Pettibon, Kenny Scharf, and Dana Schutz. The auction raised nearly \$1.5 million.

1. "Multiple Personalities," by George Condo 2. "Untitled (sleeper for amfAR)," by Eddie Martinez 3. "The Wanton Boy," by Cecily Brown 4. "Boat Group," by Dana Schutz















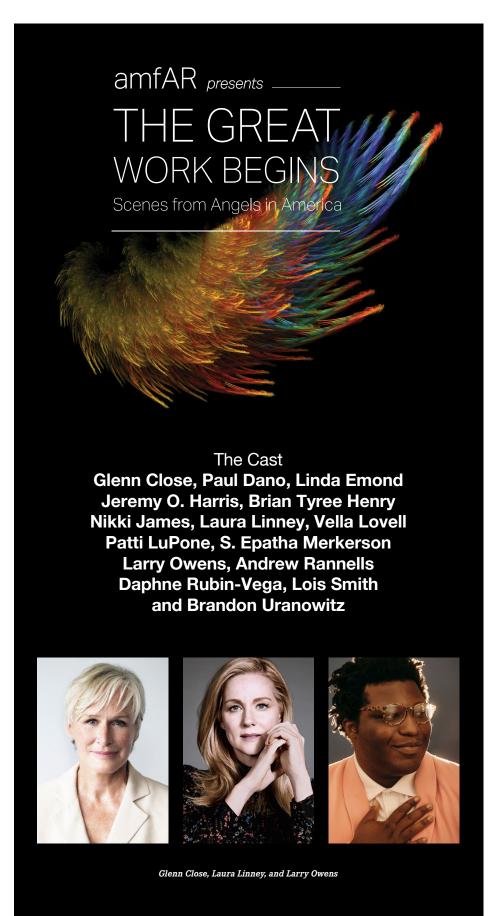




Fashion Unites: CR Runway with amfAR Against COVID-19

On May 1, amfAR teamed up with Carine Roitfeld and CR Runway, as well as Derek Blasberg, head of fashion and beauty at YouTube, to stage a spectacular virtual fashion show to support the amfAR Fund to Fight COVID-19. The 30-minute show featured a lighthearted behind-the-scenes view of the world's top fashion models in their homes preparing for the "runway." The show garnered close to 350,000 views on YouTube, and raised tens of thousands of dollars. Fashion Unites included appearances by Halima Aden, Alessandra Ambrosio, Hailey Bieber, Ashley Graham, Winnie Harlow, Karlie Kloss, Adriana Lima, Natasha Poly, Irina Shayk, and Kim Kardashian West.

1. Derek Blasberg 2. Carine Roitfeld 3. Alessandra Ambrosio 4. Halima Aden 5. Karlie Kloss



Livestream Broadcast Features Star-Studded Cast

amfAR and theater director Ellie Heyman came together to present *The Great Work Begins: Scenes from Angels in America*, a spectacular 60-minute livestream broadcast on October 8 to benefit amfAR's Fund to Fight COVID-19.

Working with playwright Tony Kushner, Ms. Heyman enlisted a spectacular cast of actors (left), artists and technicians who generously donated their time and talents to the project. They included composer Ellis Ludwig-Leone (San Fermin, New York City Ballet), award-winning creative director Paul Tate dePoo III, and TBD Creative Media.

The free virtual event was followed by a live conversation moderated by Paul Wontorek, Editor-in-Chief of Broadway.com, and featuring Mr. Kushner, Ellie Heyman, amfAR CEO Kevin Robert Frost, and several of the actors. The lively discussion covered aspects and themes of the play, as well as activism and COVID-19 research.

"I'm touched and honored that amfAR and the remarkable Ellie Heyman decided to build this evening around Angels," said Kushner. "For over thirty years, amfAR has been steadfastly determined to find a cure for AIDS. Like everyone else on the planet ... I'm praying that the novel coronavirus will prove easier to obliterate than HIV."

"We are thrilled to be partnering with Ellie Heyman and to have the support of Tony Kushner for this timely reworking of what is considered to be the most profound and poignant artistic exploration of the AIDS crisis," said amfAR CEO Kevin Robert Frost. "Angels is an intensely personal work that is so much more than just an AIDS play and, in this time of COVID and national unrest, its themes of racism and government failings make it as relevant and resonant today as it was when it was first performed 30 years ago."

To view the broadcast and for more information, go to **thegreatworkbegins.org**



LAST PRINT ISSUE!

To reduce costs and increase efficiency, this will be the final printed version of *Innovations*. We will transition to a twice yearly digital newsletter beginning in spring 2021. We urge you to sign up today to receive your future issues of *Innovations* via email.

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