



**Making the
Moon Beast**

Alums shake
up TV

A new paint
for artists and
astronauts



How a 3-D
printed monster
helped save
stop-motion
animation.
See page 30.



ON THE COVER: A 3-D printed, stop-motion animated monster from the 2106 film *Kubo and the Two Strings*

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CFA ON INSTAGRAM



CFA students in Assistant Professor of Movement Yo-EL Cassell's movement class used paint as fuel for their imagination.

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A NOTE FROM HARVEY

Arriving in January 2018 as the new dean of College of Fine Arts at Boston University, I quickly learned that people asked three questions with regularity. First, "How do you like Boston?" Second, "What is your vision for the college?" Third, often in a whisper, "So... what does a dean do?"

I love Boston's energy and the sense of possibility it offers students. It is a city that celebrates education and embraces those who dedicate themselves to the pursuit of knowledge. It also acknowledges its complicated history as both a trailblazer (e.g., the revolutionary spirit of the 1770s) and a laggard (e.g., the painful slowness of racial integration in the 1970s). Today, Boston is in the midst of a renaissance. The arts are flourishing. Buildings are reaching new heights; the skyline is changing every year. Boston is amazing.

I want every BU student, as well as their friends and families, to have a meaningful arts experience: to see a play at Booth Theatre, an exhibition in Stone Gallery, a concert at Tsai Performance Center or Symphony Hall. CFA should be a beacon for the arts on campus, in Boston, and throughout the nation. It should attract not only the very best artist-scholars to study and teach at BU, but also neighbors from Brookline, Boston, and beyond to encounter the future of theater, music, and the visual arts. At all times, CFA must commit to championing diverse and inclusive work and serve as a model of professional ethics and excellence.

As dean, I help people understand that there is no better investment of their energy, money, and time than the arts. Imagine a wedding without music, dancing, photography, brilliantly designed cakes and invitations; Halloween without costumes; summers without movies; commuting without songs on the radio. Almost every aspect of our lives is touched by the fine and performing arts. Numerous studies have evidenced the power of the arts. Engineers perform better academically when they study on an arts-rich campus. Medical patients experience less pain when they can listen to their favorite songs. Children develop a more profound sense of empathy when they encounter a story presented onstage rather than within a book. The arts define our lives.

I love talking about BU and sharing stories of the successes of our students, staff, faculty, and alumni. It is this desire to spotlight your excellence in a more dynamic manner that led to the retirement of *Esprit* and the launch of *CFA*, our new semiannual magazine. I hope you will enjoy reading this inaugural issue. Let me know what you think at cfadean@bu.edu.

Harvey Young, Dean of CFA

WRITE: Share your thoughts on this brand spanking new magazine—and anything else CFA-related—at cfaalum@bu.edu.

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Natasha Moustache

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WHAT REMAINS TO BE SEEN

Artist of abstraction Howardena Pindell ('65) ponders identity and memory in a career-length retrospective

By Mara Sassoon



Previous spread: *Video Drawings: Swimming* (1975) Chromogenic print; framed: 14 x 16 1/8 in.

Left: *Video Drawings: Abstract* (1976) Chromogenic development print; framed: 13 1/4 x 16 in.



Above: *Self-Portrait* (1963–64) Oil on canvas; 29 3/4 x 26 3/4 in.

WHEN HOWARDENA PINDELL recalls her BU days, her time spent in professor emeritus Conger Metcalf's drawing class is especially vivid. "We were always drawing eggs," she says.

All those eggs had a purpose, of course. "It helped us learn to control our use of value," the lightness and darkness of a color. "BU had a really excellent program for learning figuration—I was trained as a figurative artist," says Pindell ('65), a 1983 Distinguished Alumni Award winner who teaches in Stony Brook University's department of art.

After BU, Pindell earned an MFA at Yale, which challenged her training in figuration. It was the late '60s, a tumultuous time for the art world, when new and radical movements were gaining ground—abstraction, minimalism, pop art. Grad school exposed Pindell to all of them. "Some people frowned on anyone who was a figurative painter, and so I had kind of an inner struggle about my work," she says.

Representational imagery wars with abstraction throughout her work, now on view at the Brandeis University's Rose Art Museum in a career-length retrospective, *Howardena Pindell: What Remains To Be Seen*. The chronological exhibition, which spans more than 50 years of Pindell's career, premiered at the Museum of Contemporary Art Chicago.

In the exhibition's 144 works—from a self-portrait she composed during her time at CFA (*Self-Portrait*, 1963–64) to more recent vibrant and abstract collages—Pindell pays homage to her experiences as a female artist of color.

In 1969, Pindell was the first African American woman to become a curator at the Museum of Modern Art in New York.

"Working in a major museum made a big difference in my own art," she says. "I could go into the museum to study the work on the days when the public was not admitted, and in some cases if I needed to catalogue something I would have hands-on access to a work."

At the museum, she became enthralled with the art of abstract painters Wassily Kandinsky and Larry Poons—whose pieces embrace geometric shapes and rely heavily on mark making—and with the more figurative, intensely colored pastels of Odilon Redon.

Their influence is especially evident in Pindell's *Video Drawings* series, a hybrid of figuration and abstraction. She would affix drawings she made on acetate to an image playing on a television screen, and then photograph the composition. In *Video Drawings: Abstract* (1976) ambiguous figures in white robes that appear to be participating in a parade are disrupted by Pindell's crisscrossing black arrows



Above: *Untitled #5B (Krakatoa)* (2007) Mixed media on paper collage; 13 x 21 1/4 x 2 1/2 in.

All images courtesy of Museum of Contemporary Art Chicago

and red circles. The curve of the television set is visible at the top of the composition, imbuing it with more movement.

In *Video Drawings: Swimming* (1975), Pindell enlivens the frozen image of a blurred man diving into an illuminated pool with frenetic Kandinsky-like marks composed of random dots, arrows, and numbers.

A native of Philadelphia, Pa., Pindell grew up during segregation, and many of her works touch upon racism, inequality, and identity. She recalls a childhood visit to a root beer

stand in Kentucky, where she and her father "were given these chilled mugs, and at the bottom of the mugs were giant red circles. I was stunned when I asked my father why that was, and I learned that it meant it was dishware reserved for black people. So, I like to say that I was scared by a circle," she says.

The circle recurs in many of her pieces, including two abstract collages, *Untitled #4D* (2009) and *Untitled #5B (Krakatoa)* (2007). Both works comprise circles and ovals punched out of colorful drawings she'd created over



Left: *Autobiography: Water (Ancestors/Middle Passage/Family Ghosts)* (1988) Acrylic and mixed media on canvas; 118 x 71 in.

Right: *Detail from Autobiography: India (Lakshmi)* (1984) Mixed-media collage on paper; 17 3/4 x 26 3/4 x 2 in.

several years (the hole punch is a prominent tool in her arsenal—she has them in a variety of sizes). The circles overlap to form a larger amorphous shape, which gives works like *Untitled #5B (Krakatoa)* a three-dimensional quality, with many circles standing on their edges, bursting out of the composition.

“To make them stand up, I used Jade glue. I’d prop the pieces up with Play-Doh, and then the glue would set and I’d remove the Play-Doh. It’s very secure and also archival,” Pindell says. The type of glue is made specifically for archival book and canvas repair. “I’m interested in archival materials since work can deteriorate—that’s something I got from my museum job, seeing how work deteriorates over time.”

A series of mixed-media works, including *Autobiography: India (Lakshmi)* (1984) and *Autobiography: Water (Ancestors/Middle Passage/Family Ghosts)* (1988), are influenced by a car accident that left Pindell with short-term amnesia that affects her to this day. For these works, “I’d lie down on a canvas and trace my body, cut it out, trim it, and sew it back into the canvas,” she says.

The pieces, like memory, are visually fragmented, with torn imagery collaged on paper. Pindell has painted the spaces in between. “The presence of my body is very clearly in the works throughout this series—the feeling was, I could have died in the car accident, and I just wanted to express myself and my points of view.” ●

HOWARDENA PINDELL: WHAT REMAINS TO BE SEEN IS ON VIEW AT BRANDEIS UNIVERSITY’S ROSE ART MUSEUM FROM JANUARY 24 THROUGH JUNE 16, 2019.



RISING STAR

Rock 'n' Roll Baritone

By Andrew Thurston

OPERA SINGER BENJAMIN TAYLOR ('14,'16) is a resident artist at the Pittsburgh Opera, where he most recently played Prince Yamadori in *Madama Butterfly*; in 2019, he'll be onstage as Schaunard in *La bohème*. *New York Classical Review* has called him "an immensely powerful baritone."

First moment you realized you could really sing Elementary school. PE and chorus were the same period, but you had to take a test to get into choir. I got a perfect score on it; I saw that I could match pitch.

Last song you sang in the car *Blinded by the Light* by Manfred Mann's Earth Band. Right now, I've been listening to a lot of classic rock.

Mozart or Led Zep? It has to be Mozart. He's the original rock star.

"I played in a rock and metal band in high school."

First time you sang solo for an audience *Enter Sandman* by Metallica. I played in a rock and metal band in high school.

Strangest warm-up/cool-down routine I have a coconut ginger candy before I sing.

Greatest strength as a performer My flexibility with other castmates; I want to make every-one look as great as possible.

Greatest flaw as a performer I'm a nervous wreck 98 percent of the time. I just embrace it; I use that energy to make something out of it.

Greatest career achievement Last February, I won the George London Award.

Most embarrassing bum note I did this audition and it still haunts me. I was starting with a Russian piece and I didn't remember any of the words, so I just did lip trills for 30 seconds. I stopped and I restarted—and I did the same thing. I said, "Thank you," and walked off.

Aria you love singing "Silvio's Aria" from *Pagliacci*; it's a very romantic and dramatic piece.

Aria you dread singing "Largo" from *Barber of Seville*. That piece is so tough, but so rewarding when you do it.

Role you'd love to do Figaro in *Barber of Seville*.

If you hadn't been a singer, you would have... Had a little skateboard shop.

Your retirement plan Owning a truffle farm.

Usual reaction when you tell people your job "Oh, I love *Phantom of the Opera*." I have to tell them it's a musical. Or, "That's awesome; sing something."

Advice for wannabe opera singers Learn a language: Italian, French, or German. Languages are the most important thing.

Watch Benjamin Taylor sing "Silvio's Aria" from the opera *Pagliacci* at bu.edu/cfa-magazine.

Oshin Gregorian

SOUND BITES

"Artists are the arbiters, the purveyors of empathy and compassion in this world."

Golden Globe- and Emmy Award-winning actor **MICHAEL CHIKLIS ('85)** told graduates at the 2018 CFA Convocation to bring humanity to a tumultuous world. "True, we entertain and amuse," he said, "but much of that entertainment allows people to think and feel, to discuss and debate, and understand what it's like to walk a mile in another person's shoes. We cast light on injustices and the state of our society."

Listen to his speech at bu.edu/cfa-magazine.



THE RED CARPET

DISTINGUISHED ALUMNI AWARDS

CFA's 2018 Distinguished Alumni Awards honored three exceptional alums for their artistry, dedication, and activism.



KELLY KADUCE ('99) performed the titular character in Santa Fe Opera's 2018 production of *Madama Butterfly*, about which *Broadway World* wrote: "Kaduce gave a performance filled with beautiful tone quality, exquisite phrasing, and dramatic conviction."

Painter **SEDRIK HUCKABY (BUTI'95, CFA'97)** takes inspiration from European Old Masters, the quilting tradition, and the family and friends who serve as the subjects of his portraits. His distinctive use of thickly applied paint gives his works a luminous sculptural quality.

KATY RUBIN ('07), founder and executive director of Theatre of the Oppressed NYC, is a self-described "joker, actor, and circus artist" who leads theater workshops for homeless adults and youth, LGBT teens, people living with HIV/AIDS, and recent immigrants, among others.

FOR MORE NEWS AND EVENTS VISIT BU.EDU/CFA.

CALENDAR

INAUGURAL SEASON AT BOOTH

THE 2018–2019 inaugural season at the BU Joan & Edgar Booth Theatre "reveals an eclectic and stirring exploration of powerful stories, told with intense theatricality inspired by the creative possibilities of our new artistic home," says Jim Petosa, director of the School of Theatre.

ANGELS IN AMERICA, PART ONE: MILLENNIUM APPROACHES

October 17–21, 2018
By Tony Kushner
Directed by Jillian Robertson ('19)

ANGELS IN AMERICA, PART TWO: PERESTROIKA

October 26–28, 2018
By Tony Kushner
Directed by Jeremy Ohringer ('19)

STEWART F. LANE AND BONNIE COMLEY MUSICAL: RUNAWAYS

December 7–16, 2018
Book, Lyrics, and Music by Elizabeth Swados
Directed by Elaine Vaan Hogue ('97)
Music Direction by Matthew Stern ('17)

DOLORES CLAIBORNE

February 21–24, 2019
By Tobias Picker
Conducted by William Lumpkin
Stage Direction by Jim Petosa

THE LATHE OF HEAVEN

April 26–May 5, 2019
By Ursula Le Guin
Adapted by Natsu Onoda Power
Directed by Sara Katzoff ('20)

Learn more at bu.edu/booth.

CONVER SATION

COMPOSER TO COMPOSER VALERIE COLEMAN AND MISSY MAZZOLI DISCUSS THE PRIVACY OF COMPOSING AND THE VULNERABILITY OF PERFORMING

Edited by Lara Ehrlich

Photo by Benedict Evans

GRAMMY-NOMINATED composer and flutist Valerie Coleman uses her “skillfully wrought, buoyant music” (*New York Times*) as a form of storytelling: in one chamber work, nomadic Roma tribes traverse dusty roads while a flute sonata gives voice to slaves trafficked from West Africa. Coleman (BUTT’89, CFA’95) premiered her latest piece, *Shot Gun Houses*, a suite for clarinet and string quartet based on the life of Muhammad Ali, in 2018.

Missy Mazzoli’s “savage, heartbreaking and thoroughly original” (*Wall Street Journal*) music is distinctive for its ferocity that veers into horror, like her opera dismantling the American dream through the story of 19th-century Nebraskan homesteaders and an operatic work reimagining the story of Lot’s wife. Recently named composer-in-residence at Chicago Symphony Orchestra, Mazzoli (BUTT’98, CFA’02) premiered her newest opera, *Proving Up*, in 2018.

Mazzoli and Coleman were both listed among the top 35 women composers in classical music by the *Washington Post*. Their work has been performed at Carnegie Hall and Kennedy Center, among other venues, though never in the same season. Mazzoli is the founder of (and keyboardist in) the all-female chamber music ensemble Victoire. Coleman is the founder of (and flutist in) the Grammy-nominated all-female chamber music ensemble Imani Winds—which has performed Mazzoli’s music.

Although their paths have crossed musically time and time again, they’ve never met. They’d never even spoken, until they connected by phone to talk about the addictiveness of the flow state, how motherhood influences creativity, and finding inspiration while surfing.

Missy Mazzoli: I’ve known of you for so many years. It’s nice to talk to you, finally.

Valerie Coleman: Yeah! This is great.

MM: In my own work, performing, teaching, and writing are all essential. I can’t give any of it up because it’s all part of the puzzle. If I weren’t performing, my writing wouldn’t be as rich and I’d feel like I was losing touch with my performers. How do you look at the puzzle of your life?

VC: I would say that one has to celebrate the imperfections of juggling all of it. For example, motherhood is a wonderful thing, but it’s also a challenge to find headspace when your daughter’s decorating the house with bits of paper—but even in that moment, there’s an energy that can be inspiring.

MM: I love this idea of embracing the imperfection of it all. Similarly, a long time ago, I accepted that I would not be the greatest pianist in the world, and that’s actually good because it forces me to come up with creative pieces, turning these quote-unquote imperfections into an asset and creating something new out of them.

Grammy-nominated composer and flutist Valerie Coleman (BUTT’89, CFA’95) premiered her latest piece, *Shot Gun Houses*, in 2018.





Missy Mazzoli (BUTI'98, CFA'02), composer-in-residence at Chicago Symphony Orchestra, premiered the opera *Proving Up* in 2018.

VC: Your music touches on the human experience and juxtaposes soulfulness and peacefulness with energy-laden moments—that's really exciting to hear. What motivates you?

MM: I think human beings are the most inspiring thing in the world. I'm interested in how we're flawed, how we try to communicate and often fail, how we try to fix things and mess everything up, how we relate to each other in really beautiful ways—but also evil ways. All of that has been fodder for my operas and my instrumental works, like two melodies working with each other and then in opposition. It's like a drama playing itself out.

VC: You hit on something that deeply resonated with me: communication and opening someone's mind to another's experience. It seems more relevant than ever for creators to be empathetic, to step out of our own comfort zone to be that mediator.

“I think human beings are the most inspiring thing in the world. I’m interested in how we’re flawed.”

MISSY MAZZOLI

You put together the Victoire ensemble as the voice of your music. Tell me everything! What's the logistical structure of the dang thing?

MM: I put it together 10 years ago, soon after I moved to New York, because I wanted control over where and how my music was performed. I thought, “I can't just wait around for Carnegie Hall to call me”—which they did, eventually, because I was so visible with this ensemble I'd made myself.

I wanted a social life around my music, to pull together five of my best friends who I can feel vulnerable around. I also wanted to work with women. When we go on tour, it's a loving and accepting and fun experience. It became a lab through which I developed my voice.

VC: Do you feel more of a connection with your audience when you're performing your own work?

MM: Absolutely. People connect with what they see in front of them, that sharing of kinetic energy. I found that a lot working with [chamber music ensemble] Imani Winds; when they perform my music, people start to see not only what a living composer does, but the energy behind it.

VC: People don't connect with what a composer does, the creative process of stripping yourself bare to create a new entity that impacts the listener's emotional value. That state of impacting the people around me keeps me going as a composer. The psychologist who coined the term *flow* says it's the state of being in which a person is involved in an activity to the point that nothing else seems to matter because the moment itself is transcendent. That's what I think people feel when a composer performs their own music.

MM: I love that idea.

VC: That flow state is addictive. Part of me loves the private nature of composing because it's something no one else can touch, sort of like meditation. But I also love bringing it to other people.

MM: As you get older, you start to value time more. In the midst of the world spinning around you, it's hard to find flow unless you retreat into that insular bubble that allows you to be completely vulnerable.

VC: Once the piece is done, the vulnerability is there for everyone to see and to feel vulnerable themselves in a cathartic way.

MM: How does being a mother impact that flow?

VC: It's made me harder in letting people know that what I do is as valid as anybody else's nine-to-five job. I hunger for that flow state, so if I don't get it, I become aggressive about it.

Aggressive, not in terms of my child, but in terms of ensuring she has a sitter who's present and letting my husband know that this is my time. Before my daughter was born, I was more flexible; the flow came when it came, and I could stay up all night and write music. I've become much more efficient and more hard-nosed about what time is sacred.

At the same time, having my daughter and being introduced to a love that has completely unseated me has influenced my creative process. Now more than ever there's a certain level of giving that goes into writing music.

MM: It's inspiring to hear you talk about being a creator who's also a mother, who's thriving, and whose work is informed by that experience in a positive way.

VC: Thank you—and congratulations on your appointment as composer-in-residence at Chicago Symphony Orchestra, man! Can you tell us a little bit about that?

MM: I'll be writing music for the symphony, and I'm curating their MusicNOW chamber music series. It's an opportunity to commission exceptional up-and-coming composers, a lot of them women who have yet to be celebrated by a major symphony orchestra.

VC: There are so many levels of why we have to be mentors in this day and age.

MM: I agree. I founded a program, Luna Lab, for young female composers in their teens, on a similar premise. When I graduated from CFA I thought, “If this works out for me, I'm going to use my influence to make it easier for young women coming after me.”

I had great teachers my whole career, like Martin Amlin [a professor of music and chair of the composition and theory department] and Richard Cornell [a professor of music, composition, and music theory] at CFA. Martin was the first person in my life to say that I might have a future in music. And I was like, “Alright, I'm in. I'm doing this.”

Who were your mentors?

VC: [Composer and conductor] Tania León. She's this force of nature unto herself. I can't

“Part of me loves the private nature of composing because it’s something no one else can touch, sort of like meditation.”

VALERIE COLEMAN

tell you how often she's reduced me to tears because of the conviction with which she's dedicated herself to changing classical music to be more inclusive and celebratory of people and ideas that are different. This is an exciting time for women composers. This idea of helping one another is starting to manifest in such an impactful, grand-scale way.

I'm curious, every composer has to begin their new works from seed material and I believe every composer has their own method of getting that. For me, it's standing in the shower and just letting the water run. Do you have an unusual way of getting seed material?

MM: I'm inspired by stories of endurance and achievement. The news is a big source of inspiration—I look for little nuggets of humanity there. I also surf. That's the ultimate flow for me because I can't really think of anything except not dying. I feel very free out there; I'm not competing with anybody when I'm on a surfboard.

VC: Wow, that's so dang cool.

MM: When's your next premiere?

VC: It's *Phenomenal Women* [concerto for wind quintet and chamber orchestra], based on a poem by Maya Angelou, with Imani Winds and the American Composers Orchestra in November [2018]. What about yourself?

MM: I'll premiere a new work with Chicago next season, and my third opera is coming to New York in September [2018], so I'm getting ready to do the things, like promotion, you have to do to nurture these little babies.

VC: After you wrote the piece, now comes the harder stuff. You can't just let them go into the world, you have to nurture them. It's so much work but so exciting.

MM: I feel really energized, really clear, like we should talk every morning. ●

This conversation has been condensed and edited for clarity.

FEATURE

Tanya Saracho ('98)
is the creator and
showrunner of *Vida*
on Starz.

RUNNING THE

In an industry
dominated
by men,
women are
changing the
culture

Larsen and Talbert/Getty Images Portrait

By Abigail Cain

Krista Vernoff ('93)
wrote for seven
seasons of *Grey's*
Anatomy and returned
as showrunner for
season 14.

SHOW

Corey Nickols/Getty Images

"Everyone I hire, I hire with an eye for them to run their own show. I'm nurturing showrunners."

TANYA SARACHO

Tanya Saracho was not even an hour into her first day writing for the Lifetime show *Devious Maids* when a male coworker looked down at her and said, "You know you're the diversity hire, right?"

Saracho ('98) had no idea what he was talking about. She called her agent, who explained: most major broadcast networks subsidize one entry-level writer of color for each scripted show. Although it's meant to foster inclusion in writers' rooms that are overwhelmingly white and male, these

"diversity hires" are rarely hired permanently; showrunners will trade them out for another subsidized writer the next season.

"For the rest of the year that tainted how I spoke, how I pitched, how I had agency in that room," says Saracho, who was born in Mexico and raised along the Texas border. Although the show followed the lives of four Latina maids

in Beverly Hills, Saracho was initially the only Latina writer and one of two women in the room.

Saracho was ready to throw in the towel after *Devious Maids*, but she agreed to one more meeting, for the HBO series *Looking*, which first aired in 2014. There, she found herself surrounded by other writers still new to television; the experience was so supportive that "I was like, wait, maybe I do want to do this," she says.

Since then, she's risen rapidly through the writers' room to become the creator and showrunner of Starz's breakout hit *Vida*. Following two Mexican American sisters who return to their Los Angeles neighborhood after their mother's unexpected death, the show deftly and frankly interweaves themes of class, race, and sexuality. *Vida* wrapped up its first season in May to enthusiastic reviews ("Life may be too short, but *Vida* is just right," wrote the *New York Times*) and was renewed for a second season. Saracho also signed a three-year deal with Starz to develop new projects—and she's bringing other women with her.

During the 2016–17 television season, only 19 percent of showrunners were women; AMC, TBS, and TNT had no women at all running their shows. Industry pioneers like Saracho and fellow CFA alums Krista Vernoff ('93), showrunner of *Grey's Anatomy*, and Nina Tassler ('79, Hon.'16), founder of PatMa Productions, are changing the way women are represented—both on-screen and off—to ensure that Hollywood is no longer a white man's world.

WHAT'S A SHOWRUNNER, ANYWAY?

Before moving to Los Angeles, Saracho hardly watched TV. She was busy working as a playwright in Chicago, where, in 2010, she was named "Best New Playwright" by *Chicago Magazine* and awarded a grant from the National Endowment for the Arts. So, when an agent took her out to lunch in 2011 and suggested she'd be a natural television writer, it took her by surprise.

Roger Kisby/Getty Images

Erica Parise/© 2017 Starz Entertainment, LLC



Saracho's breakout hit, *Vida*, follows Mexican American sisters Emma (Mishel Prada) and Lyn (Melissa Barrera) back to Los Angeles after their mother's death.

Tanya Saracho

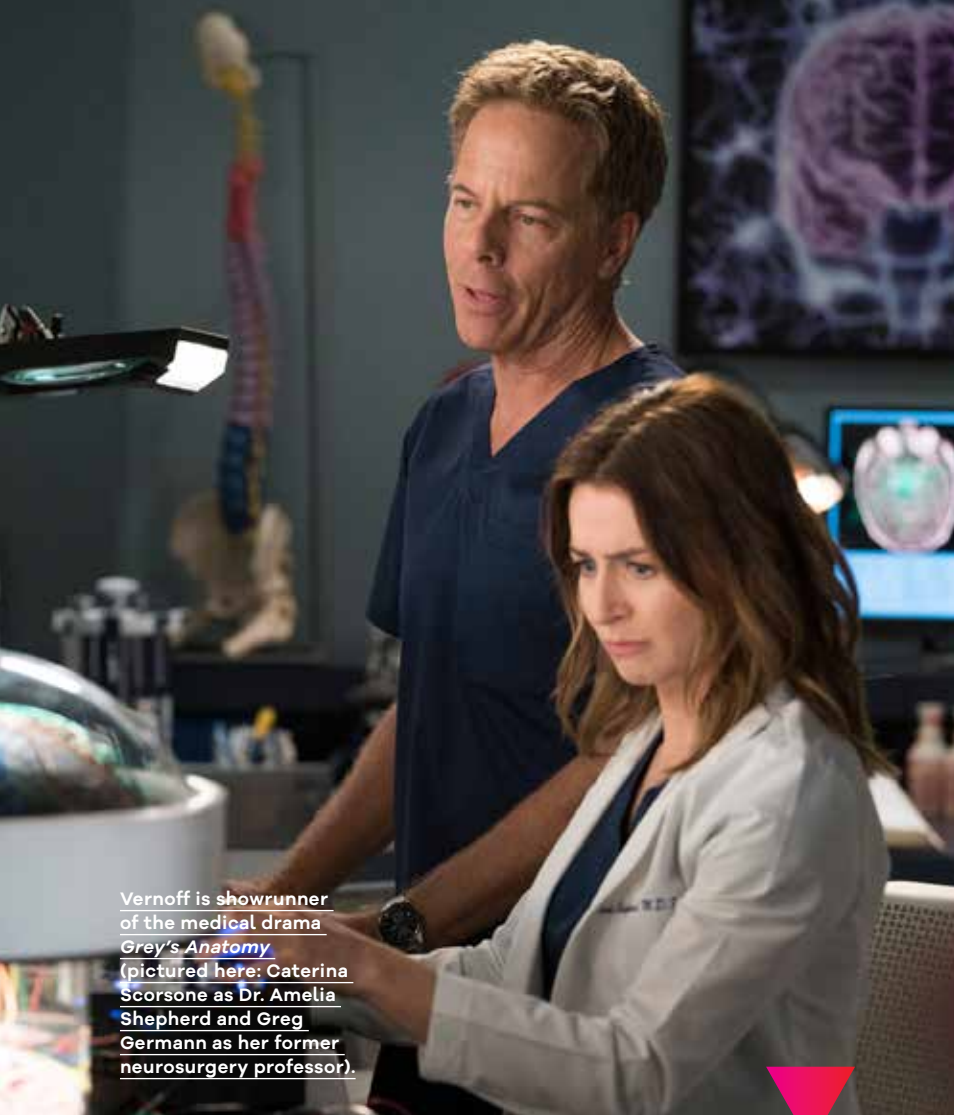
2018–2019: Creator, executive producer, and writer for *Vida*
2015: Coproducer and writer for *How to Get Away with Murder*
2014–2015: Coproducer and writer for *Looking*
2013: Writer for *Devious Maids*
2010: Named Best New Playwright by *Chicago Magazine*
2010: Awarded a grant from the National Endowment for the Arts
2000: Founder of Teatro Luna theater company in Chicago, Ill.

She wasn't quite sold on the idea, but took a few meetings in Los Angeles, and "*Devious Maids* just sort of happened," she says. *Looking* came next, followed by *Girls* and *How to Get Away with Murder*. In 2016, Starz put out a call for showrunners for a series about "gentefication," the gentrification of a neighborhood by wealthier Latinx people. Saracho, whose plays tackled racial and socioeconomic divides, was uniquely suited for the subject matter. She answered the call, and *Vida* was born.

Showrunning may have been new to Saracho, but the term has been in the television lexicon since the early 1980s to describe a particular breed of supercharged executive producer. Previously, creative direction had been controlled by the studios, which hired contract writers to flesh out ideas handed down by higher-ups. Throughout the 1970s and 1980s, shows began offering writers more creative freedom—laying the foundation for the visionary writers/producers who would become the showrunner vanguard: John Wells of *ER*, David Simon of *The Wire*, David Chase of *The Sopranos*, and David Milch of *NYPD Blue*.

Showrunners are now some of the most formidable figures in entertainment, commanding contracts and industry clout to rival those of powerhouse movie directors. Shonda Rhimes, who helms several small-screen blockbusters including *Scandal* and *How to Get Away with Murder*, signed an estimated \$100 million deal with Netflix in 2017. In February 2018, Ryan Murphy—of *Nip/Tuck* and *American Horror Story*—followed suit when he inked a \$300 million contract with the streaming giant, in what's believed to be the biggest deal in TV history.

Despite the industry prominence of showrunners, most people outside of Hollywood have only a hazy idea of what they do. In short, they are the boss, with the final say on all creative and managerial decisions concerning a television series. Depending on the project, a showrunner's responsibilities could include developing the concept for a show, hiring cast and crew members, steering a writers' room, counseling directors, dealing with studio and network executives, and balancing the budget.



Vernoff is showrunner of the medical drama *Grey's Anatomy* (pictured here: Caterina Scorsone as Dr. Amelia Shepherd and Greg Germann as her former neurosurgery professor).

“Showrunning, in a way, is a bit like when I was running Teatro Luna,” Saracho says of the all-Latina theater company she founded and led for a decade in Chicago, “except with higher Hollywood stakes.” Rather than Teatro Luna’s \$150,000 yearly operating budget, she says, there are “millions of dollars on the line.”

For all its power and prestige, showrunning is a punishing profession. “It is an extremely difficult job. It is extremely time-consuming in a way that I wasn’t quite prepared for,” says Krista Vernoff, showrunner of the hit ABC medical drama *Grey’s Anatomy*.

As an acting major, Vernoff took a playwriting course with Jon Lipsky, a much-loved professor of playwriting and acting at CFA who passed away in 2011. She found she had a talent not only for performing dialogue, but for writing it. In the spring of 1998, she moved to Los Angeles with several sample scripts in hand, and was promptly told, “Your writing is really strong, your character work is really strong, but it’s not funny enough.” She realized she was better suited for hour-long dramedies—which fuse elements of comedy and drama into a single show—than half-hour sitcoms and went on to write for *Law & Order*, the short-lived *Wonderfalls*, and *Charmed*. In 2005, she was hired by Rhimes, at the time a

fledgling showrunner, to write for the first season of *Grey’s Anatomy*.

Vernoff went on to write for seven seasons of *Grey’s*, penning season two’s Emmy-nominated episode “Into You Like a Train.” Although she was credited as “coshowrunner” during that time, she says her role more closely resembled that of a head writer since Rhimes was the one with ultimate creative control. She left ABC in 2011, working as an executive producer for Showtime’s *Shameless* and serving as showrunner for five pilots that didn’t make it to series.

Then, in 2017, Rhimes handed Vernoff the reins for season 14 of *Grey’s*. It was her first time showrunning an active show, and she worked 80-hour weeks for months on end. One day, she was so physically worn out that she woke up and couldn’t stand; a doctor had to come to her house and hydrate her with an IV. Vernoff even called up *ER*’s Wells to make sure she wasn’t doing something wrong. Nope, Wells answered, *sounds like a first-year show*—which, in some ways, it was.

BREAKING UP THE BOYS’ CLUB

Before landing at *Grey’s*, Vernoff spent three years working for WB’s *Charmed*, where her boss once told her “I bet you’re good in bed” in front of the rest of the writers’ room. She left, despite a major raise, because “the show had gone from being a girl power show to being a ‘How do we get the girls naked this week?’ show. And I, as a feminist, was really struggling. I have always said I left *Charmed* because I came in pitching fairies, and I left pitching stripper demons.”

Historically, the writers’ room has often been a deeply uncomfortable place for nonwhite, nonmale writers. According to studies conducted by UCLA and San Diego State University, 67 percent of writers in the 2016–17 television season were men; 86 percent were white. And these trends are even more pronounced among those leading the shows—during the same season, 81 percent of showrunners were men, and 90 percent were white.

The lack of diversity is due in part to a closed feedback loop. Showrunners typically work their way up through a series of writers’ rooms before finally helming their own show. They then tend to hire people who look and sound like them or those they’ve worked with before, and that’s almost always white men.

During an interview with a potential writer, Vernoff says, showrunners have already reviewed the candidate’s résumé and writing samples. What they want to find out during the interview is “if you’re someone they can hang with for 10 hours a day,” she says. More often than not, that

translates to someone who makes them comfortable, who has shared life experiences. “One of the things that we’re all talking about now is that we have to be willing to be uncomfortable,” Vernoff says.

Research shows programs with at least one female creator also hire far more women than other shows, and *Grey’s* and *Vida* are no exception. Saracho’s writers’ room is staffed with seven women and one man, while Vernoff made a point to hire a male writer last season when her blind read turned up 14 scripts written by women. She also hired people of color for the three open writer slots for season 15, since she’d “inherited a lot of writers who were white,” she says.

Women showrunners are not just waiting for change to come from the top down—they’re changing the culture from the inside. “Everyone I hire, I hire with an eye for them to run their own show,” Saracho says. “I’m nurturing showrunners.” There are eight Latinx showrunners across the entire television industry, she says, and “that’s not enough. That’s not even one percent. We have to make more.” To bring her writers up the ladder along with her, she often recruits them to participate in projects outside the writers’ room, like interviewing script coordinators.

Nina Tassler is thinking even bigger. As the head of CBS Entertainment for 11 years, she made it her mission

“Hollywood has admitted that there is a major gender problem and that it’s unmanageable. We’ve named it. We’re talking about it, and now we have the power to begin to change it.”

KRISTA VERNOFF

At *Vida*, Saracho’s all-Latinx writers’ room includes Puerto Ricans, Salvadorians, Dominicans, Mexican Americans, and LGTBQ writers. No one is a diversity hire, she says, and no one person is expected to speak for an entire country or culture.

A NEW FRONTIER

Since Harvey Weinstein’s alleged sexual abuse went public in 2017, Hollywood has become a hub for conversations about power and representation and a locus for the #MeToo and Time’s Up movements. More than 1,000 women in the entertainment industry—including Uzo Aduba (’05), Geena Davis (’79, Hon. ’99), Julianne Moore (’83), Marisa Tomei (’86, Hon. ’02), and Alfre Woodard (’74, Hon. ’04)—signed the Time’s Up open letter published by the *New York Times* in January 2018, which called attention to the misogynist work environments faced by women in all walks of life. Vernoff herself has written several articles for the *Hollywood Reporter*, speaking out about her experiences in the television industry, including the sexist behavior she encountered while working on *Charmed*.

to provide more opportunities to women in television, both as executives and as showrunners. But it shouldn’t stop there, she says.

“I think it’s important that you encourage women to be not only showrunners, but also to be in an overseeing capacity, to have multiple projects on the air at one time,” says Tassler, who left CBS in 2015 to start her own company, PatMa Productions, which employs women and people of color, specifically. “Can we find more opportunities for women directors? Can we find more opportunities for women casting directors? Can we find more opportunities for female line producers?” she asks. “We’re looking to populate as much of our work as possible with female voices, leadership, creators, storytellers.”

For her part, Vernoff is optimistic. “We are becoming more and more comfortable telling the truth,” she says. “And until you’ve named a problem and spoken the truth you cannot fix it. Hollywood has admitted that there is a major gender problem and that it’s unmanageable. We’ve named it. We’re talking about it, and now we have the power to begin to change it.” ●

LISTEN TO
VERNOFF ON A
BU ALUM’S POD-
CAST AT BU.EDU/
CFA-MAGAZINE.

ABC/Eric McCandless

BEHIND

SCENE

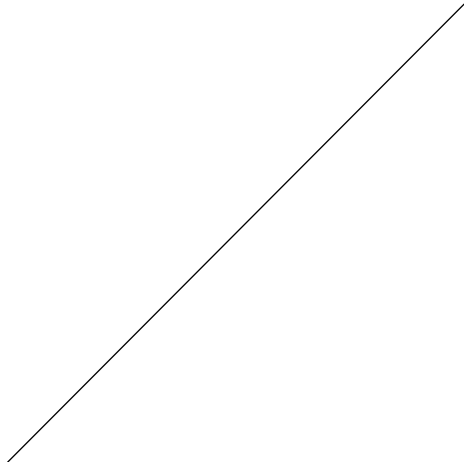
THE

Designing angel wings. Rigging lights. Dyeing dress shoes. Here's what it takes to stage a show at the new Booth Theatre.

By Andrew Thurston

Photos by Natasha Moustache
and Jason Kimball

CURTAIN



The two-part *Angels in America: A Gay Fantasia on National Themes* is an intense production: during seven hours of total stage time, lead actors are also required to take on a couple of minor roles *and* help shuffle props during rapid scene shifts. Tony Kushner’s multi-award-winning exploration of AIDS in 1980s New York is the perfect showcase for the Joan & Edgar Booth Theatre, which was built as a shifting, fluid space—seats rise, trapdoors disappear, runways emerge. One moment it can be a traditional theater with an end stage, the next a theater in the round.

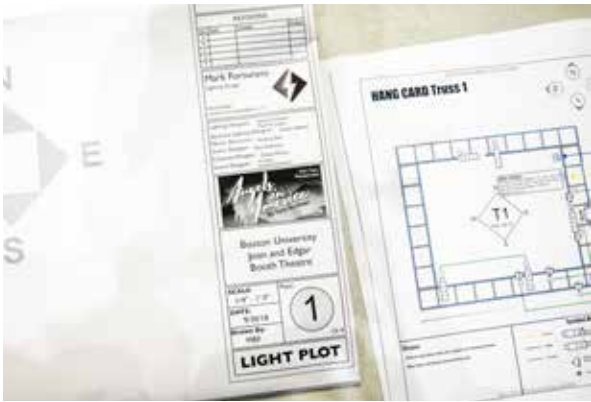
CFA staged *Angels in America* at Booth in October 2018, splitting the production’s two parts into consecutive runs with different directors and casts—though not sparing the actors multiple parts. A fortnight before opening night, *CFA* magazine was given exclusive behind-the-scenes access to watch the play take shape.

Stepping backstage at Booth is like peeking into Narnia. The black box of the theater is 21,000 square feet, but the theater complex itself is 75,000 square feet. Entire worlds emerge from behind almost every door: a mini millinery with mannequin heads, hats, and fabric; a hanger-like set design workshop full of whirring machine tools; rooms stuffed with wigs and clothes. Some clash with noise, students and faculty swirling around each other as they build props or test lighting setups; others, like the classrooms that double as workshops (or is it vice versa?) for set and costume designers, charged with quiet concentration.



The double-height scenery and paint shop is big enough to accommodate the production of sets for two shows at the same time—even while another is being staged. Raw materials arrive on a loading dock and are milled down on-site, then shaped and assembled. A section of the space has a wooden floor to mimic the theater. “Not only can we assemble scenery here,” says Johnny Kontogiannis (’02/’20), Booth’s

production manager, “we can actually do a setup of the whole set. That way, we can see how it all goes together and work out the kinks right here.” The theater complex also has classrooms and studios for scene designers. “A big part of our teaching is getting on our feet and doing,” says Kontogiannis. “Our ideal situation is to say to students, here’s a theater, here’s some money, go put on a show; then, we help guide it.”



Booth’s ceiling holds a grid of nine lighting rigs. Each one can be moved independently, flying to the ground for lights to be hung, then set at different levels to alter the atmosphere or focus onstage. Kontogiannis calls the space a playground: “In a proscenium theater [a theater with a frame, or proscenium], you have a more

defined relationship, you’re looking through a frame; here, you’re behind the proscenium and we’re inhabiting one space. That’s an important part of how we approach the storytelling—we’ve brought the audience into the space of the story.” Backstage, there’s a lighting and sound design lab for students to practice.



The costume shop does double duty. During the day, a partition is pulled across the room: on one side, faculty teach classes; on the other, students work on their projects for upcoming shows. At night, the entire room is dedicated to production preparation. "We teach it and then we make it," says Kontogiannis. Small side rooms have space for actors to step in for fittings. All the students can also head into the lighting and sound design lab to see how a costume looks when plunged into the spotlight. "A student will take the thing they've learned and implement it very quickly," says Kontogiannis.



"Imagine your grandmother's attic," says Kontogiannis of Booth's costume shop, stocked with props and costumes. In one room, tables, couches, phones, typewriters, and every conceivable kind of knickknack fill shelves and storage bins; in another, a two-story dry-cleaning storage system holds clothes sorted by gender and period. Kontogiannis, who formerly taught at Ithaca College and has also worked on Broadway, admits it would have been easy for BU to have stuck it all in a suburban warehouse, but says there's something compelling about being able to browse the rooms, to touch the objects and be inspired. "We actually think of these rooms more as libraries than storage. You could click through clothes on a computer, but it's not the same as feeling them." If a costume isn't quite right, students can also dye or tailor them to fit the actor or time period.



[LEARN MORE ABOUT BOOTH AND WATCH BEHIND-THE-SCENES VIDEOS AT BU.EDU/CFA-MAGAZINE.](#)

By Joel Brown

THE NEW BLACK

NASA uses a new pigment to absorb light in space. What will artists do with it?

LIGHT GOES IN. IT DOESN'T COME OUT.

The paint defies reflection, rendering invisible the surface detail of an object coated in it. The object becomes a chromatic black hole. Even the paint's name has a cool, slightly ominous vibe: Singularity Black.

Developed for NASA to reduce incidental glare on telescopes and other equipment used to study faint, distant stars, Singularity Black sucks up 98.5 percent of the light that enters it. A typical matte black paint absorbs only about 80 percent. Star-gazing scientists aren't the only ones geeking out over the potential applications of this sci-fi wonder. For one of the first nonscientists to be given access to the pigment, it was "one of the most interesting and revolutionary things I'd ever looked at," says Jason Chase ('03), artist-in-residence at NanoLab, the Waltham, Mass., firm where materials scientists created Singularity Black.



Jason Chase ('03) created this piece, *Black Iron Ursa*, by coating a cast iron Gummy Bear with a new black pigment that absorbs 98.5 percent of all light.

Courtesy of Jason Chase

For one of his first experiments with Singularity Black, Chase created a light-defying little black dress on which the paint renders wrinkles virtually invisible.



While still learning how to use it, he has created a light-defying little black dress—the paint renders wrinkles virtually invisible—and a sort of optical-illusion photo booth where a hanging disc painted with Singularity Black makes the poser appear headless. Now, he’s teaching other artists how to use the paint to help inspire more work that deceives and intrigues.

SCIENCE, NOT MAGIC

Singularity Black is a formula built around carbon nanotubes, chemical structures 1/1,000 the width of a human hair. They’ve been used since the 1990s to improve the strength of plastic and provide thermal and electrical conductivity, and more recently in “ultra black” coatings like Singularity Black.

“Vertically aligned nanotubes are the blackest thing on earth, but it’s not magic, it’s science,” Chase says.

The nanotubes’ light-absorbing property comes from their molecular structure and electric properties, as well as the physical structure of the coating. The key to the complex reaction: a photon (the basic unit of light) entering a nanotube is converted to heat and dissipates, says Tom Morgan, NanoLab’s director of nanocomposites and biosensors.

NanoLab, which specializes in developing and designing nanotube products, “grows” the chemical structures by heating a carbon-bearing gas in a chamber to break up the gas molecules. The carbon atoms reassemble on surfaces in the chamber as cylindrical molecules that to the naked eye appear as black powder, but under a microscope look like spaghetti, says Morgan. NASA hired NanoLab to develop processes to untangle and align the nanotubes and suspend them in paint.

“We were able to develop a spray-coatable formulation, which hadn’t been done before,” says Colin Preston, NanoLab’s senior research scientist. “As we started to get some traction with optics companies, we really saw for ourselves the beauty, the aesthetic effect of these coatings, and it seemed there was some artistic use for this.”

A couple of years earlier, Preston had been given a present from his girlfriend (now his wife): a “Drawing in Pubs” class through the Museum of Fine Arts. Attendees worked on their drawing skills while enjoying drinks, and Chase was the instructor.

In 2017, Preston invited him to visit the lab.

“He told me what I was looking at and asked me, did I want to make some art with it?” says Chase, who has shown his pop-surrealistic Americana oil paintings (like his rendition of the infamous Nagasaki mushroom cloud composed of Jiffy Pop Popcorn) at Atelier Gallery in Newport, R.I., and Bromfield Gallery in Boston’s South End. “I couldn’t wait to figure out how to use Singularity Black in my own work. And I’m excited to see how other artists are going to use it.”

A BLACK BLOB

Chase’s wooden easel is an anachronism perched in a corner of the NanoLab offices, near high-tech equipment including an infrared spectrometer (used to identify chemicals) and a thermogravimetric

Cydney Scott/BU Photography



Cydney Scott/BU Photography, Courtesy of Jason Chase



“NANOTUBES ARE THE BLACKEST THING ON EARTH, BUT IT’S NOT MAGIC, IT’S SCIENCE.”

JASON CHASE

analyzer (which measures a material’s mass throughout a change in time and temperature).

Lately Chase has used this spot to work on paintings with Singularity Black and other paints NanoLab is experimenting with, including Morgan White, a matte white oil paint that lightens any color blended with it without changing the color’s hue.

From the start, Chase found using Singularity Black to be tricky, as it requires special spraying procedures, a dozen to 50 coats, plus a final heating process. It’s also “fume-y,” Chase says, requiring proper ventilation. After application, the surface is easily marred with normal wear.

“It’s like a fussy nail polish,” Chase says. “It sprays on and then it dries, and even if you just peel up your masking, it will lift and tear. You have to cut every edge with a rounded blade.” And one milliliter of pigment covers one square centimeter of surface area, so the learning curve is costly.

“I had a bunch of bad ideas, and it took me two weeks to come up with something I could do,” Chase says. For his first project, *Black Iron Ursa*, he coated a cast iron Gummy Bear candy (which he’d made a few years earlier) with Singularity Black, placing it on a rainbow-striped carousel for contrast. Everything within the bear’s outline disappears before the eye, so from most angles it just appears to be a black blob.

The paint has opened up his art to new types of conceptual thinking. “Light and color is a huge percentage of what a painter’s concern is,” Chase told online art newsletter *Hyperallergic*. “So, absolutely, having the blackest, black paint to incorporate is really interesting. But in order to use it in really smart ways, it’s going to take experimentation, and that’s exciting. . . . You could make a drawing in Singularity Black, but if it’s a piece [that requires] single brushstrokes—like a calligraphy piece—after you bake it, it’s not going to be functioning at the level it can. But I think there can be incredibly avant-garde works made with the implications of looking at something so black that your brain can’t really figure it out.”

Collaborating with NanoLab has also led him to a new role in making art. “It’s a collaboration on all levels, and that’s part of my career now,” he says. “To not only create art but help other artists create. I want to be like the artists who inspired me, who left doors open for others to create works that are truly innovative and different than anyone has seen before.

“A new black that is very light absorbent, and offers better contrast, regularity of surface, and many uses—probably ones we cannot imagine yet—is a nice gift to artists, architects, industrial designers, and scientists,” says Richard Raiselis, an associate professor of art, painting who leads a course on the science of color, and who taught Chase. “Artistic doors open when artists dream about new situations with new tools. Artists are the beneficiaries of other industries. If not for the auto manufacturers, many of the colors, especially the beautiful organic pigments, might not have surfaced for art.”

PAINT FOR ALL

In 2016, a British company that debuted a similar paint incited controversy by initially licensing its use to a single artist, Anish Kapoor. With Chase’s help, NanoLab is going the opposite direction, making the pigment available to all artists. They’ve even started regular workshops for interested artists, sort of a Singularity Black boot camp, and offer a coating service for artists who want to use the paint without the fuss.

In opening up the pigment to wider use, the scientists’ first goal is to make Singularity Black easier to use—and more affordable. Currently, 20 milliliters costs \$50, so even enough pigment for a modest project would be out of the reach of a lot of artists.

“We get calls from artists who want to do, like, a 10-foot sculpture,” Chase says, “and we want to see that too, but hang on! Your first version should probably be a lot smaller.”

For those impatient to get started on their own light-absorbing art, Chase and the NanoLab scientists have also created a version that’s easier to use. Gravity Black is a regular oil paint using nanotubes, and working with it is more wallet-friendly: \$150 per 30 milliliters of oil paint, which spreads normally and can cover much more area than a similar amount of Singularity Black. Soon, anyone will be able to try it out.

“Artists have always been the first to get ahold of new material and technologies and push them to limits that the engineers and scientists didn’t even know were possible,” Chase told *Hyperallergic*. “To be a part of that is so exciting.” ●



MAKING THE

MOON BEAST



How a 3-D printed monster helped save stop motion By [Lara Ehrlich](#)

The fanged serpent erupts into the sky, lashing its skeletal tail as it spirals toward the moon. It twists back on itself with a roar and streams toward the camera, writhing like an eel above the night-soaked street. Its eyes gleaming, the Moon Beast strikes. Although the beast moves with seemingly effortless agility, it's powered by painstaking visual effects. Stop motion—a form of animation pioneered in 1898, in which animators manipulate physical models by hand between frames—gave cult classics like *Rudolph the Red-Nosed Reindeer* (1964) and the Wallace and Gromit films a distinctive charm. The process is so laborious, however, that stop motion faded with the advent of computer-generated imagery (CGI) in the 1990s, and all but died out. Laika Entertainment is bringing it back. —>

The Moon Beast from Laika’s 2016 film *Kubo and the Two Strings* started with sketches (fig. 1) and a physical model (fig. 2) inspired by the prehistoric fish, *Dunkleosteus*. The studio’s prototyping team brought the beast to life through a combination of stop-motion techniques, 3-D printing, and CGI.

The studio’s 2016 film *Kubo and the Two Strings* follows young Kubo’s quest to defeat his evil grandfather, the Moon King Raiden, who transforms into the Moon Beast for their final showdown. To create the awe-inspiring monster, the Oregon-based studio merges tried-and-true stop-motion techniques with 3-D printing and CGI. The studio’s rapid prototyping—3-D printing—department, headed by Brian McLean ‘99, is leading the stop-motion revolution.

McLean has been with Laika since its inaugural project, *Coraline* (2009), the first-ever film to use 3-D printing in stop-motion animation, an achievement celebrated with an Academy Award nomination for Best Animated Feature Film. McLean has since helmed the rapid prototyping for 2012’s Oscar-nominated *ParaNorman* and 2014’s *The Boxtrolls*, also short-listed for an Academy Award. In 2016, McLean was recognized for pioneering the use of 3-D printers in stop-motion film with a Scientific and Engineering Oscar plaque.

McLean is no stranger to unusual materials and techniques. Prior to Laika, he was an environmental sculptor for Disney theme parks (“Most of the world—whether it’s Vegas or theme parks—is sculpted out of foam,” he says. “It’s sickening how much foam!”). He also worked with Warner Bros. to produce a holiday window display featuring foam sculptures of Harry Potter and Hagrid in the Chicago department store Marshall Field’s.

McLean considers 3-D printers yet another tool in his sculptural arsenal, like a rasp or a chisel, he says. “It’s amazing what people can do creatively when you combine traditional techniques with emerging technology.” The Moon Beast, in particular, is a triumph of engineering; while it dominates the screen for fewer than 10 minutes, it took 80 artists more than 6 months just to build the model (not counting the time involved in animating it).

“The Moon Beast looks different, it looks creepy and scary, and you can’t quite put your finger on how it was created. It feels like a great homage to the old masters of stop motion who created these crazy creatures,” says McLean, who shares with CFA how his rapid prototyping team brought the beast to life.

PHYSICAL TO DIGITAL AND BACK AGAIN

Before *Coraline*, animating a character’s face was reliant on manually adjusting the movements and expressions of models composed

of either clay or silicone stretched over metal frames. Both methods produced “jittery, jerky” films, McLean says. “They’re beautiful, but you’re constantly reminded of the craft; you’re seeing the process and seeing the animator’s hand. Our idea was to try to find a way to make it as perfect as we can, so you don’t get drawn out of the story.”

Laika’s method, 3-D printing replacement animation, harnesses the power of traditional methods and new technologies. The animators use 3-D printing to design and print limitless versions of a character’s facial features, which they swap out with different iterations between each frame to achieve

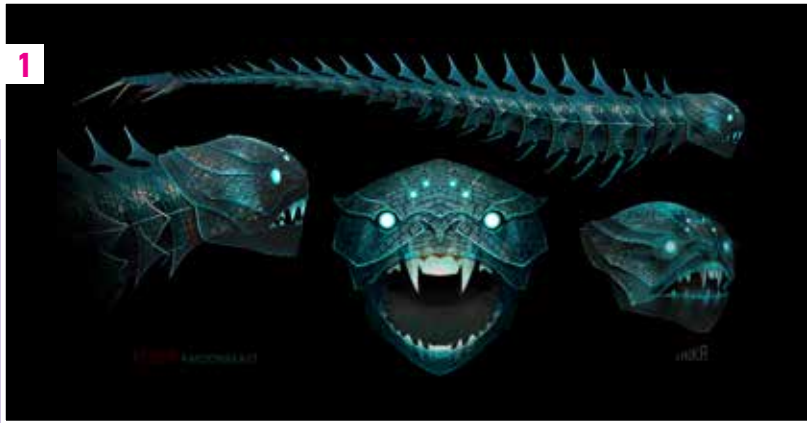
subtle expressions. The effects team uses CGI to erase the evidence of manual manipulation, like the seams connecting removable sections of the model’s face. Kubo alone had 23,187 faces with 48 million potential expressions.

Laika uses 3-D printing “not because it makes it faster or cheaper, or takes fewer people or it’s easier to do by any stretch,” McLean says. “The reason we do it is because it allows our actors, which are these little nine-inch puppets, to perform in really realistic ways.”

To establish the Moon Beast’s realism, they started with character sketches (figure 1) and a physical model (figure 2) inspired by the *Dunkleosteus*, a serpentlike prehistoric fish

“IT’S AMAZING WHAT PEOPLE CAN DO CREATIVELY WHEN YOU COMBINE TRADITIONAL TECHNIQUES WITH EMERGING TECHNOLOGY.”

BRIAN MCLEAN



The prototyping team scanned the model into a program (fig. 3) that allowed them to sculpt the monster’s exterior and interior to achieve its moonlike glow. They infused sections of the beast with a “recipe” of lighting effects (fig. 4).

All images courtesy of Laika Entertainment

with plates of bony armor. They scanned the preliminary monster into a digital program (figure 3) that allowed them “to control not only the external surface of a sculpt, but the inside of the object,” McLean says. “You can create something in a 3-D printer that would be impossible to manufacture any other way.”

The team developed the beast’s textured glow by digitally infusing sections of the Moon Beast with a “recipe” of lighting effects (figure 4). Then, the animators needed to transfer the effects to a physical puppet.

That’s where they hit a snag: McLean’s vision of imparting the Moon Beast with a “cyan-like glow and salmon-colored shimmer” was beyond the scope of even the new 3-D printer, which could only print in one color. That’s how the title character in *Coraline* was printed; every iteration of her face was hand-painted, a process so time-consuming that it limited the scope of her expressions. (She had only 6,333 faces and 207,000 expressions, compared to Kubo’s 23,187 and 48 million.)

“You couldn’t have too many faces, or too much detail because that detail had to be repeated thousands and thousands of times,” McLean says. “And if it wasn’t repeated exactly on each face, it would come across as chatter. It limited how that character could look.”

For the Moon Beast, the team was determined to break down those barriers, imbuing the monster with unrestrained agility and an unearthly inner light. They created Laika’s first fully 3-D printed puppet.

A BEAST IS BORN

Laika’s reputation for innovation “gave us a lot of clout within the 3-D printing industry. We were responsible for pioneering a whole new use of the technology,” says McLean, who asked the company that provided the printer for *Coraline* for a machine that could print more colors. That’s how he secured exclusive access to a printer still in development.

Other 3-D printers print in compressed powder, which produces fragile pieces in a single color. The new printer (figure 5) employs durable plastic and prints in three colors



The prototyping team printed for 147 days (fig. 5) to deliver 1,417 different faces (fig. 6) for the Moon Beast that could be swapped between frames to achieve the monster’s expressions. They painted each piece of the Moon Beast’s body with ultraviolet paints (fig. 7) to give the monster a shimmering glow under different lighting combinations.



simultaneously, a combination that produces detailed pieces that are also strong enough to withstand the wear and tear of production.

McLean’s team used the new printer to produce the 881 individual parts that comprise the Moon Beast’s segmented exoskeleton. They backed the pieces with gold Mylar to give the creature its distinctive translucence, and achieved its shifting, shimmering glow with ultraviolet paints (figure 7) illuminated by different lighting combinations.

They printed for 147 days to deliver 1,417 different faces (figure 6) that could be swapped between frames to achieve the monster’s expressions and rigged the puppet onto a flexible frame (figure 8) so animators could manipulate it against a green screen.

Every 50 hours of work resulted in approximately 4 seconds of footage (figure 9).

The effort paid off, McLean says. “By photographing a real object bathed in real light, we’re giving it a wonderful sense of depth and



texture and vitality. CGI animators spent literally decades trying to find a way to render something that feels real. We have the benefit of photographing something real that feels like it has a personality and a life breathed into it. That’s what drew me to sculpting to begin with.

“I grew up with effects done practically, like *Star Wars*, *Indiana Jones*, and *ET*. Nowadays, kids come out of the theater and think, ‘That was done on the computer; it was easy.’ They forget that artists and technicians brought those things to life.

“What I love about being involved in Laika is that it brings back the magic we grew up with, leaving the theater thinking, ‘How did they do that?’” ●

Additional reporting by Angelica Frey



McLean (fig. 8) and his team rigged the puppet onto a flexible frame so animators could manipulate the Moon Beast against a green screen. Every 50 hours of work resulted in approximately 4 seconds of footage (fig. 9).

[WATCH A VIDEO OF THE MAKING OF THE MOON BEAST AT BU.EDU/CFA-MAGAZINE.](https://www.bu.edu/cfa-magazine/)

CLASS NOTES

WRITE TO US!

We want to hear what you've been up to. Send us your stories and photos, and we'll share the highlights here. Email cfaalum@bu.edu.

1950s

Elaine Burkly ('56), a retired fine arts director for the Falmouth Public Schools, recently directed performances of the Choraliers in Falmouth, Mass.

Edward Avedisian ('59,'61) received American University of Armenia's inaugural Presidential Commendation award in recognition of his role in the advancement of education in Armenia.

Sidney Hurwitz ('59) was one of three artists who presented work at the exhibition *Vanished Landmarks from Boston and Beyond*, held at Don Gorvett Perkins Cove Gallery in Ogunquit, Maine.

1960s

Brice Marden ('61, Hon.'07) presented work at the Gagosian Gallery in New York, N.Y., for the European Fine Art Fair in 2018.

1970s

Stewart F. Lane ('73), a six-time Tony Award-winning producer, co-owner and operator of the Palace Theatre on Broadway, was inducted into the Manhattan Jewish Hall of Fame in May 2018.

Jane Blair ('74) presented a lecture on Paul Cézanne at the Winchester Jenks Center in Winchester, Mass., in May 2018.

Alison Edwards ('75) performed in the new theater company PRIME Productions' debut, the

regional premiere of Steven Carl McCasland's *Little Wars* at Mixed Blood Theatre in Minneapolis, Minn.

Paula Plum ('75) starred in the Lyric Stage Company of Boston's 2017 production of *Who's Afraid of Virginia Woolf?*

Gretchen M. Pusch ('77) performed in the final program of the Taos Chamber Music Group's 24th season in Taos, N.M.

Claudia Stevens ('77), a librettist, held a lecture before *Middlemarch in Spring* at Charlottesville Opera in Charlottesville, Va.

Robert Stuart ('77) participated in *Select*, a group art show at Garvey|Simon Art Access in New York, N.Y., in summer 2017.

Christopher Purdy ('78) celebrated his silver anniversary as a radio show host with WOSU Public Media in spring 2018.

Ellen Schön (PIA'78, '84) and her mother have combined their talents for the exhibition *Schön and Schön* at The Art Gallery at North Hill in Needham, Mass.

Sally Donnell Rilee (PIA'79) displayed her paintings at the Paramount Theater in Burlington, N.C., in 2017.

Paul Schulenburg ('79) has exhibited at museums and appeared in national art publications. He has been recognized with awards by the Salmagundi Club and the Copley Society of Art, and in July 2018, the *Cape Cod Chronicle* called his work "delightful to the eyes, as well as to the intellect and soul."

1980s

Peter Edwin Krasinski ('80, STH'98) produced Cecil B. DeMille's *The King of Kings* at St. Mary's Church in Newport, R.I., in spring 2018.

Julia Shepley ('80) presented prints at the Montserrat College of Art Gallery in Beverly, Mass., in summer 2017.

Jason Alexander ('81, Hon.'95) cocreated Audience Network's *Hit the Road* and guest-starred on CBS's *Young Sheldon*. In spring 2018, he headlined with the New Jersey Symphony Orchestra.

Todd Ellison ('82) will assume the role of music director and principal conductor of the Philly Pops in spring 2019. [Learn what inspires Ellison at bu.edu/cfa-magazine](https://www.bu.edu/cfa-magazine).

Christopher Akerlind ('85) won a 2017 Tony Award for Best Lighting Design of a Play for his work in *Indecent*.

Francisco Noya ('88) directed the Indigo Girls with the New Philharmonia Orchestra in Newton, Mass., in spring 2018.

1990s

Susan Dalian ('90) directed *Lie After Lie After Lie* at MACH 33: A Festival of New Science Driven Plays at Pasadena Playhouse in Pasadena, Calif.

Rhett Martinez ('93) wrote *Three on a Match*, an allegorical drama

Courtesy of Disney Theatrical Productions



"It's fun to delve into the wide-eyed innocence of this character. He's this joyful object of love."

GREG HILDRETH ('05)

Disney's Snowman Showman

THE AUDIENCE GOES WILD when Olaf the snowman bumbles onto the stage in *Frozen, the Broadway Musical*, the \$30 million stage version of Disney's smash hit film. Children cry out Olaf's name like he's a rock star. Although Greg Hildreth has portrayed the snowman who loves warm hugs since the show's pre-Broadway run in 2017, he says the audience's adoration never gets old.

It also helps sustain him in a challenging role that requires serious physical effort and dexterity: Hildreth ('05) mans a four-foot puppet harnessed to his lower waist; the 16-pound rig takes two people to put on. With his right hand, he operates levers in the snowman's foam head that make Olaf talk, blink, or wiggle his eyebrows, while he uses his left hand to control his twiggy arms.

Hildreth says learning the role was like "learning to spin plates," and to prevent injury, he sees a physical therapist twice weekly. "It's a physical strain, but it's also this extreme mental challenge as well," Hildreth says. "It's a full-body experience."

Frozen is Hildreth's fourth appearance on Broadway, where he has played rebel Jean-Michel in the 2013 production of Rodgers and Hammerstein's *Cinderella*; Alf, the lady-loving seafarer in *Peter and the Starcatcher*; and a university president in *Bloody Bloody Andrew Jackson*.

None has been received quite like *Frozen*'s snowman star.

"It's fun to delve into the wide-eyed innocence of this character," Hildreth says. "He's this joyful object of love."—MEG WOOLHOUSE

[Learn more about Hildreth and hear him sing at bu.edu/cfa-magazine](https://www.bu.edu/cfa-magazine).

about the legacy of state terrorism in Latin America. In spring 2018, the play was presented by the IATI Theater in New York, N.Y.

Jeff Mossa ('93) was nominated for a 2018 Primetime Emmy Award for Outstanding Production Design for a Narrative Contemporary or Fantasy Program (One Hour or More) for his work as a designer on FX's *American Horror Story: Cult*.

Suzanne Wiggan ('94) presented oil paintings and ink monotypes in *In Pursuit* at the Taos Art Museum at Fechin House in Taos, N.M.

Kerry Ni ('96) was elected to the Hingham, Mass., school committee in spring 2018.

Margo Saulnier (BUTI'90, CFA'96) is the cultural coordinator for New Bedford, Mass., and will be overseeing the development and implementation of the New Bedford Arts and Cultural Plan.

Susan "Sue" D. Wagner ('97) was the producer of the musical *Hello, Dolly!*, which won a 2017 Tony Award for Best Revival of a Musical.

Courtney McDonald Bottoms ('99) performed with Chix with Stix at the Albany Symphony Orchestra in Albany, N.Y., in spring 2017.

David W. Sisco ('99) published his first book, *Mastering College Musical Theatre Auditions: Sound Advice for the Student, Teacher, and Parent* (Contemporary Musical Theatre Corp., 2017).

2000s

Noah Bean ('00) starred as Foster Hilburn in the second season of Hulu's *Shut Eye*, which premiered in December 2017.

Brad Daniel Peloquin ('00, Wheelock'16) starred in *Brecht on Brecht* at the New Repertory Theatre in Watertown, Mass., in 2017.

Daria Polatin ('00), a playwright and TV writer, published the young adult thriller *Devil in Ohio* (Feiwel and Friends, 2017).



Daniel J. Rabone Memorial Fund

Educator and actor **Daniel J. Rabone ('91)** was a mentor to young theater artists; when he died in 2015, his husband **Richard P. Trevino (SPH'06)**, director of finance at BU's **National Emerging Infectious Diseases Laboratories (NEIDL)**, embarked on establishing a fund for young adults to attend the **BU Summer Theatre Institute (BUSTI)**. [Learn more about supporting the fund at bu.edu/cfa-magazine](https://bu.edu/cfa-magazine).

Jessica Dickey ('01) presented her play *Row After Row* in February 2018 with The Comrades at the Apollo Studio Theater in Chicago, Ill.

Akiko Fujimoto ('01), assistant conductor of the Minnesota Orchestra in Minneapolis, Minn., directed the orchestra at the Phipps Center for the Arts 30th annual concert at the Lakefront Park bandshell in Hudson, Wis., in summer 2018.

Wayne Wilcox ('01) starred as Nelson Rockefeller in the Off-Broadway rock musical *Bulldozer: The Ballad of Robert Moses* at the Theatre at St. Clement's in New York, N.Y., in winter 2017–2018.

Daniel Zaitchik ('02) wrote the book, music, and lyrics for the musical *Darling Grenadine*.

Uzo Aduba ('05) was named Heifer International's first ambassador to Africa in 2018, through which she will assist the organization's mission to end hunger and poverty. In 2017, she received the Ally for Equality Award at the Human Rights Campaign National Dinner and the Point Courage Award. Aduba also contributed to America Ferrera's book *American Like Me: Reflections on Life Between Cultures* (Gallery Books). In 2018, she appeared in the HBO series *2 Dope Queens* and in Netflix's *Candy Jar*.

She voiced Queen Novo in 2017's *My Little Pony: The Movie*, will appear in *Beats* (2019), and portrays Suzanne "Crazy Eyes" Warren on the Netflix series *Orange Is the New Black*.

Sara Chase ('05) worked on the pre-Broadway workshop of *Romy and Michelle's High School Reunion* and on the musical adaptation of the movie *Roman Holiday*.

Rachel Hellmann ('05) curated the exhibition *Self Portraits: The Original Selfie* at the Arts Illiana Gallery in Terre Haute, Ind.

Matt Otto ('06) created the sound design for the play *Abigail's Party*, a revival of a play by Mike Leigh, at the Barrow Group Theatre Company in New York, N.Y.

Liam Mulshine ('07) performed in Inis Nua Theatre Company's American premiere of Lee Coffey's *Leper and Chip* at Louis Bluver Theatre at The Drake in Philadelphia, Pa.

Craig Swan ('07) created the seven-foot sculpture *Sundial* as part of his collection of public art for the town of Norman, Okla. He also was recently appointed as an advisor for The University of Oklahoma College of Engineering.

Kevin Chi-Sing Leong ('08) is the music director of Masterworks Chorale in Cambridge, Mass., and led the group in their 78th season. He is also the music director of the 120-voice Concord Chorus and was previously the artistic director and conductor of the 180-voice Harvard-Radcliffe Chorus and associate conductor of the Harvard-Radcliffe Choruses at Harvard University.

Ben Pilat ('08), a lighting designer, joined the theater arts department at Colorado Mesa University in Grand Junction, Colo., where he taught three classes and designed three shows in spring 2018.

Charles A. Poole, Jr. ('08), music educator at Everett Public Schools in Everett, Mass., was inducted into the World Drum Corps Hall of Fame in August 2017. Poole has

Kalman Zabarsky

served as an adjudicator for Drum Corps International, Drum Corps Associates, Winter Guard International, New England Scholastic Band Association, Maine Band Directors Association, Mid East Performance Association, United States Scholastic Band Association, and Bands of America.

Ibrahim Miari ('09) starred as Richard Saad in *The Humans* at Walnut Street Theatre in Philadelphia, Pa., in spring 2018.

Ida Pappas ('09) is the performing arts coordinator at Lexington Public Schools in Lexington, Mass.

2010s

Vera I. Rubin ('10), a violinist, participated in a Hungarian music performance at Cornerstone at Canton Assisted Living and Memory Support Community in Canton, Mass.

Annie Wiegand ('10), one of few deaf professional lighting designers based in the New York City area, recently became a teaching artist at Roundabout Theatre Company in New York, N.Y.

Stephen Marotto ('11,'18), a cellist, joined the new music ensemble Sound Icon, and presented Morton Feldman's rarely performed piece, *Patterns in a Chromatic Field*, at the Great Music at St. Bart's concert series in New York, N.Y., in May 2018.

The following alums performed in *Fiddler on the Roof* at New Repertory Theatre in Watertown, Mass.: **Eric Sauter ('11)**, **Patrick Varner ('13)**, **Adrienne Boris ('15)**, **Eli Raskin ('16)**, **Ben Salus ('16)**, **Adam L. Barrameda ('17)**, **Grant "Bo" Krucik ('17)**, and **Dylan Wack ('18)**.

Seth MacLeod ('12), principal cellist with the Boston Civic Symphony, performed at Beacon Hill Civic Association's An Evening at 74 in April 2018. The event celebrates music, performance, and food, and encourages Boston, Mass., residents to experience the arts while building community.



Dissent Collar #11



Dissent Collar #6



Dissent Collar #7

ROXANA ALGER GEFFEN ('99)

Inspiration: Ruth Bader Ginsburg

Roxana Alger Geffen ('99) presented a talk at a summer event series at the College of the Atlantic in Bar Harbor, Maine, about her latest work, *Dissent Collars*, which was inspired by Supreme Court Justice Ruth Bader Ginsburg. Ginsburg accessorizes her judicial robes with statement-making collars, including a famous "dissent collar" for occasions when she objects to Supreme Court decisions.

Courtesy of Roxana Alger Geffen



Seen On-Screen



Kim Raver ('91) appeared in ABC's *Designated Survivor* and *Grey's Anatomy*, voiced Captain Marvel in Marvel Animation's *Marvel Rising: Secret Warriors*, and is executive producing a trilogy of Lifetime films based on Jane Green novels.

Julianne Moore ('83) starred in 2018's *Gloria Bell*, *My Life on the Road*, and *After the Wedding*. She participated in a Time's Up live event at the 2018 Tribeca Film Festival and penned excuse letters for students who walked out in support of gun control.



Michaela Watkins ('94) played Julia Child in Comedy Central's *Drunk History*. She starred in Hulu's comedy-drama *Casual*, which aired its final season in 2018.

Ginnifer Goodwin ('01) won the 2017 Kids' Choice Award for Favorite Frenemies for her performance as Judy in *Zootopia*. She also starred in Nick Payne's play *Constellations* at Geffen Playhouse Theatre in Los Angeles, Calif.

Michael Chiklis ('85) appeared in the 2018 film *1985* and narrated the 2017 documentary *Fallen*. In 2018, he also starred in CBS's drama pilot *Murder* and voiced Zeus on Disney Channel's *DuckTales*.

Daniel Peterson ('12) gave a talk in May 2017 at the Democratic Club of the High Desert in Palmdale, Calif., on the future of arts in public education.

John Zdrojeski ('12) performed as Romeo in *Romeo and Juliet* with Commonwealth Shakespeare Company in Babson Park, Mass.

Emily Ranii ('13) directed *The Normal Heart*, a modern American classic presented by Burning Coal Theatre Company in Raleigh, N.C.

Andrew Brown ('14) is production coordinator and facilities manager at Lyric Theatre of Oklahoma in Oklahoma City, Okla.

Kristen Cooke ('14) was featured in *Oboe for ORCF*, a fundraising musical event for the Ottawa Regional Cancer Foundation in Ottawa, Canada.

Lena McCarthy ('14) was recently featured in *Boston Voyager Magazine* for her murals and public art projects throughout Boston.

Ben Owens ('14) is the director of the middle and high school bands in North Reading, Mass.

Peter Cirka ('15) performed at Pennsylvania State University, where his program included the piano nocturnes of Gabriel Fauré. He has appeared as a soloist in concertos with the Contemporary Chamber Ensemble of Ithaca N.Y., and the Penn State Sinfonietta.

Nik Sadhnani ('15) starred as Dar in *The Invisible Hand* at the Cleveland Playhouse in Cleveland, Ohio.

Marcelle Schiff ('15) presented *Music and Meaning: Why We Sing* for the Unitarian Universalists of Southern Delaware.

Michael Driscoll ('16) received the 2017 American Choral Directors Association's Julius Herford Dissertation Prize.

Kristin Howard ('16), a soprano, was the guest artist in Gabriel Fauré's *Requiem*, performed by the Chatham Chorale.

Hyun Min Lee ('16) joined the staff at Concord Community Music School in Concord, N.H.

Mark Liu ('16) received the Music Inspiration Award at the Chicago Youth Symphony Orchestra's spring concert in May 2018.

Matthew Macca ('16) starred as Dromio of Ephesus in Shakespeare's *The Comedy of Errors* at the Hartford Stage in Hartford, Conn.

Jonathan Stewart ('16) joined the Choral Society as a soloist for Handel's *Messiah* concert in December 2017.

Tatiana Gil ('17) had her first full-length work, *Lithosphere Heart*, a semi-autobiographical piece, produced as a staged reading through the OUT'hood Residency Program at The Theater Offensive in Boston, Mass.

Nicholas A. Mancini ('17) displayed his paintings at the *Best of the Northeast* exhibition at Helen Day Art Center in Stowe, Vt.

Matt Scinto ('17), conductor of the Cape Cod Chamber Orchestra, is establishing an estimated 25-member ensemble intended to bring classical music to new venues, play works by young composers, and help foster younger audiences.

Arden Cone ('18) exhibited work in *Looking Away: Arden Cone and Glen Miller* in May 2018. She writes, "I explored a revisionism of Southern history in oversized paintings about Confederate monuments."

Kendall Driscoll ('18) played the flute for the symphonic debut of the Aiken Civic Orchestra in Aiken, S.C.

Stephen Pick ('18) was named the executive director to the staff of the performing arts organization Journey Theater Arts Group in Vancouver, Wash.

Baron R. Pugh ('18) was the scenic designer of *The Wiz* at the Lyric Stage Company of Boston in Boston, Mass.



HOW A PHOTO OF A VIOLINIST WHO DIED IN AUSCHWITZ INSPIRES GRAMMY-WINNING CONDUCTOR BRAMWELL TOVEY

IN 1943, Austrian violinist Alma Rosé was taken to the Auschwitz concentration camp, where she was made conductor of the women's orchestra that performed for prisoners and officers. She died of illness in Auschwitz in 1944 and is remembered for bringing her fellow prisoners and musicians a spiritual escape amidst the horrors of the Holocaust.

A decade earlier, Rosé had been an international star. The niece of composer Gustav Mahler and daughter of a celebrated concertmaster, Rosé was the founder of the all-women Wiener Walzermädeln (The Viennese Waltzing Girls), a salon orchestra that toured internationally to great success until the Nazis took control of Austria.

When reading a book about the Women's Orchestra of Auschwitz, Bramwell Tovey, an associate professor of music and director

of orchestral activities, was struck by a photograph of Rosé (center) with Wiener Walzermädeln in a 1930 concert. He says the photograph, showing "the fullness of life, which we know was destroyed afterwards, and its sense of loss," has become "an emblematic impetus" for a violin concerto he's composing for the National Arts Centre Orchestra in Ottawa, Canada.

"I'm also writing this piece exactly 50 years after the death of my father, who died when I was 15. That particular sense of loss is helping me to realize what I'm trying to express, a narrative that can take the listener to different levels," says Tovey, also an award-winning jazz pianist and conductor. "The German philosopher, Arthur Schopenhauer, said that music takes over where words cease function." —LE

Courtesy of ABC (Raver), Comedy Central (Watkins)

Gustav Mahler-Alfred Rosé Collection, Music Library, Western University, London, Canada



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David Martins,
conductor
Paul Hindemith
Symphony in Bb

Bramwell Tovey, conductor
Francis Poulenc – *Gloria*
Gustav Holst – *The Planets*

Monday, April 1, 2019