ALFRED P. SLOAN FOUNDATION

March 2022 *Program Updates from VP and Program Director Doron Weber*

THEATER

What You Are Now, New Play About Refugees & Trauma, Debuts at Ensemble Studio Theatre

The new Sloan-commissioned play *What You Are Now*, written by Sam Chanse and directed by Steve Cosson of The Civilians, debuted at the Ensemble Studio Theatre (EST)/Sloan Mainstage Production on March 10 and will run until April 3. The play tells the story of Pia, a young neuroscientist working on biochemical approaches to treating memory and PTSD, whose mother experienced the violence of 1970s Cambodia. Chanse collaborated with Ichan School of Medicine at Mount Sinai neuroscientist Daniela Schiller, whose research focuses on trauma and the neural mechanisms underlying emotional control. The writing and mainstage production of *What Are You Now* were supported by a 2019 Sloan grant to EST, one of Sloan's two flagship theater partners. The play has received positive reviews, including from The New York Times and The New York Stage Review. Trustees interested in attending may contact Doron Weber (weber@sloan.org).

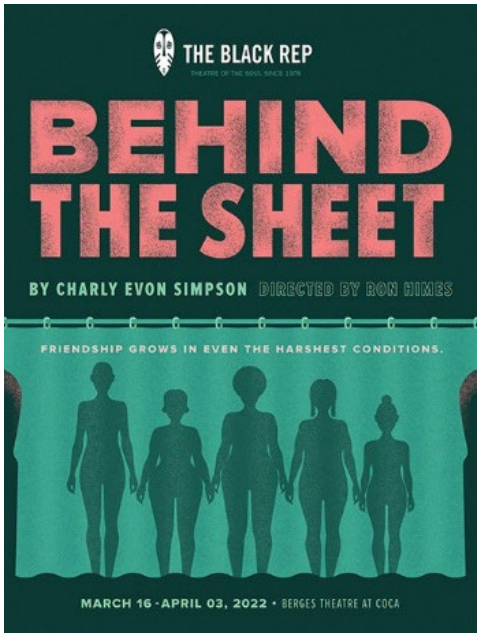
Oscar Winner Mark Rylance Play about Handwashing Pioneer Premieres to Acclaim in the UK

Dr. Semmelweis, a Sloan-developed play about Dr. Ignaz Semmelweis, opened at the Bristol Old Vic Theater in the United Kingdom on January 20. The play, starring Academy Award winning actor Mark Rylance (*Bridge of Spies*, *Don't Look Up*) and co-written by Stephen Brown and Rylance, follows Semmelweis as he discovers that handwashing by physicians can save lives while working in a maternity ward in Vienna, but encounters fierce opposition from the medical community. The play has received positive coverage in *The Bristol Post*, *The Daily Mail*, and *The Guardian*, among others. The writing of *Dr. Semmelweis* was supported by a 2017 Sloan grant to the National Theatre in London, currently in talks with Sloan about bringing the play to the West End.

Golden Shield About U.S. and China Internet Censorship to Open at Manhattan Theatre Club

Golden Shield, a Sloan-supported play by Anchuli Felicia King, is set to open at Manhattan Theatre Club (MTC) on May 17. The play tells the fictionalized story of a lawsuit against an American technology company that was hired by the Chinese government to build a real-life internet firewall, known as the Golden Shield Project. It uses a translator to move from Chinese to English. *Golden Shield* originally came to Sloan via EST and had its world premiere in 2019 at the Melbourne Theatre Company in Australia (pictured left), garnering positive reviews. The US premiere at MTC is supported by a 2022 Sloan production grant.

Behind the Sheet Opened at the St. Louis Black Rep



Behind the Sheet, the hit EST/Sloan-commissioned play written by Charly Evon Simpson, is being staged by the St. Louis Black Rep in Missouri with Sloan support. The play is inspired by the life of Dr. J. Marion Sims, a controversial 19th century physician credited as "the father of modern gynecology." It explores the fictionalized lives of the enslaved black women Sims experimented on to become a pioneer in his field. The play's EST/Sloan mainstage debut, which was extended twice due to popular demand, received a New York Times Critic's Pick review, as well as positive coverage from Science Friday, New Scientist, Science Magazine, PRI, and TheaterMania, among many others. *Behind the Sheet* was also produced as a radio drama for the Sloan-funded L.A. Theatre Works *Relativity* series. The production of this play at the St. Louis Black Rep is supported by the Mainstage Initiative, a part of a 2019 Sloan grant to EST.

EST Hosts Virtual Artist Cultivation Panel for Sloan Theater Program

To publicize the unique opportunities afforded by the EST/Sloan commissioning program, EST hosted a Sloan Artist Cultivation Panel at the end of November 2021. At the event, moderator and EST Science Press Liaison Rich Kelley discussed what makes a great science play with Sloan-supported playwrights Sam Chanse (*What You Are* Now) and Lucas Hnath (*A Doll's House, Part 2; Isaac's Eye*), whose plays were EST/Sloan Mainstage productions in 2022 and 2012, respectively. The panel also included scientists Karine Gibbs, Associate Professor in the Department of Plant and Microbial Biology at the University of California, Berkeley, and Mandë Holford, Associate Professor in Chemistry at Hunter College and CUNY-Graduate Center, as well as host and co-creator of *RadioLab* Jad Abumrad. The event was free and open to any playwright interested in writing a science play. The 2022 cultivation event was supported by a 2019 Sloan grant to EST.

L.A. Theatre Works Kicks Off with Sloan-Supported Play About Ben Franklin's Son

L.A. Theatre Works (LATW), the nation's leading producer of audio theater and Sloan partner for a 40+ science play series, released a new recording of an EST/Sloan play as part of their 2021-22 season. *Franklinland* is a comedy by Lloyd Suh about the American Revolution that looks at the relationship between William Franklin and his legendary father Benjamin Franklin. The production of new radio science dramas as part of the *Relativity* series, which reaches millions of listeners across the world, is part of a 2019 Sloan grant to LATW.

FILM

Sloan Winner at SFFILM *Don't Look Up* Nominated for Four Oscars, Including Best Picture

The Sloan Science in Cinema Prize at SFFILM, which recognizes the compelling depiction of science in a narrative feature film, was awarded to *Don't Look Up* in November 2021. Since then, the film has received four Oscar nominations, including Best Picture, Best Original Screenplay, Best Original Score, and Best Film Editing, and writer/director Adam McKay, who called his film a "love letter to science," has also been nominated for Best Original Screenplay for the 2022 Writers Guild Awards. In celebration of the award, SFFILM and Sloan hosted a virtual panel discussion that included writer/director Adam McKay, star of the film Leonardo DiCaprio, and physicist Joseph Barranco. *Don't Look Up* has received positive reviews from outlets such as The New York Times, The San Francisco Chronicle, and Rotten Tomatoes, among many others. The film is currently the second most streamed movie on Netflix and shattered records for most streamed film in one week. The award is part of a 2019 Sloan grant to SFFILM to develop and champion films that explore scientific or technological themes and characters.

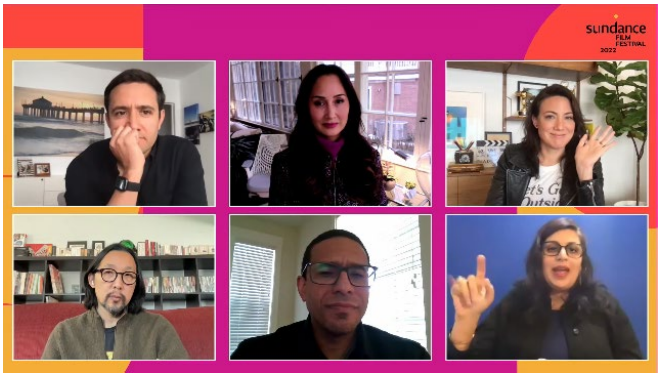
SUNDANCE 2022: After Yang Wins 2022 Sloan Feature Film Prize at Sundance

After Yang was awarded the Alfred P. Sloan Feature Film Prize at this year's Sundance Film Festival and screened virtually as part of the Festival program. The narrative feature film, directed and written by filmmaker Kogonada and starring Colin Farrell (*Minority Report; Miami Vice)*, is about a family that buys a lifelike, artificially intelligent android. The film was cited by the jury "for its exquisitely crafted and deep poetic meditation on how technology can help us reflect on our humanity, and the ways our brains navigate memory, loss, and connection — even while it poses new challenges to our privacy, security, and identity." This year's Sloan jury included neuroscientist Heather Berlin, chemist Mandë Holford, actor Tenoch Huerta (*Son of Monarchs; Sin Nombre*), producer Lydia Dean Pilcher (*Radium Girls*), and filmmaker Shawn Snyder (*To Dust*). *After Yang* has received positive press from The New York Times and Rolling Stone among other outlets and received a great score from Rotten Tomatoes. The Sloan Feature Film Prize and other Sloan activities at Sundance are supported by a 2021 grant to the Sundance Institute.

SUNDANCE 2022: Sundance Celebrates Three New Sloan-Winning Projects

Three exciting new projects featuring scientific themes and characters were celebrated at the virtual Sloan awards ceremony at the 2022 Sundance Film Festival and will now be developed via the nationwide Sloan film pipeline. Shawn Snyder (writer/director) and Jason Begue (writer) were awarded the Sloan Commissioning Grant for *The Futurist*, about a controversial real-life neuroscientist who attempts to rectify his past and author his future by using his own brain for cyborgian experimentation; Nuhash Humayan was awarded the Sloan Development Fund for *Moving Bangladesh*, about a struggling Bangladeshi entrepreneur who creates an app that may transform transport in developing countries forever; and Kathryn Lo was awarded the Sloan Episodic Fellowship for *Our Dark Lady*, about the appropriation of scientist Rosalind Franklin's work in the discovery of DNA's double helix. At the event, Kogonada also accepted the Sloan Feature Film Prize on behalf of his film *After Yang.*

SUNDANCE 2022: Sloan Panel at Sundance Brings Together Scientists and Filmmakers



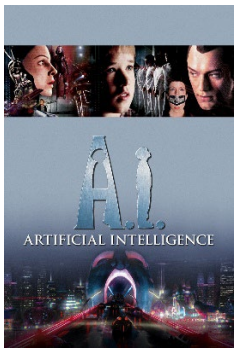
Two scientists and two filmmakers gathered virtually to discuss big tech and film for the Sloan panel at the 2022 Sundance Film Festival. *The Big Conversation: Machine Yearning* was moderated by Gadi Schwartz, correpondent for NBC News and host of Peacock's The Overview, and featured Cynthia Breazeal, founder and director of the Personal Robots group at the MIT Media Lab; Vice President of Microsoft Research and founding chief of the Intelligence Systems Center at Johns Hopkins Applied Physics Laboratory, Ashley Llorens; co-creator, co-showrunner, executive producer, and director of HBO's Westworld, Lisa Joy; and filmmaker Kogonada (*After Yang).* The full panel discussion is available to stream via the Festival's YouTube page.

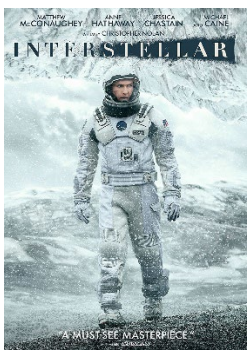
David France's COVID-19 Vaccine Film *How to Survive a Pandemic* Premieres

How to Survive a Pandemic by Oscar-nominated documentary filmmaker David France (*How to Survive a Plague, Welcome to Chechnya)* premiered in an invitation-only screening at the Thessaloniki Documentary Festival on March 10 and in New York City on March 17. Shot across five continents, the film chronicles the development and rollout of the COVID-19 vaccine and features leading figures in the global science community, such as director of the U.S. National Institute of Allergy and Infectious Diseases Dr. Anthony Fauci, co-developer of the Moderna vaccine Dr. Kizzmekia Corbett, chairman and CEO of Pfizer Dr. Albert Bourla, director-general of the World Health Organization Tedreos Adhanom Ghebreyesus, and CEO of the South African Medical Research Council Dr. Glenda Gray. The film received a grant from the Sloan Foundation in 2021 and will debut on HBO on March 29. Watch the trailer here.

Academy Museum Launches Oscar Sundays Science Month

The Academy Museum of Motion Pictures, the largest institution in the United States devoted to the art, science, and artists of moviemaking, launched the Sloan-supported Oscar Sundays Science Month for the month of May, beginning with a look at the science in science-fiction. The series includes screenings of Oscar-nominated and Oscar-winning films focused on scientific themes and characters, such as *Fantastic Voyage, The Andromeda Strain, The Matrix, A.I.,* and *Interstellar.* Screenings will be followed by speakers and panels. The Museum will also host discussions that look at breakthrough scientific and technical filmmaking achievements. The Academy, which hosts the annual Academy Awards and is home to a membership organization of 10,000 preeminent film professionals, opened the brand-new Academy Museum of Motion Pictures in September. Sloan is a founding sponsor of the Academy Museum, with a 2020 grant to support science and film programming.





Sloan Student Prize Winners Celebrated at Awards Reception

The winners of the Sloan Grand Jury and Student Discovery Prizes were announced at a virtual awards reception hosted by Sloan and the Museum of the Moving Image (MoMI) in January, and their work received a staged reading in an in-person showcase at MoMI on March 17. The Sloan Grand Jury Prize celebrates the "best of the best" winning screenplays submitted by Sloan's six film school partners. The 2022 winner was Marisa Torelli-Pedevska (below, left), from the University of Southern California School of Cinematic Arts. Her screenplay *Starlight,* inspired by the life and career of Cecilia Payne-Gaposchkin, tells the story of a young female scientist who arrives at the University of Cambridge in 1919 and must choose whether to follow the rules or change the game. The Sloan Student Discovery Prize, launched in 2019, celebrates an exceptional science or technology script from one of six new public universities added to the program. Juli Jackson (above, right), from Temple University, won the 2022 award for their script *Delta*, about a farm worker with a deep connection to the land who meets an out-of-town biologist in a rural community. The two scripts were selected by an all-female jury that included actress Cara Seymour (*Radium Girls);* producer Natalie Qasabian (*Searching*); Cinetic's Head of Tracking Alexis Galfas; Princeton University Historian of Technology Dr. Emily Thompson; Cornell Tech Interaction Design Specialist Dr. Wendy Ju; and marine biochemist Dr. Bethanie Edwards of the University of California, Berkeley. The management of these awards is supported by a 2021 grant to MoMI. The trailer for the event is available via Vimeo.

Sloan Film Summit to be Held April 8-10

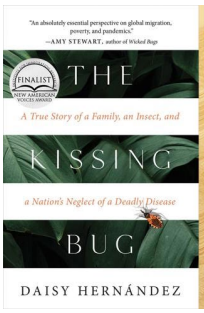
The 2022 Sloan Film Summit, hosted by Film Independent in Los Angeles, is set to open at the Japanese American National Museum from April 8-10. The Summit will be a three-day event of screenings, panels, staged readings, project updates, networking opportunities, and community building for Sloan film grantees since the last Summit in 2017. The event will include keynote speakers such as Nobelist Dr. Andrea Ghez as well as screenings of Sloan-supported films such as *After Yang* by Kogonada and a special tour of the newly opened, Sloan supported Academy Museum.

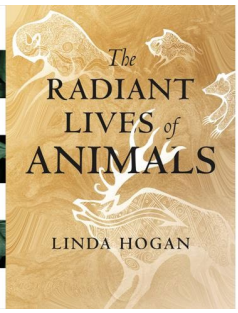
Work Begins on Christopher Nolan's Film Based on Pulitzer Prize-winning Sloan Book

Oppenheimer, a film by Academy Award-winning director Christopher Nolan (*Interstellar, Inception, The Dark Knight*), has begun pre-production in New Mexico. The film will be based on the Sloan-supported, Pulitzer Prize-winning book *American Prometheus* by Kai Bird and Martin J. Sherwin, which tells the life story of American theoretical physicist J. Robert Oppenheimer, known as "the father of the atomic bomb" for his role in the Manhattan Project. Award-winning Irish actor Cillian Murphy (*28 Days Later, Inception*) has been cast in the title role and a long list of distinguished actors has also signed on, including Matt Damon, Robert Downey Jr., Emily Blunt, Florence Pugh, Rami Malek, Benny Safdie, Josh Hartnett, Dane DeHaan, Jack Quaid, Matthew Modine, David Dastmalchian, Alden Ehrenreich, and David Krumholtz.

BOOKS

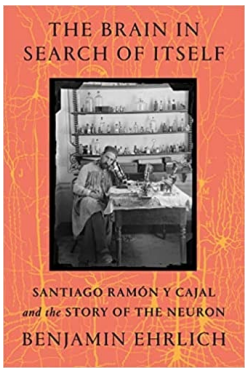
Inaugural National Book Foundation / Sloan Science + Literature Winners Celebrated





In a novel partnership with the National Book Foundation that includes fiction and poetry for the first time, the inaugural Sloan Science + Literature Award Ceremony was held at the Museum of the Moving Image on March 3. Winning titles include *The Kissing Bug* by Daisy Hernandez, a story focused on Hernandez's personal experience uncovering how poverty and racism have conspired to keep Chagas disease hidden; *The Radiant Lives of Animals* by Linda Hogan, a series of poems from the perspective of a Chickasaw writer on humanity's relationship to animals and the natural world; and *In the Field* by Rachel Pastan, which tells the fictional story of a queer woman breaking into the new scientific field of genetics in the 1920s. The selected works were chosen by a committee of scientific and literary experts who focused on books that celebrate and contribute to the diversity of voices in scientific writing. The Science + Literature Award winners were highlighted in the Associated Press and The Hill. The National Book Foundation received a grant from the Sloan Foundation in 2021 to establish these prizes.

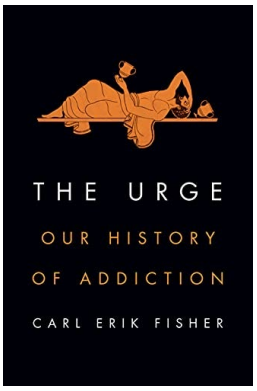
The Brain in Search of Itself: Santiago Ramón y Cajal and the Story of the Neuron by Benjamin Ehrlich Published



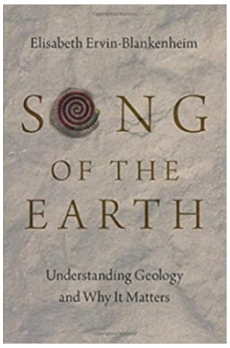
A biography of both a pioneering scientist and artist, *The Brain in Search of Itself: Santiago Ramón y Cajal and the Story of the Neuron* by author and journalist Benjamin Ehrlich was published on March 15. The book is the first major biography of the great Spanish Nobel-winning scientist who discovered neurons and is considered the father of modern neuroscience. Containing images of Cajal's seminal anatomical drawings, the book has received positive reviews from Science Magazine and Kirkus Reviews, with the latter calling it "a beautiful composition that shows Cajal's indelible contribution to science and art." Ehrlich received a 2018 Sloan grant to support the research and writing of this book.

The Urge: Our History of Addiction by Carl Erik Fisher Published

The Urge: Our History of Addiction, by Assistant Professor of Clinical Psychiatry at Columbia University Carl Erik Fisher, was published on January 18. Drawing on his own experience as a clinician, researcher, and recovering alcoholic, Fisher recounts the centuries-old story of addiction and examines the controversy of the nature of addiction and the best way to treat it. Fisher's book has sparked conversation around addiction in The New York Times, NPR, The Washington Post and The Guardian. It also received positive reviews in The Boston Globe and Inside Higher Ed, among other outlets. Fisher received a 2019 Sloan grant to support the research and writing of this book.



Song of the Earth: Understanding Geology and Why It Matters by Elisabeth Ervin-Blankenheim Published



Song of the Earth: Understanding Geology and Why It Matters by geology instructor Elisabeth Ervin-Blankenheim was published on November 12. The book combines narratives of pioneering geologists, a biography of the Earth itself, the science underlying mountain building and oceanic evolution, and the influence of climate change to create a historical and philosophical account of planet Earth. Ervin-Blankenheim received a 2020 Sloan grant to support the research and writing of this book.

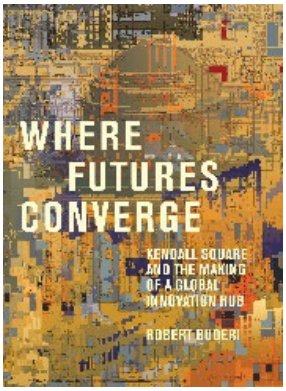
A Tactical Guide to Science Journalism: Lessons from the Front Lines to be Published June 2

A Tactical Guide to Science Journalism: Lessons From the Front Lines will be published on May 19. The book is an updated version of the popular *A Field Guide for Science Writers,* supported by Sloan in 1997 and 2006, that was compiled by 40 of the top science communicators in the country and has since become the leading resource for science journalism in the nation. Contributing writers include Deborah Blum, Pulitzer Prize-winning science writer and Director of the Knight Science Journalism Program at MIT, Ashley Smart, Senior Editor at Undark magazine and previous editor at Physics Today magazine, and Tom Zeller Jr., who spent 12 years as a staff writer and editor at The New York Times. The book was supported by a 2020 Sloan grant to the editors via the Massachusetts Institute of Technology.

Vagina Obscura: An Anatomical Voyage by Rachel E. Gross to be Published March 29

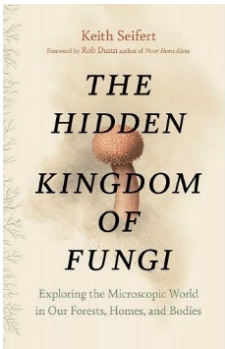
Vagina Obscura: An Anatomical Voyage by award-winning science journalist Rachel E. Gross will be published on March 29. The book looks at how an emerging generation of women and LGBTQ scientists are seeing a new biology of change and resilience within the organs of reproduction – the uterus, ovaries, and vagina. Kirkus Reviews praised the book: "Women's biology has generated much recent scientific interest, which Gross conveys with enthusiasm and clarity through her conversations with gynecologists, bacteriologists, urologists, medical anthropologists, and surgeons." Gross received a 2020 Sloan grant to support the research and writing of this book.

Where Futures Converge: Kendall Square and the Making of a Global Innovation Hub by Robert Buderi to be Published May 10



Where Futures Converge: Kendall Square and the Making of a Global Innovation Hub by author and journalist Robert Buderi will be published on May 10. The book tells the history of Kendall Square in Cambridge, Massachusetts, sometimes called "the most innovative square mile on the planet," that hosts life science hubs such as Biogen, Moderna, and Pfizer. Buderi uses his own experience working in Kendall Square to tell fascinating stories of great innovation in this area stretching back two centuries and speculates about the next big pioneering enterprise. Buderi received a 2020 Sloan grant to support the research and writing of this book.

The Hidden Kingdom of Fungi: Exploring the Microscopic World in Our Forests, Homes, and Bodies by Keith Seifert to be Published May 25



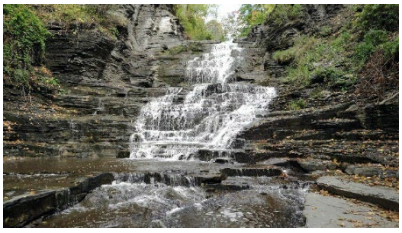
The Hidden Kingdom of Fungi: Exploring the Microscopic World in Our Forests, Homes, and Bodies by career mycologist Keith Seifert will be published on May 25. The book explores the vital role of microscopic fungi in life-changing medical breakthroughs, innovative technologies, and our favorite foods. It details the complexity of fungi, from their potential to contribute to a more sustainable Earth to their destructive roles in disasters such as the Irish Potato Famine and deadly diseases. The book also includes a foreword by biologist, author, and two-time Sloan grantee Rob Dunn (*A Natural History of the Future*). Seifert received a 2020 Sloan grant to support the research and writing of this book.

Sloan-Backed Books Nominated for PEN/E.O. Wilson Literary Science Writing Award

Two Sloan-funded books – Carl Zimmer's *Life's Edge: The Search for What It Means to Be Alive* and Lauren Aguirre's *The Memory Thief and the Secrets Behind How We Remember—A Medical Mystery* – were among the five finalists for the prestigious PEN/E.O. Wilson Literary Science Writing Award (both pictured left). The Award, named in honor of scientist and author Edward O. Wilson, celebrates writing that exemplifies literary excellence on physical or biological sciences and communicates complex scientific concepts to a lay audience.

TELEVISION

Sloan-Supported Episode of *Poetry in America* About the Workings of the Universe Aired



"Cascadilla Falls," a science-themed episode of *Poetry in America* supported by a Sloan grant, aired in February and is now available to stream online. The episode, hosted by Harvard University professor of literature Elisa New, introduces viewers to the workings of the universe in the poem "Cascadilla Falls," by acclaimed modernist poet A.R. Ammons, whose educational background in biology and botany shaped his writing. Guests include Planetary scientist Lindy Elkins-Tanton, composer DJ Spooky, geologist Daniel Schrag, poet Joshua Bennett, CEO Larry Berger, and philosopher Rebecca Goldstein. "Cascadilla Falls" was supported by a 2018 grant to Verse Video Education.

RADIO

EFF Completes Inaugural Season of New Podcast on Problems of the Modern Web

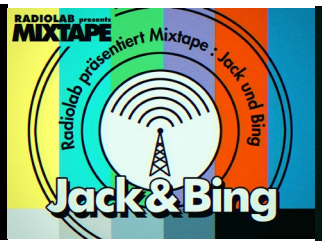
How to Fix the Internet, a new Sloan supported podcast from the Electronic Frontier Foundation (EFF) that tackles the thorniest issues of the modern web, completed its first season in February. The episodes, hosted by EFF's Executive Director Cindy Cohn (pictured left) and Special Advisor Danny O'Brien, include episodes such as "What Police Get When They Get Your Phone;" "The Revolution Will Be Open Source;" "Who Should Control Online Speech?;" and "The Life of the (Crypto) Party" with Marc Maron (pictured above). *How to Fix the Internet* is supported by a 2021 grant to EFF.

Longtime Sloan Grantee *RadioLab* Celebrates 20th Anniversary

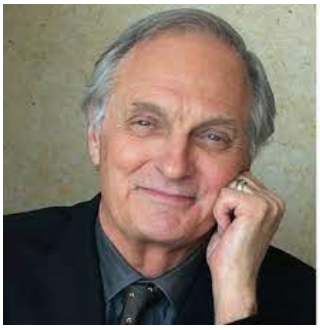
New York Public Radio's annual gala celebrated the 20th anniversary of RadioLab on November 21, 2021. Hosted by Julianna Margulies, attendees included Ira Glass (*This American Life*), former NYPR President/CEO Goli Sheikholeslami, and *RadioLab* co-hosts (pictured from left to right) Latif Nasser, Jad Abumrad (outgoing), and Lulu Miller. The Sloan Foundation has been supporting *RadioLab* since its inception.

Full *Radiolab* Miniseries *Mixtape* Available for Streaming

Mixtape: How the Cassette Changed the World, a new miniseries by the widely acclaimed, Peabody award-winning podcast *Radiolab,* released its final episode in November. The five-episode miniseries looks at the invention and impact of the cassette tape, examining the science, history, and geopolitics of the technology. *Mixtape* includes stories such as how the US military used tape recorders and microphones to bring a ghost story to life during the Vietnam war and how the cassette tape created the internet. The series is supported by a 2018 Sloan grant to New York Public Radio.



Clear+Vivid Podcast Hosted by Alan Alda Releases Full Slate of Science-Themed Episodes

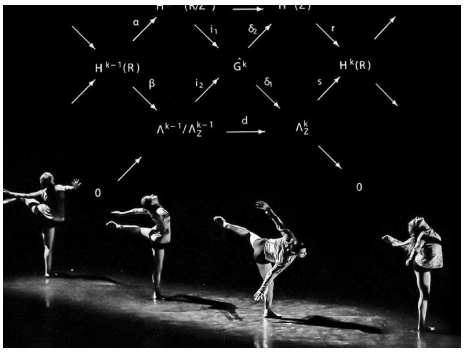


Seven Sloan-funded, science-themed episode of the popular podcast *Clear+Vivid* debuted since November. The episode featured prominent scientists Kate Crawford, Stephon Alexander, Nancy Padilla-Coreano, Bianca Jones Marlin, Diego Bohórquez, Marcia Rieke, and Karl Deisseroth, in conversation with host Alan Alda (pictured left), science champion and six-time Emmy Award and Golden Globe winner. Science-themed episodes of *Clear+Vivid* are supported by a 2021 Sloan grant to the podcast creators via the Stony Brook Foundation.

NEW MEDIA

"An Evening of Math and Dance" to Open at The Gerald W. Lynch Theater

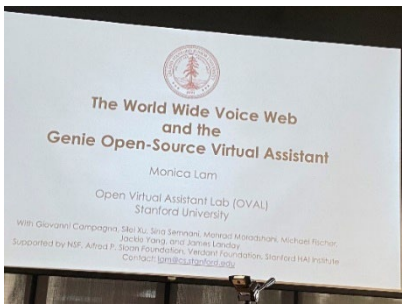
Artistic Directors Kyla Barkin and Aaron Selissen are commemorating the 30th anniversary of



the Barkin/Selissen Project with "An Evening of Math and Dance" at The Gerald W. Lynch Theater at John Jay College on April 29 and 30. The evening will consist of a performance of *Differential Cohomology: Dance of the Diagram*, followed by a panel discussion featuring prominent figures of math and dance, including mathematician, hedge fund manager, and philanthropist Jim Simons. The performance is supported by a 2019 Sloan grant to the Barkin/Selissen Project through the Foundation for Independent Artists.

UNIVERSAL ACCESS TO KNOWLEDGE / SPECIAL INITIATIVES

Stanford University Workshop Rolls Out Virtual Assistant Prototype



Monica Lam (pictured left), Professor of Computer Science at Stanford University and faculty director of the Open Virtual Assistant Lab, hosted a workshop to showcase the first live demonstration of Genie, a privacy-preserving, open-source virtual assistant that would serve as an alternative to Amazon's Alexa or Google Home. Lam's goal is to create a decentralized open-source voice ecosystem, just like the World Wide Web (WWW) that she

calls the World Wide voice Web (WWvW). The prototype is a fully working system with a smart speaker that runs on Linux and the web, including compatibility with Android and iOS, and completes all the top 10 skills for virtual assistants. The Sloan Foundation supported Dr. Monica Lam's research in this area with a 2020 grant.

Consumer Reports Evaluates DIY Home Security as Part of Sloan-Supported Efforts to Safeguard Consumers' Digital Rights

Consumer Reports (CR) tested multiple brands of ten of the most popular DIY home security systems and found that half are relatively easy to jam. The test revealed that a burglar can use a laptop and a portable radio frequency transceiver to block the signals from a door, window or motion sensors and enter a home without triggering the alarm. CR also reached out to the manufacturers of the weakest systems about improving their safety. The tests are designed in CR's Digital Lab using The Digital Standard, an open-source set of criteria for evaluating the security and privacy of digital products, supported by a 2021 Sloan grant.

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