

John Adams

Doctor Atomic

CONDUCTOR
Alan Gilbert

PRODUCTION
Penny Woolcock

SET DESIGNER
Julian Crouch

COSTUME DESIGNER
Catherine Zuber

LIGHTING DESIGNER
Brian MacDevitt

CHOREOGRAPHER
Andrew Dawson

VIDEO DESIGN
**Leo Warner &
Mark Grimmer
for Fifty Nine
Productions Ltd.**

SOUND DESIGNER
Mark Grey

GENERAL MANAGER
Peter Gelb

MUSIC DIRECTOR
James Levine

Opera in two acts

Libretto by Peter Sellars,
adapted from original sources

Saturday, November 8, 2008, 1:00–4:25pm

New Production

The production of *Doctor Atomic* was made possible by a generous gift from **Agnes Varis** and **Karl Leichtman**.

The commission of *Doctor Atomic* and the original San Francisco Opera production were made possible by a generous gift from Roberta Bialek.

Doctor Atomic is a co-production with English National Opera.

The Metropolitan Opera
2008–09 Season

The 8th Metropolitan Opera performance of

John Adams's

Doctor Atomic

Conductor

Alan Gilbert

IN ORDER OF VOCAL APPEARANCE

Edward Teller

Richard Paul Fink

J. Robert Oppenheimer

Gerald Finley

Robert Wilson

Thomas Glenn

Kitty Oppenheimer

Sasha Cooke

General Leslie Groves

Eric Owens

Frank Hubbard

Earle Patriarco

Captain James Nolan

Roger Honeywell

Pasqualita

Meredith Arwady

Saturday, November 8, 2008, 1:00–4:25pm

This afternoon's performance is being transmitted live in high definition to movie theaters worldwide. *The Met: Live in HD* series is made possible by a generous grant from the **Neubauer Family Foundation**. Additional support for this *Live in HD* transmission and subsequent broadcast on PBS is provided by the **Alfred P. Sloan Foundation**.



Ken Howard/Metropolitan Opera

Gerald Finley
(foreground) as
J. Robert Oppenheimer
in *Doctor Atomic*

Chorus Master Donald Palumbo
Musical Preparation Linda Hall, Howard Watkins, Caren Levine,
Donato Cabrera, Erie Mills, Pei-Yao Wang
Assistant Stage Directors Eric Einhorn, David Kneuss
Prompter Caren Levine
Met Titles Michael Panayos
Scenery, properties, and electrical props constructed and painted
by Cardiff Theatrical Services and Metropolitan Opera Shops
Assistant to the Set Designer Rob Thirle
Assistant Costume Designer David Newell
Costumes by Metropolitan Opera Costume Department and
Angels The Costumiers, London
Wigs by Metropolitan Opera Wig Department
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author of *Atom Bombs*
Sound equipment provided by Meyer Sound Laboratories, Inc.

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This production uses flash and loud sound effects.

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of the Metropolitan Opera.

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Synopsis

Act I

- SCENE 1 The Manhattan Project laboratory, Los Alamos, New Mexico.
June, 1945
- SCENE 2 The Oppenheimers' house in Los Alamos
- SCENE 3 The "Trinity" test site at Alamogordo, New Mexico. July 15, 1945

Intermission

Act II

- SCENE 1 The Oppenheimers' house, early morning, July 16, 1945
 - INTERLUDE Rain over the Sangre de Cristo Mountains
 - SCENE 2 The test site. Midnight, July 16, 1945
 - SCENES 3 AND 4 Countdown
-

Act I

Work on the atomic bomb approaches its culminating point, led by physicist J. Robert Oppenheimer and Army Commander General Leslie Groves. Since the surrender of Germany, many of the scientists have begun to question the necessity of using the bomb against Japan. Edward Teller and Robert Wilson are especially troubled by the moral and social implications and try to convince the others to sign a petition to President Truman. Oppenheimer admonishes them. He has just returned from Washington and describes the decision to bomb Japanese cities, focusing on civilian targets.

Oppenheimer answers the concerned questions of his wife, Kitty, with verses by one of their favorite poets, Baudelaire. For a few brief moments, they are transported into the intoxicated climate of the poem. Left alone, Kitty thinks about the contradictions of peace, war, and love.

It is the night of the test of the first atomic bomb. A massive electrical storm is lashing the test site, and the bomb, partially armed and hoisted on a high tower, is in danger of being struck by lightning. Chief Meteorologist Frank Hubbard warns the frustrated General Groves that attempting the test in these conditions is extremely dangerous. Captain Nolan of the Army Medical Corps tries to impress upon Groves the deadly toxic properties of plutonium and radiation poisoning, which are only just beginning to be understood. As panic starts to take hold, the general dismisses all staff to confer with Oppenheimer alone. The physicist gently teases Groves about his chronic weight problems, and Groves leaves to get some sleep. Oppenheimer faces his own personal crisis alone in the desert, recalling a sonnet by John Donne that inspired him to name the test site "Trinity": "Batter my heart, three-person'd God."

Synopsis *continued*

Act II

Two hundred miles from the test site, Kitty and her Indian maid, Pasqualita, watch the night sky for signs of the explosion. Pasqualita occasionally checks on the Oppenheimers' sleeping child. Kitty again reflects on war, death, and the resurrection of the spirit.

Seven-month-old Katherine Oppenheimer awakens, crying. Pasqualita comforts her, singing a lullaby.

All personnel have been cleared from the blast area. Wilson and Hubbard are at the bomb tower, making last-minute measurements ordered by Groves. Both are extremely worried about testing the bomb in the middle of an electrical storm. At the observation bunker, the scientists discuss the possibility that the detonation might set off an uncontrolled chain reaction ending in the destruction of the earth's atmosphere. Oppenheimer claims that such a result is not possible. With the rain still coming down, Groves disregards all warnings about the storm, and Oppenheimer orders everybody to prepare for the test shot at 5:30am.

Groves is plagued by fears of sabotage, while Oppenheimer is in a state of extreme nervous exhaustion. Everyone waits, each absorbed in his own thoughts. The men make bets, trying to guess the yield of the bomb. Oppenheimer surprises everyone by his pessimistic prediction, and even Groves is unable to conceal his waning faith. Suddenly, the night sky is filled with a terrifying vision of Vishnu as described in the *Bhagavad Gita*: "At the sight of this, your Shape stupendous, full of mouths and eyes ... terrible with fangs ... when I see you, Vishnu ... with your mouths agape and flame-eyes staring—all my peace is gone; my heart is troubled." At zero minus ten minutes, a warning rocket is fired and a siren sounds. Then the storm breaks, and the sky over Ground Zero suddenly clears. Another warning rocket goes off, and at zero minus 60 seconds, a third one signals the final countdown. Base Camp resembles an outpost of the dead: rows of scientists and Army personnel lying facedown in shallow ditches. There is no movement or whisper of activity, only the rhythmic countdown over the loudspeaker. At zero minus 45 seconds, an engineer flips the switch for the automatic timer. The triggering circuits begin to fire. "Zero minus one." There is an eerie silence.

John Adams **Doctor Atomic**

Premiere: San Francisco Opera, 2005

This monumental contemporary opera is a riveting examination of one of the most significant episodes in world history: the events leading up to the testing of the first atomic bomb in New Mexico in 1945. Like composer John Adams's previous operas *Nixon in China* and *The Death of Klinghoffer*, *Doctor Atomic* is not a reenactment of a historical moment but rather an exploration of the people, personalities, and issues involved in an epic incident. The focus of the piece is the title character, J. Robert Oppenheimer, the cultivated American physicist who was the director of the Manhattan Project, which developed the world's first nuclear weapon during World War II. The libretto is created from a variety of original sources, including U.S. government documents and communications from the scientists and military personnel involved in the project. Beyond that, other texts become part of the story by association with the characters: the sacred Hindu epic *Bhagavad Gita* (which Oppenheimer studied in the original Sanskrit and famously quoted in reaction to his work on the project), and poetry by such diverse writers as John Donne, Charles Baudelaire, and Muriel Rukeyser, as well as a traditional song of the Native American Tewa people.

The Creators

John Adams (b. 1947) is among the world's most esteemed living composers and has written works in a variety of genres, including orchestral, chamber, and vocal music. Over the years his musical language has fanned out in a multitude of directions, incorporating elements from various artistic traditions all over the world. Many of his works have taken recent historical events as a departure point. These include the operas *Nixon in China* (1987), *The Death of Klinghoffer* (1991, about the hijacking of the cruise ship *Achille Lauro*), and *I Was Looking at the Ceiling and Then I Saw the Sky* (1995, dealing with the Los Angeles earthquake of 1993). *On the Transmigration of Souls* (2002), which won a Pulitzer Prize, commemorates the victims of the September 11 attacks. The libretto of *Doctor Atomic* was fashioned from a variety of sources by Peter Sellars (b. 1957), the remarkable and often controversial theater director whose work has expanded the horizons of traditional opera for many audiences.

The Setting

The opera is set in and around Los Alamos, New Mexico. The first two scenes of Act I take place about a month before the actual test. The remainder of the opera chronicles the events of the night of July 15–16, 1945, just before the detonation of the first atomic bomb.

The Music

Adams's score for *Doctor Atomic* does not adhere to any single musical dogma, but makes use of a wide spectrum of musical ideas and methods. There are several extended aria-like solos, most notably for Oppenheimer (a soliloquy based on John Donne's sonnet "Batter my heart, three-person'd God," at the end of Act I), for Kitty (a rendering of the Rukeyser poem "Easter Eve 1945," opening Act II), and for Pasqualita (a haunting lullaby sung during a rainstorm in Act II). These solos, like the score as a whole, cannot be classified as "traditional" or "avant-garde," but resonate in both directions at once. "Concrete music" also figures in the score—ambient sounds from actual life that punctuate the music, such as running motors, crying babies, and snippets of pop music and spoken word. The choral presence is also very strong, most notably in Act II, with lines from the *Bhagavad Gita* that so haunted Oppenheimer. Whether lyrical or dissonant, the score is entirely accessible to the modern ear, which will respond to such familiar devices as the tritones, traditionally dubbed "devil in music," that throb without resolution at the opera's finale—like the issues raised by the advent of nuclear power.

Doctor Atomic at the Met

This season's performances mark the opera's Met premiere. The production by Penny Woolcock, with set designs by Julian Crouch, reflects the Met's renewed commitment to presenting contemporary masterpieces by important living composers.

A Note from the Composer

In 1999 I received a call from Pamela Rosenberg, who was just beginning her tenure as general director of the San Francisco Opera. She had a provocative suggestion, that I compose an "American Faust" opera. Her historical figure of choice to embody that character was none other than J. Robert Oppenheimer. In Pamela's mind, Oppenheimer's decision to accept the U.S. Army's invitation to lead the Manhattan Project and develop the atomic bomb had a latter-day "pact with the devil" implication. Oppenheimer's eventual fall from political grace and public humiliation mirrored the Faust myth.

I might have been a little uncomfortable with the thought of taking on a myth as familiar and universally celebrated as Faust, but Pamela's mention of Oppenheimer rang a bell with an urgency I'd not felt since Peter Sellars had popped the Nixon and Mao question to me nearly 20 years earlier. The atomic bomb had been the overwhelming, irresistible, inescapable image that dominated the psychic activity of my childhood. The mushroom cloud was a sinister consort to my young thoughts, a source of existential terror that seemed permanently factored into every one of life's decisions, the ultimate annihilator of any positive emotions or hopes. I had come of age during the era of heated rhetoric and skittish paranoia that typified the Cold War, and the small-town, rural idyll of my childhood was always clouded by the absurdities of air-raid drills, "family" bomb shelters, arsenals of nuclear warheads, and the chatter of politicians invoking the evils that lurked behind what Churchill with his gift for epithets had so evocatively dubbed the "Iron Curtain."

Despite my misgivings about the Faust connection, I answered Pamela's request in the affirmative almost immediately, and within a few days I was plunged deep into what would become nearly four years of research and thinking about the topic.

Oppenheimer, known as "Oppie" to his friends and students, was certainly a magnetic figure for dramatic treatment. In life he possessed qualities we don't usually associate with scientists. He was



John Adams

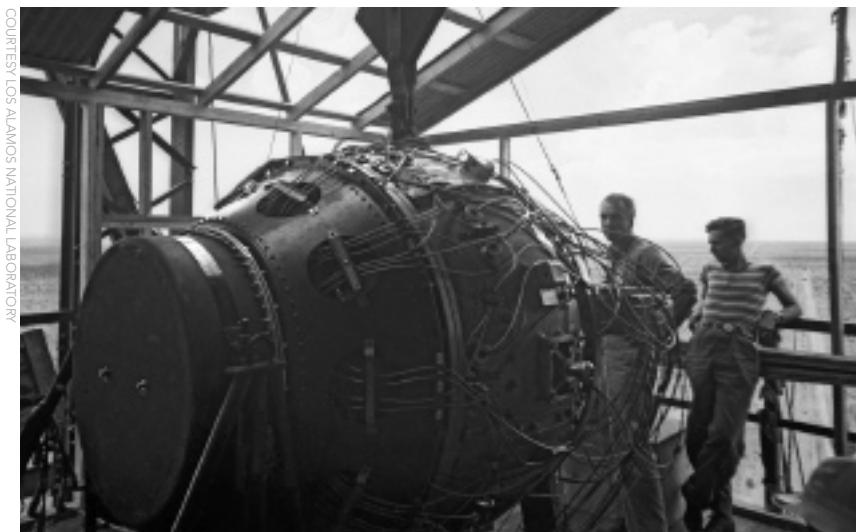


COURTESY EMILIO SEGRE VISUAL ARCHIVES

J. Robert Oppenheimer and General Leslie Groves at the test site several days after the explosion

A Note from the Composer *continued*

highly cultured in all the arts; immensely literate; able to speak fluent German, French, and Dutch; and had a reading command of half a dozen more languages, including Sanskrit, which he learned so that he could read the *Bhagavad Gita* in its original form. At Harvard, as an 18-year-old taking advanced graduate courses in physics and chemistry, he unwound at night by composing sonnets. Some 25 years later, in the anxious hours leading up to the test firing of the bomb, he is rumored to have calmed his shattered nerves by reading from a tattered copy of Baudelaire's *Fleurs du mal*, which he kept as a kind of spiritual vade mecum.



The first atomic bomb, nicknamed the Gadget, sits atop the test tower, July 15, 1945.

There were any number of ways to treat the story [of the bomb's creation]. In some respects Pamela Rosenberg's Faust analogy was very apt. Certainly Oppenheimer and many of his coworkers suffered remorse after the war when they witnessed the devastation wrought by the weapon they had made. And Oppenheimer himself had traded scientific independence for great political influence. But this was wartime, and the young physicists and engineers that Oppenheimer assembled in Los Alamos outside of Santa Fe all rightly considered themselves in a race with the Nazis. Oppenheimer had many left-wing friends, and he had dabbled moderately in Socialist causes during the 1930s. His brother, Frank, had joined the Communist Party, and his wife's first husband had been a Communist union organizer in the Pennsylvania coal mines. For Oppenheimer to sign on to be the principal player in the army's most secret weapons program had some aspects of a Faustian bargain. He pledged loyalty and obedience in exchange for which he was allowed to assemble the most stellar cast of scientific

COURTESY LOS ALAMOS NATIONAL LABORATORY

A Note from the Composer *continued*

geniuses ever to be brought together to solve a single problem. But in the end, there was no reason not to believe that their efforts were anything other than patriotic and devoted to saving civilization as they knew it.

Once I'd decided to make this opera I contacted Peter Sellars and asked if this might be a project that would interest him. As with the earlier operas, we started with plans that were much too grand, projecting a design that would begin with Los Alamos and culminate eight years later with Teller betraying Oppenheimer at a hearing of the Atomic Energy Commission, of which Oppenheimer had been a charter member.

But by the time this opera reached the stage several years later, in October 2005, almost all of this had changed. I had given it a name: *Doctor Atomic*. Peter had proposed calling it *The New Atlantis*, after an essay by the 16th-century English philosopher Francis Bacon, but I wanted something that had more of a populist ring to it, as if it were a story title out of *Life* magazine circa 1950. It was a title that resonated with science fiction and the American middlebrow impression of scientific geniuses. And in a nod to Pamela Rosenberg's initial inspiration, it also hinted a backdoor reference to [Thomas] Mann's *Doktor Faustus*.

The libretto for *Doctor Atomic* was unlike anything the opera world had ever encountered. I had prodded Peter to assemble a libretto from the huge amount of documented material that we'd already compiled. This was a radical but actually workable idea. Instead of writing an original text from scratch, we would give the historical characters the very words they had said, either by quoting them verbatim, as we did by utilizing Edward Teller's and General Groves's memoirs, or by using recollections by and interviews with the scientists and military personnel

who had participated in the project.

But the expressive high points in *Doctor Atomic* are those set to real poetry, poetry that Oppenheimer had a special affinity for. In both acts I set passages by his beloved Charles Baudelaire, dreamlike evocations about time and space, about the keenest of sensual pleasure on the one hand and the bleakest of existential dread on the other. Later in the opera, the eerie silence that accompanies the final countdown is interrupted by a pounding, violent choral vision of fiery holocaust set to Christopher Isherwood's translation of the *Bhagavad Gita*:

At the sight of this, your Shape stupendous,
Full of mouths and eyes, feet, thighs and bellies,
Terrible with fangs, O master,
All the worlds are fear-struck, even just as I am.

COURTESY THE DEPARTMENT OF ENERGY



A Note from the Composer *continued*

In an inspired decision, Peter placed the famous John Donne Holy Sonnet, "Batter my heart, three-person'd God," at the very end of Act I. The "three-person'd God" of Donne's poem provided the stimulus for Oppenheimer's whimsical naming of the test site: Trinity. The image of the physicist, alone at last, contemplating his dark, destructive creation, drew from me a musically strange response, but one that in retrospect seems entirely appropriate. After a whole act of music that teeters on the cusp of atonality, "Batter my heart" appears as an archaic trope, its D-minor chord sequences projecting a slow, stately gravitas that to me spoke for the poem's content as well as for what must surely have been Oppenheimer's wildly conflicting emotions. How could this supremely intelligent and sensitive man not have peered into the terrible future of what this bomb would bring? How could he not have suspected the horrific, lingering pain and slow, agonizing death that its radiation would cause for tens of thousands of innocent civilians? The Donne poem is an expression of the keenest spiritual pain, a beseeching, an appeal to God that He physically beat and batter the speaker in order that his divided self might rise up and be made whole again:

That I may rise, and stand, o'erthrow me, and bend
Your force, to break, blow, burn and make me new.

I struggled for months over how to treat the explosion. No operatic evocation of an atomic bomb could go head-to-head with the dazzling effects available to a Hollywood director. Trying to pull out the orchestral stops to approximate an atomic explosion would only produce a laughable effect for an audience inoculated by years of George Lucas space epics. Ultimately I chose to create an extended orchestral countdown, a panoply of clocks, some ticking, others pounding like pile drivers, each at its own tempo. Underneath the clock polyphony is a bone-rattling booming coming from loudspeakers that surround the audience. To this I added, at the peak moment, a cluster of recorded baby screams that shrieks across the physical space of the theater like a sonic knife, slashing the darkness. At the high point of this countdown, with the chorus singing frantic, wordless exclamations, the entire cast takes cover, lying prone on the stage, staring straight into the eyes of the audience. As the tape recorded voice of a Japanese woman repeatedly asking for a glass of water plays in the distance, the audience gradually realizes that they themselves are the bomb. —John Adams

COURTESY EMILIO SEGRE VISUAL ARCHIVES



The mushroom cloud created by the first atomic bomb

Excerpted from Hallelujah Junction by John Adams, published by Farrar, Straus and Giroux, LLC. Copyright © 2008 by John Adams.

A Note from the Director

September 12, 1933. The day the world changed forever.

While Leo Szilard was waiting for the traffic lights to change on Southampton Row in London, he conceived the idea of the nuclear chain reaction and of its potential to make a wildly destructive weapon. Then, in 1939, he and his friend Enrico Fermi conducted a simple experiment proving that the chain reaction was possible. "We turned the switch, saw the flashes, watched for ten minutes, then switched everything off and went home. That night I knew the world was headed for sorrow."

Szilard also knew that scientists in Nazi Germany could easily arrive at the same conclusion. After all, they had all read the same scientific papers and attended the same conferences. He asked his friend Albert Einstein to secure him an interview with President Roosevelt to persuade him to fund the Manhattan Project.

Robert Oppenheimer was chosen to run the research station at Los Alamos, where they created the plutonium bomb dropped on Hiroshima. The mesa in New Mexico was remote enough to keep the project secret and underpopulated enough for the test. Oppenheimer was clever and charismatic and he was able to attract the most brilliant scientists in the world to head off to the privations of the desert—legendary names such as Serber, Wilson, Christie, Teller, Feynman, Bethe, Segre, and Bohr. Most of them were highly cultured, non-conformist geniuses. Like many of them, Oppenheimer was politically very left-wing. His first great love, Jean Tatlock, was a member of the Communist Party and ended up killing herself, and his wife, Kitty, was a former member whose first husband had been killed in the Spanish Civil War. Many of the scientists were Jews who had fled the Nazis, and all of them fervently believed they were racing against the clock to build the atomic bomb before Hitler got his hands on it and the game was over.

General Groves, in charge of the military side of the project, considered the scientists "the greatest collection of crackpots the world has ever known," an opinion he formed early on (when Szilard insisted on taking a bath during their first encounter), and he was never inclined to revise it. Most people hated him, but he was an effective leader. The army functions on unquestioning obedience and compartmentalization; scientists thrive on exchanging ideas and free thinking. It was an uneasy marriage. The military men worried about the unreliable political affiliations of the scientists and sneered at the "longhairs," while they in turn were disparaged as "plumbbers."

There was a third, disparate group on the hill at Los Alamos, the adult population of a village of Tewa Pueblo Indians, who were trucked there daily to fulfill menial jobs—cleaning, childcare, stoking furnaces. They had very strong ideas of their own and a powerful alternative cosmology. As the scientists were busy making a weapon to destroy the atom, the basic building block of the universe, the Tewa were dancing to keep everything in its place,

A Note from the Director *continued*

sorrowfully confident that we would burn the earth to a crisp and only they would survive.

The race was on.

But then Germany surrendered. According to *The Decision to Use the Atomic Bomb and the Architecture of an American Myth*, by Hiroshima expert Gar Alperovitz, Japan knew that it was losing the war and was suing for peace. Neither country was anywhere near developing nuclear weapons. This is where *Doctor Atomic* starts, two weeks before the test. Leo Szilard, the man who had initiated the project—a man who loved freedom and knew so much about oppression, having fled rising anti-semitism in his native Hungary, that he lived in hotel rooms with a packed suitcase always on hand—sent a letter to his friend Edward Teller suggesting that it was morally reprehensible to use the atomic bomb on Japan. Part of this extraordinary letter is sung in the opera. The young Quaker physicist Robert Wilson agreed and tried to get his fellow scientists to sign a petition for President Truman. He suggested they invite Japanese observers to the test and give them a chance to surrender before dropping the bomb.

But Oppenheimer was adamant. The test was due to take place the night before the Potsdam conference, where Truman, Stalin, and Churchill had arranged to carve up the post-war world, and Truman wanted a trump card to use against Stalin. Targets in Japan had already been chosen, densely

populated, pristine targets that had not been fire-bombed, so they could see exactly how effective these new bombs would be.

And the rest is history.

When the test bomb exploded successfully at Trinity, Oppenheimer stood up and stretched: "It worked," and exclaimed, "I am become Death, the destroyer of worlds." There was a celebration on the test site. Richard Feynman played



Winston Churchill, Harry S. Truman, and Joseph Stalin at the Potsdam Conference, July 1945

the bongos on the bonnet of a trunk and everyone got drunk. But after the bomb was dropped on Hiroshima, many of the scientists became deeply depressed. Oppenheimer told Truman, "We physicists have known sin." Truman dismissed him as a "crybaby."

Was it wrong to drop the bomb? The question of whether more lives would have been lost if Japan had fought on is a valid one. But isn't that just a variant

A Note from the Director *continued*

of "If I don't do it, someone else will"? There was a choice. Do the ends justify the means when it is our side doing the choosing?

Doctor Atomic is about people who lived this dilemma: good, clever, kind, funny people. The average age at Los Alamos was 25. These people worked hard, they partied hard, the birthrate skyrocketed; they skied, rode horses, argued, and played the piano. Some of them deeply regretted the part they had played in ushering in the nuclear age; others did not. They were all seduced by the sheer audacity of the endeavor they were engaged in. They wanted to know if it worked.

The terrible truth is that there is ravishing beauty in destruction. John Adams has composed a beautiful opera in *Doctor Atomic* and we have set out to create a production which captures both the beauty and the horror of its ambition. —Penny Woolcock

Modern Woman

Last season, Dr. Agnes Varis underwrote the new production of Philip Glass's *Satyagraha* as well as its outdoor ad campaign. She's done the same and more for John Adams's *Doctor Atomic*, expanding her Rush Tickets program so that more people can see the opera. On the eve of the premiere, she tells the Met's Matt Dobkin why supporting contemporary works is an important part of her legacy.

What draws you to Doctor Atomic?
It's a combination of Adams and the story of Oppenheimer and of the atomic bomb. This opera and its subject fall right in line with my politics and my love of history. I was interested in it because it was about Oppenheimer, and I paid extra attention because it was Adams.

What about Oppenheimer captures your imagination?

I was a kid when they were working on this bomb, and I had three brothers and one sister in the service, so I certainly knew there was a war going on. But I don't think I was paying much attention to Oppenheimer's work then. As time went on, though, and certainly by the time I was in college, we got to know these subjects. And I studied chemistry—so I admired Oppenheimer as a scientist, who was also an American and a genius.

Satyagraha was about Gandhi's early years. You seem drawn to operas with political themes...

I grew up at a time when you knew who the guys in the white hats were and who the guys in the black hats were. But then, as you mature, and you read more, and you live more, you see that maybe things just aren't that clear. I think it was a moral mistake to use the bomb on Hiroshima. The Japanese were teetering, and what we were doing by killing people, was punishing them for a rogue regime.

These kinds of history-based moral questions often figure in Adams's work. When did you first encounter his music?
The first time I really listened to his work was in the late-eighties with *Nixon in China*. The idea of that opera fascinated me. Nixon was *not* my favorite president! But anyway, I listened to it, and it was absolutely magnificent. I found the story fascinating and the music very lyrical. It was modern, but not in a way that hurt my sense of what opera should sound like.

Why did you decide to expand the Rush Tickets program for this production?

The atomic bomb has affected all of us, from its creation all the way up to the present. It never seems to leave us. And I felt it was important for people to see that these scientific geniuses understood the consequences. Because life is about the consequences of our actions.

Why is it important for the Met to present contemporary operas?

Unless the Met wants to become a boutique opera company, it has to do contemporary opera. It has no choice. And it's important to help keep the art form moving forward. The fact that both *Satyagraha* and *Doctor Atomic* are contemporary meant a lot to me, because I wanted to be part of making Met Opera history. It's part of my legacy. I'm proud and honored that people will say, "Who was the lady who helped put on these contemporary operas—one all in Sanskrit and one about a bomb?!" M

Libretto Sources

"Easter Eve 1945," "Three Sides of a Coin," "The Motive of All of It," "Seventh Elegy, Dream Singing Elegy," "Ninth Elegy, the Antagonists" from *The Collected Poems of Muriel Rukeyser* (University of Pittsburgh Press, 2005) © William L. Rukeyser, by permission of International Creative Management.

"The Double Death" from *The Collected Poems of Muriel Rukeyser* (McGraw Hill, 1978) © Muriel Rukeyser, by permission of International Creative Management.

Memoirs: A Twentieth-Century Journey in Science and Politics by Edward Teller, © 2001 by Edward Teller. Used by permission of Susan Wendy Teller and Paul Teller.

Target Hiroshima: Deak Parsons and the Creation of the Atomic Bomb by Al Christman, Annapolis, MD: Naval Institute Press, © 1998. Used by permission.

The Day the Sun Rose Twice: The Story of the Trinity Site Nuclear Explosions, July 16, 1945 by Ferenc Morton Szasz, © University of New Mexico Press. Used by permission.

Material from *Songs of the Tewa* by Herbert Joseph Spinden (translator) used courtesy of Sunstone Press, Box 2321, Santa Fe, NM 87504-2424, www.sunstonepress.com

Twenty Prose Poems by Charles Baudelaire, translated by Michael Hamburger © 1988 by Michael Hamburger. Used by permission.

Atomic Spaces: Living on the Manhattan Project by Peter Bacon Hales © 1997 by Board of Trustees of the University of Illinois. Used by permission of the University of Illinois Press.

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Composer John Adams and librettist Peter Sellars used many literary and historical sources for *Doctor Atomic*, including the *Bhagavad Gita* and the poetry of Muriel Rukeyser, Charles Baudelaire, and John Donne. One of Donne's Holy Sonnets (reprinted here) inspired Oppenheimer to name the New Mexico atomic test site "Trinity."

Holy Sonnet XIV *John Donne (1572–1631)*

Batter my heart, three person'd God; for, you
As yet but knocke, breathe, shine, and seeke to mend;
That I may rise, and stand, o'erthrow mee,' and bend
Your force, to breake, blowe, burn and make me new.
I, like an usurpt towne, to'another due,
Labour to'admit you, but Oh, to no end,
Reason your viceroy in mee, mee should defend,
But is captiv'd, and proves weake or untrue.
Yet dearely'l love you,' and would be loved faine,
But am betroth'd unto your enemie:
Divorce mee,'untie, or breake that knot againe;
Take mee to you, imprison mee, for I
Except you'enthralle mee, never shall be free,
Nor ever chast, except you ravish mee.

The Cast and Creative Team



Alan Gilbert
CONDUCTOR (NEW YORK, NEW YORK)

THIS SEASON *Doctor Atomic* for his Met debut, *Carmen* for his Vienna State Opera debut, and concerts with the New York Philharmonic, Royal Stockholm Philharmonic Orchestra, and the Philadelphia Orchestra, both in Philadelphia and at Carnegie Hall.

CAREER HIGHLIGHTS Has led the Baltimore, Boston, Chicago, and San Francisco Symphony Orchestras; the Cleveland Orchestra; Bavarian Radio Symphony Orchestra; and Berlin Philharmonic. He has also led the Los Angeles Opera and Zurich Opera, and in 2003 became the first music director of the Santa Fe Opera. He was chief conductor and artistic advisor of the Royal Stockholm Philharmonic Orchestra from 2000 through last June and has been the guest conductor of Hamburg's NDR Symphony Orchestra since 2004. Next season he becomes the new music director of the New York Philharmonic.



Penny Woolcock
DIRECTOR (BUENOS AIRES, ARGENTINA)

THIS SEASON *Doctor Atomic* for her Met debut and *One Day* (a film she both wrote and directed) for London's Channel 4 television.

CAREER HIGHLIGHTS Was both writer and director for the feature films *Margate Exodus* (2006), *Mischief Night* (2006), and *The Principles of Lust*. Her work for television includes *The Death of Klinghoffer* (2003, adapted from John Adams's opera of the same name), *Tina Takes a Break* (2001), *Macbeth on the Estate* (1997), and *The Two Marys* (1993). Work in documentary film includes *The West House*, *The Five of Us*, *Silver Darlings*, *Kids, Goronstoun*, *The Peer and the Peaches*, *Mad Passionate Dreams*, *Shakespeare on the Estate*, *From Wimps to Warriors*, and *When the Dog Bites*.



Julian Crouch
SET DESIGNER (KEIGHLEY, UNITED KINGDOM)

THIS SEASON *Doctor Atomic* and the 125th Anniversary Gala at the Met.

MET APPEARANCES Associate director and set designer for *Satyagraha* (debut, 2008).

CAREER HIGHLIGHTS He is a director, designer, writer, and teacher whose career has spanned theater, opera, film, and television. Early in his career he worked with Trickster and Welfare State International. In 1992 he began a creative partnership with Phelim McDermott; their most enduring collaboration to date has been the award-winning *Shockheaded Peter* for Cultural Industry. With Lee Simpson and Nick Sweeting, he and McDermott formed the Improbable theater company in 1996. Their productions of *70 Hill Lane* and *Sticky* have gained national and international recognition. Recently, he designed *Jerry Springer—The*

The Cast and Creative Team *continued*

Opera, A Funny Thing Happened on the Way to the Forum (London's National Theatre), and *The Magic Flute* (Welsh National Opera). He is currently co-directing and designing the *Addams Family* musical for Broadway.



Catherine Zuber
COSTUME DESIGNER (LONDON, ENGLAND)

THIS SEASON *Doctor Atomic* at the Met and the Broadway revival of *A Man for All Seasons*.
MET APPEARANCES *Il Barbiere di Siviglia* (debut, 2006).

CAREER HIGHLIGHTS Productions for Lincoln Center Theater include *The Coast of Utopia*, *South Pacific*, *Seascape*, *The Light in the Piazza*, *Dinner at Eight*, *Twelfth Night*, and *Ivanov*. Broadway productions include *Little Women*, *Doubt*, *Frozen*, *Dracula*, *The Sound of Music*, *Triumph of Love*, *London Assurances*, *The Rose Tattoo*, *The Red Shoes*, and *Philadelphia, Here I Come!* Off-Broadway: *Intimate Apparel*, *Engaged*, *The Beard of Avon*, and *Far Away*. Has also designed for the Salzburg Festival, American Ballet Theatre, Canadian Opera Company, New York City Opera, Houston Grand Opera, and Los Angeles Opera.



Brian MacDevitt
LIGHTING DESIGNER (LONG ISLAND, NEW YORK)

THIS SEASON *Doctor Atomic* for his Met debut; Broadway productions of *13*, *Speed-The-Plow*, and *American Buffalo*; and lighting designs for the Merce Cunningham Dance Company season at BAM.

CAREER HIGHLIGHTS Received Tony Awards for his lighting designs for the Broadway productions of *The Coast of Utopia*, *The Pillowman*, and *Into the Woods*. Additional Broadway credits include *Inherit the Wind*, *Fiddler on the Roof*, *The Color Purple*, *Urinetown*, *Master Class*, and *The Invention of Love*. He has also designed lighting for the film *The Cradle Will Rock* and for productions at the Abbey Theatre, Lyon Opera Ballet, American Ballet Theatre, Tere O'Connor Dance Company, and Lar Lubovitch. He is the recipient of numerous awards, including the Obie, Lucille Lortel, Los Angeles Ovation, Bessie, and Drama Desk awards. He is a member of the faculty of SUNY Purchase.



Andrew Dawson
CHOREOGRAPHER (BOGNOR REGIS, ENGLAND)

THIS SEASON *Doctor Atomic* for his Met debut.

CAREER HIGHLIGHTS A theater director, performer, Feldenkrais practitioner, and hand model, he studied dance in New York with Merce Cunningham and theater in Paris with Philippe Gaulier, Monika Pagneux, and Jacques Lecoq. Pieces he has created and performed include *Space Panorama* (1987), the story of the Apollo 11 moon landing told with only his

On Stage at the Met

Puccini

MADAMA BUTTERFLY

Academy Award®-winning director Anthony Minghella's stunning production returns. The new hit of the Met, starring Patricia Racette, has been hailed as "piercingly beautiful" by *The New Yorker* and "gorgeous" by *The New York Times*.

OCT 29 NOV 1 mat, 4, 8 eve, 11, 15 eve, 19, 22 eve

Tchaikovsky

THE QUEEN OF SPADES

Seiji Ozawa returns to the Met after an absence of more than 15 years. He conducts Tchaikovsky's adaptation of Pushkin's engrossing tale, with tenor Ben Heppner as the soldier whose obsession with cards leads him down a spiral of madness and murder. Maria Guleghina stars as the innocent woman drawn into his descent.

NOV 21, 24, 29 eve DEC 3, 6 eve, 10, 13 mat

Verdi

LA TRAVIATA

Verdi's tragic story of a Parisian courtesan comes to life in Franco Zeffirelli's opulent production, starring Anja Harteros as Violetta. Massimo Giordano is the young man who flouts convention to win her love.

OCT 27, 31 NOV 3, 6, 12, 15 mat, 20

Mozart

THE MAGIC FLUTE

HOLIDAY PRESENTATION

Julie Taymor's breathtaking production returns for the Met's annual series of holiday presentations. With special pricing, this audience favorite is a great way for families to celebrate the season.

Matinees DEC 22, 27, 30, 31
Evening JAN 1

Visit metopera.org for full casting information and ticket availability.

The Cast and Creative Team *continued*

hands; *Quatre Mains* (1998), currently being revived for a season at UCLA; and his award-winning solo show about the death of his father, *Absence and Presence* (2005), which was later performed in 2006 at New York's PS 122. He also created and directed the stage show of *Wallace and Gromit* (1995), *Amnesia Curiosa* for Rainpan 43 (2008 at Washington, D.C.'s Studio Theatre), and fabrik Potsdam's award-winning *Pandora 88* (2003).



**Leo Warner & Mark Grimmer
for Fifty Nine Productions**

PROJECTION DESIGN

THIS SEASON *Doctor Atomic* and the 125th Anniversary Gala at the Met.

MET APPEARANCES *Satyagraha* (debut, 2008).

CAREER HIGHLIGHTS Leo Warner (left) and Mark Grimmer (right) are the founding directors of Fifty Nine Productions, a film and new media production company that specializes in filmmaking and integrating the moving image into live performance. Working primarily in the UK, North America, and Europe, Warner and Grimmer are associate artists of the National Theatre in London. Recent stage productions include *Dorian Gray* (New Adventures, London), *Cherry Blossom* (Traverse, Edinburgh), *The Minotaur* and *Salome* (Covent Garden), *Alex* (Arts Theatre, London), *Carmen* (English National Opera), *The Seven Deadly Sins* (Royal Ballet, London), *Black Watch* (National Theatre of Scotland), and *War Horse*, *Attempts on Her Life*, ...some trace of her, and *Waves* (National Theatre, London). Upcoming are *Dido and Aeneas* (English National Opera/Young Vic), *Wunschkonzert* (Schauspiel, Cologne), and *Al Gran Sole Carico d'Amore* (Salzburg).



Mark Grey

SOUND DESIGNER (VIENNA, AUSTRIA)

THIS SEASON *Doctor Atomic* for debuts at the Met and English National Opera, and *The Bonesetter's Daughter* at the San Francisco Opera.

CAREER HIGHLIGHTS Recent projects include sound design and artistic collaboration on Adams's *On the Transmigration of Souls*, commissioned by the New York Philharmonic in 2002. Performances include works at Avery Fisher Hall, Carnegie Hall, London's Royal Albert Hall and Barbican Centre, Sydney Opera House Concert Hall, and Amsterdam's Concertgebouw. He designed the sound for the world premiere of *Doctor Atomic* at the San Francisco Opera in 2005 with subsequent productions in Amsterdam and Chicago. His works for Paris's Théâtre du Châtelet include Adams's *El Niño* and Peter Eötvös's *Angels in America*. He made his Carnegie Hall debut as a composer in 2003. Recent solo, ensemble, and orchestral works include commissions for the Kronos Quartet, Leila Josefowicz, Colorado Music Festival, Paul Dresher Ensemble, The California EARUnit, and former Kronos cellist Joan Jeanrenaud. He has also worked with Steve Reich, Philip Glass, and Terry Riley.

The Cast and Creative Team *continued*



Meredith Arwady

MEZZO-SOPRANO (KALAMAZOO, MICHIGAN)

THIS SEASON Met debut as Pasqualita in *Doctor Atomic*, her European debut as Ulrica in *Un Ballo in Maschera* in Frankfurt, her debut with the Houston Grand Opera in the world premiere of André Previn's *A Brief Encounter*, and concert appearances in Tippett's *A Child of Our Time* at Carnegie Hall.

CAREER HIGHLIGHTS Lyric Opera of Chicago appearances in *Doctor Atomic*, as well as Mistress Quickly in *Falstaff* and Tippett's *Midsummer Marriage*; her 2006–07 debut with the New York Philharmonic in Prokofiev's *Alexander Nevsky*; Mistress Quickly with the Opera Company of Philadelphia; and her debut with the Santa Fe Opera as Gaea in *Daphne*. She has also appeared with Chicago Symphony Orchestra at the Ravinia Festival, the Toronto Symphony, Pittsburgh Symphony, Houston Symphony, and Seattle Symphony.



Sasha Cooke

MEZZO-SOPRANO (COLLEGE STATION, TEXAS)

THIS SEASON Kitty Oppenheimer in *Doctor Atomic* at the Met and with English National Opera; concert appearances with the Colorado Symphony, Met Chamber Ensemble, Baltimore Symphony Orchestra, Edmonton Symphony Orchestra, and Oratorio Society of New York; and recitals in New York, Washington, California, and Virginia.

MET APPEARANCES Second Priestess in *Iphigénie en Tauride* (debut, 2007), the Sandman in *Hansel and Gretel*, and a Madrigal Singer in *Manon Lescaut*.

CAREER HIGHLIGHTS Olga in *Eugene Onegin* with the Israeli Opera, Endimione in *La Calisto* at the Juilliard School, Charlotte in *Werther* and Dorabella in *Cosi fan tutte* at Rice University, and the world premieres of John Musto's *Bastianello* and William Bolcom's *Lucrezia* with the New York Festival of Song. As the winner of the 2007 International Young Concert Artists she made recital debuts last year at Carnegie's Zankel Hall and at the Kennedy Center. She is a third-year member of the Met's Lindemann Young Artist Development Program.



Richard Paul Fink

BASS-BARITONE (MASSILLION, OHIO)

THIS SEASON Edward Teller in *Doctor Atomic* and Alberich in *Das Rheingold*, *Siegfried*, and *Götterdämmerung* at the Met; the Water Gnome in *Rusalka* with the Canadian Opera Company; and Amonasro in *Aida* and Alberich with the Seattle Opera.

MET APPEARANCES Telramund in *Lohengrin* (debut, 1998), Shaklovity in *Khovanshchina*, George Wilson in the world premiere of Harbison's *The Great Gatsby*, Klingsor in *Parsifal*, and Don Pizarro in *Fidelio*.

CAREER HIGHLIGHTS Alberich in Dallas, Toronto, and Berlin; Edward Teller in the world premiere

Holiday Magic at the Met

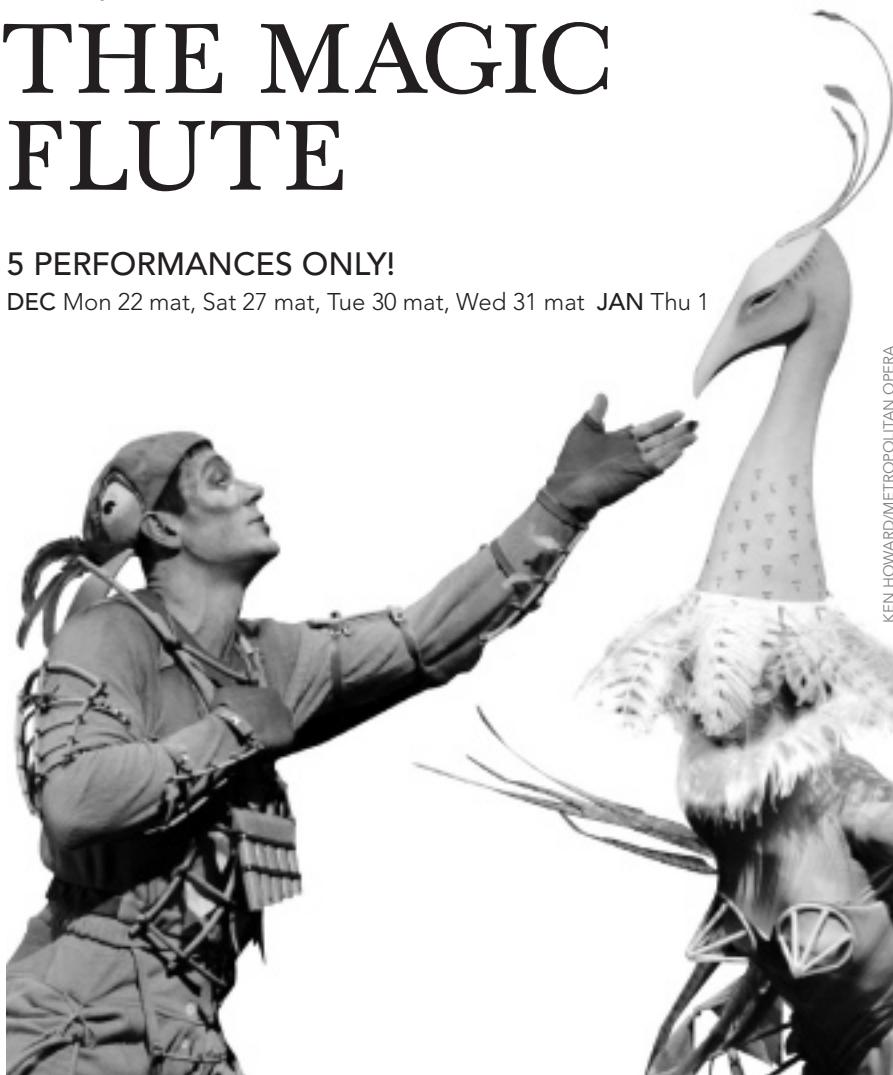
Back by popular demand! Julie Taymor's breathtaking production of Mozart's *The Magic Flute* returns for the Met's annual series of holiday presentations! With special pricing, this audience favorite—abridged and sung in English—is a great way for families to celebrate the season.

Mozart

THE MAGIC FLUTE

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The Cast and Creative Team *continued*

of *Doctor Atomic* at San Francisco Opera as well as with the Netherlands Opera and Lyric Opera of Chicago; Klingsor in Berlin, Salzburg, Paris, and Houston; and Kurwenal in *Tristan und Isolde* for Welsh National Opera. He has also sung Nick Shadow in *The Rake's Progress* in Trieste, Sebastiano in *Tiefland* with Washington National Opera, the Four Villains in *Les Contes d'Hoffmann* in New Orleans, Iago in *Otello* and Barnaba in *La Gioconda* in Miami, and the Dutchman in *Der Fliegende Holländer* in Berlin and Santiago.



Gerald Finley
BARITONE (MONTREAL, CANADA)

THIS SEASON J. Robert Oppenheimer in *Doctor Atomic* at the Met and English National Opera, Captain Balstrode in *Peter Grimes* with English National Opera, Frank/Fritz in Korngold's *Die Tote Stadt* at Covent Garden, and the Count in *Le Nozze di Figaro* at the Salzburg Festival.

MET APPEARANCES Papageno in *Die Zauberflöte* (debut, 1998), Marcello in *La Bohème*, and Don Giovanni.

CAREER HIGHLIGHTS Don Giovanni at Vienna's Theater an der Wien, Eugene Onegin with English National Opera and at Covent Garden, Golaud in *Pelléas et Mélisande* at Covent Garden, the title role in the world premiere of Picker's *The Fantastic Mr. Fox* for Los Angeles Opera, the title role of Britten's *Owen Wingrave* and Count Almaviva at Covent Garden, and J. Robert Oppenheimer in the world premiere of *Doctor Atomic* at the San Francisco Opera, followed by performances in the same role with the Netherlands Opera and Lyric Opera of Chicago.



Eric Owens
BASS-BARITONE (PHILADELPHIA, PENNSYLVANIA)

THIS SEASON General Leslie Groves in *Doctor Atomic* for his debut and Sarastro in *The Magic Flute* at the Met, Capellio in *I Capuleti e i Montecchi* at Covent Garden, and concert engagements with the Los Angeles Philharmonic, Philadelphia Orchestra, and Atlanta Symphony Orchestra.

CAREER HIGHLIGHTS General Leslie Groves for the world premiere of *Doctor Atomic* with the San Francisco Opera and subsequent performances with Lyric Opera of Chicago, Oroveso in *Norma* at Covent Garden and with Opera Company of Philadelphia, Fiesco in *Simon Boccanegra* and Sarastro with Washington National Opera, Ramfis in *Aida* with the Houston Grand Opera, the Speaker in *Die Zauberflöte* with Paris's Bastille Opera, Rodolfo in *La Sonnambula* in Bordeaux, and Sparafucile in *Rigoletto*, Ferrando in *Il Trovatore*, and Colline in *La Bohème* with Los Angeles Opera. He has also appeared with English National Opera, Pittsburgh Opera, Florida Grand Opera, and Glimmerglass Opera.

Science Experiment

The Alfred P. Sloan Foundation has long supported artistic endeavors with scientific content. But *Doctor Atomic* is its first major foray into opera.

“We are always looking for opportunities to humanize the image of scientists,” says Doron Weber of the Alfred P. Sloan Foundation. “We encourage artists to treat scientific subjects in a way that’s entertaining and engaging and will get people excited.”

Weber supports scientific inquiry in books, radio, film, theater, television, and “other efforts” through the foundation’s Public Understanding of Science and Technology program. This last designation is where *Doctor Atomic* comes in. John Adams’s operatic exploration of the creation of the atomic bomb is noteworthy not just for its seductive score and moving libretto (created by Peter Sellars), but also for its inclusion of what Weber calls “hard science.” “We need people like John Adams who know how to make beautiful music,” Weber says. “And I was very impressed by how much real science is in the opera. It’s embedded, integral to the story. That’s very unusual.” The science of *Doctor Atomic* was of keen interest to the Sloan

Foundation, which provided a leadership grant to support programs surrounding the production, in particular the live high-definition transmission on November 8 and the subsequent PBS broadcast.

The Sloan Foundation was established in 1934 by its namesake, then the CEO of General Motors. More than a decade ago, the foundation extended its reach to include the arts; since then it has supported science-related artistic endeavors by groups such as Manhattan Theatre Club (*Proof*), the Tribeca Film Festival, and National Public Radio, in addition to providing grants for many individual film, TV, and book projects. But working with the Met was a departure.

“This is new territory for us,” Weber says. His hope is that audiences’ curiosity about science will be stimulated by the production, but above all he wants people to have a satisfying artistic experience. “If you’ve made an opera about it, then it has to deal with human emotions. There’s just no way you can be detached when it’s opera.” —Matt Dobkin