



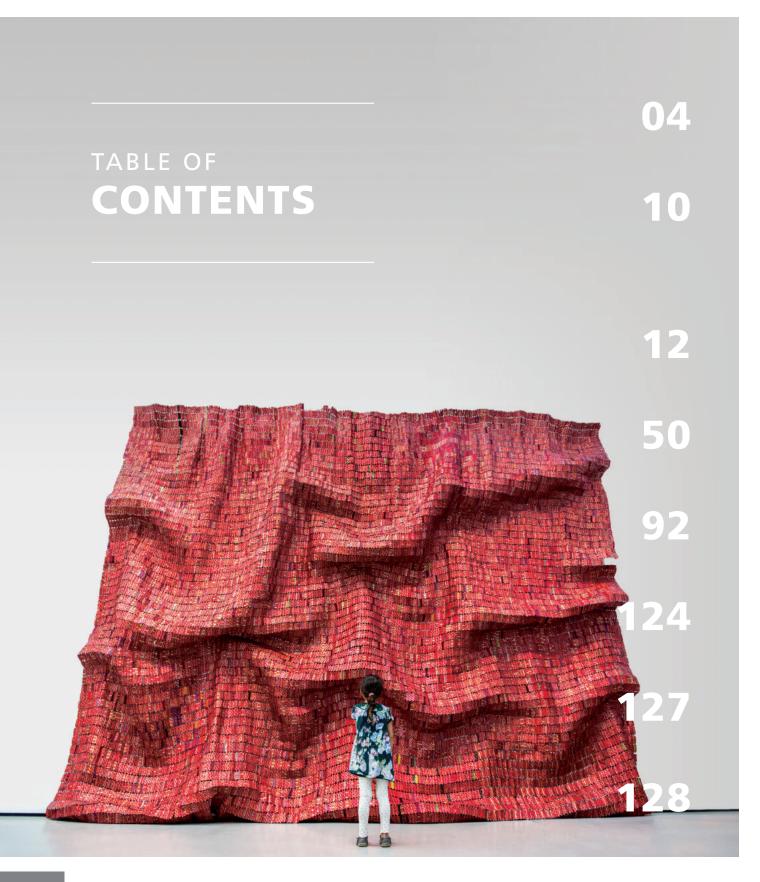
#### MISSION OF

## THE BROAD FOUNDATIONS

Working to ensure that every student in an urban public school has the opportunity to succeed.

Making significant investments to advance major scientific and medical research.

Fostering public appreciation of contemporary art by increasing access for audiences worldwide.



### **FOUNDERS LETTER**

## MESSAGE FROM THE BOARD OF GOVERNORS

**SCIENCE** 

**EDUCATION** 

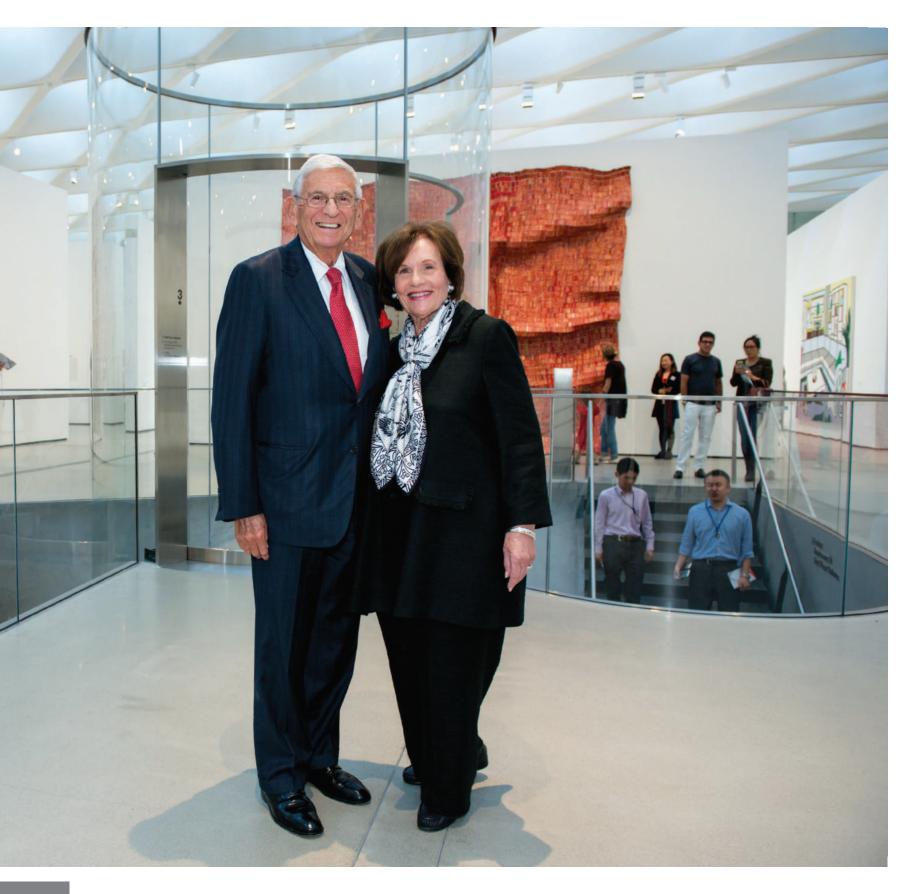
**THE ARTS** 

**GRANTS** 

**FINANCIAL STATEMENT** 

THE BROAD TEAM

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## ENTREPRENEURSHIP FOR THE PUBLIC GOOD IN

## EDUCATION, SCIENCE AND THE ARTS

BY ELI BROAD AND EDYTHE BROAD

**The public has always been** a focus of our philanthropic initiatives: improving public schools, advancing scientific and medical research that benefits human health and increasing access to the arts for the broadest possible audience.

We both grew up in Detroit and attended great public schools. It was in those early school years that we were exposed to—and inspired by—art on field trips to the Detroit Institute of the Arts. And when family members faced medical crises, we found many of the most promising advances were pursued by scientists and researchers at public universities. In the world of business, we created public companies that were focused on providing affordable homes to young families and secure retirements to aging Americans. So when we had the opportunity to turn our efforts to the world of philanthropy, our focus on entrepreneurship for the public good in education, science and the arts was the culmination of our collective experiences—and our best efforts at giving back to the country that has been so good to us. We are pleased to have been one of the initial signatories of the Giving Pledge, committing to give 75 percent of our net worth away during or after our lifetimes. To date, we have invested more than \$4 billion in education, science and the arts.

As we reflect on the past two years and look ahead to the future, we are again awestruck by the talented professionals whose work we are privileged to support. In public education, we are deeply indebted to the numerous

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state superintendents, district leaders and public charter school managers who work tirelessly each day to ensure every student receives a great education and to support the dedicated teachers passionate about helping their students master academics. In science, we are energized by the researchers who are relentless in the pursuit of solving the mysteries of disease and discovering the medical path to a healthy life. And in the arts, we are inspired by the artists whose work challenges, provokes and stimulates creative thought.

#### PUBLIC EDUCATION

Our sense of urgency in public education stems from a recognition that our country's economic health, the strength of our democracy, our national security and certainly our ability to give every student a shot at the American dream depends on the strength of our public schools. Sadly, we haven't made anywhere near enough progress since the 1983 release of "A Nation at Risk," the landmark report that sounded a wakeup call for America's public schools as other countries accelerated the education of their students.

AS YOU'LL
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HILDREN—
In the 16 years since we began working to improve public schools, the definition of a school system has evolved.
Where there once were traditional public school districts, private and parochial schools, today there are also public charter school networks, state-run districts most often comprised of historically low-performing schools and portfolio systems that give parents high-quality public school options for their children. Our interest has always been in protecting and improving public schools—however they are defined. That's why we have invested more than \$650 million since 1999 to improve America's public schools.

We have invested more than \$144 million in developing and scaling high-quality public charter management organizations that run systems of schools. The demand for public charter schools is greater than the current supply. Nationally, 1 million families are on waiting lists to attend charter schools. In our hometown of Los Angeles, we are supporting an ambitious project over the next eight years to bring high-quality public schools to all students.

The Broad Center continues to be our largest and longest-running grant and reflects our belief that leadership is the crucial element to successful public schools. In recent years, the Center has expanded its work to encompass the changing definition of these school systems. In addition to supporting traditional urban school district superintendents, The Broad Center's two programs—The Broad Academy and The Broad Residency in Urban Education—boost the efforts of leaders and top managers in public charter systems, state departments of education and recovery and achievement school districts. These leaders are dedicated to the belief that great



teachers must be supported, that dollars must be focused on the classroom where they have the greatest impact on teaching and learning, and that every child deserves the opportunity to achieve his or her full potential.

With the changing landscape of public schools today—and sluggish academic gains across the board—we decided to pause The Broad Prize for Urban Education while we evaluate how best to incentivize public school systems to improve dramatically. We are, however, continuing to award the \$250,000 Broad Prize for Public Charter Schools, due to the impressive academic gains produced by public charter school systems. And we hope that the Common Core State Standards will raise the bar for higher academic success nationwide.

Public schools played such a vital role in our lives, and we have a deep commitment to give the same solid foundation to the millions of students who today attend public schools. As you'll read in these pages, education is the great equalizer, giving all children—regardless of their family income or background—the opportunity to soar.

#### SCIENTIFIC | MEDICAL RESEARCH

To date, we have invested more than \$800 million in scientific and medical research. It is the area of our philanthropy that gives us the most hope and the greatest joy for the simple reason that not a single researcher is satisfied with the current state of health and medicine. The scientists we support are pure in their drive to unlock the mysteries of disease. They live and breathe their research, testing out hypotheses, adjusting their theories as they tackle individual diseases, cell by cell, genome by genome.

The Broad Institute of MIT and Harvard is at the forefront of genomic medicine. Under the leadership of Eric Lander, the institute continues to grow in the scope of its research

FOUNDERS LETTER

and expand its bright cadre of scientists and researchers from all disciplines who work collaboratively and share their discoveries freely. The Broad Institute's groundbreaking work to decode the Ebola genome led to major advances in how quickly and accurately doctors in Sierra Leone were able to diagnose and then treat the deadly disease. Not a day goes by that we are not impressed by a scientific paper or study published in a medical journal detailing the work underway at the Broad Institute.



The three stem cell centers we support in California—at UCLA, UC San Francisco and USC—are forging ahead with their own life-changing discoveries. Thanks to the work of researchers at these stem cell centers, babies born with fatally compromised immune systems have been cured, patients suffering from Lou Gehrig's disease have hope for new drug therapies and promising research could reverse the ravages of aging. While these advances may not prolong our lives or ease our aches, we truly believe that this research will improve the health of future generations, giving millions of people longer, more productive lives.

#### THE ARTS

After collecting art for more than 50 years and assembling a public art collection through The Broad Art Foundation, we could not be more delighted to open The Broad as a permanent home for our art on Grand Avenue in downtown Los Angeles. With

a visionary design by renowned architect Elizabeth Diller of Diller Scofidio + Renfro, the innovative "veiland-vault" concept has exceeded our expectations, providing beautiful galleries and integral storage that has enabled us to consolidate the works in our collection in one home while continuing our longstanding practice of lending art to museums around the world.

With the goal of making contemporary art accessible to the broadest possible public, we decided to offer free general admission, because we want to see families, visitors of all ages and from all walks of life, tourists from around the country and across the globe come to The Broad to experience contemporary art. Over the years, we were drawn to contemporary art because we were fascinated by the conversations with the artists, who had much different perspectives than business people, bankers, lawyers and accountants. As we researched and studied art, we learned that the best collections were assembled during the artist's lifetime. And because art of our time reflects many thoughtprovoking social, political, cultural and racial issues, we knew that contemporary art was what we wanted to collect and share with the public.

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TO EXPERIENCE
CONTEMPORARY
ART.

Since The Broad opened on Sept. 20, 2015, we have been overwhelmed by the public response to and interest in contemporary art. We feel like our art has found a permanent and public home, and it is a privilege to be able to share our collection and the joy we have experienced through art.

As we look to the future, we want to ensure that our philanthropic work continues. We have confidence in the leaders we have enlisted to oversee these initiatives, and we appreciate the distinguished board members who advise and direct our foundations, our scientific work, The Broad Center and our new museum.

In this report, we are pleased to share the faces and voices of our grantees. No one can tell the story of the important work they do every day better than they can. We are immensely proud of their work and their passion, and we are humbled to play a small role in supporting their work.

El. Sund Edythe Broad

Eli and Edythe Broad are co-founders of The Broad Foundations.

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On behalf of The Broad Foundations Board of Governors, Lam pleased to echo Eli and Edye's sentiments about the important and remarkable efforts undertaken by the scores of dedicated men and women who are passionate about their work in education, science and the arts. And we are unequivocally committed to the emphasis on the public in our work: to improve public schools so that every child has the opportunity to achieve and succeed; to support scientific and medical research that will benefit the lives of this and future generations; and to increase access to the arts for all who want to be challenged and moved by the experience.

We continue to be inspired by and grateful to our grantees, who are transforming the lives of students across America, improving the health of millions of people around the world today and long into the future, and enriching audiences by making the arts accessible to the public. Until we, as a country, ensure every student receives an excellent education that prepares him or her for life after high school, we will fail to deliver on the American dream. The work of scientists and researchers at the Broad Institute and at the three stem cell centers in California is truly inspiring, and there is no question that the scientific and medical research and discoveries, and the treatments that result from those findings, will make a profound difference in human health. Finally, we believe the arts enrich the human spirit. We champion the Broads' commitment to making sure that the public has access to the arts, and especially contemporary art and architecture through the beautiful new Broad museum on Grand Avenue.

We share Eli and Edye's commitment to this work, and we are privileged to advise them as they continue to make strategic—and significant—investments. We keep a careful eye on all of our activities, especially what's working. Data and regular progress reports on each investment are critical to ensuring that dollars are invested wisely and in a way that has the greatest impact on the most people.

Each member of our board is humbled and inspired by the incredible, tireless efforts of Eli and Edye. They are a remarkable pair, unstoppable in their philanthropic journey to improve the lives of others. We are enthusiastic and supportive of the worldclass foundation and museum teams they have assembled and believe that the right leadership makes all the difference in setting an ambitious vision and taking the necessary steps to make it happen.

We are more bullish than ever about our areas of investment and their potential to make a profound difference in how we educate our children, solve the mysteries of disease and provide inspiration through the arts. We salute the work of our grantees and look forward to sharing their continued successes.



Jay S. Wintrob is the vice chairman of The Eli and Edythe Broad Foundation Board of Governors.

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The Broad Foundations

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MESSAGE FROM THE BOARD OF GOVERNORS













#### STANDING ON THE

## CUSP OF A REVOLUTION

BY DAVID BALTIMORE



**Fifteen years ago,** when The Eli and Edythe Broad Foundation was getting its start, the world stood on the cusp of a revolution in scientific and medical research. The Human Genome Project, a collaborative effort by 20 laboratories and hundreds of scientists worldwide to sequence the stuff that makes us who we are, published the first full drafts of our genetic material. It was the culmination of a half century's work—

starting with the discovery of DNA's structure—to transform biology from a science dependent on microscopic observation to a science of genes and proteins, the smallest but most fundamental pieces of the puzzle of life. The answers to essential human questions—who we are, why we are different from one another, why we get sick, why we die, how we can live better lives—were still far from being answered. But, at that moment, they appeared in much sharper focus than ever before.

If there ever was an opportune time to jump-start a science, it was the early years of this century. Eli and Edye Broad saw the opportunity represented by what we now call genomic science, started supporting it, and have remained vanguard supporters of this scientific endeavor in the years since.

Since 2000, The Eli and Edythe Broad Foundation has invested more than \$800 million into the pursuit of scientific and medical research. The greatest proportion of that investment has gone to the Broad Institute, headed by Eric Lander, who led the Human Genome Project. Like all the scientific knowledge it builds upon, the Broad Institute began as an experiment. Eric Lander wanted to see what would happen if he put the smartest scientists from a variety of disciplines (biology, chemistry, mathematics, engineering and more) together in a new kind of laboratory, one that departed from the traditional university structure to make more room for collaboration. He found these great minds in the legendary institutions of Cambridge and Boston, Massachusetts, both academic and medical. Eli Broad helped Eric convince Harvard University and the Massachusetts Institute of Technology to work closely together.

Both men succeeded beyond what they could have hoped back in 2001, when I first introduced them. Back then, Eli and Edye were curious about the work of scientists studying inflammatory bowel disease, a debilitating gastrointestinal disorder that afflicted one of their sons. They wanted to start a small medical research program into the disease, funding small start-up grants into innovative research. They asked me for a few names of smart researchers, and Eric Lander was at the top of my list because he was investigating the disease from the fundamental, genetic point of view. Fortunately for all of us, Eric had other ideas in mind that went far beyond pursuing research in his own lab. Eli and Edye went on to fund the Broad Medical Research program, investing more than \$43 million to advance research into the cause, treatment and cure of inflammatory bowel disease. The program continues today, run by the Crohn's & Colitis Foundation of America.

Thanks to the vision and leadership of Eli, Edye and Eric, the Broad Institute has become a community of 2,500 biologists, chemists, engineers, computer scientists and other talented researchers from a variety of disciplines and affiliated with the top institutions in the world—Massachusetts General Hospital, the Dana-Farber Cancer Institute, MIT and Harvard. So far, they have authored more than 3,800 publications and are studying cancer, psychiatric disorders, diabetes, heart disease and infectious disease, among other subjects. They have shared their methods, tools and enormous data sets with the global scientific community, speeding up the process of discovery worldwide. Uniting all these efforts are a series of common goals: to assemble a complete picture of the

molecular basis of life, to uncover the molecular basis of disease, to discover the mutations that characterize particular cancers as a guide to treatment, and ultimately to revolutionize the process of developing medical treatments. In only the past few years, the Broad Institute has helped scientists around the world better understand the mutations of the Ebola virus, and its researchers have developed a technology that can easily edit genomes, discovered a "pre-cancerous" state in human blood and advanced the study of schizophrenia.

The Broad Institute isn't Eli and Edye's only legacy in scientific and medical research. As they worked to launch the Broad Institute in the early 2000s, Eli and Edye were troubled, like many Americans and particularly like those in the scientific community, about the controversy surrounding stem cell research. Some resistance had been expected—stem cell research often uses biological material derived from embryos—but it remains shocking to me that the President of the United States effectively halted an entire field of scientific inquiry, one that held the promise of revealing treatments to devastating diseases. Californians, to their credit, passed by a wide margin a proposition to support stem cell research in their state with a \$3 billion bond issue.

Once again, The Eli and Edythe Broad Foundation was ready to invest at an essential moment. Giving a total of \$75 million to UCLA, UC San Francisco and USC, the foundation helped build the centers where stem cell research would take place, institutions that would not have been eligible for federal funding. It was another remarkable example of institution building by the Broad family.

In only a few years since their founding, the three stem cell centers at these universities have made impressive advances in Lou Gehrig's disease, studying why we age and, most significantly, in curing "bubble baby disease." UCLA researchers were able to successfully treat 23 babies with the ailment. Ten years after Californians passed their stem cell proposition, six years after the partial lifting of the federal ban, it's clear that most Americans support stem cell research for its vast potential to improve human life.

Eli and Edye have partnered with key figures and institutions representing the most forward-looking elements of the scientific community. Their embrace of new ideas has come early, allowing them to be catalytic in their philanthropy. Like scientists, Eli and Edye are not driven by dogma. Rather, they and their foundation pursue one thing: creative results. They live, like we scientists do, for the thrill of the experiment, the surprise of the discovery, and that wonderful feeling of knowing that they put something new and good into the world.



Dai Q Beli

David Baltimore is a Nobel Laureate, president emeritus and Robert Andrews Millikan professor of biology at the California Institute of Technology and a member of The Eli and Edythe Broad Foundation Board of Governors.

## **BROAD**

## \$700 MILLION

total giving to the Broad Institute by The Eli and Edythe Broad Foundation

2,500+

number of scientists affiliated with the Broad Institute

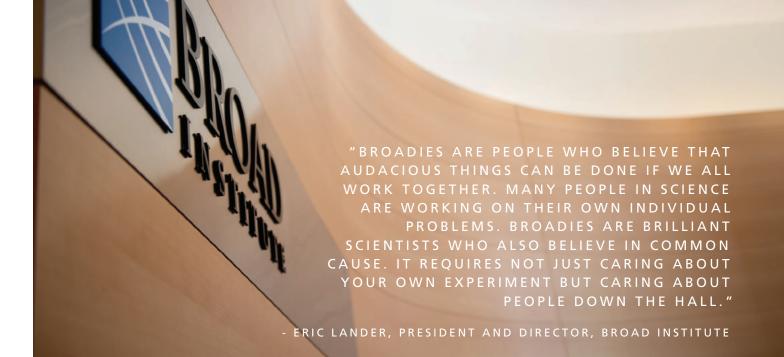
100,000+

number of scientists around the world who rely on the Broad Institute's freely available resources for their research

3,800+

number of publications to date by Broad Institute researchers



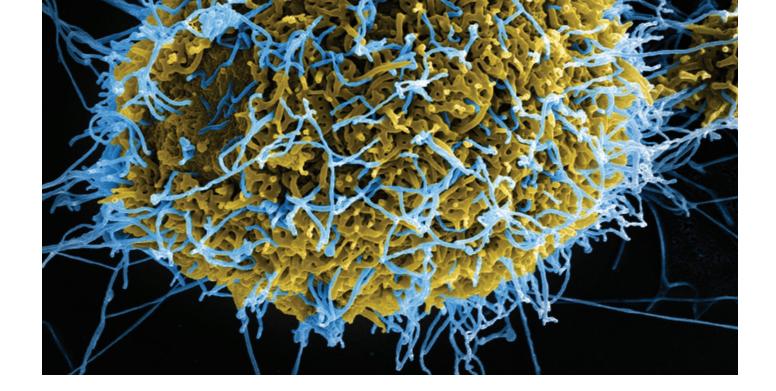


Without the vision and leadership of Eric Lander and Eli and Edye Broad, the world of science would be very different than it is today. The talented researchers of Harvard University and the Massachusetts Institute of Technology would work in individual labs, without the opportunity or incentive to collaborate. Their respective institutions would still be rivals, keeping their distance from, if not outright competing with, one another. Scientists around the world would have to work much harder and spend more money to access data sets and systems, technologies and biological samples that are essential to the pursuit of treatments for disease. We would know far less about—and be much further from treating—cancer, diabetes and heart disease.

Instead, thanks to that vision, and an investment of \$700 million from The Eli and Edythe Broad Foundation, the Broad Institute is a thriving community of more than 2,500 scientists, whose work supports the research of 100,000 more scientists,

and who are transforming human health around the world. Since the Broad Institute was created in 2004, it has truly revolutionized the world of science. From its multi-building headquarters of more than 722,000 square feet in Cambridge, Massachusetts' Kendall Square, and with an annual research budget of more than \$251 million, the Broad Institute is the hub of the most innovative genomics research in the world that is revolutionizing biomedicine. It is also the leader in democratizing science, making discoveries freely available, sharing tools and technologies and encouraging a global collaboration in the pursuit of improving human health.

From groundbreaking work to diagnose and treat the Ebola virus to unlocking the genomic secrets of mental illness to discovering the tools that have the potential to forever change how we treat disease, the work of the Broad Institute has already made an indelible impact on science, and on the human condition.



"DURING THE EBOLA EPIDEMIC, MY LAB AND I JUST FELT LIKE MONTHS GAPPED... THE DAYS WERE **DEVASTATING AND** DIFFICULT, BUT **ALSO INCREDIBLY** MEANINGFUL, AND I'VE NEVER SEEN THE INDIVIDUALS IN MY LAB WORK AS HARD AS THEY DID, OR SHOW THE KIND OF COMMITMENT THAT THEY DID."

> - PARDIS SABETI, BROAD INSTITUTE



## PARDIS SABETI, BROAD INSTITUTE

# VOICES FROM THE FRONTLINES OF AN EPIDEMIC

In 2010, Pardis Sabeti, a senior associate member of the Broad Institute and head of its viral-genome efforts, proposed a genetic study of the deadly Ebola virus. To test, treat and stop Ebola, the disease had to be studied at the molecular level.

"I've always been fascinated by infectious microbes," Sabeti said, "because they are so dangerous and deadly on a global scale. They are mysterious and powerful forces to be reckoned with. I have a deep passion for medicine, and in particular for infectious disease. I've also had people close to me die of infectious disease. That makes it personal as well."

Requiring samples from people infected with the virus, Sabeti's study became possible only in 2014, when West Africa suffered the largest Ebola outbreak in history, killing more than 10,000 people in Liberia, Sierra Leone and Guinea before the epidemic waned.

Out of tragedy came a medical advance: Sabeti and her colleagues at the Broad Institute—along with several scientists who died from the virus—worked to help track Ebola's mutations and shape the global response to it.

By the time the Ebola epidemic had taken hold, Sabeti had spent years studying Lassa, a lesser-known but similarly deadly virus affecting West Africa. Thousands of patients had already benefited from the five years she spent developing diagnostic tools for the disease. Sabeti's reputation was well-established—beyond being a brilliant scientist who was only the third woman to graduate summa cum laude from Harvard Medical School, she had also single-handedly burnished a new approach to computational genomics, exploring when mutations arise in genomes and what that means for the evolution of pathogens.

"I had a formative experience being assigned as an undergraduate advisee of Eric Lander," Sabeti said. "That pretty much solidified my love for genetics. I also deeply enjoy the discovery and pursuit that's part of being a scientist. At its foundation, it's actually a creative process."

Sabeti's work on Ebola began soon after the epidemic reached Sierra Leone, when she and her team received an email of the test results from a patient testing positive for Ebola. Pulling together her colleagues in what she called the Ebola War Room—a conference room at the Broad Institute headquarters—Sabeti plotted not only her genome study, but also how her team could help send advanced diagnostic tools to the affected countries.

In early June 2014, scientists in Sierra Leone shipped tiny tubes of human blood serum by DHL Express to the Broad Institute, where scientists tested the samples for Ebola, isolated the virus's RNA, prepared the RNA to be decoded and

finally ran the Ebola code through one of the fastest DNA sequencers in the world. Throughout, Sabeti reminded her team of safety first. As she put it, infectious disease is "a challenging area, where we can be leaders, but we can only be leaders if an error is never made." Broad Institute computers created a finished genetic code, and within two weeks, Sabeti and her team were analyzing it so they could share their findings.

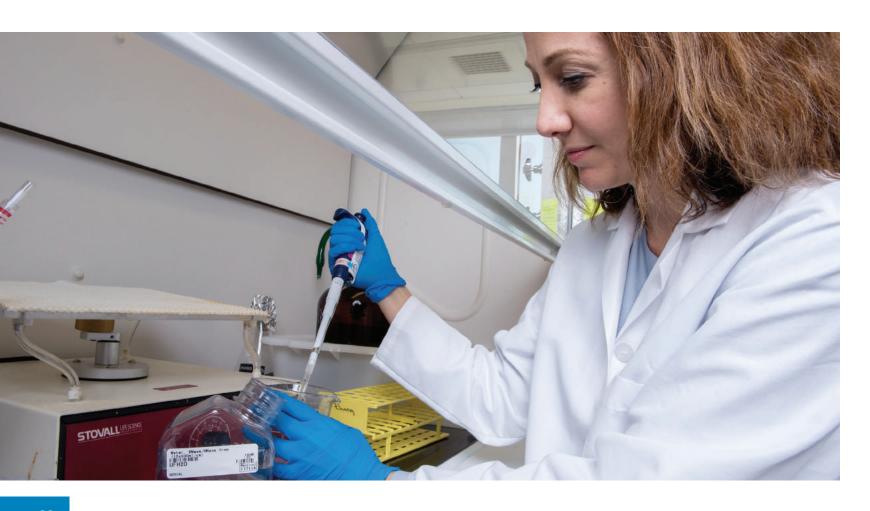
"The simple fact of having data in near real time is so important and needed," Sabeti said. "We made all of our own data publicly available immediately as we generated it. As newcomers to outbreaks, we discovered that this was not the

cultural norm, and our actions helped push the idea forward that we need to work collaboratively and openly in an outbreak."

Within two months, Sabeti and her team had analyzed 99 Ebola genomes and published their findings in Science magazine. The genomes from the 2014 outbreak, they found, had more than 300 genetic changes compared to genomes from past outbreaks. They also discovered, in a widely reported finding, that the virus began in one person and spread rapidly after 12 people attended the same funeral. demand more of ourselves, because we The team's data, shared broadly with scientists around the world, represented a fourfold increase in the amount of Ebola

genomic data available to that point and a departure from the way most infectious disease research was done—in silos, not shared. Now, Broad Institute scientists are helping train doctors in West Africa to sequence Ebola genomes so they can track the virus in real time, streamlining the response to any future outbreak.

"We have the tools and the technology at our disposal to be one step ahead of viruses," Sabeti said. "What we need to do is to be committed to working together in order to stop outbreaks. We should will only win if we work together."



99

Ebola virus genomes sequenced from 78 patients in Sierra Leone, diagnosed in less than a month

18,959

letters of code in an Ebola genome

### 1 BILLION

number of Ebola particles that fit on the tip of a pencil



"UNTIL RECENTLY, IF YOU WANTED TO STUDY HOW **GENES ARE EXPRESSED IN** THE BRAIN, YOU HAD TO TAKE A PIECE OF THE **BRAIN, THROW** IT IN A BLENDER AND MEASURE ALL THE RNAS IN THAT SMOOTHIE. **BUT THEN YOU'RE** STUDYING THE AVERAGE OF THE CELLS—IT DOESN'T **TELL YOU WHAT** ANY ONE CELL IS DOING. WE DEVELOPED DROP-SEQ SO WE COULD STUDY THE BRAIN NOT IN SMOOTHIE FORM, BUT MORE LIKE A FRUIT SALAD. WE CAN ANALYZE EVERY SINGLE PIECE OF FRUIT."

> - STEVE MCCARROLL, BROAD INSTITUTE



## STEVE MCCARROLL, BROAD INSTITUTE

## UNSCRAMBLING SCHIZOPHRENIA

#### **Steve McCarroll will always**

remember what sparked his interest in studying psychiatric disease.

"I had a classmate in graduate school who developed schizophrenia," said McCarroll, who today is the director of genetics at the Stanley Center for Psychiatric Research at the Broad Institute. "Over the course of two to three years, he went from being an exciting classmate, full of hope about the future, to someone who could barely perform even a simple job."

McCarroll now devotes much of his energy to improving our understanding of schizophrenia and, through that research, to improving treatments for the disease. He developed a system, Drop-Seq, to study how genes are expressed in the hundreds of types of cells in the brain, and his lab's open-source technology is downloaded every five minutes by scientists around the world.

In 2014, McCarroll's colleagues at the Broad Institute led the largest study to

date of the genetic basis of schizophrenia —or any psychiatric disorder. Combing the genomes of 37,000 schizophrenia patients and 113,000 people without the disease, they found 108 sites in the genome linked to schizophrenia. The strongest of these was a region linked to immune function.

But why were immune genes affecting a disorder of the brain? McCarroll and a student in his lab identified an immune gene that the brain repurposed into another role—sculpting the nervous system during key times in development—and determined that schizophrenia risk arises from over-active forms of this gene. McCarroll's team also went on to find that the interaction between two types of cells in the brain—neurons and microglia—may be a key contributor to schizophrenia and a target for potential therapies.

The work is challenging, McCarroll notes, because of the very nature of the brain. Unlike diseased organs that can be biopsied, diseases of the brain, protected behind the skull, cannot be studied in



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a petri dish or a hospital setting. While cancer research has seen dramatic progress over the last several decades, advances have been few for illnesses of the brain, until guite recently.

"You can't pull out people's brains and study them. That is why the genome has provided such a powerful way in. We can acquire people's genomes noninvasively through samples," McCarroll said, even as easily as taking a sample of cells from someone's skin. "That has made it possible to find genes underlying illnesses that had not been discovered in decades of earlier research."

Though finding treatments for the disease could take years or even decades, McCarroll's work could pave the way. Currently, schizophrenia affects one in 100 people around the world. The mental illness can cause debilitating delusions, difficulties in a person's emotional response and a collapse of thought processes.

Schizophrenia patients have been without new forms of treatment since the 1950s, when scientists pioneered drugs to treat delusions—and that strategy, which attacks the proteins linked to regulating dopamine in the brain, was discovered by accident and does not work equally well for all patients.

Until large-scale genomic studies like the one overseen by McCarroll, there was little ability or incentive to pursue research into mental illness. As Broad Institute Director Eric Lander put it, "pharmaceutical companies who left this field because there was nothing concrete to work on are putting their toes back in the water."



150,000

number of genomes scientists searched for clues about schizophrenia

83

newly identified sites in the genome linked to schizophrenia four times the number of previously known links

1 in 100

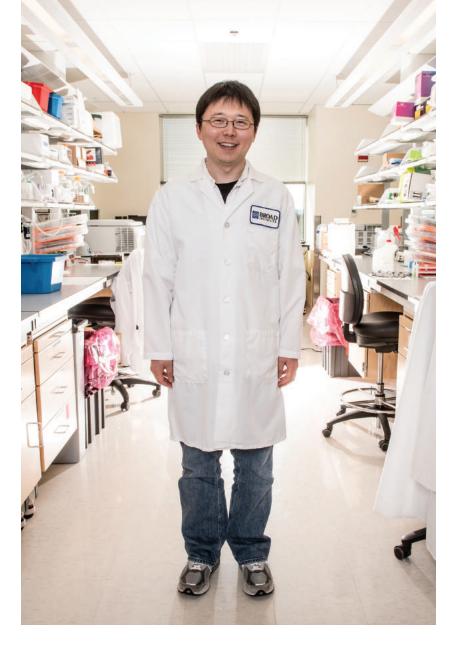
people worldwide have schizophrenia

2.5 MILLION

Americans suffer from schizophrenia

"IN THE PAST **COUPLE OF** DECADES, WE STARTED TO **KNOW A LOT** MORE ABOUT **HOW GENETIC MUTATIONS MAY** CAUSE DISEASE. WE KNOW WHAT **CAUSES CYSTIC** FIBROSIS, SICKLE CELL ANEMIA. **BUT THEN IF YOU** KNOW WHAT THE MUTATIONS ARE, YOU WANT TO KNOW, WHY CAN'T WE JUST GO INTO THE CELL AND FIX IT?"

> - FENG ZHANG, BROAD INSTITUTE





## FENG ZHANG, BROAD INSTITUTE

## DEVELOPING A REVOLUTIONARY GENOME TOOL

**One of the most** revolutionary genomic technologies of our time started with a Wikipedia search.

Feng Zhang had just settled into his lab at the Broad Institute in 2011, where he was set to study diseases affecting the brain, when he overheard an infectious disease biologist talking about something called CRISPR. The naturally occurring segments of DNA helped bacteria cut bad DNA out of a cell nucleus to protect itself from infection.

Intrigued, Zhang plugged "CRISPR," which stands for Clustered Regularly Interspaced Short Palindromic Repeats, into Wikipedia's search bar to discover that some researchers had found ways to apply CRISPR to particular genes within bacteria, but they had not managed to use the technology on mammals.

Zhang decided to investigate. The young scientist, barely out of his 20s, had

already invented another breakthrough technology called optogenetics, which controls neural activity in the brain with light and could lead to therapies for psychiatric and neurological problems. Two years later, while a post-doctoral fellow at Harvard, he had used another method, the TAL effector system, to activate or repress mammalian genes.

Within two years of joining the team at the Broad Institute, Zhang found a way to apply CRISPR to the human genome, effectively creating a pair of gene "scissors" that could snip harmful pieces from a DNA strand and replace them with healthy ones.

For his discovery, Zhang was dubbed "DNA's master editor" and "the Midas of methods"—with good reason. His CRISPR method was more precise and easier to use than earlier genome-editing methods, and Zhang readily shared his new tool

with scientists around the world. Zhang's eagerness to share the technology—a principle that underlies the Broad Institute's work—dramatically increased the speed of scientific discovery.

"CRISPR is such a foundational research tool that it really does not make any sense to keep it closed or proprietary," Zhang said. "One analogy might be that if you made programming languages for the web proprietary, it would be so much harder for the Internet to develop."

The discoveries since Zhang published his research have been nothing short of transformative. Researchers around the world have used Zhang's CRISPR technique to target harmful genes in animal models of cystic fibrosis, sickle cell anemia and autism. They have demonstrated that gene editing in mosquitoes could one day help fight the spread of malaria. Diseases could eventually be snipped out of human cells from muscular dystrophy to HIV to cancer. Zhang has remained at the forefront of developing CRISPR, discovering that the method could turn genes "on" as well as "off," and that it could be used to target multiple sites throughout an entire genome, crucial for studying complex ailments like cancer, which involves multiple genes.

CRISPR is a powerful enough technology that it has come under the scrutiny of esteemed scientists, led by Nobel Laureate David Baltimore. The scientists encouraged their peers to avoid human germline-editing experiments because of the potential dangers—an unethical trial, an accidental snip or insertion—and asked that civic leaders and the general public weigh in. The stakes are high financially, too, as the tool could lead to treatments worth billions of dollars.

In the meantime, there is still plenty for Zhang to explore—CRISPR offers clues about which genes play a part in disease, how cancer metastasizes, how tumors grow and, of special interest to Zhang, how neurological disorders like depression develop.

"Mental illnesses like depression or schizophrenia are some of the most debilitating diseases a person can have," Zhang said. "By developing new technologies to help us understand the brain and the mechanisms of disease, I hope we can help tackle some of these problems."





24,000+

requests for CRISPR reagents from around the world

\$5,000

cost to use the previous genome editing technology (zinc-finger nucleases)

\$30

cost to use CRISPR

#### **BOARDS**

32

## **BROAD INSTITUTE**

ELI AND
EDYTHE L.
BROAD
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Although members of the Broad Institute community are formally affiliated with many different institutions, they come together at the Broad Institute around the singular goal of transforming medicine. Within this open but tightly integrated community, creative scientists at all career stages gain access to the resources and collaborators needed to test new ideas and to build and apply the critical tools that empower the worldwide biomedical community.

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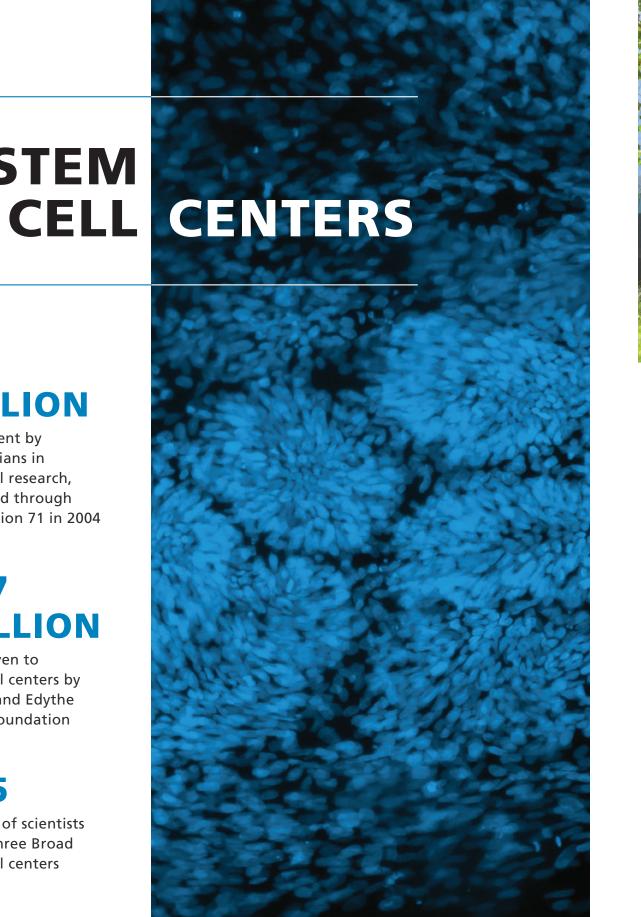
Chief Scientist, Stanley Center for Psychiatric Research Broad Institute of MIT and Harvard Professor of the Practice, Department of Biology Massachusetts Institute of Technology

#### Feng Zhang

Investigator, McGovern
Institute for Brain Research
Assistant Professor, Departments
of Brain and Cognitive Sciences
and Biological Engineering
Massachusetts Institute of Technology

<sup>\*</sup> chairman of the board

## **STEM**



## \$3 **BILLION**

investment by Californians in stem cell research. approved through Proposition 71 in 2004

## **\$77 MILLION**

total given to stem cell centers by The Eli and Edythe **Broad Foundation** 

**375** 

number of scientists at the three Broad stem cell centers







In 2015, three California stem cell research institutes held a retreat for 300 of their faculty, postdoctoral candidates and graduate students to share findings and seed collaborations—with a few games of volleyball and a scavenger hunt thrown in for fun. Beyond a shared mission to work toward treatments for blood diseases and cancers, the three institutes shared another common bond: all were funded by The Eli and Edythe Broad Foundation.

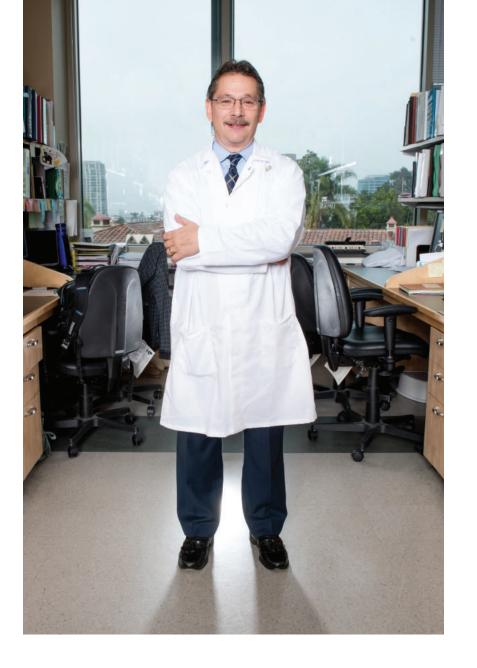
With an investment of \$77 million from The Eli and Edythe Broad Foundation, California is home to three of the world's leading research centers studying how to cure the worst of human diseases using our own stem cells. After their first gathering in Santa Barbara, California, attendees from the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA, the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC, and the Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research at UCSF agreed that scientific research at their

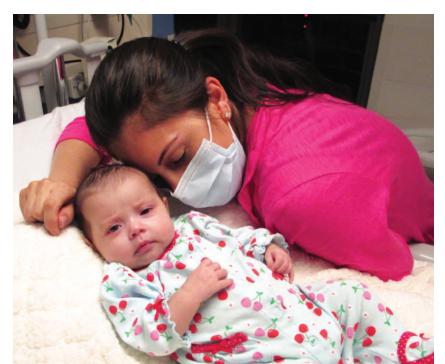
campuses was moving so quickly, and opportunities for collaboration were so prevalent, that there was power in convening more often to compare notes and advance one another's research. Each institution can only do so much alone, but with the power of hundreds of scientists combined, speaking openly and sharing unpublished new research, the three Broad centers stand to make progress even faster.

The energy of the scientists is palpable. Already, stem cell research has led scientists at UCLA to cure 23 children suffering from "bubble baby disease," and the findings have expanded to clinical trials to treat sickle cell anemia. With the promise to dramatically improve the treatment of diseases like macular degeneration and leukemia, restore movement to limbs paralyzed by spinal cord injuries and even reverse aging, stem cells are the next frontier in scientific research.

"ONE OF THE **FUNDAMENTAL PROPERTIES OF** THE IMMUNE SYSTEM IS ITS **ABILITY TO REACT** AGAINST FOREIGN THINGS, LIKE **BACTERIA AND VIRUSES THAT** CAUSE SICKNESS, **BUT NOT AGAINST** YOUR NORMAL TISSUE. WHEN THAT DOESN'T WORK PERFECTLY. YOU HAVE AN IMMUNE DEFICIENCY. THAT'S WHAT HAPPENS IN **BUBBLE BABY** PATIENTS."

- DONALD KOHN, BROAD CENTER OF REGENERATIVE MEDICINE AND STEM CELL RESEARCH AT UCLA





### DONALD KOHN, BROAD CENTER OF REGENERATIVE MEDICINE AND STEM CELL RESEARCH AT UCLA

## BURSTING THE BUBBLE OF INFANT DISEASE

Alysia Padilla-Vaccaro's twin girls were only a few months old when one of them, Evangelina, was diagnosed with a fatal genetic immune deficiency known as "bubble baby disease."

"It's heartbreaking being in a hospital with your newborns," Padilla-Vaccaro said. "And then having your twins separated? And the diagnosis? It was torture."

Infants with the disease are born without a functioning immune system, which makes them vulnerable to infection. Babies have to be completely isolated from germs, meaning they often can't leave their rooms or hug their parents.

Without treatment or a bone marrow transplant, most babies die from bubble baby disease within a year.

But with Evangelina's diagnosis came a glimmer of hope: doctors told Padilla-Vaccaro that one spot remained in a clinical trial run by Donald Kohn, a stem cell researcher at the Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA who had been studying bubble baby disease for three decades. Padilla-Vaccaro readily agreed to the trial since Evangelina's twin sister was not a bone marrow match, leaving the family with no other hope.

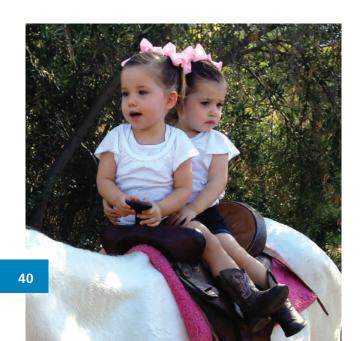
Fortunately for Padilla-Vaccaro and the other families in Kohn's trial, the groundbreaking stem cell therapy has cured all 23 babies who have received it—and cure is not a word that scientists use lightly.

"We avoid using the 'cure' word," Kohn said. "We don't know what will happen in 15 years. But this is one of the first cases in gene therapy—which has held promise for 25 years—that is bringing an effective treatment."

Until Kohn's work, the only hope for a cure was a matching bone marrow transplant, a procedure that is not always successful.







Kohn has dedicated his career to understanding the genetic mutations that cause blood disorders like bubble baby disease. His ultimate goal is to create stem cell gene therapy treatments that use a patient's own blood-forming stem cells to fix the broken genes. This eliminates the disease-causing mutations and the associated debilitating symptoms—in effect, what Kohn calls "a self-transplant."

In 2001, Kohn began a clinical trial for bubble baby patients and continued to perfect the method through subsequent clinical trials. Evangelina received her transplant in 2012.

"Dr. Kohn walked us through it. He took the time to talk to us for three hours," Padilla-Vaccaro said. "You think of scientists as not being easy to talk to. But he made it easy for us to understand. He never promised us something he couldn't deliver. And let me tell you, that man delivered. We're beyond grateful."

After Padilla-Vaccaro checked Evangelina into the hospital for the trial, within 24 hours, doctors were removing her bloodforming stem cells. In a week, she was receiving a round of chemotherapy to help her through the treatment. After that, doctors transplanted the modified bloodforming stem cells—by hand, with a syringe, slowly injecting over the course of five minutes. Evangelina stayed in the hospital for four weeks, but she started to show signs of recovery in just two weeks.

"It's horrible to see your child go through that," Padilla-Vaccaro said. "They're just so tiny. You think they're weak. But she proved us wrong. She was not weak."

It was within days of Christmas 2012 when Kohn gave Padilla-Vaccaro the good news.

"At first he used this jargon, I didn't know what it meant, about stem cell counts," she said. "But then he finally said, 'It worked.' That moment was the most important moment in my life."

After the successful trial, Kohn began to study how to apply his method of "self-transplant" to sickle cell disease, a painful genetic disorder that affects 100,000 people in the U.S., most often African Americans. Sickle cell increases the risk of stroke, causes organ damage and shortens life spans. In 2015, Kohn began a clinical trial for sickle cell using the same stem cell gene therapy method applied in his bubble baby trials.

Padilla-Vaccaro, meanwhile, returned home with her daughter. Evangelina was soon able to do everything her twin sister could do—play outside with other children, go swimming and even have a birthday party.

"It was a 'Bring Your Germs, Let's Celebrate!' party," Padilla-Vaccaro said. She added, "Dr. Kohn and God. Those are the two in my life I owe the world to."

### 1 YEAR

life expectancy for children with bubble baby disease, without treatment

### **30 YEARS**

how long Donald Kohn has researched the disease

## 23 OUT OF 23

number of babies successfully treated for the disease so far



"THE IDEA OF SOMETHING BEING ATTRIBUTED TO THE **BLOOD IS SUCH AN** OLD IDEA. WE CAN **GO BACK TO THE** VAMPIRE. THERE ARE MYTHS IN MAYAN AND AZTEC CULTURE THAT ATTRIBUTE **SOMETHING SPECIAL** TO THE BLOOD. THERE HAS ALWAYS BEEN A CULTURAL NOTION ABOUT THE POWER OF BLOOD. IT'S AN IDEA THAT PEOPLE ALMOST **EXPECTED—THAT** YOUNG BLOOD IS GOOD—AND WE'RE APPLYING THE SCIENTIFIC PROCESS TO IT."

- SAUL VILLEDA, ELI AND EDYTHE BROAD CENTER OF REGENERATION MEDICINE AND STEM CELL RESEARCH AT UCSF



SAUL VILLEDA: ELI AND EDYTHE BROAD CENTER OF REGENERATION MEDICINE AND STEM CELL RESEARCH AT UCSF

## YOUNG BLOOD HOLDS SECRET TO AGING

A scientist at the Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research at UCSF may have discovered an unlikely source of the fountain of youth.

"I thought of aging as wear and tear," said Saul Villeda, an assistant professor of anatomy at UC San Francisco and a member of the Broad Center of Regeneration Medicine and Stem Cell Research at UCSF. "But that's not what it is. There are genes that control how long you live. There are interventions that can extend the lifespan. There are reasons a tortoise lives hundreds of years and a mouse lives three."

Answering the centuries-old question of how to stay young, Villeda found that the blood of young mice can help rejuvenate old mice.

After injecting elderly mice with plasma from the blood of young mice, Villeda put the old mice through a series of tests: they had to find their way through an underwater maze to a platform above the water line. It was an easy task for a 3-month-old mouse but a challenging one for a rodent of the ripe old age of 18 months. Villeda likened it to trying to find a car in a parking lot—a young person will remember the location with clues from the environment without giving it any thought, while an older person might struggle.

Villeda observed that old mice with blood plasma from their younger peers could find their way around the maze as if they were only 6 months old thanks to improved stem cell functioning. When put into a threatening environment, the old mice reacted like 3-month-olds—suggesting that survival instincts improved even more dramatically than memory.

The study, published in Nature Medicine magazine in 2014, cannot be applied to humans yet, even if it holds promise for Alzheimer's disease and heart disease. In a follow-up study, published in the same journal in 2015, Villeda identified

a protein in blood plasma that causes memory loss in older mice—when the protein was blocked, the older mice had improved memory function. And when the protein was introduced in younger mice, their memory suffered.

"We started out studying the good factors of young blood," Villeda said. "But now we also know that old blood is bad."

The study was not Villeda's first foray into what he calls "rejuvenation research." As a graduate student at Stanford University, Villeda surgically attached young mice to old mice to circulate blood between both. He discovered that the older mice developed healthier connections between cells in the hippocampus, the area of the brain that helps create memories and that degenerates in Alzheimer's patients. (The younger mice did not fare so well in Villeda's experiment—they grew old prematurely.) Similar studies also found that young blood helped older mice grow stronger and faster, leading to a small clinical trial that is in progress to test the impact of young blood on Alzheimer's patients.

Villeda continues to study the impacts of aging and possible treatments for the physical and mental degeneration that can come with it.

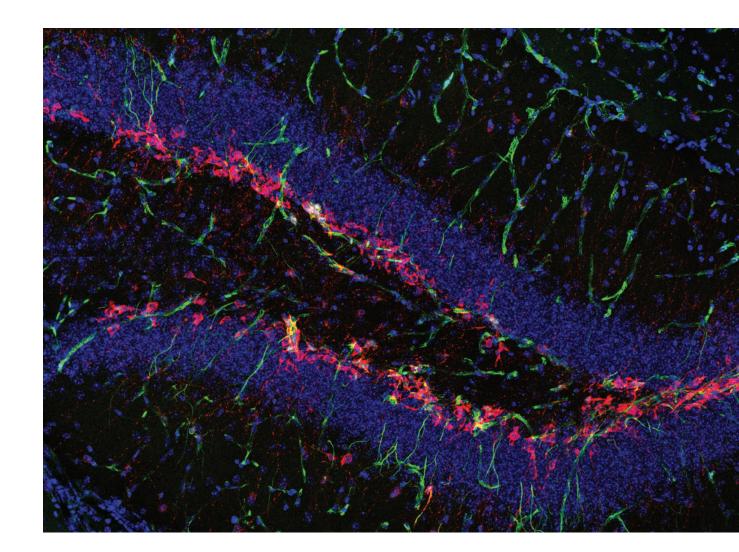
"I don't want to live forever," Villeda said.
"I want to live my 85 years. But I'd love to be able to read a book as I go to sleep, and think about it, and then peace out. I want my faculties there. I want my 'healthspan' to be as improved as I can have it."

## 30 BILLION

number of hours Americans spend caring for their elderly relatives and friends, for a total cost of \$522 billion

### 18 MONTHS

the age of a mouse considered to be equivalent to a 70-year-old human





"I REMEMBER WHEN I TOLD MY DAD I WAS STUDYING THE ORIGIN OF LIFE, HE SAID, 'WHY?' I SAID BECAUSE I WANT TO KNOW WHAT HAPPENED, AND HE SAID, 'WHY?' AND I SAID 'IT'S KNOWLEDGE, IT'S INTERESTING." HE KEPT ASKING WHY, AND I REALIZED I HAD NO ANSWER. NOW IT'S EASIER. WE'RE TRYING TO CURE ALS. HE DOESN'T ASK WHY."

- JUSTIN ICHIDA, ELI AND EDYTHE BROAD CENTER FOR REGENERATIVE MEDICINE AND STEM CELL RESEARCH AT USC





JUSTIN ICHIDA: ELI AND EDYTHE BROAD CENTER FOR REGENERATIVE MEDICINE AND STEM CELL RESEARCH AT USC

## REVERSING THE EFFECTS OF LOU GEHRIG'S DISEASE

Millions of people took the plunge when it came to joining the fight against amyotrophic lateral sclerosis. The international Ice Bucket Challenge—a social media phenomenon where people videoed themselves dumping cold water over their heads while spurring others to do the same—helped raise \$100 million for research into the incurable neurological disease.

Justin Ichida, a researcher at the Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC, appreciated the increased awareness of the disease and support for research because he has spent more than a decade working to find a cure for ALS. "I've

noticed that non-scientists I talk to are almost always aware of the disease now, whereas most were not before," Ichida said.

ALS, which first came to national attention in 1939 when it ended the career of baseball player Lou Gehrig, causes the degeneration of motor neurons that support brain and spinal cord function.

Over time, patients lose the ability to control muscles and often suffer paralysis and respiratory failure. The cause of ALS is unknown for most people—at least 20 to 30 different genes contribute to the disease. But Ichida saw that no matter the mutation, all patients suffered a similar end result—their nerve cells stopped working properly.

"SCIENCE CLICKED FOR ME WHEN I READ JURASSIC PARK IN SEVENTH GRADE. IT WAS THE FANTASY OF CLONING ANYTHING, ANY KIND OF ANIMAL AND BRINGING IT BACK INTO A FULLY LIVING THING THAT **WAS REALLY EXCITING TO** ME. I KNEW I **WANTED TO** DO THAT. IT'S CRAZY TO THINK **HOW ONE BOOK** CHANGED THE **COURSE OF** 

- JUSTIN ICHIDA, ELI AND EDYTHE BROAD CENTER FOR REGENERATIVE MEDICINE AND STEM CELL RESEARCH AT USC

MY LIFE."





5,600

Americans diagnosed with ALS each year

42,000

number of compounds USC researchers will screen to seek potential ALS treatments

## 3 TO 5 YEARS

how long most patients survive after their ALS diagnosis "It's a major point of mechanistic convergence in the disease," Ichida said. "No matter the form of ALS, it results in that same problem. So if we target that correctly, we could hopefully treat a significant portion of the patients."

Ichida pioneered a method to test thousands of potential drug treatments on cells taken from ALS patients to determine which are most likely to be effective at stemming the neurodegenerative disease. Already, Ichida has found several FDA-approved drugs that appear to prevent ALS patients' cells from degenerating, at least in a petri dish. He is now working to find a compound that works well enough to take to clinical trial—where his method could ultimately be tested in patients to see if the effects of ALS can be reversed.

Working up to 14 hours a day in his lab, Ichida tests various chemical compounds—thousands so far—to see if anything creates a positive response in the cells and reverses neural degeneration. Because many neurodegenerative diseases appear to hamper cell function in the same way as ALS, Ichida hopes that his research will also shed light on Huntington's Disease, Parkinson's, Alzheimer's and dementia.

The long hours don't bother Ichida, who relishes the process of discovery and has wanted to be a scientist since the seventh grade, when he read "Jurassic Park." And his passion for the subject shows little sign of waning.

"I'm excited to see what we know 25 years from now," Ichida said. "I think we are beginning to see a lot of advances, but it's still too early to say. We need at least 25 years."













**EDUCATION** 

#### WE CAN AND MUST DO BETTER

## IMPROVING PUBLIC SCHOOLS

BY GREGORY MCGINITY AND BECCA BRACY KNIGHT



**In our nearly 15 years** working with The Eli and Edythe Broad Foundation and The Broad Center to improve urban public education in America, we've witnessed a remarkable amount of positive change.

Across the country, educators, leaders, families and communities are embracing what's possible in American public schools. Our public schools are striving for new, higher standards for all students. States and districts are working together to lift chronically

low-performing schools. Teachers and school leaders are increasingly aware of the unconscionable opportunity gaps students of color and low-income students face—and they are doing more about it. There is a growing urgency to keep all students in school through graduation by ensuring disciplinary policies are supportive rather than punitive. More and more families are demanding access to strong public schools of all kinds, including high-performing charters and magnets, for their children.

A handful of cities and states exemplify the commitment to school improvement and collaboration. In Denver, district and charter schools are both authorized and held accountable by the district, and enrollment is unified across the system. In New Orleans, the district is comprised almost entirely of public charters. Not only has the new composition raised the academic bar for students across the city but—after at first struggling to successfully engage with families and communities—it has also pioneered restorative justice and unified enrollment policies that could serve as an inspiration for all districts. In Washington, D.C., public school enrollment in both district and charter schools has increased because both types of schools are working collaboratively to raise academic achievement.

These changes didn't happen overnight. It took tremendous commitment, investment and leadership—and much work remains to be done. The Broad Center is continuing to play an important role in the work in all three of these places—and in cities and states around the country. Over the next three years the center will double its leadership development programs by expanding both The Broad Academy and The Broad Residency.

New Orleans in particular has seen the most dramatic changes, begun in the wake of the tragedy of Hurricane Katrina. The city has become a model for educators around the country who believe that public school improvement can only occur when educators are empowered, families can access a range of great public school options and equity is a topmost priority. More than three dozen members of The Broad Center networks have joined thousands of other educators in working tirelessly to continue improving the city's schools.

The Eli and Edythe Broad Foundation is supporting districts that look to New Orleans for lessons—and the foundation is hopeful that other states will consider creating innovative governance models that give families high-quality public school options and empower teachers and school leaders to do what's best for their students. States most often pursue these portfolio districts—also called opportunity, achievement or recovery districts—to dramatically improve their lowest-performing schools. These districts give schools more power over their budgets, their teams and their classrooms—amounting to a deeper level of local empowerment that is especially supportive of teachers in the classroom. They set rules about equity and access, and they inspire improvement and innovation in neighboring traditional schools.

The Eli and Edythe Broad Foundation has worked to grow the most effective public charter schools for more than a decade. As hundreds of thousands of parents are

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demanding high-quality charters, the foundation is working to ensure that new and expanding charters are indeed providing students and families with a great education. To do that, the foundation is supporting stronger authorization of charter schools so that underperforming campuses are closed. We want to showcase the charter organizations that are proving that every child—especially those from low-income families and communities of color—can achieve at high levels.

The Eli and Edythe Broad Foundation also works to support policies that provide equitable funding for public charter schools and equal access to facilities. In New York City, when the mayor threatened to take away Success Academy's classroom space, CEO Eva Moskowitz mobilized 17,000 parents to march across the Brooklyn Bridge and organized 20,000 to descend on the capitol steps in Albany.

The demand for great public schools is also evident in the long wait lists when high-quality schools open. Success Academy attracts 10 times as many students as there are seats available—their schools are ranked in the top 1 percent of all schools in New York in math and the top 3 percent in English. Nationally, there are more than a million students waiting to attend a public charter school. Demand for high-quality schools isn't limited to charters. In downtown Los Angeles, one high-performing magnet school run by USC drew 15 applications for every open seat as parents seek better options for their children.

The Eli and Edythe Broad Foundation is working with other funders to meet that demand, while The Broad Center is preparing leaders to take on the challenge of serving students in the highest-need communities. Since 2003, the foundation has invested \$144 million in growing high-performing public charter schools across the country and especially in our hometown of Los Angeles. Students in these schools receive more hours of high-quality learning time in a joyful, rigorous school environment that prepares them for a successful life after high school.

Indeed, there is a recognition—from schoolhouses to courthouses, from state capitals to communities across the country—that we can and must do better improving our public schools and supporting America's students. Our students deserve access to excellent public schools and great teachers. They deserve the opportunity to achieve at high levels and graduate from high school with the skills and knowledge to have a successful life.

Positive change like we've seen in the past several years isn't possible without the incredible dedication of the great leaders, teachers, staff, families and communities working to support public schools today. Making progress in public schools is a complex and constant struggle. But there are thousands of committed individuals who work tirelessly on behalf of our nation's school children.

That's why, in this year's report, we want to share their stories, in their own words. In the following pages you'll meet superintendents, principals, teachers, parents, students and instructional and operations staff. Every one of them has an inspiring story to share—and together, their efforts are improving America's public schools.



Largey Molinty Bes & Kizz

Gregory McGinity is the executive director of The Eli and Edythe Broad Foundation. Becca Bracy Knight is the executive director of The Broad Center.

4 EDUCATION

# THE

number of Academy alumni who have been named state superintendents of the year

number of Residency alumni who continue to work in education

number of states that have had Academy and Residency graduates serve as state superintendents of education



#### The Broad Center's mission

is deceptively simple: to develop transformational leaders in urban public education.

But its two programs—The Broad Academy and The Broad Residency offer participants a deep study of public education leadership and all its complexities. The Broad Academy is an advanced development program for leaders who have established careers most from public education—and are ready to serve large urban school districts, state departments of education and public charter school networks. The Broad Residency recruits, trains and supports talented, experienced managers to serve in high-level positions in those systems.

Both the Academy and the Residency are highly selective programs that seek to instill in participants a commitment to transform public school systems to serve all students and prepare them for fulfilling lives after high school. The two years of development sessions take place in cities throughout the country so participants in both programs can learn from a variety of community settings and contexts. Between sessions, fellows and residents apply their skills as they develop a strong, collaborative professional network with their cohorts.

More than 460 professionals have participated in the Academy and Residency, serving students across the country. From ensuring equity in school disciplinary policies to improving public school options and create the conditions for equity in cities like New Orleans and Denver, Academy and Residency alumni, like those profiled in the following pages, work tirelessly to ensure every student has access to a world-class education.

Since their inception more than a decade ago, both programs have been revamped and strengthened. Armed with feedback from participants and a reflection of the skills necessary to successfully lead public school systems, The Broad Academy supports its participants as they develop strategies for rapid and sustainable improvement on behalf of students, nurture strong partnerships with communities and collaborate with colleagues across the nation. The program has been expanded from 10 months to two years, adding more than 100 hours of learning with an emphasis on three goals: transformational leadership, educational excellence and equity. In 2015, The Broad Residency received accreditation as a degree-granting program by the Western Association of Schools and Colleges Senior College and University Commission, meaning alumni will now receive a Master of Education in Educational Leadership.

While academics are core to any school system's success, Academy and Residency participants learn how other factors from streamlined and supportive operations teams to student discipline policies that are restorative rather than punitive—also impact teaching and learning. After Academy and Residency participants complete the programs, they continue in leadership roles of increasing responsibility and impact.

Indeed, no matter the role or the school system served, the goals are the same: to ensure their organizations run successfully and excellence that enable students and teachers to succeed.

"I AM THE FIRST PERSON IN MY FAMILY TO GRADUATE FROM HIGH SCHOOL. MY MOM DROPPED OUT IN NINTH GRADE, AND MY FATHER DROPPED OUT IN 10TH GRADE. I GREW UP WITH MY GRANDPARENTS, WHO DROPPED OUT IN **ELEMENTARY SCHOOL** AND MIDDLE SCHOOL. **EDUCATION WAS NOT** A HUGE ISSUE IN OUR FAMILY. IT WAS NOT EMPHASIZED. THE MAIN THING WAS **GETTING A JOB TO** HELP SUPPORT THE FAMILY, I WORKED AT A FACTORY WHERE MOST OF MY FAMILY WORKED, I'M PUTTING THESE PIECES TOGETHER IN AN ASSEMBLY LINE AND I THOUGHT, 'THIS IS NOT WHAT I WANT TO BE DOING WITH MY LIFE."

- KATRINA CONLEY, GREEN DOT PUBLIC SCHOOLS



#### THE BROAD RESIDENCY

## LIGHTENING THE LOAD FOR EDUCATORS

#### Katrina Conley is a teacher's dream. manager at Alain LeRoy Locke College

The director of operations for Green Dot Public Schools is working toward one goal for the public charter network's principals and teachers.

"I want them to focus only on teaching and learning," Conley said. "Everything else I want to take off their plate."

The Broad Residency alumna is managing a team that oversees facilities, purchasing, food services, transportation and student recruitment for 23 Green Dot schools in Los Angeles, Memphis, Tennessee and Tacoma, Washington. Based on feedback from school operations staff, Conley has implemented a plan she calls School Operations 2.0, creating a career pathway for school operations staff to become school operations managers. These new positions, Conley believes, will free principals and teachers from worrying about operations while giving school operations staff an opportunity to grow in leadership roles.

"In the past, this was a more clerical role," said Jesus Sandoval, a school operations

manager at Alain LeRoy Locke College Prep Academy in Los Angeles. "Now it's hands on. We have to find the best ways of managing the school, and that will translate into something positive for our students."

Thanks to Conley's efforts, educators can focus on Green Dot's mission of serving more than 10,000 students, the great majority of whom live in historically highneed communities. As one of the rare nonprofit public school operators that pursues full turnarounds of schools—taking charge of an existing school rather than starting a new school and adding a grade each year—Green Dot embraces a demanding operating environment.

For Conley, who is the first in her family to graduate from high school, it is an ideal role.

"I found my calling," she said. "The experience I had in college completely changed the trajectory of my own life. I wanted to support schools that do the same thing for others."



## **MILLION**

number of K-12 suspensions each year

250,000

student arrests for misdemeanors nationwide

22%

the increased odds of a student dropping out of school after one arrest



#### THE BROAD ACADEMY

## **KEEPING STUDENTS IN SCHOOL ON THE PATH TO GRADUATION**

It's a disturbing trend when schools put students on the path to incarceration instead of college.

The practice has become so common that it has been coined the school-to-prison pipeline. It starts when students receive excessive punishment for minor infractions, Wilson plans to expand the program to all doled out disproportionately to students of color. Students who have been suspended or arrested are more likely to drop out, and students who drop out are more likely to be arrested.

Broad Academy alumni are leading the way to stop the vicious cycle, reinforced by the Academy's emphasis on equity, transformational leadership skills and K-12 improvement strategies. John Deasy, former superintendent of the Los Angeles Unified School District, who serves as The Broad Center's superintendent-inresidence, led the nation's second-largest district to ban suspensions for minor indiscretions, known as "willful defiance." LAUSD's suspension rate fell from 8.1 percent to about 1.5 percent under Deasy's Christina Heitz, director of The Broad tenure, and districts around the country have followed suit.

One of Antwan Wilson's first tasks as superintendent of the Oakland Unified School District in California was to institute restorative justice practices, giving students counseling and other support instead of punishment. Student achievement has already increased, and 135 of Oakland's schools by 2020.

Florida's Broward County Public Schools Superintendent Robert Runcie has created a model restorative justice program that schools around the country are replicating. Thanks to the program, suspensions were down 25 percent from 2011-2012 to the 2013-2014 school year. More than 2,000 students have gone through the intervention program, and 90 percent did not commit a repeat offense. The Broward program was also a model for the White House's efforts to encourage all districts to eliminate zero-tolerance discipline.

"When we focus on ways to keep students in school rather than push them out," said Academy, "we set them on the path to learn, graduate and go on to lead successful lives."



"When I became superintendent, LAUSD had 50,000 suspensions. Ninety-seven percent were discretionary, and nine out of 10 were black boys. Virtually all were for 'willful defiance'things like not bringing a pen, not picking up trash, not doing homework. That's juvenile behavior, not willful defiance... We had to change policies and contracts. We had to couple that with true restorative justice practices and build a student bill of rights. We trained 35,000 people. We put restorative justice coordinators in schools. Then we had to say no to willful defiance. We ended it. Suspensions dropped by more than 80 percent. And black and brown male achievement went up. It turns out, if you stay in school, you learn."



#### WILSON

"I felt like the system had been set up to push students out of school. Don't get me wrong. Most of the things kids get in trouble for, they did. I felt that as a student. I watched it as a teacher. But for me, discipline is about teaching lessons. It's about putting people in a position to recognize that doing things wrong gets you more time with adults, more attention, more work. Kids think doing something wrong can get them out of work. If we want to prepare all kids to be college, career and community ready, they have to be in school. We have to keep them in school.

"I don't believe discipline is about punishment. There are times a kid can't be in school when they pose a serious safety threat to others. Anything less than that, we should work to keep them in our school and our district. I used to tell my students that. You're not going to fail, unless you're not in school."

"Over the last couple of decades, the country has moved to a zero-tolerance mindset. And that zero-tolerance mindset has resulted in 3 million students being suspended from school each year. That's an average of one student per teacher per classroom in this country. That is an alarming statistic, and not something you can just live with. You have to recognize we're not helping kids—we're hurting kids. We are putting them on a path to failure and dysfunction. You can make your school much safer by actually having discipline policies and supports that focus on addressing the root causes associated with student behavior rather than having a zero-tolerance mindset. Expelling a student, suspending them, and having that student out on the street and not engaged in anything positive will ultimately adversely affect all children. It's the morally right and ethically right thing to do—to make sure we do the very best we can to provide kids with the opportunity to be successful."





## \$6.5 **BILLION**

total philanthropic

## **MILLION**

people displaced by Hurricane Katrina

80

percent of New Orleans that flooded during Hurricane Katrina



### THE BROAD ACADEMY AND THE BROAD RESIDENCY IN NEW ORLEANS

### **AFTER THE STORM**

**Broad Academy and Broad Residency** participants are drawn to urban locales where they can help dramatically improve public schools and deliver a great education to underserved students. Nowhere is that more evident than in Louisiana and specifically New Orleans, which in the decade since the devastation of Hurricane Katrina has drawn 38 Broad Academy and Broad Residency alumni to rebuild schools and provide high-quality educational opportunities to the students and families of New Orleans and statewide. Working with committed educators across the city, Broad Academy fellows and Broad residents have supported New Orleans schools to reach new heights of academic achievement—and a new commitment to equity across the school system.

From demanding higher standards on the floor of the state capitol in Baton Rouge to supporting the hard work in classrooms in the heart of the Treme neighborhood, the Academy and Residency alumni profiled in the following pages are committed—like educators across New Orleans—to an ethos of continuous improvement. For Louisiana State Superintendent John White, that means no more failing schools and a career credential or college credit for all graduates. "No one," White said, "should graduate without their diploma leading to a next

step." For Broad residents Michael Stone and Naressa Cofield, both of whom work to support schools in the city, that means making sure school leaders and teachers can focus on what matters most—students.

And for Patrick Dobard, it means improving and fully implementing an equity agenda. Dobard serves as superintendent of the Recovery School District (RSD), created in 2003 to oversee the transformation of the lowest-performing schools in Louisiana. Today, the RSD holds its 68 public schools accountable for academic performance and equity, but leaves operations and decision-making to the schools. Dobard's work is making the RSD a model for districts everywhere. The district now requires a hearing before students are expelled, providing students and families with the opportunity to partner with the RSD and schools to identify and address underlying needs. Through comprehensive supports and services, like mental health care, the district ensures students continue to pursue their education and start on a path to success.

Dobard, Cofield, Stone and White join many other educators from the Academy and Residency in creating improved educational opportunities for New Orleans students, from expanded access to pre-K to achieving college and career readiness.

giving to New Orleans after Hurricane Katrina



"I GET IN MY CAR TO GO HOME. FIFTEEN MINUTES INTO THE DRIVE, MY CHIEF OF STAFF CALLS AND SAYS, 'TURN AROUND, A GUNMAN RAN INTO ONE OF **OUR SCHOOLS.'** IT'S CHAOS. WE CAN'T FIND HIM."

> - PATRICK DOBARD, **RECOVERY SCHOOL DISTRICT, LOUISIANA**

#### PATRICK DOBARD

"My first day was the perfect snapshot of the work. I had a press conference formally announcing me as superintendent. We arranged to have it at the neighborhood high school in the 7th Ward that three of my six brothers and sisters graduated from. When the RSD took it over, it was the lowest-performing high school in the city of New Orleans. The room was packed. When I got to the school, a young man was waiting to escort me to the press conference. I walked up and I said who I was, 'I'm the new superintendent.' And he just stopped. He looked at me in shock. So as we walked to the library I struck up a conversation. I found out that he was surprised because I was a black man. He couldn't reconcile all these people in the room for a black man about to oversee the schools. In his mind, a black man being in a position of power and permanence, of being the focus of something, was not something he was used to. I went to the press conference, and I didn't use my prepared remarks. I spoke to that. I said I want to move our schools so that kids would not be shocked that the superintendent is a black man. It should be the norm for our young black men and women to be succeeding at high levels.

"I get in my car to go home. Fifteen minutes into the drive, my chief of staff calls and says, 'Turn around, a gunman ran into one of our schools.' It's chaos. We can't find him. They're trying to get kids out of the building. There's 50 police cars, flashing lights, streets blocked off, people standing in the medians—or the neutral ground as we call them in New Orleans—trying to figure out parent pick up. That was my introduction to the police chief of New Orleans. We met on the neutral ground. He gave me his cell phone. He knew what he was doing. I jumped in and tried to help. It was a long evening. I was like, 'Oh my gosh, this is my first day.'

"We must be intentional about giving hope to minority and impoverished kids. That's our No. 1 goal. From the student who ushered me in to the press conference to the gunman, who was a young black man, we need to give them hope. A black man in charge should be normal. And it shouldn't be accepted that the gunman is a black youth. We have to transform our system. And you have to plan for the unexpected. If you think your first day is shaking hands and hugging kids, mine was a bit grittier and a bit more like the challenging and complex New Orleans that I grew up in. It's exciting and hopeful. But it can also be extremely depressing because of some ills that still plague our society. My job, it teaches me, don't get too high when things are going well and don't get too low when there are challenges. Embrace all of those feelings and use them as a catalyst to make a difference for our youth, every day."

### **NARESSA**

"I am most proud of rolling out systems that remove the inefficiencies of schools so every second is spent on teaching and learning. Before we implemented these systems, it was very difficult for anyone to assess how students were progressing.

"Teachers would have their grade books and attendance rosters, but were required to contact multiple people if a student was absent. Sometimes they were successful, but unfortunately, many times they were not.

"Now everyone has access to every piece of information, and everyone who is responsible for supporting students can act on that information. For example, all of a student's teachers know what a student knows and can do and what needs re-teaching. Social workers are immediately aware of absences and can intervene before students are truant. Interventionists know which students need targeted support and what to focus on. Our speech therapist can run a report to identify students in need of speech services instead of waiting for a teacher referral. School leaders can identify areas where teachers need coaching and support. We can provide access to real-time student performance data that empowers families to provide at-home support. It makes me so happy to know that everyone vested in the success of our schools can respond to the needs of our students and teachers. I dislike inefficiencies, and I dislike paperwork, so I am really happy to be able to do this work."







### **MICHAEL STONE**

"The first school I visited in New Orleans was in the fall of 2010. It was really struggling with behavior, the quality of instruction, teacher supports. But they were committed to getting better. I went back last year and it was completely transformed. It's the same school leader—he stuck it out. He kept fighting to make the school better. He has been relentless. You could feel the warmth between kids and teachers. The school was calm and orderly, but it had that hum and that buzz that schools have when they're working well. The list of schools that have felt like that is so long."

#### WHITE

"On a school visit, I knelt down next to a young lady in fourth grade. I said, 'What's your name, young lady?' She said, 'My name is Kenyetta.' I said, 'What are you doing?' She said, 'We're plotting lines on a graph.' I looked at it and I said, 'Is it hard?' She said no. And I said why. And she said, 'Because it's easy.' I said okay, alright. So I started to walk away and she tugged on my sleeve and said, 'I can do harder work. I want to do harder work.' I turned back around and knelt back next to her and said, 'Well, why aren't you doing it?' And she said, 'Because no one ever asked.' Our job is to ask."

# THE BROAD CENTER

Members of The Broad Center network are currently working in public education in the following regions:



**ALABAMA** Huntsville

**ARKANSAS** Helena

CALIFORNIA

Burbank Fresno Long Beach Los Angeles Madera Mountain View Oakland

Oceanside Ontario Redwood City Riverside San Diego San Jose

COLORADO Commerce City

Denver

CONNECTICUT Hartford New Haven

DISTRICT OF COLUMBIA

**DELAWARE** Dover

FLORIDA
Fort Lauderdale
Jacksonville
Miami
Orlando
West Palm Beach

**GEORGIA** Atlanta Decatur Marietta

ILLINOIS Aurora Chicago Elgin INDIANA Fort Wayne Indianapolis

**LOUISIANA**Baton Rouge
New Orleans

MASSACHUSETTS

Boston Malden

MARYLAND Baltimore Rockville Towson Upper Marlboro

MICHIGAN Detroit Sterling Heights

**MINNESOTA** 

Saint Paul

MISSOURI
Saint Louis

MISSISSIPPI Ocean Springs

NORTH CAROLINA Charlotte Gaston Raleigh Thomasville

**NEBRASKA** Omaha

NEW JERSEY Camden Jersey City Newark Passaic Trenton

**NEW YORK** Brooklyn New York City Syracuse

**OKLAHOMA**Oklahoma City

OREGON Portland

OHIO

Cleveland

PENNSYLVANIA Harrisburg Philadelphia Phoenixville

Philadelphia Phoenixville Pittsburgh Quakertown

VIRGINIA Arlington Norfolk

**WASHINGTON** Renton

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# THE



26

public school districts recognized as Broad Prize winners and/or finalists since 2002

states with a **Broad Prize** winner or finalist

former U.S. Cabinet secretaries who have served on The Broad Prize selection jury





For the past 13 years, The Eli and Edythe Broad Foundation has awarded The Broad Prize for Urban Education to recognize the public school districts that have demonstrated the greatest overall performance and improvement in student achievement while narrowing gaps among low-income students and students of color.

In 2014, for the first time, only two school districts were named finalists—Gwinnett County Public Schools in Georgia and Orange County Public Schools in Orlando, Florida. In another first, both were named winners, splitting the \$1 million in college scholarships for their high school seniors.

But after more than a decade of evaluating dozens of districts, the review board and selection jury—the panels of prominent education and public service leaders that choose The Broad Prize winner—recognized how rarely school improvement happens effectively, sustainably and rapidly enough to make a difference for students who need a quality education now.

In February 2015, The Eli and Edythe Broad Foundation announced that, because of disappointing results in our urban public

schools and the changing landscape of education with innovations like recovery school districts, The Broad Prize would be paused while the foundation considers how best to update the award.

During the pause, the foundation will continue to celebrate the achievements of previous finalist and winning districts, provide funds to current Broad Prize scholarship recipients and award The Broad Prize for Public Charter Schools.

That award, introduced in 2012, continues to showcase high-performing charter management organizations that prove high achievement is possible in public schools serving the most disadvantaged students. In 2014, the review board awarded the prize to KIPP for its ability to provide a great education to tens of thousands of students across the country. In 2015, Noble Network won the prize for its success in serving high school students.

We hope that The Broad Prize for Public Charter Schools will continue to inspire creativity and urgency to ensure public schools prepare all students for success after high school.



86

percent of KIPP students from low-income families

94

percent of KIPP students who complete 8th grade and graduate from high school

**95** 

percent of KIPP students who are black or Hispanic



# 2014 BROAD PRIZE FOR PUBLIC CHARTER SCHOOLS

# KIPP SCHOOLS FOCUS ON RESULTS

KIPP Schools has long been the largest charter management organization in the country—and one of the oldest—and in 2014, it was also named the network with the most outstanding overall student performance and improvement as winner of The Broad Prize for Public Charter Schools.

The Broad Prize for Public Charter Schools review board selected KIPP as the winner of the \$250,000 award not only for its academic achievements—the network closed more achievement gaps for Hispanic students than other charter organizations eligible for the prize, and closed more ethnic and income gaps for middle school students than other eligible charters—but also for the network's ability to do so at scale. With 183 schools in 20 states and the District of Columbia, KIPP serves nearly 70,000 students, putting it on par with the 100 largest school districts in the country.

Every KIPP school shares a dedication to high expectations and a focus on results. But each school also answers the needs of its community. One such campus is KIPP Comienza Community Prep, which serves 520 kindergarten through fourth-grade

students in Los Angeles by creating a tight-knit sense of family among teachers, parents and students.

Comienza teachers are often found in local parks on weekends, chatting with community members, or making home visits in the summers to check on students. Parents come to campus for lessons in English or technology, and they can attend the first 20 minutes of the school day to meet with their child's teacher and classmates. Students take classes in building character and making murals and have "spirit days" when they wear the clothing of their parents' home countries or bring a representative item. The result is a school that feels like, in the words of one parent, "a home away from home."

While creating a warm, welcoming environment, Comienza also achieves results. The school ranked No. 1 on state academic assessments in 2015 among schools serving a majority of low-income students in the Los Angeles Unified School District. Comienza is also the top California school that has more than 60 percent English learners.

"The KIPP way of teaching is high expectations, no excuses and revolutionary love. Our teachers believe in our students' potential. We will do whatever it takes to make sure that potential is realized. We don't accept any excuses. We know what's possible. We've proven what's possible. So we will do whatever it takes. I know that sounds harsh, but at Comienza, we balance high expectations with love. We nurture relationships. We spend most of our day here. It's important we love each other and we enjoy spending time together and working together."





"I believe that I can reach my students when I have an understanding of who they are as people and when I have an open mind about where they come from. At KCCP, I am learning that connecting with students is not based on how similar you are to them but rather the teacher's ability to show empathy, dedication and love. We have teachers from all walks of life that are able to connect with students based on love and empathy. When teachers can create these connections, student achievement is inevitable."



"At a very young age, I had my mind set on being a teacher. I remember school as a very positive experience. School served as my safe haven. I had a rough childhood and upbringing, and at school I felt the happiest, safest and most at peace. In second grade, I began to say I would be a teacher because I immediately saw the powerful impact of an educator. That has always been my career path, and here I am now, living my dream.

"Every teacher here has a direct manager. That person comes into your class weekly, and you meet every two weeks to talk about data and what's happening in your classroom. They give you feedback in the moment, which helps you with your teaching practice. They're always available to brainstorm ideas and help you master skills. The consistent collaboration is very helpful for your personal development as an educator and also greatly impacts your ability to reach all students you're serving."

# 2015 BROAD PRIZE FOR PUBLIC CHARTER SCHOOLS

# **NOBLE NETWORK PROVING STUDENTS CAN EXCEL**

# High school is especially tough

for struggling students—and there's a reason those are the years students usually ninth-graders graduate from high school drop out. But for the Noble Network of Charter Schools, high school is where the organization has proven that students can learn and excel.

Noble, which operates 16 high schools and one middle school in Chicago, won the 2015 Broad Prize for Public Charter Schools sending all students to college, with an for its success in helping its more than 11,000 students advance academically and achieve higher graduation rates than the Illinois state average. That success is even more dramatic for Noble's students of color and those from low-income families.

Serving a student population that is 95 percent African-American or Hispanic and 89 percent low-income, Noble consistently ranked among the top-performing public school districts in Illinois on measures like academic proficiency for African-American, Hispanic and low-income students in reading, math and science. Noble graduates a higher percentage of its students of color and low-income students

than the statewide average. For example, 87 percent of Noble's African-American in four years compared to 71 percent in Illinois. In 2015, Noble graduated its largest senior class of 1,500 students, with 100 percent of the class accepted to college and 90 percent enrolling.

Founded in 1999, Noble focuses on increasing emphasis on supporting them through college graduation. The charter network provides its students more quality instructional time in school than most schools and sets high expectations for all. Noble's college team counsels students, encourages sophomores to attend college programs and tracks alumni progress. The charter network developed what it calls The Robot, a customized Excel document that helps students explore college choices by showing them their likelihood of getting into college based on grade point average and ACT scores. The charter network's goal is to achieve a 75 percent college graduation rate for its alumni by 2020.



"I started teaching math in Chicago Public Schools in the 1990s. I saw 'Stand and Deliver.' I became a wannabe Jaime Escalante. Charter school laws were being passed around the country. One got passed in Illinois. My fiancée, now my wife, who was teaching at a different public school in Chicago, had to coach me on what they [charters] even were. In the fall of 1999, we opened our first high school. Our students were complaining from Day One about the long hours and strict rules. Thankfully '60 Minutes' did their story on KIPP that very same fall. I turned on my VCR and taped it as soon as the stopwatch started. I showed it to my students and said, 'We're not the only ones doing this."



# MATT NIKSCH

"My job is to worry about all our kids going to college and graduating from college. One of the things all of us working in education in the K-12 sector didn't realize is how horrible the results are for kids going to college and not enough of them being able to persist. That's depressing from one point of view, but it's also this huge opportunity. If you can identify some things that are going to help your kids persist, it's changing lives. In 2015, Noble graduated 1,500 seniors. If we can get 10 percent better, that's 150 kids earning college degrees and having much better lives. Any way you look at it, it's a really great thing. What gets me up in the morning is that everything I do is going to have a real impact on lives—and there's the opportunity to have a lot of impact on a lot of lives."

# THE BROAD PRIZE

# **MAKING HISTORY IN 2014 WITH TWO WINNERS**

**Year after year,** The Broad Prize selection jury wrestles with whether to reward an urban school system that has compelling improvement or impressive performance. In 2014, the first year with only two finalists because the review board panel that selects the contenders was underwhelmed with the field, the selection Gwinnett County Public Schools—the jury's struggle was even more pronounced. Georgia's Gwinnett County—a previous Broad Prize winner in 2010 and a finalist in 2009—had sustained strong performance over several years. Orange County Public Schools in Orlando, Florida was a first-time Broad Prize finalist and had demonstrated rapid academic gains in just a few years no easy feat for a large urban district. Both school systems had relatively similar demographics—well over 100,000 students, roughly split between African-American, Hispanic and white, with more than 50 percent coming from low-income families. And both districts had made progress particularly with their students of color and their low-income students.

The strong performer was a model for any American district that had achieved a high level of academic success but needed to sustain it.

80

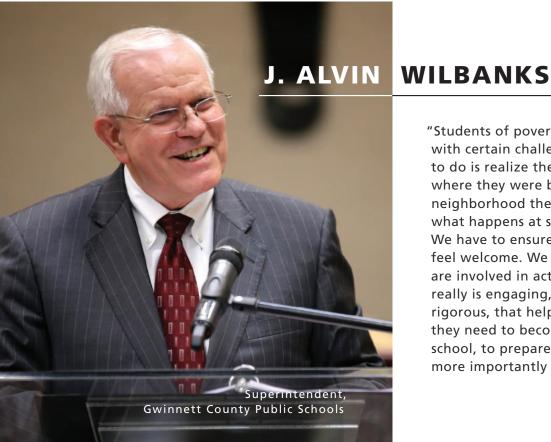
The strong improver was a model for any district looking to support its students to higher levels right away rather than progress steadily over years of effort.

Ultimately, the jury decided that both deserved to win The Broad Prize. strong performer—benefited from years of stable leadership since 1996 under superintendent J. Alvin Wilbanks, and a school board where the tenure ranged from one to four decades. Orange County Public Schools—the strong improver—had a relatively new superintendent in Barbara Jenkins, but one who had learned the ropes as deputy to her predecessor and who brought renewed energy and focus to the role.

For the superintendents, the shared award was welcome—and a relief. As Jenkins said after the prize was announced, "Thank God it's over." Wilbanks added, "Orange County is a great district. And we think we're a pretty great district as well."



"At a school, I want to see a welcoming environment that the children are happy to be part of. I want to see student work displayed. I want to see things about college and career displayed—for children as young as elementary school. I want them to see themselves as college and career candidates in the future. I'm looking for that vibe. In the classroom I want to see students engaged in learning. Not just sitting and listening, but engaged, working in groups, engaged in problem-solving, in higher-order thinking, things we believe children are capable of if we give them those challenges. I also want to see a team that's happy to be there, from the custodian to the bus drivers to, most important, the teachers."



"Students of poverty obviously come to you with certain challenges. But what we have to do is realize the students could not help where they were born. They can't help the neighborhood they live in. But we can control what happens at school. We have to do that. We have to ensure that, number one, they feel welcome. We have to ensure that they are involved in activities and coursework that really is engaging, but at the same time is rigorous, that helps them become the student they need to become to be successful while in school, to prepare for college or career, but more importantly to prepare for life."

# BROAD PRIZE SCHOLARS

# **ACHIEVEMENT AGAINST ALL ODDS**



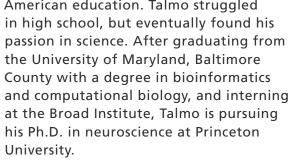
**Unlike most** college scholarship recipients, the more than 1,200 students who have been awarded \$16 million in Broad Prize scholarships since 2002 didn't have the highest grade point average in high school. Instead, much like their school districts, Broad Prize scholars demonstrated improved academic achievement against all odds. These students have overcome family struggles, financial challenges and other hardships to achieve their dreams of going to college.

Broad Prize scholars receive \$20,000 to attend a four-year college or university or \$5,000 to attend a two-year college. About 91 percent attend four-year institutions, and they graduate from college at a rate nearly double the national average for low-income students.

Talmo Pereira, a graduate of Montgomery County Public Schools in Maryland, a 2010 Broad Prize finalist district, grew up in Brazil with a single mother who left her young son with his grandmother so she could work in the United States. She eventually saved enough money to reunite of Medicine. the family and give Talmo a shot at an

American education. Talmo struggled in high school, but eventually found his the University of Maryland, Baltimore County with a degree in bioinformatics at the Broad Institute, Talmo is pursuing his Ph.D. in neuroscience at Princeton

Elieth Martinez shares Talmo's passion for science. A graduate of the Long Beach Unified School District, the 2003 winner of The Broad Prize, Elieth graduated from UC San Diego—the first in her family to attend college—before pursuing medical school at UC San Francisco. From emigrating with her family from Nicaragua to growing up in Inglewood, California, Elieth watched her family struggle. When their visas expired, they were undocumented and unable to find affordable medical care. With those memories burned into her mind, Elieth vowed to become a doctor serving lowincome communities. Elieth is now a medical resident at Duke University School





# **MARTINEZ**

"One of the main reasons I succeeded academically was UCLA's pre-med enrichment program. It's geared toward helping low-income, underserved students at UC and Cal State campuses who want to go to medical or dental school. I found mentors who had the same story and background that I did, the same challenges, and they were practicing physicians. They taught me how to study, how to build academic skills, and encouraged me and believed in me. It was challenging going to UCSD and being the first in my family to go to college and not having resources. I plan to be a mentor when I'm a practicing physician. I want to keep helping lowincome students reach their potential, just like others helped me."

"When I was 7 years old, my mom decided to move to the United States in search of work to provide a better life for me. She was eventually able to bring me to join her, but only after eight years of separation. My mom sometimes saved enough money to bring me to the U.S. to come visit. During these visits I'd watch Pokemon cartoons. That helped me pick up English, because I already knew all the lines in Portuguese. Eventually when I moved to the U.S., I retained enough English to start high school as a sophomore. Even though I received pretty decent grades in Brazil, they transferred over as Cs and Ds, if they transferred at all. I had to find ways to be able to prove myself and show I was capable of taking rigorous courses. Early on my mom realized education was going to be the key to unlocking all the opportunities I would need to be successful in life. I live by that message. I truly believe that through education everything is possible. It is astounding what a few opportunities can enable in someone's life."

**EDUCATION** 

# SPEAKERS AND WINNERS CIRCLE

# THE BROAD PRIZE FOR **URBAN EDUCATION**

**2014 SPEAKER AND WINNERS** 

# **SPEAKER**

Hon. Tony Blair, Former Prime Minister of the United Kingdom

Gwinnett County Public Schools, Georgia Orange County Public Schools, Florida



**PAST SPEAKERS AND WINNERS** 

# 2002

#### SPEAKERS

U.S. Senator Edward Kennedy U.S. Secretary of Education Roderick Paige

# WINNER

Houston Independent School District

# 2003

U.S. Secretary of Education Roderick Paige

Long Beach Unified School District, California

## 2008

# SPEAKERS

**NBC News Special Correspondent** Tom Brokaw

Former U.S. Secretary of Education Roderick Paige

Former U.S. Secretary of Education Richard Riley

Brownsville Independent School District, Texas

# Caroline Kennedy

# SPEAKERS

# WINNER

# 2009

# SPEAKER

U.S. Secretary of Education Arne Duncan

Aldine Independent School District, Texas

# 2004

# SPEAKERS

Former U.S. Secretary of Housing and Urban Development Henry Cisneros

U.S. Secretary of Education Roderick Paige

# WINNER

Garden Grove Unified School District, California

# 2005

# SPEAKERS New York Times Columnist and Author Thomas L. Friedman

U.S. Secretary of Education Margaret Spellings

Norfolk Public Schools, Virginia

# 2006

# SPEAKERS

Former President William Jefferson Clinton

U.S. Secretary of Education Margaret Spellings

# WINNER

Roston Public Schools

# 2007

# SPEAKERS

Former U.S. Secretary of State Colin Powell

U.S. Secretary of Education **Margaret Spellings** 

## WINNER

New York City Department of Education

## 2010

# SPEAKERS

NBC Nightly News Anchor Brian

U.S. Secretary of Education Arne Duncan

#### WINNER

Gwinnett County Public Schools, Georgia

2011

# GRAMMY® Award Winner and Education Activist John Legend U.S. Secretary of Education

# Arne Duncan WINNER

Charlotte-Mecklenburg Schools, North Carolina

# 2012 SPEAKERS

#### Former Chairman of the Joint Chiefs of Staff Admiral Michael G. Mullen, Retired

U.S. Secretary of Education Arne Duncan

Miami-Dade County Public Schools

# 2013

# SPEAKER

U.S. Secretary of Education Arne Duncan

Houston Independent School District

84 **EDUCATION** 

# **PUBLIC**

# \$144 **MILLION**

invested by The Eli and Edythe **Broad Foundation** in public charter schools nationwide

6,100 public charter schools in the U.S.

# **MILLION**

student names on public charter school waiting lists across the country



# If the public charter school

movement was a student, it would have just graduated from college.

The first charter school opened in 1992 in Minnesota based on a simple but revolutionary idea: give schools more freedom to innovate in exchange for more accountability for student achievement. Within a decade, there were hundreds of charter schools across the country, and within two decades, thousands. The most successful schools began to open new campuses to serve more students, transforming themselves into high-quality charter management organizations that oversee great schools nationwide, almost all of which serve primarily communities of color and students from low-income families. The largest among the charter systems, KIPP Schools, serves nearly 70,000 students and celebrated its 20th anniversary in 2014.

The Eli and Edythe Broad Foundation was an early supporter of creating and expanding high-quality public charter networks. Over the past 17 years, the foundation has invested more than \$144 million into these public schools that are proving all students, regardless of background and ZIP code, can achieve at high levels. We have helped bring great schools to large urban centers like New York—where we support Success Academy and Achievement First—and our home city of Los Angeles, where we have worked to seed and scale networks like Green Dot Public Schools, Alliance College-Ready Public Schools and KIPP.

Like any movement, the public charter school drive of the past 24 years has had its struggles, one that charter supporters are addressing with increasing effectiveness: the push for maintaining quality. While

charters on the whole have grown, innovated and answered the demands of families around the country, not every charter school has lived up to the promise of delivering a great education to its students. That's why The Eli and Edythe Broad Foundation also supports efforts to increase the quality of public charter schools and close poor-performing charters.

The charter networks we have supported over the years have delivered innovation and results. They have pioneered new methods of classroom management and leadership development, created teacher residency and mentorship programs, developed curricula for character education and led the charge to support students not just to high school graduation but to and through college.

Success Academy boasts the top two schools in math in the entire state of New York. Its students perform at more than double the city and statewide averages in math and English.

Across the KIPP network, 94 percent of students who graduate from eighth grade go on to finish high school, and a recent study called KIPP's impact on student achievement "positive, statistically significant and educationally substantial."

Green Dot has eight high schools ranked among the best in the country by U.S. News and World Report, and Alliance has six on the same list.

By the time the public charter school movement is settling into middle age, we anticipate that these charter networks will be even stronger, providing more students with the world-class education they deserve.

**EDUCATION** 

# SUCCESS ACADEMY

# **SPELLING SUCCESS** FOR ITS STUDENTS

Since its founding in 2006 by former New York City councilwoman Eva Moskowitz, Success Academy Charter Schools has become one of the most prominent charter networks in the country because of its ability to rally parents, influence politics and achieve extraordinary academic results for students.

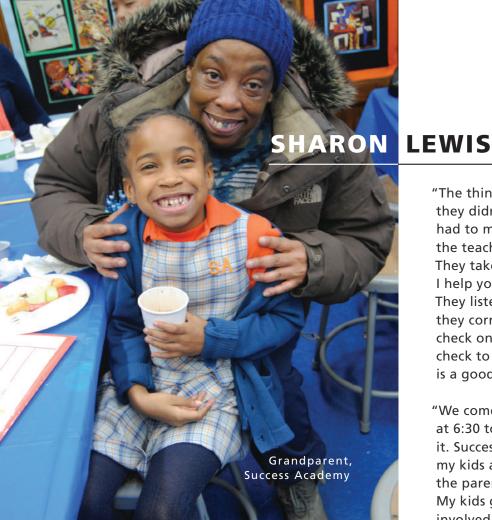
The Eli and Edythe Broad Foundation was the first financial backer of Success. "I met with Eli Broad and said, 'I know I'm a politician, but I'm going to start a set of schools," said Moskowitz. "He gave us our first \$1 million gift." Since then, the foundation has invested \$14 million to help the charter network grow to 43 schools and counting. Success Academy's 9,000 students, the great majority of whom come from low-income families and communities of color, rank in the top of the state in math and are among the best in English. Above all, Success students are taught to follow their curiosity—teachers talk less in the front of the room, and children learn by doing rather than by memorizing.

"Kids are curious about the world around them long before they are interested in reading or math," Moskowitz said. "Kids have to puzzle over things."

Success designed a curriculum from scratch because it found no existing materials that were designed to challenge students, Moskowitz said. Success kindergartners study physics through simple experiments, and students in later grades do not repeat material from one grade to the next, as most textbooks require. Units of study are flexible rather than rigidly scheduled to take one month each. Students also expand their horizons through dance classes, chess competitions and debating championships.

The goal, Moskowitz said, was to create an education that any family would want their child to have. The proof is in the demand: for every open spot in a Success classroom, 10 students are clamoring to get in. And if Success has its way, it will soon be able to serve many more students: the network hopes to grow to include 100 schools by 2020.

"We are a different animal than when we started because we are pre-K through high school," Moskowitz said. "In about seven years, we will be graduating 5,000 seniors a year. It's a massive undertaking."



"The things they have now in charter schools, they didn't have it at their old school. You had to make appointments or call to talk to the teacher. At Success, you don't have to ask. They take time out. They always say, 'What can I help you with? What does your child need?' They listen to you. If something isn't right, they correct it. They check on everything. They check on reading. That is a good thing. They check to make sure the attire is up to par. That is a good thing.

"We come all the way from the Bronx. We leave at 6:30 to get to school before 7:30. But I love it. Success Academy is a good school. It helps my kids a lot. I get along with the teachers and the parents. I go to the rallies. I do everything. My kids go to these schools, so I want to be involved in everything the school has."



# **JOFTUS**

"I knew in elementary school that I wanted to be a teacher. I'm one of five children, so I was always helping my siblings with their homework. I loved the satisfaction of seeing my hard work and someone else's hard work pay off. I was fortunate enough to go to private school, but I didn't want to get into teaching to go that same route. I wanted to make more of an impact. As soon as I heard about Success and talked to people who worked here, I knew it would be a place where I could walk out of work and know I made an impact in the life of a child. I'm so lucky that's how I feel on a day-to-day basis."

# PUBLIC CHARTER SCHOOLS

# PROVIDING MORE OPPORTUNITIES FOR LOS ANGELES FAMILIES

# **Since California became** the

second state to approve a public charter school law in 1992, Los Angeles has long been fertile ground for excellent public charter schools. L.A. leads the nation in the number of students attending public charter schools, and in the last decade alone, the city has supported the growth of several high-quality public charter networks that have expanded across the city, statewide and nationally.

Today, more than 22 percent of Los Angeles public school students attend charter schools. And tens of thousands more families want to enroll their children in public charter schools—but there simply are not enough seats. The quality of education public charter schools provide makes clear the reason for this demand. A 2014 Stanford study found that Los Angeles charter schools deliver the equivalent of 50 extra days of learning in reading and nearly 80 extra days of learning in math in one school year.

But the demand for public charter schools is about culture as much as it is about results. By giving principals and teachers more resources and autonomy, public charter schools can quickly and adeptly respond to the needs of their schools and their communities.

At Green Dot Public Schools, which serves more than 10,000 students in Los Angeles alone, it means taking over the most challenged and struggling local district schools and transforming them into safe, successful campuses. And at Alliance College-Ready Public Schools, it means a personalized approach to learning so the network's 10,000 students receive individualized instruction.

The Eli and Edythe Broad Foundation is working to support and expand these public charter networks and others as they improve educational opportunities for Los Angeles students. Our goal over the next eight years is to help give every family access to a high-quality public school, effectively eliminating the wait list for public charter schools in Los Angeles. Every family, and every student, deserves the chance to attend a great public school, and we hope to help make that a reality in our home city.



# **GONZALEZ**

"There is a beautiful quote by Stephen Sondheim, from 'Into the Woods.' The line is 'Children may not obey, but children will listen.' That resonates so strongly with me because I know even though my sixth-graders are so young, I know they are listening to the questions we pose as educators. It gives me hope that in developing critical thinking skills, they will come back and serve this community. There is a narrative that if you live in South or East L.A. you have to get out. But I don't see it that way. I think change comes from within. My kids give me hope. I know they're listening."

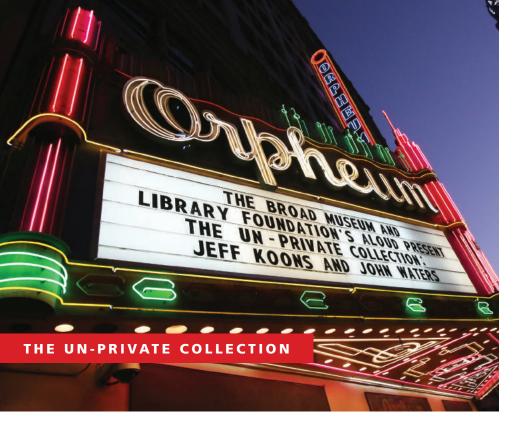




"After five years working for the district, it was clear to me there were limits to the amount of change I could effect in the classroom, even as a teacher leader. We were running into district policies and teachers union issues that were preventing a group of us from really pushing the kids as hard as we needed to, to prioritize instructional minutes, to build a safe and strong culture. So when I got the phone call offering me a position to go to Green Dot, one thing they said was, 'We will always put the needs of students before the needs of adults.' That was not in my experience the practice in some of the larger districts. What that has meant is building schedules and teacher assignments not on seniority but on what students need and who the best people are to teach them. It means going out of our way to engage families and communities, making sure they're welcome at the school site and involving them in addressing some of the barriers to learning that we observe with the students. And finally it was a place where I could work with other people who had chosen and gone out of their way to work in a high-need environment where we were going to hold ourselves accountable. I was very moved by the fact that I was going to work really hard and do whatever it took and so was every other person that I was working with. The strength of the team was really appealing to me."

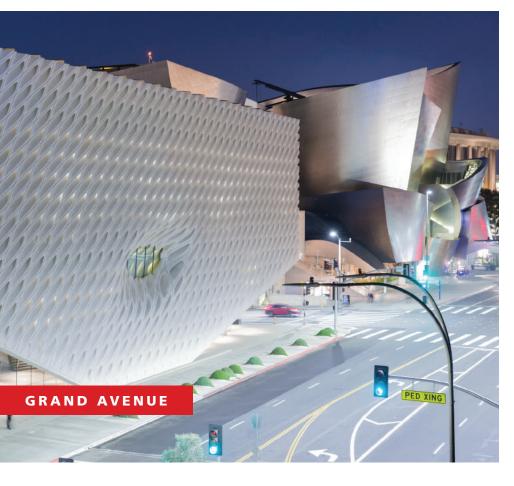
Animo Pat Brown

Charter High School













THE ARTS

# TURNING A PRIVATE LOVE OF ART COLLECTING INTO

# A PUBLIC TREASURE

BY JOANNE HEYLER



The doors of The Broad, Los Angeles' newest contemporary art museum, may have opened in 2015, but the process of turning Eli and Edye Broad's private love of collecting art into a public treasure began decades earlier.

Edye's love for collecting came early, on a grade school visit to a museum in Detroit in the 1940s when she first saw Pablo Picasso's *Three Musicians*. Even today, she describes encountering that painting as "a punch in the gut," and it remains one of her favorite

works. Later, traveling with Eli on business trips, Edye roamed galleries and acquired a Georges Braque print, an early work by L.A.-based contemporary artist Betye Saar, and in 1970, a Henri de Toulouse-Lautrec print that piqued Eli's interest, sparking the couple's art obsession.

The Broads' first decade of collecting as a couple was ambitious and wide-reaching. In 1972 they acquired an 1888 Vincent van Gogh drawing. Two years later, they purchased Joan Miro's *Painting*, March 13, 1933, from a renowned series of 18 paintings based on collages that the artist created in the attic studio of his parents' Barcelona apartment. The Broads made their first foray into contemporary art in 1978, acquiring a prime example from Jasper Johns' "crosshatch" series, the first he painted in color. And that Van Gogh drawing? It was eventually traded for a very different sort of artwork: an important painting by contemporary artist Robert Rauschenberg, *Untitled*, 1954, to this day one of the most significant works in the couple's collection.

In the 1980s, the Broads became addicted to acquiring works that reflected the here and now, with all its social and political complexities. During Eli's New York business trips, the couple meandered through Soho and the East Village, visiting gallery shows and studios of artists who are now world famous, like Keith Haring and Jean-Michel Basquiat. Eli was also drawn to work with stark, uncompromising political content by Jenny Holzer, Hans Haacke and Barbara Kruger. Kruger, for one, has said that museums and major collectors showed almost no interest in her early work, and she found it hugely encouraging when the Broads acquired her work. In that pivotal decade, the Broads discovered two artists whom they have since collected in notable, and in fact, truly singular depth: Cindy Sherman and Jeff Koons.

By the mid-1980s, Eli and Edye Broad had become established collectors of contemporary art and realized that their deepening commitment to art could serve a larger public purpose. In 1984, they established The Broad Art Foundation, dedicated to loaning artwork to museums around the world so that the widest possible audiences could experience the art of their time. It marked the beginning of Eli and Edye's efforts to make their collection publicly accessible. While many contemporary art buyers were keeping artworks behind closed doors in their homes—or worse, in their basements and storage facilities—and treated art as an investment, the Broads were determined to keep the collection in the public eye. Museums anywhere could tap the foundation's collection for their walls. The decision to take a public approach to their collecting gave the Broads room to grow their collection to approach the breadth and depth of a museum's trove. Works by some 128 new artists entered the collection during the 1980s, and by the 1990s the Broads' holdings of classic historic Pop art also began to grow, with works by artists like Andy Warhol and Roy Lichtenstein. These would eventually number nearly 100 works, creating a historic base for all the 1980s work that had first drawn Eli into contemporary art.

Alongside the profile of the art foundation, by the mid-1990s, Eli began to take on a more public persona in the civic and arts worlds of Los Angeles. Though he had long been a presence—he was founding chairman of the Museum of Contemporary Art, and

THE ARTS

he helped secure the cornerstone of its permanent collection—Eli's philanthropy in art and culture was creating a larger-than-life profile. He joined then-Mayor Richard Riordan to revive a major but troubled project: Walt Disney Concert Hall, situated downtown and directly across from MOCA. After eight years and raising \$225 million—much of it handled personally by Eli and the mayor—construction was completed, and Disney Hall opened triumphantly in October 2003.

I became curator of The Broad Art Foundation in 1995, at a crucial moment for the art collection and the Broads' philanthropy, both of which were finding a new sense of purpose at this time. Even as the collection continued to evolve, with new artists and roughly 50 acquisitions added annually, a topic of increasing focus was their future destination. Since the 1980s, Eli and Edye cared above all that the art they collected be publicly accessible. By 2005, the collection had grown to roughly 1,500 works; 500 more would be added by 2015. It represented a journey of over four decades of one family's patronage, marked by very deep relationships to certain artists' entire oeuvres and deep friendships with many of the artists themselves. Indepth groupings of key artists' works—in not just one or two cases, but across generations of American artists, including Sherman, Koons, Lichtenstein, Christopher Wool, Andreas Gursky and many others—were unmatched anywhere.

In 2009, we found the right site for our museum in downtown Los Angeles, on Grand Avenue. This was a homecoming, located on one side of the street across from MOCA, which Eli had helped build nearly 40 years prior and on the other side, across from Walt Disney Concert Hall. Situating The Broad on the main cultural corridor of Los Angeles would also cap Eli's even wider role in a newly burgeoning downtown area. Eli was convinced, long before it was fashionable to say so, of the potential of downtown to evolve past its longstanding high-rise tower-filled, nine-to-five identity, into the cultural, commercial, social and residential center it is becoming today. We are thrilled to be part of that revival and a contributor to Los Angeles' ascendancy in the contemporary arts landscape, so much of which has happened because of Eli and Edye Broad.



For

Joanne Heyler is founding director of The Broad. She is also the longtime director and chief curator of The Broad Art Foundation.

96 THE ARTS

# THE BROAD

**251** 

artworks in The Broad's inaugural installation

60,000

followers on social media by opening day

109,662

visitors in the first 45 days

428,840

reservations in the first five months



# When The Broad opened to

the public on Sept. 20, 2015, it not only became Los Angeles' newest contemporary art museum, it also became the hottest ticket in town. A month before the museum opened, when online ticket reservations debuted, the museum's website crashed from the demand. Six weeks later, nearly 275,000 free tickets had been reserved. And the museum had only been open two weeks.

The Broad had been a long time in coming. It opened five decades after Eli and Edye Broad moved to Los Angeles, over four decades after they began collecting contemporary art, 31 years after they started The Broad Art Foundation as a public lending library, and five years after construction of the museum's innovative architectural design began on Grand

Avenue in downtown Los Angeles. It represented the culmination of the Broads' lifelong passion for art and the deep desire to share that art with as many people as possible. The public intersection of their collection and an architecturally distinct home to show the art came together with a generous gift to their adopted hometown: a museum, the art within and free general admission.

The museum opened to great fanfare: previews for more than 400 media from around the world, two dinner celebrations for nearly 1,500 artists, civic leaders, national and international museum directors, celebrities and friends, including former President Bill Clinton, and a public dedication with more than 600 civic, community and business representatives, including California Gov. Jerry Brown



THE ARTS











and Los Angeles Mayor Eric Garcetti. The civic dedication featured two 88-foot ribbons that stretched from the top of the museum's distinct honeycomb façade to the expansive sidewalk below, released when Eli and Edye Broad pushed a giant red button in a symbolic opening of their gift to the city.

But the real celebration came on opening day, as people lined up around the block to see the more than 250 works of contemporary art in the museum and under the sublime skylit third-floor gallery. They wanted to ride the 105-foot escalator that would transport them through the sculptural second-floor core of the museum, where the art was stored when not on display or on loan to another museum. They wanted to peek into that storage to glimpse the art that might be on the gallery walls on a future visit to The Broad.

They came to experience contemporary art: iconic works by Andy Warhol, Jeff Koons' 12-foot-tall blue *Balloon Dog*, Icelandic artist Ragnar Kjartaanson's The Visitors—a 64-minute, nine-screen video installation of musicians playing and singing, one to each screen, perfectly and poignantly synchronized. They were drawn to Yayoi Kusama's Infinity Mirrored Room, standing one at a time for a minute on a small platform in a mirrored room, surrounded by LED lights that give visitors an intensely personal experience of space and time, reflection and infinity.

The Broad's first audience reflected Los Angeles: all ages, residents and tourists alike, and every shape and size and color. The art and the architecture was for them to experience, to share with friends and family on future visits, and to have the freedom to visit favorite artworks, again and again.



"THE LIFE OF A PAINTING DEPENDS ON THE INTIMACY WITH WHICH SOMEBODY CONTINUES TO LOOK AND FIGURE OUT ALL OF THE DECISION-MAKING THAT WENT INTO THAT PAINTING."

- ERIC FISCHL, ARTIST



# THE UN-PRIVATE COLLECTION

# DELVING INTO THE MIND OF THE ARTIST

Long before opening its doors to the public, The Broad attracted 8,500 people to nine art talks about the artists and artworks that would ultimately be displayed in the museum.

The Un-Private Collection series—eight public talks around Los Angeles and one in Miami featuring Broad collection artists in conversation with cultural leaders, plus one special event that invited visitors to see The Broad's top-floor gallery still under construction before art walls went up—gave Angelenos a glimpse of the type of programming that would be offered when the museum officially opened.

The series of talks, named to capture the spirit of private collectors Eli and Edye Broad's decision to create a public collection, began with the Broads themselves. Rarely taking the stage to speak publicly as a couple, the Broads appeared at the Central Public Library in downtown Los Angeles with Founding Director Joanne Heyler, just blocks west from their museum's construction site. They discussed their decades-long history of collecting, their passion for making

contemporary art accessible to the widest possible audience and their hopes for the museum. They also made light of Eli's eight-figure purchase of an Andy Warhol soup can painting after Edye had almost bought one decades earlier.

"Ferus Gallery had all the soup cans," Edye said, "and they were \$100 a piece, and I wanted to buy one and I thought, 'If I bring home a painting of a Campbell's soup can, Eli would think that I had lost my mind.' We didn't have a lot of money then. That would have evoked some discussion."

After the Broads' talk, The Un-Private Collection series featured prominent artists, including Jeff Koons, Takashi Murakami and The Broad's architect, Elizabeth Diller, in a special event at Art Basel Miami Beach. Koons and Murakami attracted the largest audiences—with 1,800 people attending Koons' interview by film director John Waters and 1,200 for Murakami's sit-down with writer Pico lyer. An additional 32,000 people streamed video of the talks online to hear the artists discuss the meaning of their work, their

methods, their politics and their personal backgrounds. Paired with interviewers who were well-known in their own right—artist Eric Fischl with Renaissance man Steve Martin, film director Ava Duvernay with artist Kara Walker, for example—and taking questions from the audience, the artists were accessible and open to intimate conversations. The Duvernay and Walker talk sold out within a day, with the Los Angeles Times comparing the fervor to that of a pop concert.

The Broad had a unique, final act before its opening: Sky-lit, which offered the public access to the museum under construction—a viewing of the museum's third-floor gallery before art walls were installed. People flocked to The Broad: the event sold out in 30 minutes and drew 3,500 visitors on the Sunday of a holiday weekend. The acre of wide-open space, topped with hundreds of skylights and accessed by the freight elevator still lined with plywood, inspired hundreds of Instagram photos and Twitter messages by awestruck museum-goers.

Two temporary artworks brought more light and city sounds into the space. Artist BJ Nilsen's *DTLA* captured the sounds of the city, recorded in local neighborhoods in downtown Los Angeles, and played them, distorted and collaged, through a single row of speakers spanning the expansive gallery. After the sun set, Yann Novak's *Stillness* began, a 20-minute film projected onto a 200-foot gallery wall—juxtaposing the colors found in the light and atmosphere of Los Angeles with those found in Seattle to create a meditative, evolving lightscape.

Now that the museum is open, The Un-Private Collection will continue in 2016, along with special exhibitions and other programming series designed to illuminate the Broad collection in new ways for the public.

**9** talks i

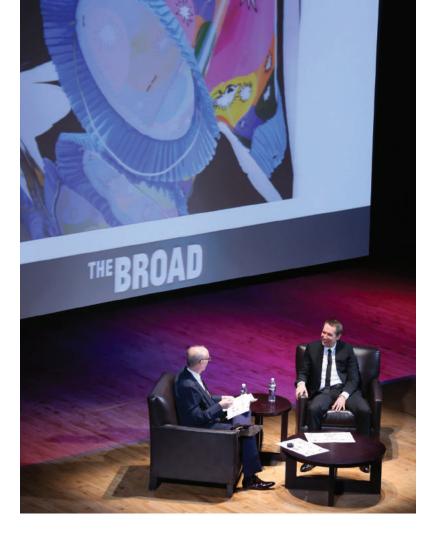
talks in seven venues around L.A.

8,500

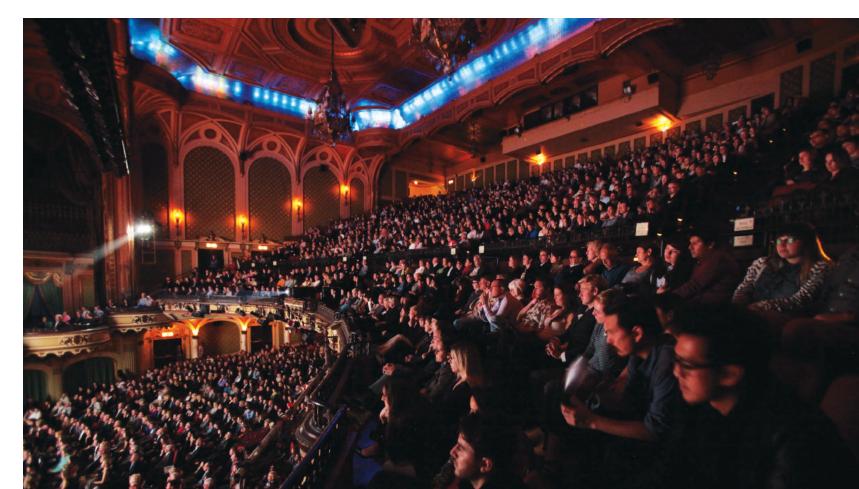
people attended
The Un-Private
Collection talks before
The Broad opened

**32,000+** online views

on YouTube









1,994

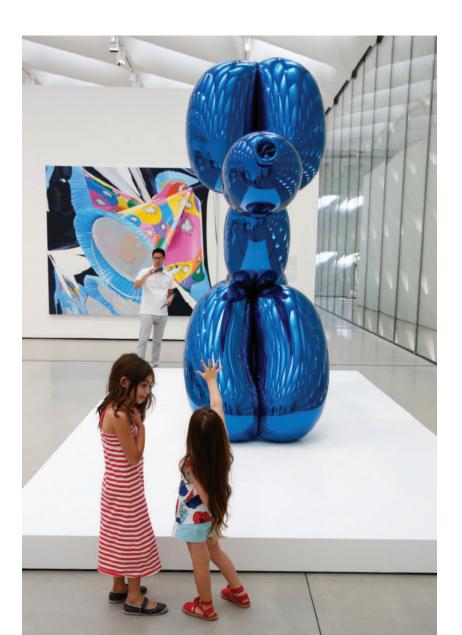
contemporary artworks in the Broad collection

# **573 WORKS**

by Joseph Beuys most works in the collection by a single artist

200+

artists in the **Broad collection** 



# THE BROAD COLLECTION

# **FOLLOWING** THE ARC OF **AN ARTIST**

Andy Warhol's silkscreen paintings of Marilyn Monroe, made just months after her death. Takashi Murakami's 82foot painting that meditates on the 2011 tsunami and earthquake in Japan. Kara Walker's intricate silhouette cutouts that provoke reflection on the painful truth of slavery. Julie Mehretu's interpretation of the Arab Spring and the Egyptian capital that was its cradle. And Barbara Kruger's graphically powerful painting that became an important image for the feminist movement.

They are among the 2,000 artworks by 200 artists that comprise the Broad collection. Five decades in the making, it has become one of the world's leading collections of postwar and contemporary art.

One of the hallmarks of the collection is the depth of representation of an artist's work, reflecting a commitment to that artist and showing the evolution of her thinking and practice. That depth of

collecting enables the Broad collection to be a key resource for museums worldwide that present retrospectives of an artist's work.

The collection includes the largest holdings of Cindy Sherman's work—124 of her photographs featuring the artist as her own model playing out feminine stereotypes—and the largest collection in the Western U.S. by German conceptual artist Joseph Beuys.

Eli and Edye Broad's taste in and interpretation of contemporary art inspires the entire collection: their experiences in the 1980s visiting artists' studios in the East Village and Soho; their attraction to strong social and political themes reflected in works by David Wojnarowicz, Cady Noland, Kara Walker, Anselm Kiefer and Mike Kelley; their love of more than five decades of paintings and sculpture by Cy Twombly; their deep friendship with artists like Roy Lichtenstein and Jeff Koons; and their early attraction to works by Jean-Michel Basquiat and Cindy Sherman. Artists from Los Angeles are wellrepresented, as works by John Baldessari, Ed Ruscha, Barbara Kruger, Mark Bradford, Mark Grotjahn and Sterling Ruby have prominence in the collection.

With one new artwork added each week on average, the collection continues to grow and remains truly contemporary. Robert Longo's charcoal drawing of an advancing line of police in riot gear during the racial unrest in Ferguson, Missouri, and a provocative single-room installation featuring a robot created by Los Angeles artist Jordan Wolfson are among the collection's most recent acquisitions and more evidence that the collection continues to accept, unflinchingly, artwork that challenges the viewer and leaves no subject off-limits.

"MORE ART, MORE
ARTISTS, MORE PEOPLE
LOOKING AT ART,
MORE OPTIONS, MORE
DIVERSITY. IT'S TOTALLY
COMPLEMENTARY. WITH
THE TWO INSTITUTIONS
ACROSS THE STREET
FROM EACH OTHER, WE
NOW HAVE SOME OF
THE MOST IMPORTANT
ART CREATED IN THE
LAST 50 YEARS."

- PHILIPPE VERGNE, DIRECTOR, MOCA





# **82 FEET**

length of longest artwork in collection—In the Land of the Dead, Stepping on the Tail of a Rainbow by Takashi Murakami



318

skylights over the third-floor gallery

**650** 

tons of steel reinforcing the "veil" structure of the museum

50,000

square feet of gallery space



# THE BROAD ARCHITECTURE

# A NEW LANDMARK FOR LOS ANGELES

# Coral reef. Sugar cube. Skin. Cheese grater.

The Broad has been compared to many things, but for the architects, it is simply "the veil and the vault."

Diller Scofidio + Renfro, the New York-based firm that designed the High Line park in lower Manhattan, encased the museum in a porous exoskeleton that allows diffuse light into the galleries and then made the art storage a centerpiece of the design, turning the traditional "back of house" functions of a museum into part of the public's experience.

"We gave storage a high status in this design," said Elizabeth Diller, principal-in-charge of Diller Scofidio + Renfro. "It lives in the 'vault,' a large sculptural volume, trapped in the porous outer shell, the 'veil,' which filters daylight into the galleries and other spaces. But the vault is always in public view. You see it from the street. It looms above you as you enter the building. You're always circulating around and through it on your way into and out of the galleries."

Designing The Broad was a challenge from the start: how to create a museum that combined both public gallery space and enough storage for 2,000 artworks in a footprint that was one square block with a height limit of three stories. And it would be located on Grand Avenue, the heart of Los Angeles culture, across the street from the iconic and exuberant steel forms of Frank Gehry's Walt Disney Concert Hall.

Given their lifelong love of great architecture, and the belief that the best designs emerge from architectural competitions, Eli and Edye Broad invited six world-renowned architects to submit ideas in 2010. They selected Diller Scofidio + Renfro, who also designed the Institute of Contemporary Art on Boston Harbor and the renovation and expansion of Lincoln Center. Their plan for The Broad not only wowed conceptually but also captured the fundamental nature of the Broad collection and its very public focus.

The museum, at once elegant and effacing, is an ideal foil to striking, bright Disney Hall across the street. As visitors enter the cavernous lobby, under the silver shadowy

curves of the second-floor vault that shape the ceiling, they tunnel through the vault via a dramatic escalator, arriving in the ethereal light of the third-floor gallery. More than 300 skylights draw in daylight that bathes the 35,000 square feet of column-free gallery space in diffuse natural light, while the porous veil wraps the museum's façade, offering uniquely framed glimpses of downtown Los Angeles. The vault, encased in dark velvety grey Venetian plaster, offers glimpses of the interior workings of the museum and the lending library through windows along the staircase that takes visitors back down to the first floor, where 15,000 square feet more of gallery space awaits.

Adjacent to the museum is a public plaza, also designed by Diller Scofidio + Renfro, that features an intimate lawn, surrounded by a grove of 100-year-old Barouni olive trees, providing an urban oasis for museum-goers, local residents and nearby workers.

With the opening of The Broad, Grand Avenue is home to more world-class architecture in just a few blocks than can be found in any other such stretch in the world: the High School for the Visual and Performing Arts by Wolf Prix, the Cathedral of Our Lady of the Angels by Rafael Moneo, Disney Hall by Frank Gehry, MOCA by Arata Isozaki, and now The Broad by Diller Scofidio + Renfro.





"WHERE DISNEY HALL BILLOWS AND RADIATES ITS TITANIUM GLEAM, THE BROAD IS POROUS LIKE A SPONGE. ONE CAN SLIP BEHIND THE PERFORATED SCREEN FACADE WITHOUT EVEN **ENTERING THE BUILDING. DETAILS THROUGHOUT** ARE EXQUISITELY EXECUTED, FROM THE VENETIAN **PLASTER WALLS** MORE COMMONLY **SEEN IN PALACES** TO THE FINELY SCULPTED CURVE OF THE BLACK **TERRAZZO** STAIRCASE. THE CIRCULAR GLASS **ELEVATOR RISING** THROUGH THE **VERY CENTER** IS A THING OF BEAUTY."

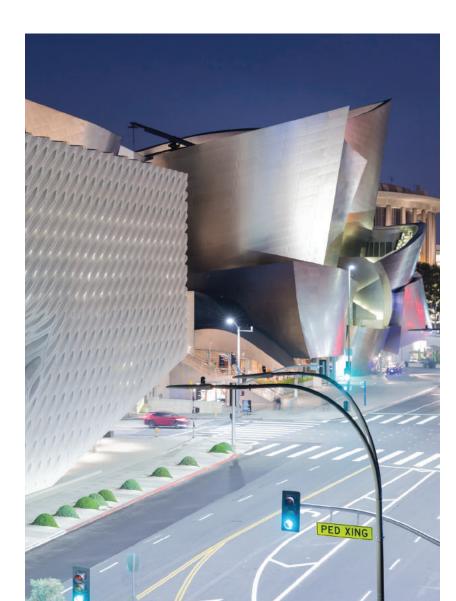
- THE WALL STREET JOURNAL



buildings created by world-renowned architects within four city blocks

# **MILLION**

estimated yearly visitors to **Grand Avenue** 



# **GRAND AVENUE**

# A VIBRANT CITY **CENTER FOUR DECADES IN** THE MAKING

When Eli and Edye Broad moved

to Los Angeles in 1963, Grand Avenue in downtown Los Angeles was mostly empty, razed of many of its aging Victorian homes only four years earlier. Foot traffic was nonexistent—with barren parcels giving way only to parking lots. Grand Avenue had been less than grand since the 1930s, when it was home to a vibrant residential and commercial neighborhood.

Today, the same stretch of street—from Cesar E. Chavez Avenue to Fourth Street, at the peak of Bunker Hill—is a bustling center for the arts.

Eli Broad saw what many others could not: the need for a vibrant city center and the potential for Grand Avenue to blossom into the cultural heart of the city that would rival New York, London and Paris.

Today, that vision is closer to becoming a reality, and The Eli and Edythe Broad Foundation has long supported the region's cultural arts. The Broads joined the Grand Avenue transformation efforts in 1979, with the founding of the Museum of Contemporary Art. Then, in the mid-1990s, when Walt Disney Concert Hall was stalled, Eli joined with then-Mayor Richard Riordan to rally the city behind a fundraising drive to build a new symphony hall. The Frank Gehry-designed Walt Disney Concert Hall opened to worldwide acclaim in 2003.

That project made clear the lack of a master plan for Grand Avenue, as parcels deteriorated because their owners—the city and the county—could never agree on a shared development strategy. Eli formed the Grand Avenue Committee to bring the branches of local government together to shape a vision for a cultural and civic district. Through negotiations with the developer, the Related Companies, Eli secured a \$50 million nonrefundable deposit. And when the economy sunk in 2008, stalling the Grand Avenue Project, that \$50 million enabled the construction of a 12-acre park stretching from City Hall

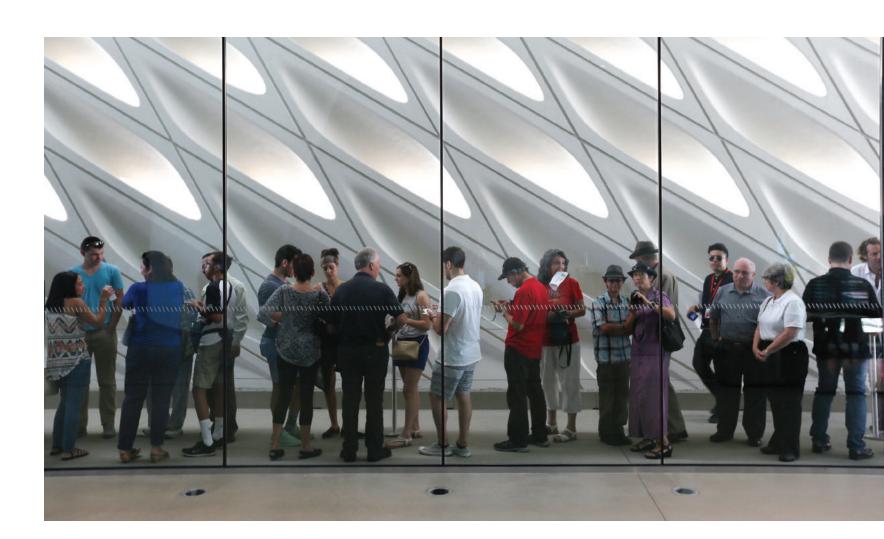
to the Music Center without spending a dollar of public funds. Called Grand Park, it has become a gathering place for civic and holiday celebrations, drawing some 40,000 residents on New Year's Eve.

The Broad museum, funded entirely by Eli and Edye Broad, further jump-started the project when construction began in 2011, signaling to banks and lenders that Grand Avenue was alive and well. It worked, and by early 2015, a 17-story residential tower opened next door to the museum. The last phase of the project is a retail-residential development across that street from Disney Hall that will be designed by Frank Gehry and will feature a luxury hotel, condominiums, shops and restaurants.

With the arrival of The Broad—along with its public plaza and adjacent restaurant, Otium—Grand Avenue stands to be the pedestrian arcade it once was, nearly a century ago.

"WE ALSO GOT INFECTED BY ELI'S PASSION FOR THE GRAND AVENUE PROJECT, WHICH IMAGINED AN URBANIZED DOWNTOWN WITH DENSITY, ACTIVITY, WITH BUZZ, AND WE ASKED OURSELVES HOW COULD A SINGLE BUILDING PARTICIPATE IN THIS EFFORT?"

- ELIZABETH DILLER, DILLER SCOFIDIO + RENFRO







"ART IS
SUPPOSED TO
BE THIS
LIVING, VITAL
CONVERSATION
BETWEEN MORE
THAN JUST AN
ARTIST AND A
COLLECTOR, BUT
BETWEEN AN
ARTIST AND AS
MANY EYES AS
CAN VIEW
THE WORK."

- KARA WALKER, ARTIST



# THE BROAD ART FOUNDATION

# SHARING A PUBLIC COLLECTION WITH THE WORLD

**Artworks in the** Broad collection have an enviable itinerary. While other artworks hang in one museum or sit in storage, pieces in the Broad collection travel the world from Dubai to Buenos Aires to Montreal.

Now, even when the works are in storage, their home is a state-of-the-art vault and elegant display at The Broad, visible to everyone who passes through and as readily available to other museums as books in a library.

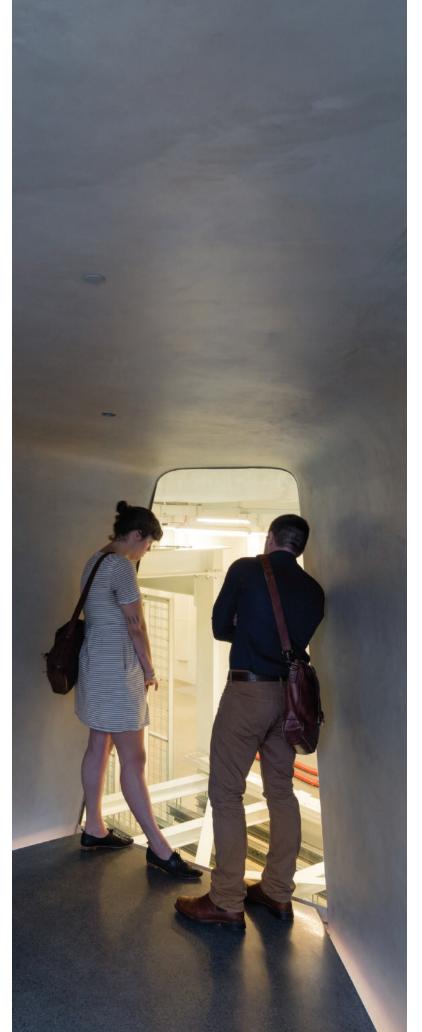
Since its founding in 1984, The Broad Art Foundation has invited curators and museum directors worldwide to Southern California to view works for exhibitions.

The actual process of lending, however, was not so easy with a collection spread across several Los Angeles warehouses. Curators had to make appointments, trek to far-flung locations, and wait while artwork was unpacked.

That changed with the opening of The Broad in downtown Los Angeles. With their own museum, Eli and Edye Broad knew they could display more of the collection and continue the public lending program that has always been core to their vision.

Today, The Broad Art Foundation—along with the nearly 2,000 works in the Broad collection—is headquartered at The Broad, with the artworks stored in the second-floor "vault," a massive grey-cement-clad core of the building. Virtually the entire collection is stored in one place—with room for significant growth. Visitors to The Broad can see the vault's undulating walls from the lobby—even from the sidewalk along Grand Avenue—and they can peer inside through overlook windows in the stairwell.

There, visitors might see registrars and museum curators sorting through artworks hung on painting racks, selecting works for an exhibition in Mexico City or Paris or North Carolina.





loans of artwork since 1984

# **500+**

number of museums that have borrowed works from The Broad Art Foundation

# 1st LOAN

by The Broad Art
Foundation: Robert
Rauschenberg's
Untitled, 1954 to the
Delaware Art Museum



THE BROAD
ART
FOUNDATION
BOARD OF
GOVERNORS

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JNDATION Edythe L. Broad
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Former U.S. Ambassador to the United Kingdom

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Chief Executive Officer
Oaktree Capital Group, LLC

# INSTITUTIONS AND BUILDINGS

The Eli and Edythe Broad Foundation helped create and/or fund these institutions and architecturally significant projects.



2015

THE BROAD

Los Angeles

Diller Scofido + Renfro



2014

BROAD INSTITUTE

Cambridge, Massachusetts Elkus/Manfredi Architects



## 2012

ELI AND EDYTHE BROAD ART MUSEUM AT MICHIGAN STATE UNIVERSITY

East Lansing, Michigan Zaha Hadid Architects



# 2011

ELI AND EDYTHE BROAD CENTER OF REGENERATION MEDICINE AND STEM CELL RESEARCH AT UCSF

San Francisco

Rafael Viñoly Architects PC



# 2010

ELI AND EDYTHE BROAD CENTER OF REGENERATIVE MEDICINE AND STEM CELL RESEARCH AT USC

Los Angeles

Zimmer Gunsul Frasca Architects LLP



# 2009

HIGH SCHOOL FOR THE VISUAL AND PERFORMING ARTS

Los Angeles

Coop Himme(I)blau /



# 2008

THE BROAD STAGE AND THE EDYE SECOND SPACE AT SANTA MONICA CITY COLLEGE

Santa Monica, California

Renzo Zecchetto Architects



# 2008

BROAD CONTEMPORARY ART MUSEUM AT LACMA

Los Angeles

Renzo Piano Building Workshop



# 2007

ELI AND EDYTHE BROAD CENTER OF REGENERATIVE MEDICINE AND STEM CELL RESEARCH AT UCLA

Los Angeles

Pelli Clarke Pelli Architects



# 2006

EDYTHE AND ELI BROAD ART CENTER AT UCLA

Los Angeles

Richard Meier & Partners Architects



2006

BROAD INSTITUTE

Cambridge, Massachusetts Elkus/Manfredi Architects



# 2006

GRAND AVENUE PROJECT

Los Angeles

Frank Gehry Partners



# 2004

THE ELI AND EDYTHE BROAD PLAZA AT CALTRANS DISTRICT 7 HEADQUARTERS

Los Angeles

Thom Mayne, Morphosis Architects



# 2003

WALT DISNEY CONCERT HALL

Los Angeles Frank Gehry Partners



# 2002

BROAD CENTER FOR THE BIOLOGICAL SCIENCES AT CALTECH

Pasadena, California

Pei Cobb Freed & Partners Architects, LLP



# 1994

THE EDYTHE AND ELI BROAD CENTER AND BROAD HALL,

PITZER COLLEGE
Claremont, California

Gwathmey Siegel & Associates Architects



1992

EDYTHE AND ELI BROAD GRADUATE ART STUDIOS, CALARTS

Valencia, California Grinstein/Daniels



# 1986

MUSEUM OF CONTEMPORARY ART

Los Angeles

Arata Isozaki & Associates

# **GRANTS 2014-2015**

# **SCIENTIFIC** | **MEDICAL RESEARCH GRANTS**

# SCIENTIFIC | MEDICAL RESEARCH GRANTS (\$1 MILLION AND UP)

Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA Eli and Edythe Broad Center for Regenerative Medicine and Stem Cell Research at USC UCLA David Geffen School of Medicine.

**Division of Digestive Diseases** 

# SCIENTIFIC | MEDICAL RESEARCH GRANTS (\$100,000 AND UP)

Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research at UCSF

# **EDUCATION GRANTS**

# **EDUCATION GRANTS (\$1 MILLION AND UP)**

Achievement First Achievement School District California Charter Schools Association California Community Foundation

Educators for Excellence **Education Reform Now** Families for Excellent Schools

Foundation for Excellence in Education

Harvard University

Michigan Education Excellence Foundation

Michigan State University

National Alliance for Public Charter Schools

National Association of Charter School Authorizers

Pitzer College

Policy Innovators in Education Network Results in Education Foundation Scholarship Management Services Silicon Schools Fund, Inc.

Success Academy Charter Schools

Teach For America

Teach For America Leadership for Educational Equity

# **EDUCATION GRANTS (\$100,000 AND UP)**

4.0 Schools

50CAN

Alliance College-Ready Public Schools Black Alliance for Educational Options

**Building Excellent Schools** Center for American Progress

Chiefs for Change

Cities for Education Entrepreneurship Trust

D.C. Public Education Fund

**Education Trust** 

**Education Week** 

EdVoice Institute

ExED

Harlem Children's Zone

**Hunt Institute** 

KIPP

KIPP New Jersey

Library Foundation of Los Angeles

Mastery Charter Schools Foundation

National Center on Time & Learning

National Council on Teacher Quality

NewSchools Venture Fund

Partnership for Educational Justice

Partnership for Los Angeles Schools

Partnership for Public Service

Progressive Policy Institute

**Public Counsel** 

Results in Education Foundation

School of Visual and Performing Arts

Stand For Children

Students Matter

Teach Plus

The Leadership Conference Education Fund

The Rhode Island Foundation

The Thomas B. Fordham Institute

Thrive Public Schools

Uncommon Schools, Inc.

United Negro College Fund, Inc.

United Way of Greater Los Angeles

Vision to Learn

Wayne State University

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# THE ARTS AND CIVIC GRANTS

# THE ARTS AND CIVIC GRANTS (\$1 MILLION AND UP)

Eli and Edythe Broad Art Museum at Michigan State University Los Angeles Philharmonic Association Museum of Contemporary Art The Detroit Institute of Arts

# THE ARTS AND CIVIC GRANTS (\$100,000 AND UP)

Colburn School of Performing Arts
HistoryMakers
International Centre for Missing & Exploited Children
J. Paul Getty Trust
Museum of Modern Art
The Jewish Federation/United Jewish Fund
Tony Blair Faith Foundation
UCLA Foundation
Wilshire Boulevard Temple

# FINANCIAL STATEMENT

The Broad Foundations
Statement of Financial Position (unaudited)
As of September 30, 2015 (at fair value)

| ASSETS  | Cash Investments Fixed Assets Art Collection Program Related Investments Other Assets  Total Assets | \$117,000,000<br>\$1,945,000,000<br>\$2,000,000<br>\$943,000,000<br>\$9,000,000<br>\$12,000,000<br>\$3,028,000,000 |
|---|---|--|
| LIABILITIES AND<br>UNRESTRICTED<br>NET ASSETS | Grants Payable Other Liabilities Unrestricted Net Assets Total Liabilities and Unrestricted Assets  | \$533,000,000<br>\$8,000,000<br>\$2,497,000,000<br>\$3,028,000,000   |

The most recent financial statements audited by Pricewaterhouse Coopers may be found at www.broadfoundation.org.

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x 145 x 3 in., © Glenn Ligon – 100 / Yayoi Kusama, Infinity Mirrored Room - The Souls of Millions of Light Years Away, 2013, wood, metal, glass mirrors, plastic, acrylic panel, rubber, LED lighting system, acrylic balls and water, 113 1/4 x 163 1/2 x 163 1/2 in., © Yayoi Kusama - 101 / Christopher Wool, Untitled, 1990, enamel and acrylic on nine aluminum panels, 96 x 64 in., © Christopher Wool - 100, 101 / Jeff Koons, Tulips, 1995-2004, mirror-polished stainless steel with transparent color coating, 80 x 180 x 205 in., © Jeff Koons - 100, 101 / Mark Bradford, Corner of Desire and Piety, 2008, 72 collages: acrylic gel medium, cardboard paper, caulking, silkscreen ink, acrylic paint and additional mixed media, 135 3/4 x 344 1/4 in., © Mark Bradford - 100, 113 / Julie Mehretu, Cairo, 2013, ink and acrylic on canvas, 120 x 288 in., © Julie Mehretu - 100 / Anselm Kiefer, Deutschlands Geisteshelden, 1973, oil and charcoal on burlap mounted on canvas, 120 1/2 x 267 3/4 in., @ Anselm Kiefer - 100 / Lari Pittman, Like You, 1995, oil and enamel on five mahogany panels, © Lari Pittman - 100 / Eric Fischl, Haircut, 1985, oil on linen, 104 x 84 in., © Eric Fischl - 102 / Chuck Close, John, 1971-72, acrylic on gessoed canvas, 100 x 90 in., © Chuck Close - 106 / Jeff Koons, Balloon Dog (Blue), 1994-2000, mirror-polished stainless steel with transparent color coating, 121 x 143 x 45 in., © Jeff Koons - 106 / Jeff Koons, Party Hat, 1995-97, oil on canvas, 114 3/8 x 127 5/8 in., © Jeff Koons - 106 / Takashi Murakami, DOB in the Strange Forest (Blue DOB), 1999, fiber-reinforced plastic, resin, fiberglass, acrylic and iron, 60 x 152 x 137 in., © 2015 Takashi Murakami, Kaikai Kiki Co., Ltd. All Rights Reserved 108, 109 / Takashi Murakami, Oval Buddha Silver, 2008, sterling silver, 61 1/2 x 31 3/4 x 30 3/4 in., © 2015 Takashi Murakami, Kaikai Kiki Co., Ltd., All Rights Reserved - 108, 109 / Takashi Murakami, In the Land of the Dead, Stepping on the Tail of a Rainbow, 2014, acrylic on canvas, 118 1/8 x 984 1/4 x 2 7/8 in., © 2015 Takashi Murakami, Kaikai Kiki Co., Ltd., All Rights Reserved - 108, 109 / Jack Goldstein, Untitled (#61 Burning City), 1961, acrylic on canvas, 84 x 132 in., © Jack Goldstein - 109 / Jeff Koons, Three Ball 50/50 Tank (Two Dr. J Silver Series, Wilson Supershot), 1985, glass, steel, distilled water, and three basketballs, 60 1/2 x 48 3/4 x13 1/4 in., © Jeff Koons -109, Hufton + Crow - 112, 113 / Urs Fischer, Ontitled, 2012, © Urs Fischer - 112 / Robert Therrien, No title, 1993, © 2015 Robert Therrien, Artists Rights Society (ARS) - 113 / Warren Air - 114 / Ellsworth Kelly, Blue Red, 1968, oil on canvas, two joined panels, 73 3/4 x 161 1/8 in., © Ellsworth Kelly - 118 / Kara Walker, African't, 1996, cut paper on wall, 144 x 792 in., © Kara Walker - 118 / Paul Pfeiffer, Four Horsemen of the Apocalypse #10, 2004, Fuji Digital chromogenic print, 48 x 60 in., © Paul Pfeiffer - 120

