

## First Case of Child Cured of HIV

amfAR'S NEW PEDIATRIC CURE RESEARCH COLLABORATORY PAYS DIVIDENDS



Dr. Deborah Persaud

The case of the first child to be cured of HIV was described before a rapt audience at the 2013 Conference on Retroviruses and Opportunistic Infections in Atlanta, GA, March 3.

Dr. Deborah Persaud of Johns Hopkins Children's Center, an amfAR grantee, detailed the case of a child in Mississippi born to a mother who tested HIV-positive during labor. Because this was the first point of contact between the mother and medical care, the doctors knew she had not taken antiretroviral therapy during pregnancy, an intervention that vastly reduces the chances of mother-to-child transmission of the virus.

With this in mind, the pediatrician in charge of the case, Dr. Hannah Gay, decided to

administer a treatment dose, rather than the usual prevention dose, of antiretroviral therapy to the infant just 31 hours after birth, to increase the chances that HIV infection could be prevented. She figured that if the infection occurred despite this therapy, at least the infant would be starting on therapy soon after birth. Infants are normally started on a treatment dose of antiretroviral therapy at six weeks or more, so there would be few other infants who had started antiretroviral treatment so soon after birth.

### Tests confirm HIV diagnosis

At roughly the same time that treatment was initiated, two tests were conducted to determine whether the infant was infected. Both tests

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## Three Types of HIV Cure

WHAT DO THEY MEAN, AND WHERE DO WE GO FROM HERE?

By Rowena Johnston, Ph.D.

On March 3, we heard the news that a child appeared to have been cured of HIV. Hard on the heels of that report came the news that 14 individuals in France had been functionally cured of HIV. So what do these cases mean? How are they similar, and how do they differ? And importantly for HIV research, where do we go from here?

Much depends on how a cure is defined. Researchers are used to thinking of a cure in two different

ways. One type, a sterilizing cure, requires that HIV be eradicated from the body of the infected person. The second, a functional cure, is less stringent in that it requires that the patient is able to stop taking antiretroviral therapy without suffering any adverse consequences of the HIV that remains in their body.

### The Berlin patient

A decade ago, almost nobody spoke of curing HIV infection as a realistic goal, yet we find ourselves

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Photo: IAS/Steve Shapiro - CommercialImage.net

Dr. Rowena Johnston (second from left) participated in a two-day pre-International AIDS Conference cure symposium in July 2012.

# Policy vs. Progress



The practical applications of the Mississippi cure case (see cover story) remain to be seen, but this is nonetheless a major step forward in our efforts to cure HIV and an important proof of principle. As you'll read in the pages of this newsletter, AIDS

research is moving forward on many fronts. The question is, will this exciting progress be matched on the policy front, or will further progress on AIDS be stymied by the same old culprits: ideology and political expediency?

Even today, the AIDS response is hampered in many significant ways by policy makers who cannot see the forest for the trees. Take syringe exchange. Despite reams of evidence that it's effective—and cost-effective—at blocking the spread of HIV and other blood-borne diseases without increasing drug use, the use of federal funds to support syringe services programs remains prohibited (see facing page).

Take vulnerable populations. Homosexuality is a crime in 80 countries, and in some of them it's punishable by lengthy prison terms or even death. When HIV infection is so clearly concentrated—and on the rise in many countries—among this population, how can we hope to respond effectively in the face of state-sanctioned hostility and discrimination?

And take the President's Emergency Plan for AIDS Relief—PEPFAR, arguably the most effective bipartisan foreign policy initiative in living memory. Why do we insist on shortchanging this program that is widely credited with altering the trajectory of the AIDS epidemic in many parts of the developing world? We now have a Blueprint for an AIDS-Free Generation, but unless we make the investments needed to implement it, it's a worthless document.

Our researchers are playing their part to create an AIDS-free generation. If only policy makers would do the same.

As always, thank you for your generous support!

Kevin Robert Frost  
Chief Executive Officer

## Global Advocacy Corps Grants Support Analysis and Advocacy

amfAR-FUNDED ORGANIZATIONS MAKING "REAL CHANGE"

In 2011, amfAR launched the Global Advocacy Corps, a small grants program that supports original policy analysis, reporting, and advocacy throughout the world. These projects are intended to help make national responses to HIV more effective and to support civil society organizations already engaged in advocacy work.

"We've seen the positive impact of our own policy analysis and wanted to support this type of work in other countries," said Owen Ryan, amfAR's deputy director of public policy. "Civil society advocates throughout the world are often doing analysis and strategic planning with limited or no support. We wanted to change that."

The Global Advocacy Corps funds community-based organizations that have established themselves as strong advocates but need support to do policy analysis work. "What's really the premium here is time," said Ryan. "Analyzing national policy and

budget data in a way that effects real change requires smart people and perseverance. We find over and over how effective advocates are pulled in a million directions. We're hoping the Global Advocacy Corps will provide the resources that allow civil society groups to identify the most important policy changes in their countries."

Last year, the program funded grants in Nigeria, Uganda, Zimbabwe, Malawi, and Swaziland with a deliberate focus on Sub-Saharan Africa. This year, the program hopes to expand to Eastern Europe and Asia. Ryan says that ultimately he'd like to be able to point to examples of former Global Advocacy Corps grantees who are continuing this type of work on their own in a few years' time. ■

For more information, visit [www.amfar.org/publicpolicy.html](http://www.amfar.org/publicpolicy.html).

## INNOVATIONS

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# amfAR Calls for Restoration of Federal Support for Syringe Services Programs

NEW REPORT HIGHLIGHTS PROVEN PUBLIC HEALTH, PUBLIC SAFETY, AND ECONOMIC BENEFITS OF SYRINGE SERVICES PROGRAMS (SSPs)

Injection drug use remains a driving force in the HIV epidemic, accounting for 14 percent of new infections among women and 7–11 percent of new infections among men in the United States in 2010. Needle sharing during injection drug use is also the primary driver of hepatitis C infection in the U.S. An issue brief released by amfAR in January asserts that the ban on federal funding for SSPs impedes domestic efforts to meet the goals of the National HIV/AIDS Strategy and to achieve an “AIDS-Free Generation.”

In 2009, Congress removed a 21-year prohibition on the use of federal funds to support SSPs, only to re-impose the ban two years later. In the brief, amfAR argues that a conclusive body of evidence demonstrates SSPs help prevent infection by reducing the re-use and circulation of injecting equipment without increasing drug use or resulting in other negative consequences. SSPs currently operate in 186 U.S. cities, and have been endorsed by numerous medical and public health organizations, as well as law enforcement officials across the U.S.

Despite this consensus, jurisdictions are still not able to use federal funds to support SSPs. The supplies provided by SSPs to prevent new infections are substantially cheaper than the cost of treating HIV or hepatitis C, and SSPs proved a vital link to drug treatment and health care services. Studies have also shown that SSPs provide a significant public safety benefit to communities by reducing the number of improperly discarded syringes, and lowering the risk of needle-stick injuries to law enforcement.

During the brief lifting of the ban on federal funding, federal dollars were used to support SSPs in California, Connecticut,

Delaware, Illinois, Massachusetts, Minnesota, New Jersey, New Mexico, New York, Puerto Rico, Vermont, and Washington. The ability to again use federal funds to support SSPs would undoubtedly be welcomed by jurisdictions in these states and in others



that are eager to prevent new HIV infections, preserve public resources, and support public health and safety goals. ■

Read the full report, *Federal Funding for Syringe Services Programs: Saving Money, Promoting Public Safety, and Improving Public Health*, at [www.amfar.org/publicpolicy.html](http://www.amfar.org/publicpolicy.html).

## amfAR Film Makes Powerful Case for Syringe Services Programs

FILM URGES LAWMAKERS TO RESCIND THE BAN ON FEDERAL FUNDING FOR SYRINGE SERVICES PROGRAMS



On February 27, amfAR released a new short film that shows in very human terms the proven ability of syringe services programs (often called syringe exchange programs) to reduce the spread of blood-borne diseases, including HIV. The 10-minute film, titled “The Exchange,” was produced by Waterbound Pictures with funding from the Open Society Foundations.

In 2013, even as injection drug use continues to contribute substantially to the spread of HIV and hepatitis C, federal public health funds are unavailable for syringe exchange.

“This is a battle we’ve been fighting for over two decades,” said amfAR CEO Kevin Robert Frost. “With this film, we hope to get the message across that it’s time to remove this ban once and for all. It’s anti-public health and it flies in the face of a large body of evidence that shows that syringe exchange programs are effective, don’t increase drug use, and don’t increase crime.” ■

View “The Exchange” at [www.amfar.org/endtheban](http://www.amfar.org/endtheban).



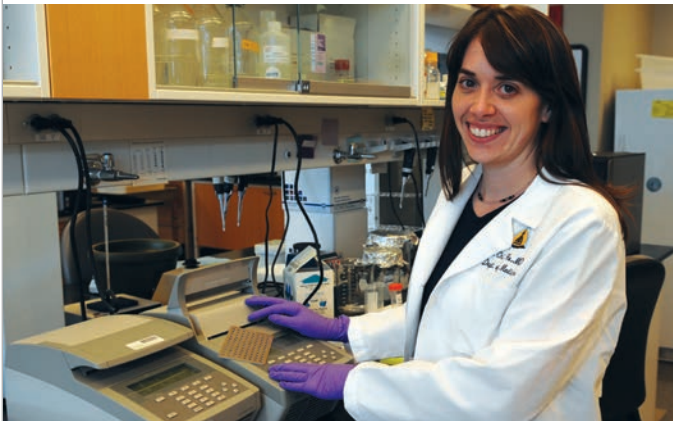
# amfAR Awards \$2 Million in New Research Grants

amfAR has awarded two new rounds of research grants and fellowships totaling almost \$2 million. The awards will support the work of a dozen scientists at leading research institutions in the U.S. and Europe. The majority are for cure-focused studies.

## Supporting young researchers

The sixth round of Mathilde Krim Fellowships in Basic Biomedical Research, created to support the work of young HIV/AIDS researchers, was announced in December. The new Krim Fellows—Christine Durand, M.D., of Johns Hopkins University School of Medicine; Lucie Etienne, Ph.D., of the Fred Hutchinson Cancer Research Center in Seattle; Alon Herschhorn, Ph.D., of the Dana-Farber Cancer Institute; and Leopold Kong, Ph.D., of the Scripps Research Institute in La Jolla, CA—will each receive \$125,000.

“The research being done by these new Krim Fellows is exciting, innovative, and potentially groundbreaking,” said amfAR vice president and director of research Dr. Rowena Johnston. “Each of the Krim Fellows is doing work that could produce major contributions in four



*Dr. Christine Durand*

separate areas of HIV/AIDS research: cure research, epidemiological research, vaccine development, and treatment development. Each is at the forefront of the current demands for addressing the pandemic.”

Dr. Christine Durand will address the case of the so-called “Berlin patient”—Timothy Brown, the first person known to have been cured of HIV—to determine which of the several interventions was responsible for curing him of HIV. Dr. Durand plans to investigate each of the three major possibilities separately: chemotherapy targeted against cancer, immune suppressive drugs, and the process of stem cell transplantation. The new information will not only help inform us about the contributions of each of these interventions to curing the patient, but may also reveal which are the most important barriers to overcome in the search for a widely available cure for HIV.

Dr. Durand will work with Dr. Robert Siliciano, who is also at Johns Hopkins and is a longtime amfAR grantee. Additionally, Dr.

Siliciano has worked closely with other amfAR-funded scientists on cure research through the Foundation’s ARCHE cure consortium.

“What’s particularly gratifying is that several of our current or former grantees are mentoring these Krim Fellows, reinforcing how important amfAR funding is to several generations of scientists,” Johnston said. “Together, they’re making important discoveries that contribute to our understanding of the virus—and how to overcome it.”

## Capitalizing on existing opportunities in cure research

In February, eight new grants totaling more than \$1.4 million were awarded to research teams from around the world who are working on a variety of cure-focused studies. This round of grants was supported in part by the Foundation for AIDS and Immune Research (FAIR).

To leverage research resources already in place, two projects will provide additional analysis of ongoing clinical trials. One of these trials is examining a pharmacological approach to curing HIV, while the other is exploring gene therapy. In each case, the investigators—Drs. Lars Ostergaard and Rafick-Pierre Sékaly, respectively—will gather additional data and conduct analyses that will broaden our knowledge in the context of the trials.

“Investing wisely in research sometimes means capitalizing on and strengthening opportunities that already exist,” said Johnston. “This round of funding enables amfAR to widen the net of new research ideas and to deepen our understanding of ongoing research projects.”

Another funded project, led by Dr. Satish Pillai at the University of California, San Francisco, will examine how an unusual genetic mutation—CCR5-delta32—may enhance the curability of HIV. He will measure the amount of virus that persists in patients with or without this mutation. His hypothesis derives from the observation that Timothy Brown, as well as two more patients who may also have been cured, all have this mutation. Several months ago, amfAR funded a research project, led by Dr. Timothy Henrich of Brigham and Women’s Hospital, to characterize more fully the HIV status of the latter two patients.

“Whether our funded researchers are working with real-time clinical trial results or building on concurrent research being conducted by amfAR-funded scientists, one thing is clear: We’re only going to find a cure for HIV if we continue to invest in research,” said amfAR CEO Kevin Robert Frost.

More than 87 percent of amfAR’s research grants are dedicated to cure-specific projects. “We’re only going to end this epidemic through smart investments, and we believe cure research is one of the smartest,” Frost said. “If we can continue to marshal the political and financial will to end AIDS, we believe we will do it in our lifetime.” ■



*Dr. Satish Pillai*

involved PCR on blood samples. PCR detects nucleic acids, the components of both DNA and RNA. Both tests—DNA PCR and RNA PCR—came back positive, indicating that the infant had HIV-infected cells, as well as virus in the blood. Because these tests were positive within the first 48 hours after birth, current guidelines suggest the infant was infected some time prior to birth. Over the ensuing weeks, close monitoring confirmed that the viral load dropped with successive tests, as expected when a patient is responding well to therapy.

More than a year later, the mother and child stopped going to the doctor when the child was 18 months of age, returning to medical care at 23 months. At that time, the mother confirmed that her child had not been given antiretroviral therapy for at least five months. The doctors conducted a viral load test to determine an appropriate treatment regimen, and were very surprised when the test came back “undetectable,” meaning there were less than 48 copies of the virus in each milliliter of blood. In a child who has stopped antiretroviral therapy, the result would be expected to be as high as several million.

## This case points to the tantalizing possibility that different populations of HIV-positive people might be cured in different ways.

Not trusting the result, Dr. Gay ordered another test, which also came back undetectable. At this point, Dr. Gay contacted her colleague Dr. Katherine Luzuriaga of the University of Massachusetts Medical School for advice. Dr. Luzuriaga, having just established a pediatric HIV cure collaboratory with Dr. Persaud with funding from amfAR, knew she had the right team of scientists poised to delve more deeply into this case.

### The pediatric collaboratory

An amfAR grant awarded to Drs. Persaud and Luzuriaga in September 2012 allowed



Dr. Katherine Luzuriaga

them to establish a research collaboratory to explore and document possible pediatric HIV cure cases. The collaboratory includes renowned researchers Drs. Stephen Spector and Doug Richman at the University of California, San Diego; Dr. Frank Maldarelli at the National Cancer Institute; and Dr. Tae-Wook Chun at the National Institute of Allergy and Infectious Diseases.

“amfAR’s support has been instrumental in documenting what we believe is a very important case of a functional HIV cure,” said Dr. Persaud. Drs. Persaud and Luzuriaga have been studying pediatric HIV infection for several years with support from the National Institutes of Health as well as amfAR. This latest amfAR grant allowed them to focus their efforts more directly on curing HIV infection in infants.

“The child’s pediatrician in Mississippi was aware of the work we were doing, and quickly notified our team as soon as this young patient’s case came to her attention,” said Dr. Rowena Johnston, amfAR vice president and director of research. “Because the collaboratory was already in place, the researchers were able to mobilize immediately and perform the tests necessary to determine if this was in fact a case of a child being cured.”

According to Dr. Persaud, comprehensive tests have confirmed beyond doubt that both mother and child were HIV positive when the child was born, and today no signs of HIV infection in the child can be detected by the most sensitive means available (see page 6).

### Proof of principle

The only other documented case of an HIV cure to date remains that of Timothy Brown, the so-called “Berlin patient” (see page 1). “For pediatrics, this is our Timothy Brown,” Dr. Persaud told *The New York Times*. “It’s proof of principle that we can cure HIV infection if we can replicate this case.”

This new case points to the tantalizing possibility that different populations of HIV-positive people might be cured in different ways. While Mr. Brown’s case was the outcome of a complex, high-risk, and expensive series of procedures, this new case appears to have been the direct result of a comparatively inexpensive course of antiretroviral therapy.

“Given that this cure appears to have been achieved by antiretroviral therapy alone,” said Dr. Johnston, “it is also imperative that we learn more about a newborn’s immune system, how it differs from an adult’s, and what factors made it possible for the child to be cured.”

**“It is imperative that we learn more about a newborn’s immune system, how it differs from an adult’s, and what factors made it possible for the child to be cured.”**

The Mississippi case also underscores the importance of identifying HIV-positive pregnant women, expanding access to treatment regimens than can prevent mother-to-child transmission, and immediately putting infants on antiretroviral therapy in the event that they are born HIV positive.

“We are proud to have played a leading role in bringing this first pediatric HIV cure to light,” said amfAR CEO Kevin Robert Frost. “The case is a startling reminder that a cure for HIV could come in ways we never anticipated, and we hope this is the first of many children cured of HIV in the months and years to come.” ■

## Three Types of Cure CONTINUED FROM PAGE 1

in 2013 with not one, nor even two, but three different types of HIV cure. The first cure—the “Berlin patient,” who we now know as Timothy Brown—has been widely reported. Mr. Brown was living in Germany when he was diagnosed with HIV infection in the mid-1990s. His infection was well controlled by antiretroviral therapy until he was diagnosed with acute myeloid leukemia about 10 years later. To treat the cancer, he received a stem-cell transplant, but his doctors took an extra step, finding a donor with a genetic mutation known as CCR5-delta32. Naturally present in around 1–2 percent of Caucasians, this mutation renders people highly resistant to HIV infection. By transplanting cells from a donor with the mutation, doctors knew there was a good chance of curing Mr. Brown’s leukemia and hoped they might also eradicate—or at the very least bring under control—his HIV infection.

Since his transplant five years ago, standard clinical tests have failed to detect any HIV in Mr. Brown’s body, he hasn’t taken any antiretroviral therapy, and he has certainly not manifested any signs or symptoms suggesting he is progressing to AIDS. Although many scientists are still not willing to go so far as to say HIV has been eradicated from Mr. Brown, it seems increasingly likely that any virus that may be left in his body will not rebound and cause health issues associated with HIV disease. This is as good a cure as exists for any disease.

### The Mississippi child

Fast forward to March 2013, when a child in Mississippi was reported to have been cured of HIV (see page 1). Knowing that scientists are skeptical regarding any claims of a cure, Drs. Deborah Persaud and Katherine Luzuriaga

**As promising as the recent reports of a cure have been, it is clear there is much work to be done to find a cure that can be applied to the 34 million people living with HIV today.**

had set up a pediatric cure collaboratory with funding from amfAR. The collaboratory included scientists specializing in all the tests that had been done to confirm the cure in Timothy Brown. These highly sensitive tests collectively suggested that if there was any virus left in this child’s body, it was unlikely to be capable of multiplying and causing disease.

### The French cohort

Only a week or two after the child cure story broke, French researchers reported they were following 14 people who were “functionally” cured of HIV. These adults had been treated with antiretroviral therapy during acute

infection, i.e., within the first several weeks after becoming infected. All had taken antiretroviral therapy for an average of three years and then stopped. They have now been off therapy for an average of more than seven years, and yet their CD4 cell counts are in the normal range and their viral loads are almost all below 50 copies per milliliter of blood, which is the goal for patients who are taking therapy. Although more sensitive laboratory tests have readily detected HIV in these patients, they appear to no longer need to take antiretroviral therapy to maintain their health, hence the designation “functionally cured.”

### What does it all mean?

What do these three different types of HIV cure tell us? First, there is as yet no cure that can be applied broadly. Timothy Brown’s cure was a grueling and even life-threatening process that cannot be recommended for patients on a wider scale. Moreover, the stem-cell donor in his case had a rare mutation—finding a tissue match for every HIV patient from among these rare gene carriers would be impossible. Mr. Brown’s case has taught researchers which kinds of tests will be needed to satisfy the rightly skeptical scientific community that a cure has taken place.

The potential to apply the findings from the child cure case is intriguing. Each year around the world more than 330,000 infants are born HIV positive. Although a regimen of antiretroviral therapy during pregnancy, sometimes with the addition of a brief regimen in infants after birth, can prevent around 98 percent of mother-to-child transmission of HIV, efforts to scale up this intervention have so far failed to reach all HIV-positive pregnant women. Even with universal coverage, some infants would still be born with HIV. What remains to be determined—and clinical research studies are currently being planned—is whether an early course of antiretroviral treatment in infants for a circumscribed period of time can eliminate HIV infection after it has occurred.

The French cases described above are clearly examples of a functional cure—the patients all still have HIV, and yet have stopped taking their medication and have not progressed to HIV disease and AIDS. It is possible that such a cure might be effected more broadly, but the major challenge would be to identify HIV-infected people sufficiently early during the course of infection for the therapy to make this difference. Even so, according to the researchers who conducted the French study, it appears that only 10–15 percent of people are functionally curable this way. It is less clear what type of cure Timothy Brown or the child have experienced. In both patients, trace amounts of the genetic material of the virus are sporadically detected. One challenge is knowing whether or not those results are “real.” In each case, the levels of virus are at the “limit of

## amfAR Interview

Renowned virologist, president of the International AIDS Society, and Nobel Laureate **Dr. Françoise Barré-Sinoussi** recently spoke to amfAR about her work and current directions in cure research. You can find the interview at [www.amfar.org/treatasia](http://www.amfar.org/treatasia). ■





# Stopping HIV Using a Cocktail of Genes Rather than Drugs

By Jeffrey Laurence, M.D.



Dr. Sara Sawyer

The headline in *The Huffington Post* heralded this new amfAR-funded work by stating that, “HIV-resistant cells created by Stanford researchers could protect patients from AIDS.” An ABC News blog further declared: “Genetically modified cells could prevent death

from HIV/AIDS, study finds.” And what led to all this promise and excitement? amfAR grantees Dr. Matthew Porteus, working in the Department of Pediatrics at Stanford University, and Dr. Sara Sawyer at the University of Texas, have worked with colleagues to create, in the test tube, genetically modified human T cells resistant to HIV infection.

Porteus, Sawyer, and colleagues took a lead from prior amfAR-funded research into so-called “restriction factors,” or normal cellular genes that have the capacity to limit the growth of HIV. Utilizing a novel and complex gene strategy based on enzymes that can cut into a host’s DNA, they were able to insert such factors—including APOBEC3G and TRIM5 $\alpha$ —into a host gene, CCR5, disrupting that gene in the process. CCR5 normally codes

for a critical receptor, or door, by which most strains of HIV enter a cell.

They refer to this approach as “Genetic HAART,” as it uses a “cocktail,” not of drugs as we normally associate with highly active antiretroviral therapy (HAART), but of genes. But both approaches involve agents with overlapping or different mechanisms of action against HIV, making resistance much less of a risk.

As Porteus explained in his paper, published online in late January in *Molecular Therapy*, a journal of the American Society of Gene and Cell Therapy, “this strategy provides multiple parallel blocks to infection.” Indeed it did. The researchers were able to protect cells against HIV strains that used the CCR5 pathway as well as other HIV strains that used an alternate “door” to infection, CXCR4.

“This method would give people a protected reservoir of T cells that would thwart immune system collapse, and the secondary infections that give rise to AIDS,” said Dr. Sawyer in the ABC News blog. This work, though as yet only at the test-tube stage, is an important step toward an eventual practical cure for AIDS. ■

Dr. Laurence is amfAR’s senior scientific consultant.



Dr. Matthew Porteus

detection” of the assays being used. In other words, the virus hovers in the region in which the assays cannot definitively say whether or not the results are a false positive. Even if there really are traces of the virus left in these patients, what are the ramifications? In both cases, the patients have been off antiretroviral therapy for significant periods of time. If either had been harboring virus that was capable of replicating, in all likelihood that virus would have rebounded by now and would be readily detectable. If the only HIV present in either patient is not replication-competent, and therefore cannot behave in the deleterious ways we care about, can we say they have a sterilizing cure?

Although most researchers might say no, one could argue that this may be as close to a sterilizing cure as we will ever come, and that such fragments may not be

as concerning as they sound. Geneticists have characterized stretches of DNA found in all humans, regardless of HIV status, called human endogenous retroviruses (HERVs). These HERVs share many of the characteristics of HIV. They are remnants of evolutionarily ancient infections with retroviruses (a class of virus to which HIV also belongs) that became incorporated into our genomes and those of our primate and mammalian ancestors. Although yet to be confirmed, it is possible that trace amounts of HIV remaining in patients who are otherwise cured of the infection will be as harmless as these HERVs.

As promising as the recent reports of a cure have been, it is clear there is much work to be done to find a cure—or possibly different types of cure—that can be applied to the estimated 34 million people living

with HIV today. That work will continue with support from amfAR, the National Institutes of Health, and other funders around the world. We owe a lot to the selflessness of the patients who have undergone the testing required to get us where we are today. We are very grateful to Timothy Brown, to the mother of the cured child, who has allowed researchers to conduct the intensive tests required to confirm the cure of her child, to the French patients for subjecting themselves to repeated testing, and to countless others who have participated in studies that have not yet brought us a universal cure, but are teaching us each day what it will take to cure HIV infection and bring an end to this pandemic. ■

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

# Supporting GMT-Led Front-Line Groups in Africa and Latin America

amfAR has announced new rounds of grants aimed at reducing the spread and impact of HIV among gay men, other men who have sex with men (MSM), and transgender individuals—collectively known as “GMT”—in Latin America and Africa. The Foundation in 2012 renamed its MSM Initiative to reflect the diversity of populations being served by the program. The 22 awards, which range from \$14,400 to \$20,000 each, will go to community-led groups working with GMT across the two regions.

“Since we renamed our MSM Initiative last year to become the GMT Initiative, we’ve helped change the global health conversation about the need to address the HIV/AIDS epidemic among transgender individuals in addition to gay men and other MSM,” said GMT Initiative Director Kent Klindera. “We hope our continued efforts will encourage other donors to recognize the importance of working with GMT to curb the epidemic.”

A primary goal of the GMT Initiative is to strengthen the evaluation process for projects funded through the program. One of the eight projects in Latin America that exemplifies this new emphasis on evaluation will be run by ASPI-DH, a group in El Salvador that will build on an earlier GMT Initiative award to train healthcare workers in public health centers about the needs of GMT. Part of the award will

pay for evaluators to pose as health center clients in order to appraise the quality of care.

Another goal of the GMT Initiative is to increase the role of advocacy and systems change in funded projects. In its first year of funding, Rock of Hope, a group based in Swaziland—a small country in southern Africa with the world’s highest HIV prevalence—will seek to create such change by engaging local media practitioners to publicly address GMT- and HIV-related stigma and discrimination. Rock of Hope will also train GMT in Swaziland to engage local healthcare providers and provide recommendations for GMT-specific HIV treatment improvements.

“As the GMT Initiative continues to evolve, we’re focusing on strategies that will better serve GMT in the long run, including systems change and evaluation processes that ensure our awards have lasting impact on local populations,” Klindera said. “We know we’re only going to change the tide of the HIV/AIDS epidemic among GMT if the larger population understands the link between HIV/AIDS and homophobia. So it’s important that the projects we fund have concrete goals and operate in a larger context.” ■

See the full list of GMT Initiative grantees and their projects at [www.amfar.org/gmt](http://www.amfar.org/gmt).

## Ecuadorian Trans Advocacy Group’s Study Gains International Attention

Silueta X is a grassroots organization in Ecuador that was started in 2008 by Diane Rodriguez, a transsexual activist. Ms. Rodriguez ran—unsuccessfully as it turned out—for a congressional seat in the leftist Ruptura 25 party in an election held in February. Had she won, she would have been the first transgender person to hold public office in Ecuador and the first openly transgender lawmaker in South America.

Ms. Rodriguez continues her work as the director of Silueta X, a recipient of a 2012 community award from amfAR’s GMT Initiative. The organization promotes human rights for all groups, focusing on young transvestite, transgender, and transsexual individuals, and provides community education and HIV prevention services. With funding from amfAR, the group conducted a study—the first of its kind—to determine which factors influence the transmission of HIV among transgender

people and to measure discrimination against transgender people on the Ecuadorian coast.

The project made waves in Ecuador and the findings were reported in *El Telégrafo*, a major news outlet, as well as by the Ministry of Health. In addition, Silueta X earned the attention of key people and organizations including the Governor of Guayas, the Mayor of Guayaquil, the Ministries of Health, Education, Justice, Interior, and Economic and Social Inclusion, as well as international groups including UNAIDS and the Pan American Health Organization. Leaders from the National AIDS Program, the Ministry of Health, and the Transition Commission for Gender Equality committed to work together to improve the situation reflected by the report.

The results spurred the government to conduct the first survey of LGBT populations in the country’s history. “In this sense we feel proud as transsexuals to have initiated our



Despite her unsuccessful run for a congressional seat in Ecuador, Diane Rodriguez (left), will continue her human rights work with Silueta X.

investigation and motivated the government to follow in our footsteps,” stated a report from the group. Silueta X’s study has provided a jumping-off point from which the organization hopes that other groups in the region will launch similar campaigns for LGBT rights.

To further Silueta X’s work, the GMT Initiative has awarded the group an advocacy grant. The money will be used to help Silueta X advocate for greater access to health and education for transgender people at the national level. ■



# TREAT Asia Launches Hepatitis C Co-Infection Study

INNOVATIVE PROJECT WILL ADDRESS CHALLENGES IN  
HEPATITIS C TREATMENT

“If everyone has the right to health, why are many of our friends dying from HCV?” asked Hidangmayum Umesh Sharma, treasurer of the Asian Network of People who Use Drugs. Asia is home to 38 percent of the estimated 130–170 million people worldwide chronically infected with hepatitis C virus (HCV). Mr. Sharma is one of approximately five million people (15 percent of all those living with HIV/AIDS) who are co-infected with HIV and HCV.

## Research on the burden of chronic HCV infection, disease severity, and the treatment needs of HIV co-infected patients in Asia is badly needed.

HCV is a serious health threat and is particularly dangerous for people who are HIV positive. Around 75 percent of infected individuals develop chronic HCV, which can lead to cirrhosis—a potentially fatal condition that can result in liver failure and is a risk factor for liver cancer. HIV-positive patients who have progressed to AIDS and are co-infected with HCV have a 50 percent greater risk of mortality than HCV-uninfected patients.



*One of the study sites, the National Hospital of Tropical Diseases in Hanoi, Vietnam*

HCV is curable with therapy in 50–90 percent of cases, depending on the virus genotype (strain) and patient characteristics, including ethnicity. Asian patients tend to have higher treatment response rates than Caucasian patients, for example.

However, treatment is costly and not routinely offered in resource-limited settings. “An outreach worker, who is the front-line service provider for HCV and HIV education, earns \$100 per month and would need to save all of his income for approximately 180 months just to buy medicine to treat his HCV,” said Mr. Sharma. Research on the burden of chronic HCV infection, disease severity, and the treatment needs of HIV co-infected patients in Asia is badly needed.

In 2013, TREAT Asia is initiating the first regional HCV screening study and treatment demonstration project for HIV-positive patients in Asia. Led by TREAT Asia Director of Research Dr. Nicolas Durier, and with scientific and biostatistics support from the Kirby Institute, Sydney, Australia, this innovative project will study the tolerability and effectiveness of HCV treatment in HIV co-infected patients within HIV clinics in Asia. The ultimate goal is to develop a pilot model of care for HCV treatment in resource-limited settings that can be replicated within the region. In addition, the project could generate data to bolster advocacy efforts aimed at securing commitments from governments and donor organizations to expand HCV treatment programs.

The screening study is being funded by the U.S. National Institutes of Health, and the treatment project will be supported by a donation of 200 courses of HCV treatment from Merck and Co. and preferentially priced HCV blood tests from Abbot Molecular. It will be implemented in Bangkok, Thailand, at the Thai Red Cross AIDS Research Centre; Hanoi, Vietnam, at the National Hospital of Tropical Diseases; Jakarta, Indonesia, at Cipto Mangunkusumo Hospital; and Kuala Lumpur, Malaysia, at the University of Malaya Medical Centre.

“With hepatitis C, we are facing a massive epidemic,” said Dr. Durier. “Most people with this infection live in developing countries, and, while we know very effective therapy exists, only a handful of them can access treatment. Medicines have been prohibitively expensive, technical guidance is lacking, and political commitment and international funding are almost nonexistent. All of this needs to be urgently addressed before we are faced with a new epidemic of liver failure.” ■

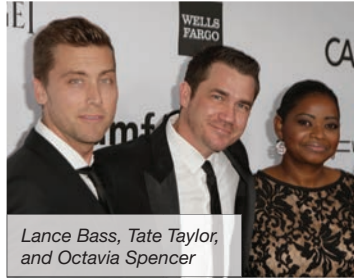


*TREAT Asia Director of Research Dr. Nicolas Durier will lead the first regional HCV screening study and treatment demonstration project for HIV-positive patients.*

# Inspiration Gala Los Angeles

Chelsea Handler hosted the third annual Inspiration Gala Los Angeles on October 11, 2012, at Milk Studios. Sarah Jessica Parker presented the Piaget Award of Inspiration to Kevin Huvane for his generous contributions to the fight against AIDS, and Katy Perry performed a stunning acoustic set of some of her most beloved hits, bringing the entire crowd to their feet. The event raised more than \$1.3 million.

**Special thanks: M-A-C Viva Glam, Piaget, Wells Fargo, Hugo Boss, Kohler, Tumi, Thom Browne, Grey Goose Vodka, FIJI water (Photos: Getty Images)**



Lance Bass, Tate Taylor, and Octavia Spencer



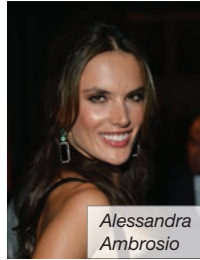
amfAR Chairman Kenneth Cole and host Chelsea Handler



Katy Perry ended the night with a beautiful rendition of her hit "Firework."



Katy Perry donated an autographed guitar, auctioned off by Kristin Davis.



Alessandra Ambrosio



Rose McGowan and Davey Detail



Piaget Award of Inspiration Honoree Kevin Huvane, Sarah Jessica Parker, amfAR Chairman Kenneth Cole, and Maria Cuomo Cole

# TWO x TWO for AIDS and Art

The 14th annual TWO x TWO for AIDS and Art benefit dinner and contemporary art auction on October 20, 2012, raised \$4.5 million for amfAR and the Dallas Museum of Art. Close to 475 people attended the sold-out black-tie event, hosted by Cindy and Howard Rachofsky at their Richard Meier-designed home, The Rachofsky House. A live auction conducted by Sotheby's North and South America Chairman Jamie Niven included works by Karl Lagerfeld and Richard Phillips, who was honored at a brunch the following day.

**Special thanks: Neiman Marcus, Audi of America, Cartier, Sotheby's, Moët Hennessy USA, todd. event design, creative services, Waldman Bros./ Chubb, Flexjet, US Risk, AT&T, Inc., Design Within Reach, Aston Martin of Dallas, Kiehl's Since 1851, Karl Lagerfeld by Fossil, Gagosian Gallery, The Joule Hotel, GDT, Unified Fine Arts and US Art, FDLUXE, Texas Graphic Resource Inc., PlainsCapital Bank, Nancy Gonzalez, Hillstone/R+D Kitchen, Kohler, Spook Stream (Photos: Kevin Tachman)**



Tony Award winner Alan Cumming performed.



TWO x TWO Chair Amy Phelan with hosts Howard and Cindy Rachofsky, Alan Cumming, and Lance Horne



Amy Phelan, Charlotte Jones Anderson, honoree Richard Phillips, and Melissa Meeks



The Rachofsky House



Maxwell Anderson, Eugene McDermott Director of the Dallas Museum of Art, with his wife Jacqueline



John Benjamin Hickey



## amfAR New York Gala

amfAR Chairman Kenneth Cole, amfAR Ambassador Janet Jackson, and supermodel Heidi Klum were honored for their exceptional contributions to the fight against AIDS at the 2013 amfAR New York Gala on February 6. The event raised more than \$2.3 million. Opening remarks by Sarah Jessica Parker were accompanied by rousing performances by CeeLo Green, Alan Cumming, and Santigold.

**Special thanks: M-A-C Viva Glam, FIJI Water, Delta Air Lines (Photos: Kevin Tachman)**



Sarah Jessica Parker



Michael Kors, New York City Mayor Michael Bloomberg, Heidi Klum, and Kenneth Cole cut the ribbon to begin IMG and Mercedes-Benz Fashion Week.



CeeLo Green and amfAR CEO Kevin Robert Frost



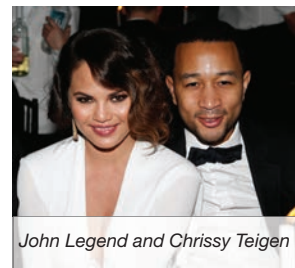
Governor Andrew Cuomo presented Kenneth Cole with his award.



Michael Kors and Honoree Heidi Klum



amfAR Ambassador and Honoree Janet Jackson, pictured with award presenter Maria Davis.



John Legend and Chrissy Teigen



Alan Cumming wowed the audience with his impromptu performance.

## Inspiration Miami Beach Party

On Thursday, December 6, 2012, amfAR held its inaugural Inspiration Miami Beach Party during Art Basel Miami Beach. Guests at the invitation-only dance party at Soho Beach House included amfAR Chairman Kenneth Cole and Maria Cuomo Cole, Russell Simmons, Dita Von Teese, John Demsey, St. Vincent, and Bobby Flay, among many others. The event featured a silent auction of contemporary works of art, and special guest DJ sets.

**Special thanks: M-A-C Viva Glam, Piaget, Moët Hennessy, Interview Magazine, artnet Auctions (Photo: Kevin Tachman)**



## generationCURE Masquerade



generationCURE Committee members (L-R) Fritz Vidanes, Ernesto Gutierrez-Lezama, Rancel Garg, Gerald Graziano, Heather-Skye McField, David Smith, John Cafarelli, and Jonathan Kreissman

On Friday, October 26, amfAR's generationCURE held its second fundraising event, Masquerade, at The Box in New York City. Nearly 200 young professionals donned masks in support of generationCURE's goal of raising \$120,000 to fund a new, cure-focused research project. The event raised more than \$19,000.

**Special thanks: Here Media, Ford Models, Legends of Kremlin Vodka, Gas Bijoux, Joseph F. McCrindle Foundation (Photo: Guest of a Guest)**



# SPEED UP THE SEARCH FOR A CURE

amfAR's collaborative approach to HIV/AIDS research has brought us closer to a cure than ever before—and we need you to be a part of the next crucial discovery. Friends of amfAR is a special group of individuals who provide constant support with monthly pledges. These contributions enable us to fund innovative research into new treatments, prevention methods, and eventually a cure for HIV/AIDS.

Even small regular donations add up. Please join today at the level that's right for you!

Visit [www.amfar.org](http://www.amfar.org) for details.



amfAR, The Foundation for AIDS Research  
120 Wall Street, 13th Floor, New York, NY 10005-3908

- Three Types of HIV Cure and What They All Mean
- amfAR Grantees Create Genetically Modified Human T Cells Resistant to HIV Infection
- New Grants Support Front-Line Groups in Africa and Latin America

INSIDE

## 2013 Calendar

- May 23** • Cinema Against AIDS Antibes, France
- May 25** • Life Ball Vienna, Austria
- June 11** • generationCURE Solstice New York City
- June 13** • Inspiration Gala New York New York City
- July 2** • Inspiration Berlin Berlin, Germany
- August** • Kiehl's Life Ride for amfAR Vancouver to Los Angeles
- September 8** • Inspiration Toronto Toronto, Canada
- September** • amfAR Milano Milan, Italy
- October 26** • TWO x TWO for AIDS and Art Dallas, Texas
- November** • amfAR Cup New Delhi, India

For more information, visit [www.amfar.org](http://www.amfar.org).

# INNOVATIONS

amfAR

MAKING AIDS HISTORY

The Newsletter of amfAR, The Foundation for AIDS Research

SPRING 2013

