

Program Updates from VP and Program Director Doron Weber

## New NYU Law Grant Seeks Community Input into Policing Technologies

A new Sloan grant has been made to New York University's School of Law to study the feasibility of creating a community-based certification body to evaluate new police surveillance products and technologies. The analysis will consist of research and interviews and will culminate with a capstone convening at NYU Law, bringing together public interest groups with policing agencies, technology companies, and certification experts. The project will be managed by Barry Friedman, Professor of Law at New York University School of Law





and Faculty Director of the Policing Project. Since this grant was made, following the death of George Floyd and the worldwide protests, Friedman has been appointed as a Special Advisor – along with former US Attorney General Loretta Lynch – to support NY State Attorney General Letitia James' investigation into the NYC Police Department and its interactions with protesters (Friedman and Lynch pictured left).

#### **FILM**

## New Sloan-Funded Doc about Sexual Harassment of Women in Science Sparks Interest

Picture a Scientist, a Sloan-funded documentary about sexual harassment of women scientists, debuted in June and has been generating thoughtful discussion. The film, directed



by Sharon Shattuck and Ian Cheney, follows the stories of three women scientists: MIT biologist Nancy Hopkins, who chaired a committee at MIT in the mid-90s that examined discrimination against women in science and produced the landmark paper "A Study on the Status of Women Faculty in Science at MIT"; American University chemist and science communicator Raychelle Burks, who has worked to fight against racial

discrimination, as well as gender discrimination, in science; and Scripps Institution of Oceanography geologist *Jane Willenbring*, who was finally able to speak out against an eminent professor's sexual harassment after gaining tenure. The film, slated to premiere at the now delayed Tribeca Film Festival, is <u>available to stream online</u> via theaters across the country. It was featured as part of Coolidge Corner Theatre's Sloan-funded Science on Screen initiative, which included a <u>Q&A with the filmmakers and subjects</u>, hosted by Radiolab's Molly Webster (pictured above). It has received positive early coverage from <u>Science Magazine</u>, <u>Salon</u>, <u>WBUR</u>, and <u>Variety</u>, among others. *Picture a Scientist* was funded by a 2018 planning grant and a 2019 production grant.



Program Updates from VP and Program Director Doron Weber

#### Coded Bias Continues Successful Run at Online Festivals

<u>Coded Bias</u>, a feature-length Sloan-backed documentary about the bias encoded in automated decision-making and machine-learning algorithms, premiered at Hot Docs, one of the premiere festivals for documentary films. The festival, normally held in Toronto, Canada, took place online this year. The film also premiered digitally as part of the Human Rights Watch Film Festival. Directed by Shalini Kantayya, *Coded Bias* features the work of MIT



Media Lab Researcher Joy Buolamwini (pictured left), who found that facial-recognition software is often unable to recognize darker-skinned faces, especially women. This discovery inspired her to create the Algorithmic Justice League and to become an advocate for the regulation of facial recognition software, a movement which recently helped lead IBM, Amazon, and Microsoft to reexamine their use of this technology. Other leading women in the field are also highlighted in the film, including mathematician Cathy O'Neal, Big

Brother Watch's Silkie Carlo, and technologist Zeynep Tufekci. The film has garnered very positive coverage from outlets such as <u>WNYC's All of It</u>, <u>Variety</u>, <u>NPR's Code Switch</u>, and <u>ParkRecord.com</u>. Coded Bias was supported by a 2019 production grant to Women Make Movies.

#### IFC Picks up Sloan-Funded Film on Nikola Tesla Starring Ethan Hawke

<u>Tesla</u>, a feature-length, Sloan-funded narrative film about inventor Nikola Tesla, best-known



for his contributions to the design of the modern alternating current (AC) electricity supply system, was <u>picked up for distribution by IFC Films</u>. The film is scheduled for theatrical release on August 21, assuming theaters will reopen by that time. *Tesla* was directed by three-time Sloan-supported director Michael Almereyda, stars four-time-Academy-Award nominee Ethan Hawk (pictured left), and features an A-list supporting cast including Kyle MacLachlan, Jim Gaffigan, and Eve Hewson. The film received the Sloan Feature Film Prize at the 2020 Sundance Film Festival, a 2016 SFFILM Sloan screenwriting fellowship, and additional production support from a 2019 Sloan grant to SFFILM.



Program Updates from VP and Program Director Doron Weber

**NEW MEDIA** 

#### UNLADYLIKE 2020 Short Films Now Available to Stream Online

Four short videos on unknown women scientist pioneers, produced as part of <u>UNLADYLIKE</u> <u>2020</u>, an animated 26-part short film series on the achievements of women, are now available to watch online. Scientists featured in the Sloan-supported episodes include: *polar explorer* <u>Louise Arner Boyd</u>, whose numerous Arctic expeditions led to new mapping and major botanical discoveries, as well as photographs of glaciers used by climate researchers today; astronomer <u>Williamina Fleming</u>, who led an all-female team of "computers" to classify stars



including the first White Dwarf, and who created a new classification system; engineer Lillian Moller Gilbreth, the first woman member of the American Society of Mechanical Engineers who helped invent time and motion study and improved industrial efficiency and worker safety; and botanist Ynes Mexia (pictured left), a plant collector who discovered over 500 new species of plants across North and South America. The series celebrates the 100th anniversary of women's suffrage. These four short films were supported by a 2019 grant to the Futuro Media Group.

#### Red Planet Farming Computer Game Popular on Steam

Red Planet Farming, a Sloan-supported NYU Game Center computer game, was released in May on Steam, the largest digital distribution platform, comprising 75% of the PC gaming market. The free-to-play game is a farming simulator with a science-based twist: the farms are located on Mars. The production team, which includes NYU graduates Nina Demirjian, Noah Lee, Sean Park, and Sean Porio, worked closely with advisors at NASA's Ames Research Center in order to create a scientifically accurate vision of how extraterrestrial farming would



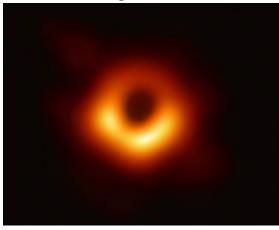
work. Red Planet Farming has received positive coverage from Happy Gamer, Exclusively Games, and Micky and has garnered very favorable user reviews. The game is now available for download on Steam, and is currently also hosted on Cool Math Games. The annual NYU/ Sloan gaming award for incorporating more science into this hugely popular medium is supported by a 2019 grant to NYU Tisch.



Program Updates from VP and Program Director Doron Weber

#### Pioneer Works Launches Multimedia Site The Broadcast

<u>Pioneer Works</u>, a creative hotbed for art and science in Brooklyn, launched its multimedia online platform, <u>The Broadcast</u>, in April. Led by Barnard College Professor of Astronomy and Physics Janna Levin, this new website brings Pioneer Works' original and in-depth science content to a new global audience. New materials available on the site include a widely viewed



conversation with theoretical physicist, mathematician, and string theorist Brian Green and an edited recording of Event Horizon, one of Pioneer Works signature Scientific Controversies discussions, on the first picture of a black hole (pictured left). The inaugural live initiative of *The Broadcast* was a stream of The Universe in Verse on April 25, an annual event hosted by Brain Picking's popular Maria Popova which celebrates science and the natural world through poetry. Launch of *The Broadcast* was supported by a Sloan planning grant in 2019, and a new grant was made in 2020 to expand and enhance the project.

#### **BOOKS**

# Author Miriam Horn Named New Leon Levy / Sloan Biography Fellow

Miriam Horn was chosen as this year's <u>Leon Levy/ Sloan Fellow</u> for a proposed biography on George Schaller, considered by many to be the world's preeminent field biologist. Horn is the



author of the New York Times bestselling Earth: The Sequel, The Race to Reinvent Energy and Stop Global Warming and Rancher, Farmer, Fisherman: Conservation Heroes of the American Heartland, which Kirkus named a Best Book of the Year. As a Sloan Fellow, Horn will receive an annual stipend of \$72,000, a graduate research assistant, dedicated office space, and access to a community of fellow biographers and CUNY's science faculty. The Leon Levy / Sloan Fellowship is supported by a 2018 grant to the Leon Levy Center for Biography at the CUNY Graduate Center, the only academic institution in the country devoted to promoting the practice of biography.



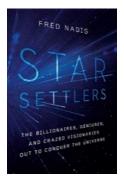
Program Updates from VP and Program Director Doron Weber

# The End of Everything: (Astrophysically Speaking) by Katie Mack to be Published Aug. 4



The End of Everything: (Astrophysically Speaking) by theoretical astrophysicist Katie Mack, an assistant professor of physics at North Carolina State University and one of the most followed astrophysicists on social media, will be published on August 4. In her book, Mack will explain five possible endings for the universe: the Big Crunch; Heat Death; the Big Rip; Vacuum Decay; and the Bounce, making complex ideas in astrophysics accessible and engaging for the lay reader. The book has received early positive press from Kirkus and Publisher's Weekly. Mack received a 2019 grant to support the research and writing of this book.

Star Settlers: The Billionaires, Geniuses, and Crazed Visionaries Out to Conquer the Universe by Fred Nadis to be Published August 4



Star Settlers: The Billionaires, Geniuses, and Crazed Visionaries Out to Conquer the Universe by author and journalist Fred Nadis will be published on August 4. The book will look at both contemporary events and the history of space travel and settlement alongside their portrayal in science fiction. It will profile important figures from billionaire visionaries like Elon Musk to prominent scientists and technologists at premier institutions like NASA, assessing their contributions, motivations, and more. Nadis received a 2019 Sloan grant for the research and writing of this book.

# The Apocalypse Factory: Plutonium and the Making of the Atomic Age by Steve Olson to be Published July 28



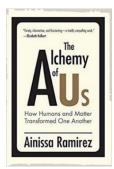
The Apocalypse Factory: Plutonium and the Making of the Atomic Age by author Steve Olson, will be published on July 28. The book examines the history of plutonium and atomic weapons. Unlike most works on the Manhattan Project and the Cold War, it will focus on the overlooked Hanford nuclear facility, which housed the first plutonium production reactor that was used to create plutonium for the first nuclear bomb and the bomb dropped on Nagasaki. Olson received a 2017 grant for the research and writing of this book.



Program Updates from VP and Program Director Doron Weber

# The Alchemy of Us: How Humans and Matter Transformed One Another by Ainissa Ramirez Garners Praise

The Alchemy of Us: How Humans and Matter Transformed One Another, published on April 7



by materials scientist and science writer Ainissa Ramirez, has been attracting positive coverage. The book considers how eight key materials—steel, copper, quartz, glass, tungsten, silver, magnets, and silicon—and the inventors who reshaped them into modern devices, have not only changed history and society but impacted our brains and biology. The book has received favorable press from outlets including <a href="NPR's Short Wave">NPR's Short Wave</a>, <a href="Science News">Science Magazine</a>, <a href="Popular Science">Popular Science</a>, <a href="Kirkus">Kirkus</a>, <a href="WSHU">WSHU</a>, and more. It was also the subject of a Sloan-funded television episode of <a href="The Open Mind">The Open Mind</a>. Ramirez received a 2018 Sloan grant to support the research and writing of this book.

#### **TELEVISION**

### Sloan-Backed Ken Burns Documentary on Mukherjee's The Gene Premiered in April

<u>The Gene: An Intimate History</u>, a two-part Sloan-backed documentary produced by acclaimed filmmaker Ken Burns and directed by award-winner Barak Goodman, aired over two nights in April on PBS. The Gene is based on the acclaimed best-selling book of the same title by



Siddhartha Mukherjee, who is featured prominently. The film brings to life the story of today's revolution in medical science through present-day tales of patients and doctors at the forefront of the search for genetic treatments, interwoven with a history of the discoveries that made these advances possible and the ethical challenges raised by the ability to edit DNA with precision. The film was supported by a 2018 grant to the Greater Washington Educational Telecommunications Association.

## Sloan-Funded Episode of Poetry in America Aired in April

"The Fish," a science-themed episode of <u>Poetry in America</u> supported by a Sloan grant, aired in April and is now available to stream online. The episode, hosted by Harvard University professor of literature Elisa New, introduces viewers to topics in marine and environmental



Moore, an acclaimed modernist poet whose educational background in biology and botany shaped her writing. Guests include Vice President Al Gore, poet Jorie Graham, and scientists from Conservation International. "The Fish" was supported by a 2018 grant to Verse Video Education.



Program Updates from VP and Program Director Doron Weber

## Sloan-Supported Documentary "Mr. Tornado" Debuted in May



"Mr. Tornado," an American Experience documentary about meteorologist Tetsuya Theodore (Ted) Fujita and his seminal tornado studies, aired in May. Fujita's revolutionary approach to meteorology – including the analysis of tornado photography – led to the creation of the Fujita scale of tornado intensity and damage and the discovery of downbursts and microbursts. This show is the third of four produced through a 2019 grant to American Experience.

#### American Experience's "The Man Who Tried to Feed the World" Premiered in April



A Sloan-supported <u>American Experience documentary</u> about the life of 1970 Nobel Peace Prize winner Norman Borlaug (pictured left), who tried to solve world hunger, aired in April on PBS and is now available to stream online. Borlaug helped India recover from a severe famine and led the "Green Revolution," estimated to have saved one billion lives. Today, with the downsides of the "Green Revolution" more apparent, Borlaug's legacy has been debated though no one has disputed the number of lives he saved. This show is the second of four produced through a 2019 grant to American Experience.

## Award-Winning Sloan / North Fork TV Festival Pilot Distemper Screened Virtually

Responding to the COVID-19 crisis, The North Fork TV Festival live streamed its award-winning Sloan-supported TV pilot <u>Distemper</u> as part of a "Create. Share. Connect." campaign. The stream was displayed live, with cast and crew doing a side by side chat with viewers. After its premiere at the 2019 North Fork TV Festival, <u>Distemper</u> went on to premiere at



multiple film festivals and was the recipient of SeriesFest's Best Lead Actor and Best Writers Awards, the Odysseus Award for best TV program, and Los Angeles Film Awards for best TV pilot and best actress. The production of *Distemper* was supported by a 2019 grant to the North Fork TV Festival, with a follow up grant for a new TV science pilot approved in 2020.



Program Updates from VP and Program Director Doron Weber

#### **THEATER**

## Sloan-Funded Production of Einstein's Dreams Nominated for Four Drama Desk Awards

<u>Einstein's Dreams</u>, a musical based on the international bestseller of the same title written by physicist and author Alan Lightman, has been <u>nominated for four Drama Desk Awards</u> for its Sloan-supported run at 59E59 Theaters. Nominations include Outstanding Music,



Photo Credit: Richard Termine

Outstanding Lyrics, Outstanding Lighting Design for a Musical, and Outstanding Projection Design. The play is set in the year 1905, when Albert Einstein was working at the patent office in Bern, Switzerland, attempting to find the balance between his career and family life, and developing his Theory of Special Relativity. It imagines Einstein's dreams during that period of his life. Performances of the play at 59E59 Theaters were supported by a 2019 grant to the Prospect Theater Company.

#### **RADIO**

## L.A. Theatre Works Offers 30 Free Sloan Radio Dramas During COVID-19 Shutdown

LA Theatre Works is offering free recordings of classic and contemporary plays for the public



to enjoy during COVID-19 lockdown, including over 30 Sloan-supported, science-themed radio dramas from its *Relativity* series. Plays include the most recent addition to the collection, *Behind the Sheet*, an Ensemble Studio Theatre/ Sloan-commissioned play written by awardwinning playwright Charly Evon Simpson. *Behind the Sheet* is inspired by the life of J. Marion Sims, a controversial 19th century physician credited as "the father of modern gynecology," and explores the fictionalized lives of the enslaved black women Sims experimented on to become a pioneer in his field. This latest recording for the *Relativity* series is part of a 2019 grant to L.A. Theatre Works.



Program Updates from VP and Program Director Doron Weber

#### UNIVERSAL ACCESS TO KNOWLEDGE

## Wikipedia Becomes Go-To Global Source for Reliable COVID-19 Information

Multiple news outlets, including CBS, Haaretz, and Wired, have recently noted that Sloan-



backed Wikipedia has become the go-to worldwide source for accurate, up to date, and location specific information during the COVID-19 pandemic. Over 4,000 articles on the pandemic have been translated into more than 100 languages and have received tens of millions of pageviews over the last few months, testifying to Wikipedia's unprecedented ability to provide reliable and timely information on a mass global scale. Rigorous editing of these pages is managed by the Wikimedia Medicine team, comprised of experts from around the world. Wikipedia is supported by major ongoing grants, including the most recent 2020 grant to support the extension of structured data from Wikimedia Commons across all Wikimedia content.

#### DPLA Offers Thousands of Free Titles and New Programs During COVID-19 Pandemic



The Digital Public Library of American has been providing free resources to educators, students, and the general public during the COVID-19 lockdown. These materials include primary source collections, online exhibitions, tens of millions of searchable media files, and Open Bookshelf, offering free popular titles. Open Bookshelf is supported by a 2019 Sloan grant to DPLA and a 2019 grant to NYPL. A new grant was also made in 2020 to support a suite of COVID-19 response activities and evaluations, including community archives capturing the experiences of African-American communities during the pandemic.



Program Updates from VP and Program Director Doron Weber

## PREVIEW: SELECT NEW GRANTS

## Sloan Backs Timely American Masters Documentary on NIAID Director Anthony Fauci

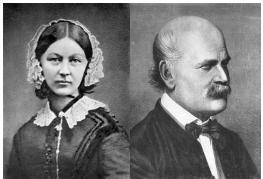


Sloan recently approved a grant to produce a feature length documentary about the life of physician, scientist, public heath spokesperson, and NIAID Director Anthony Fauci. Revisiting the long arc of his career and his role in HIV/AIDS, SARS, Ebola, and Covid-19, this film will not only shine a light on Fauci's professional evolution and the political and social forces that have shaped epidemic responses in the U.S., it will illuminate vaccine development, clinical drug trials, and the history of public health policy. It will also offer an inside portrait of Fauci, including his boyhood in Brooklyn as the son of a pharmacist, his Catholic upbringing, his ambition and love of sports, and his rigorous Jesuit education before attending Cornell. The film will be produced by

American Masters, acclaimed winner of 29 Emmy and 14 Peabody Awards and Sloan's previous partner on the successful documentaries Bombshell: The Hedy Lamarr Story and Oliver Sacks: His Own Life.

## COVID-19 Viewed through the 200-Year History of Public Health Will Air on PBS

A new Sloan grant will support a four-part television series exploring the current COVID-19 pandemic in light of the past 200-year history of public health, hosted by best-selling author Steven Johnson and University of Manchester historian David Olusoga. Each episode of the series examines one aspect of medicine and public health that has played a central role in increasing life expectancy over the past hundred years and juxtaposes it with current COVID-19 challenges. Episode topics include: our growing ability to prevent the spread of illness through the use of variolation and vaccination; the role of analyzing and mapping data—the science of epidemiology—in improving societal health outcomes; the surprisingly recent



invention of medicine that combats illness directly, such as penicillin; and the role of human and social behavior in affecting public health outcomes. The series will profile important figures in the history of public health, such as Florence Nightingale, a pioneer in statistical graphics, and Ignaz Semmelweis, who pushed physicians to routinely wash their hands (both pictured left), while keeping its eye on currents effort to combat COVID-19.



Program Updates from VP and Program Director Doron Weber

# Stanford's Privacy Protecting Virtual Assistant Project Receives Sloan Support

Stanford University received a new Sloan grant to build and pilot the first prototype of an



open-source, privacy preserving <u>virtual assistant</u>. Linking with Sloan partners including Wikipedia, Consumer Reports, and Mozilla, the team, led by Computer Science Professor <u>Monica Lam</u> (pictured left), plans to roll out a virtual assistant in one year that is not only open source in terms of access to knowledge and consumer friendly in terms of protecting personal data, but also boasts superior technology to the current devices deployed by major tech companies. In addition to working with Sloan partners, the prototype plans to collaborate with Smartnews for news, Yelp for local services, and the privacy-protecting Home Assistant for IoT. This grant to Stanford University is supported through Sloan's Universal Access to Knowledge program.