

MUSEUM OF THE MOVING IMAGE

SCIENCE & FILM

COMPANION GUIDE

A Companion To Science-Related Feature Films



INTRODUCTION

From Museum of the Moving Image's website *Sloan Science & Film*, this is a guide to 46 feature films with scientific or technological themes or characters. Each film has received development or distribution support from the Alfred P. Sloan Foundation because of its scientific content. By indexing each film by scientific subject matter and providing supplemental science content, the guide is to encourage audiences inspired by the films to explore the scientific subject matter further.

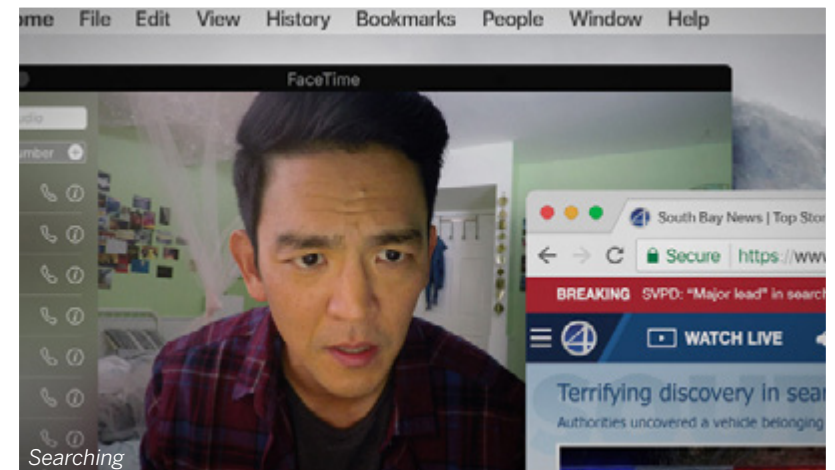
Each feature film in this guide received development support at script-stage or won a prize as a completed feature from one or more of the Sloan Foundation's institutional partners, which include: Film Independent, Tribeca Film Institute, Sundance Film Institute, San Francisco Film Society, the Black List, the Hamptons International Film Festival, and more.

The Sloan Foundation's film program encourages filmmakers to create more realistic and compelling stories about science and technology, and to challenge existing stereotypes of scientists and engineers in the popular imagination. Since 1997, the Foundation has partnered with six of the top film schools and established annual awards in screenwriting and film production, and supports screenplay development programs and feature films with the partners mentioned above. Partnering with the Coolidge Corner Theatre, the Sloan Foundation has awarded "Science on Screen" grants to cinemas across the country for pairing film screenings with talks by scientists.

Sloan Science & Film (scienceandfilm.org) is a website and online resource edited by Sonia Epstein that covers all things science and film. It is published by the Museum of the Moving Image with support from the Alfred P. Sloan Foundation. *Sloan Science & Film* features articles, interviews, and goings on, and hosts a growing library of over 50 short films—featuring science and technology themes—available to stream any time; the website published an accompanying Teacher's Guide that makes the short films accessible to teachers for use in STEM classrooms.



Valley of Saints



To Dust

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ACKNOWLEDGEMENTS

ASTRONOMY

Agora

2009. 127 minutes.

RATING: R for some violence.

SUMMARY: In Egypt toward the end of the fourth century AD after Roman conquest, a slave turns to Christianity in the hope of finding freedom while also falling in love with his master, who is a female astronomer, mathematician, and philosopher named Hypatia of Alexandria.

QUESTIONS TO EXPLORE: How was the heliocentric model of the universe proven? How are the astrolabe and hydroscope used? What technologies do NASA scientists currently use to measure the universe?

RESOURCES:

A project to catalogue the achievements of female mathematicians: <https://www.agnesscott.edu/lriddle/women/women.htm>

About the heliocentric model of the universe:
<https://phys.org/news/2016-01-heliocentric-universe.html>

NASA resource on orbital mechanics:
<https://earthobservatory.nasa.gov/Features/OrbitsHistory/>

A home activity to construct and use an astrolabe:
http://cse.ssl.berkeley.edu/AtHomeAstronomy/activity_08.html



TALENT: Written by Alejandro Amenábar and Mateo Gil. Directed by Amenábar. Produced by Álvaro Augustin and Fernando Bovaira. Photographed by Xavi Giménez. Edited by Nacho Ruiz Capillas. Principal cast: Rachel Weisz, Oscar Isaac, Rupert Evans, Max Minghella, Michael Lonsdale. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

Dark Matter

2007. 88 minutes.

RATING: R for violence, brief sexual content, and language.

SUMMARY: A Chinese student arrives at an American university to study cosmology, but his theories about dark matter conflict with those of a famous cosmologist. Based on a true story.

QUESTIONS TO EXPLORE: What evidence supports the existence of dark matter? How do cosmologists search for dark matter? How has the study of dark matter changed since the early 1990s?

RESOURCES:

A TED talk about understanding dark matter:
https://www.ted.com/talks/patricia_burchat_leads_a_search_for_dark_energy

NASA page about dark matter with related resources:<https://www.nasa.gov/audience/forstudents/9-12/features/what-is-dark-matter.html>

A New Yorker article about dark matter:
<https://www.newyorker.com/tech/elements/dark-matter-gets-its-day>

A NOVA video about dark matter:
<http://www.pbs.org/wgbh/nova/physics/dark-matter.html>

A National Geographic article with media about dark matter:
<https://www.nationalgeographic.com/magazine/2015/01/dark-matter-dark-energy-hidden-cosmos/>



TALENT: Written by Billy Shebar. Directed by Shi-Zheng Chen. Produced by Andrea Miller, Mary Salter, and Janet Yang. Photographed by Oliver Bokelberg. Editing by Michael Berenbaum and Pam Wise. Music by Van Dyke Parks. Principal cast: Meryl Streep, Ye Liu, Peng Chi, Aidan Quinn. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

The Martian

2015. 144 minutes.

RATING: PG-13

SUMMARY: During a manned mission to Mars, astronaut Mark Watney is presumed dead by his crew and ends up stranded and alone. With only meager supplies, Watney has to find a way to survive while NASA scientists try to find a way to bring him back to Earth.

QUESTIONS TO EXPLORE: How has the feasibility of manned missions to Mars changed in the past ten years and what is driving advances? What are the major challenges to sustaining human life on Mars? How are astronauts training for travel to Mars?

RESOURCES:

Homepage for NASA's Mars Exploration Program:
<https://mars.nasa.gov/>

A talk with geoscientists about living on Mars:
<https://www.youtube.com/watch?v=1-prkuqLCak>

Interview with *The Martian* author Andy Weir: <http://scienceandfilm.org/articles/2623/exclusive-interview-the-martians-andy-weir>

An illustrated presentation by a planetary scientist about preparations for human missions to Mars:
<https://www.youtube.com/watch?v=bJKt0zgajyk>

An interview with the producer of a National Geographic docudrama Mars: <http://scienceandfilm.org/articles/2800/how-to-live-4ever-mars-behind-the-scenes-with-justin-wilkes>

An article with videos about astronauts living in a Mars simulation on Earth:
<http://scienceandfilm.org/articles/3000/life-on-mars-return-to-earth-on-screen>



An interview with NASA's Director of Engineering:
<http://scienceandfilm.org/articles/2732/science-on-screen-nasas-dr-patrick-simpkins-on-october-sky>

A talk about *The Martian* by astronaut Mark Kelly:
<https://www.youtube.com/watch?v=dc8SVq4ocOk>

TALENT: Directed by Ridley Scott. Written by Drew Goddard, based on the novel by Andy Weir. Produced by Mark Huffman, Simon Kinberg, Michael Schaefer, Ridley Scott, and Aditya Sood. Photographed by Dariusz Wolski. Edited by Pietro Scalia. Music by Harry Gregson-Williams. Principal cast: Matt Damon, Jessica Chastain, Kristen Wiig. Recipient of a San Francisco Film Society Sloan Science in Cinema Prize.

HOW TO WATCH: [Amazon](#)

2030

2014. 98 minutes.

RATING: N/A

SUMMARY: Set in the year 2030, when climate change has caused most of the arable land in Vietnam to sink below sea level. A couple refuses to leave their land. Multinational corporations are working on floating farms to genetically engineer vegetables. A murder in the community causes the corporation's methods to come under scrutiny.

QUESTIONS TO EXPLORE: How is climate change affecting farmlands? What would it take to grow plants in saltwater? Why are GMO foods controversial?

RESOURCES:

A study of rising sea levels and climate change:
<http://www.climatecentral.org/news/antarctic-modeling-pushes-up-sea-level-rise-projections-21776>

Resources for facts about GMO foods:
<https://www.sciencefriday.com/articles/science-facts-gmos/>

An activity about agriculture for high-schoolers:
https://www.agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=82&grade=9&author_state=0

An activity for middle-schoolers to design a farm: <http://dx.cooperhewitt.org/lessonplan/soil-designing-the-small-farm-of-the-future/>



TALENT: Written, Directed, and Produced by Minh Nguyen-Vo. Co-produced by Bao Nguyen. Photographed by Nguyen. Edited by Julie Béziau. Music by Inouk Demers. Principal cast: Quynh Hoa, Quy Binh, Kim Long Thach. Recipient of a TFI-Sloan Filmmaker Fund Award.

HOW TO WATCH: [Vimeo](#)

Decoding Annie Parker

2013. 91 minutes.

RATING: R for language and some sexual content.

SUMMARY: Based on the true story of Mary-Claire King, a geneticist whose discovery of the BRCA1 gene changed breast cancer research and treatment, and Annie Parker, one of the first patients to test positive for the gene.

QUESTIONS TO EXPLORE: How did the discovery of BRCA1 revolutionize the study of inherited diseases? What epigenetic factors can influence the development of breast or ovarian cancer in people with the BRCA1 gene? What were the major factors that contributed to Mary-Claire King's discovery of the BRCA1 gene?

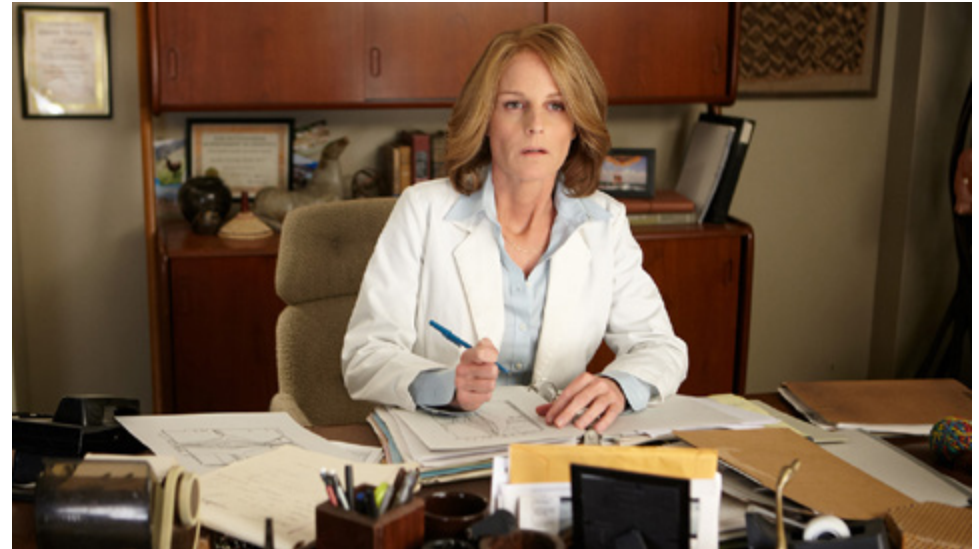
RESOURCES:

A panel about genomics and cancer with Mary-Claire King: <https://www.worldsciencefestival.com/videos/cancers-last-stand-the-genome-solution/>

A resource about the BRCA genes: <https://www.cancer.gov/about-cancer/causes-prevention/genetics/brca-fact-sheet>

Information about Mary-Claire King's discovery: <https://www.nationalmedals.org/laureates/mary-claire-king>

An interview with Mary-Claire King: <http://journals.plos.org/plosgenetics/article?id=10.1371/journal.pgen.1003828>



TALENT: Written, Directed, and Produced by Steven Bernstein. Co-written by Adam Bernstein and Michael Moss. Co-produced by Keith Kjarval, Clark Peterson, Stuart W. Ross, Ron Senkowski, and Mary Vernieu. Photographed by Ted Hayash. Edited by Douglas Crise. Music by Steven Bramson. Principal cast: Helen Hunt, Samantha Morton, Aaron Paul. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Embrace of the Serpent. 2015. 111 minutes.

SCIENTIFIC FIELD: Biology

RATING: PG-13 for brief nudity and violence.

SUMMARY: Set in the Colombian Amazon, two German explorers—an ethnologist and a botanist—search for a sacred plant. Based on the true story of ethnobotanists Theodor Koch-Grünberg and Richard Evans Schultes.

QUESTIONS TO EXPLORE: Who was Richard Evans Schultes and what was his major scientific contribution? How did anthropology and botany converge to create the field of ethnobotany? What are the field techniques that ethnobotanists use?

RESOURCES:

Interview about Richard Evan Schultes: <http://scienceandfilm.org/articles/2675/magical-realism-as-journalism-interview-with-wade-davis>

Interview with director Ciro Guerra: <http://scienceandfilm.org/articles/2654/interview-with-ciro-guerra-director-of-embrace-of-the-serpent>

Field notes from the New York Botanical Garden about ethnobotany: <https://www.nybg.org/blogs/science-talk/tag/ethnobotany/>

TED talks by ethnobotanist and anthropologist Wade Davis: https://www.ted.com/speakers/wade_davis



TALENT: Written and Directed by Ciro Guerra. Co-written by Jacques Toulemonde Vidal, based on the diaries of Theodor Koch-Grünberg and Richard Evans Schultes. Produced by Cristina Gallego. Photographed by David Gallego. Edited by Etienne Boussac and Cristina Gallego. Music by Nascuy Linares. Principal cast: Nilbio Torres, Jan Bijvoet, Antonio Bolivar. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#) | [Vimeo](#)

I Origins

2014. 106 minutes.

RATING: R for some nudity and language.

SUMMARY: A molecular biologist is researching the evolution of humans eyes in order to prove that they have evolved, rather than appeared as creationists believe. His inquiries lead to questions both scientific and spiritual.

QUESTIONS TO EXPLORE: How does the human eye differ from that of other species? Why is the evolution of the eye challenging to theorize about? How has understanding the eye led to biotechnological advances such as optogenetics?

RESOURCES:

A PBS video on the evolution of the eye:

http://www.pbs.org/wgbh/evolution/library/01/1/I_011_01.html

An article on the differences between eyes of animal and human species: <http://advances.sciencemag.org/content/1/7/e1500391>

An interview about *I Origins* with a professor of molecular biology: <http://scienceandfilm.org/articles/2360/i-origins/>

An explanation of optogenetics:

<https://www.weforum.org/agenda/2016/10/what-is-optogenetics/>

Lesson plan about optogenetics for high school students:

<http://web.as.uky.edu/biology/faculty/cooper/labWWW-PDFs/Titlew-TST-2014.pdf>



TALENT: Written and Directed by Mike Cahill. Produced by Cahill, Hunter Gray, and Alex Orlovsky. Photographed by Markus Förderer. Edited by Mark Cahill. Music by Will Bates and Phil Mossman. Principal cast: Michael Pitt, Steven Yeun, Astrid Bergès-Frisbey, Brit Marling. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Kardia

2006. 85 minutes.

RATING: N/A

SUMMARY: A woman who underwent an experimental heart operation as a child finds herself continuing to be linked to the man who aided the procedure.

QUESTIONS TO EXPLORE: How has technology related to heart surgery advanced over the past 20 years? How have non-invasive surgical techniques impacted patient outcomes? What functions can surgical robots perform, and what are the controversies surrounding putting them to use?

RESOURCES:

A journal article presenting an overview of robotic surgical techniques of the 21st century:

<http://jaoa.org/article.aspx?articleid=2093094>

An article about robotic surgeons: <https://spectrum.ieee.org/robotics/medical-robots/would-you-trust-a-robot-surgeon-to-operate-on-you>

An article from the American College of Cardiology on the future of cardiac surgery: <http://www.acc.org/latest-in-cardiology/articles/2015/09/09/08/44/cardiac-surgery-and-the-future>

A journal article about major cardiologic developments: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC124754/>



TALENT: Written and Directed by Su Rynard. Produced by Paul Barkin. Photographed by Kim Derko. Edited by Michele Francis. Music by Philip Strong. Principal cast: Mimi Kuzyk, Peter Stebbings, Erin Shpigel. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: DVD

Kinsey

2004. 118 minutes.

RATING: R for sexual content.

SUMMARY: Based on the life of Alfred Kinsey, a pioneering researcher in the field of human sexual behavior.

QUESTIONS TO EXPLORE: How did Alfred Kinsey's studies challenge existing notions of human sexuality? How has studying sexuality from a scientific standpoint changed the social perceptions of it? How has Kinsey's work continued to influence research today?

RESOURCES

A journal article about the importance of Alfred Kinsey:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447862/>

A listing of current research publications by scientists affiliated with the Kinsey Institute: <https://www.kinseyinstitute.org/research/publications/staff-publications-sue-carter.php>

An explanation of the Kinsey scale:
<https://www.kinseyinstitute.org/research/publications/kinsey-scale.php>

A citizen science project by the Kinsey institute:
<https://kinseyreporter.org/>

An article about Alfred Kinsey, and some of the historical controversy: <http://www.nytimes.com/2004/10/03/movies/alfred-kinsey-liberator-or-pervert.html>

An article about Kinsey: <http://scienceandfilm.org/articles/114/science-and-the-scientist-getting-close-to-kinsey>



TALENT: Written and Directed by Bill Condon. Produced by Francis Ford Coppola and Gail Mutrux. Photographed by Frederick Elmes. Edited by Virginia Katz. Music by Carter Burwell. Principal cast: Liam Neeson, Laura Linney, Peter Sarsgaard, Chris O'Donnell, Timothy Hutton, John Lithgow. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

Teknolust

2002. 85 minutes.

RATING: R for some sexual content.

SUMMARY: A bio-geneticist named Rosetta Stone finds a way to download her DNA onto a computer and replicate it, thereby creating three androids. Needing periodic injections of the Y chromosome to survive, the androids venture into the real world to seduce men. As the androids grow close to other people, they begin to question what it means to be human.

QUESTIONS TO EXPLORE: How does asexual reproduction function in animals? What moral and ethical questions should be considered when modifying the human genome? How has gene editing technology advanced since *Teknolust* was released in 2002?

RESOURCES:

Video of discussion between director Lynn Hershman Leeson and biologist Stuart Firestein: <http://scienceandfilm.org/articles/2867/teknolust-lynn-hershman-leeson-talks-with-stuart-firestein>

A panel discussion at the World Science Festival about DNA editing and CRISPR: <https://www.youtube.com/watch?v=Nimj6SNPq-o>

A scholarly article about sexuals vs. asexual reproduction: <https://academic.oup.com/mbe/article/27/4/954/1748932>



TALENT: Written and Directed by Lynn Hershman Leeson. Produced by Leeson, Oscar Gubernati, and John Bradford King. Photographed by Hiro Narita. Edited by Lisa Fruchtman. Music by Klaus Badelt and Mark Tschanz. Principal cast: Tilda Swinton, Jeremy Davies, James Urbaniak, Karen Black. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Fandor](#) | [DVD](#)

The Fountain

2006. 96 minutes.

RATING: PG-13 for violence and language.

SUMMARY: A man travels through time searching for a cure to save his wife who is dying of cancer.

QUESTIONS TO EXPLORE: What advances have been made in the field of longevity science? What can the study of different species contribute to understanding human longevity? What interventions can be made to impact human longevity?

RESOURCES:

Presentation by a biologist about the science of longevity:
<https://www.youtube.com/watch?v=d3nhQsBvhzE>

A scholarly article about what has been learned about longevity from comparative studies:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4353926/>

An interview with a biomedical scientist about aging:
<http://scienceandfilm.org/articles/2556/immortal-bodies-the-age-of-adaline>

Video of a discussion about the science of longevity: <https://www.worldsciencefestival.com/videos/the-radical-new-science-of-longevity/>

A podcast interview with a biomedical gerontologist about aging: <https://www.theguardian.com/science/audio/2016/nov/29/big-unknowns-can-we-stop-ageing-science-weekly-podcast>



TALENT: Directed by Darren Aronofsky. Written by Aronofsky and Ari Handel. Produced by Arnon Milchan, Iain Smith, and Eric Watson. Photographed by Matthew Libatique. Edited by Jay Rabinowitz. Music by Clint Mansell. Principal cast: Hugh Jackman, Rachel Weisz, Sean Patrick Thomas. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

To Dust

2018. 98 minutes.

RATING: N/A

SUMMARY: Grieving the recent death of his wife, Shmuel, a Hasidic cantor, struggles to make peace with his loss and finds himself yearning to know what is happening to her body underground. Going outside the bounds of his community, he finds a local biology teacher and enlists his help.

QUESTIONS TO EXPLORE: What is the process of decomposition of organic matter? How do forensic anthropologists conduct research, and what sorts of questions do they ask? What techniques do forensic anthropologists rely on?

RESOURCES:

Forensic anthropology lesson plans and resources for middle and high school students: <https://qrius.si.edu/teachers/online/science-teaching-resources/bones-and-forensic-anthropology>

Questions and answers related to forensic anthropology: <https://qrius.si.edu/explore-science/jump/forensic-anthropology>

An article about forensic anthropology researchers and their practices from The New York Times: <https://www.nytimes.com/2016/06/14/science/forensic-science-body-farm.html>

An article in Science about the biology of decomposition: <http://www.sciencemag.org/news/2015/12/thousands-unexpected-microbes-break-down-our-bodies-after-death>

A breakdown of the stages of decomposition of the human body: <http://aboutforensics.co.uk/decomposition/>

An interview with actor Géza Röhrig: <http://scienceandfilm.org/articles/3083/gza-rhrig-on-the-tribeca-winning-film-to-dust>



TALENT: Written and Directed by Shawn Snyder. Co-written by Jason Begue. Produced by Josh Crook, Scott Floyd Lochmus, Emily Mortimer, Alessandro Nivola, and Ron Perlman. Photographed by Xavi Giménez. Edited by Allyson Johnson. Music by Ariel Marx. Principal cast: Géza Röhrig, Matthew Broderick. Recipient of an NYU-Sloan First Feature Film Award and a TFI-Sloan Student Grand Jury Award.

HOW TO WATCH: [Find out when it is available.](#)

A Birder's Guide to Everything

2013. 86 minutes.

RATING: PG-13 for mature references.

SUMMARY: A teenage birder thinks that he may have spotted an extinct species of bird. On the eve of his father's remarriage, he sneaks out with his fellow birders in the hopes of documenting his discovery.

QUESTIONS TO EXPLORE: Looking to citizen science, what can amateur birders contribute to research? How do birders document their observations? What are the major factors that lead to a species' extinction, and how can they be mitigated?

RESOURCES:

How birders identify species:

<http://www.audubon.org/content/how-identify-birds>

An online toolkit developed by the Audubon Society:

<http://web4.audubon.org/educate/toolkit/>

A citizen science project to spot banded birds:

<https://blog.nature.org/science/2013/08/05/banded-birds-citizen-science/>

How to create a wildlife-friendly habitat:

<https://www.nature.org/newsfeatures/pressreleases/online-platform-helps-citizen-scientists-transform-outdoor-space-into-wild-1.xml>

A New York Times article on identifying birds: https://www.nytimes.com/2015/06/21/magazine/identification-please.html?_r=0

Preserving Critical Species: Inquiry to Action (Lesson Plan)

<https://www.nationalgeographic.org/activity/mission-animal-rescue-inquiry-action/>



TALENT: Written and Directed by Rob Meyer. Co-written by Luke Matheny. Produced by Kirsten Duncan Fuller, Lisa K. Jenkins, Dan Lindau, and R. Paul Miller. Photographed by Tom Richmond. Edited by Vito DeSario. Music by Jeremy Turner. Principal cast: Kodi Smit-McPhee, James Le Gros, Daniela Lavender, Ben Kingsley. Recipient of a Sundance Sloan Feature Film Prize and a TFI-Sloan Filmmaker Fund Award.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Basmati Blues

2018. 106 minutes.

RATING: N/A

SUMMARY: A young American scientist is sent to India to promote a new kind of genetically-modified rice, but quickly finds herself wrestling with the real-world effects of her work.

QUESTIONS TO EXPLORE: How could genetically modified organisms (GMO) help solve hunger issues? What is the public suspicion of GMOs based upon, and how can those concerns be addressed? What scientific breakthroughs have aided the engineering of GMOs?

RESOURCES:

An article in Science about eating GMOs: <https://www.sciencemag.org/news/2016/05/once-again-us-expert-panel-says-genetically-engineered-crops-are-safe-eat>

A scholarly publication analyzing a range of studies that look at the health effects of GMOs: <http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0111629&type=printable>

A scholarly publication about GMOs and food security: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0064879>

A summary of the food safety assessments of golden rice: <http://irri.org/golden-rice/faqs/how-has-the-food-feed-safety-assessment-of-golden-rice-been-conducted>

An article in the MIT Technology Review about GMOs: <https://www.technologyreview.com/s/522596/why-we-will-need-genetically-modified-foods/>

Interview with *Basmati Blues* producer Monique Caulfield: <http://scienceandfilm.org/articles/2660/exclusive-interview-basmati-blues-monique-caulfield>



TALENT: Written by Dan Baron, Jeff Dorchon, and Danny Thompson. Directed by Dan Baron. Produced by Monique Caulfield and Jeffrey Soros. Photographed by Himman Dahmija. Edited by Tom Lewis. Music by Steven Argila. Principal cast: Brie Larson, Utkarsh Ambudkar, Donald Sutherland, Tyne Daly. Recipient of a Film Independent Sloan Producer's Grant.

HOW TO WATCH: DVD

Druid Peak

2014. 111 minutes.

RATING: N/A

SUMMARY: A coming of age story about a troubled teenage boy who sent to live with his father, a biologist, working on a wolf reintroduction program at Yellowstone.

QUESTIONS TO EXPLORE: What caused the decline of grey wolves in Yellowstone National Park? What efforts have been made in Yellowstone National Park to protect endangered species? What are the pros and cons of reintroducing species into the wild?

RESOURCES:

An article about Yellowstone's wolf population: <https://www.yellowstonepark.com/things-to-do/wolf-reintroduction-changes-ecosystem>

Information on the Druid Peak wolf pack at Yellowstone: http://www.yellowstonewolf.org/yellowstones_wolves.php?pack_id=10

A Q&A with the biologist leading a wolf restoration project in Yellowstone: <https://www.nps.gov/yell/learn/photosmultimedia/qa-wolves.htm>

Information about U.S. species reintroduction programs: <https://www.aza.org/reintroduction-programs>

Why is biodiversity important? (Lesson plan on biodiversity and bioblitz) <https://www.nationalgeographic.org/activity/introducing-biodiversity-and-bioblitz/>



TALENT: Written and Directed by Marni Zelnick. Produced by Julie Buck, Dana Morgan, and Jeff Petriello. Photographed by Rachel Morrison. Edited by Keith L. Davis. Music by Timo Elliston. Principal cast: Spencer Treat Clark, Andrew Wilson, Rachel Korine. Recipient of an NYU-Sloan First Feature Film Award.

HOW TO WATCH: [Amazon](#)

Grizzly Man

2005. 103 minutes.

RATING: R for language.

SUMMARY: This documentary chronicles the life and death of Timothy Treadwell, a bear enthusiast who was killed during one of the most extreme experiments on human-animal cohabitation.

QUESTIONS TO EXPLORE: How did Timothy Treadwell's life work helped raise awareness about grizzly bears? What are the dangers of cohabitation for both humans and wild animals? What are the controversies surrounding human-animal cohabitation?

RESOURCES:

A discussion about Grizzly Man, conservation, and wildlife:
<https://www.youtube.com/watch?v=dASUaOS5vVI>

An interview with director Werner Herzog:
<https://www.npr.org/templates/story/story.php?storyId=4778191>

A PBS series about animal and human cohabitation:
<http://www.pbs.org/earth-a-new-wild/home/>

An article about human-animal cohabitation in urban centers: <http://www.conservationmagazine.org/2013/12/cohabitation/>

A talk about grizzly bears and humans:
<https://www.youtube.com/watch?v=7T7dLIH9W0I>

A talk about the psychology of Timothy Treadwell:
<https://www.youtube.com/watch?v=zK3Ggu1dPx0>



TALENT: Written and Directed by Werner Herzog. Produced by Erik Nelsson. Photographed by Peter Zeitlinger. Edited by Joe Bini. Music by Richard Thompson. Principal cast: Timothy Treadwell, Amie Huguenard, Werner Herzog. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Future Weather

2012. 100 minutes.

RATING: N/A

SUMMARY: When her single mom runs off to California, Laudurée—a passionate environmentalist—moves in with her grandmother and focuses her energy on her classroom science project.

QUESTIONS TO EXPLORE: What are some of the leading causes of climate change? How can citizen science help mitigate climate change? How does climate change impact people's lives around the world most profoundly?

RESOURCES:

Environmental science teaching materials from MIT:
<https://ocw.mit.edu/courses/environment-courses/>

Climate Change Q&As from NASA: <https://climate.nasa.gov/faq/>

The role of ecosystems in stabilizing the climate:
<https://www.epa.gov/enviroatlas/enviroatlas-benefit-category-climate-stabilization>

Citizen Science projects from the National Park Service:
<https://www.nps.gov/subjects/climatechange/citizenscience.htm>

Science Friday podcast on communicating with people about Climate Change: <https://www.sciencefriday.com/segments/whats-the-best-way-to-convince-a-climate-change-denier/>

A lesson plan about extreme weather:
<https://www.nationalgeographic.org/activity/extreme-weather-on-earth/>



TALENT: Written and Directed by Jenny Deller. Produced by Deller and Kristin Fairweather. Photographed by Zak Mulligan. Edited by Shelby Siegel. Music by Erik Friedlander. Principal cast: Perla Haney-Jardine, Lili Taylor, Amy Madigan. Recipient of a Film Independent Sloan Producer's Grant and Fast Track Grant, and a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Obselidia

2010. 103 minutes.

RATING: N/A

SUMMARY: George, a lonely librarian, decides to create a compendium of obsolete things. After meeting Sophie, who believes nothing is obsolete as long as someone loves it, he begins to change his beliefs.

QUESTIONS TO EXPLORE: How does planned obsolescence impact climate change? What are some of the intended and unintended consequences of planned obsolescence? How do planned obsolescence practices impact individuals?

RESOURCES:

An article on the good and bad of planned obsolescence:
<https://www.perc.org/blog/planned-obsolence-good-and-bad>

An explanation from the EPA of how different communities define zero waste: <https://www.epa.gov/transforming-waste-tool/how-communities-have-defined-zero-waste>

The Economist on planned obsolescence:
<https://www.economist.com/node/13354332>

A BBC report on planned obsolescence: <http://www.bbc.com/future/story/20160612-heres-the-truth-about-the-planned-obsolence-of-tech>



TALENT: Written and Directed by Diane Bell. Produced by Chris Byrne, Matthew Medlin, and Ken Morris. Photographed by Zak Mulligan. Edited by John-Michael Powell. Music by Liam Howe. Principal cast: Michael Piccirilli, Gaynor Howe, Frank Hoyt Taylor, Chris Byrne, Kim Beuche. Recipient of a Sundance Sloan Feature Film Prize and a TFI-Sloan Filmmaker Fund Production Award.

HOW TO WATCH: [Amazon](#)

Radium Girls

2018. 98 minutes.

RATING: N/A

SUMMARY: Based on the true events of the 1920s, teenage sisters paint glow-in-the-dark watch dials at the American Radium Factory. But when one falls ill, it becomes evident that radium is not the miracle, healthy serum it has been said to be.

QUESTIONS TO EXPLORE: How did Marie and Pierre Curie isolate radium? How has radium been used in good and bad ways since it was discovered? What are the effects of radium on the human body?

RESOURCES:

An interview with director and producer Lydia Pilcher: <http://scienceandfilm.org/articles/2774/radium-girls-interview-with-lydia-dean-pilcher>

An article about Marie Curie: <http://scienceandfilm.org/articles/2849/a-new-film-about-marie-curie-by-marie-nolle>

A PBS documentary, *The Poisoner's Handbook*, about toxic chemicals in everyday products:
<https://www.pbs.org/wgbh/americanexperience/films/poisoners/>

Information on the *Radium Girls* case:
<https://www.atomicheritage.org/history/radium-girls>

An article on the *Radium Girls* and radium dangers:
<https://web.archive.org/web/20090721113733/http://www.radford.edu/~wkovarik/envhist/radium.html#radiumdangers>

About Marie Curie's research: https://www.nobelprize.org/nobel_prizes/physics/laureates/1903/marie-curie-facts.html



TALENT: Directed by Ginny Mohler and Lydia Dean Pilcher. Written by Mohler and Brittany Shaw. Produced by Lydia Dean Pilcher and Emily McEvoy. Photographed by Mathieu Plainfosse. Edited by Giacomo Ambrosini. Music by Lillie McDonough. Principal cast: Abby Quinn, Cara Seymour, Joey King, Scott Shepherd. Recipient of an NYU-Sloan First Feature Film Award.

HOW TO WATCH: [Find out when it is available.](#)

Songcatcher

2000. 109 minutes.

RATING: PG-13 for sexual content.

SUMMARY: A musicologist visiting her sister at a rural school in Appalachia makes an amazing discovery of Scottish-Irish ballads.

QUESTIONS TO EXPLORE: What research methodologies are most useful to musicologists? What technological developments have advanced the field of musicology? How do musicology and ethnomusicology differ?

RESOURCES:

A musicologist talks about *Songcatcher* and transcribing music: https://www.youtube.com/watch?v=i_qFMEu88_Y

An explanation of ethnomusicology from the Society for Ethnomusicology:
<http://www.ethnomusicology.org/?page=WhatisEthnomusicol>

An article on archival technology and ethnomusicology:
<http://newsroom.ucla.edu/stories/ethnomusicology-archives-efforts-to-preserve-cultural-memory-are-threatened>

Ethnomusicology lesson plans by the Smithsonian:
<https://folkways.si.edu/lesson-plans/smithsonian>



TALENT: Written and Directed by Maggie Greenwald. Produced by Richard Miller. Photographed by Enrique Chediak. Edited by Keith Reamer. Music by David Mansfield. Principal cast: Janet McTeer, Michael Harding, Michael Davis, Emmy Rossum, Aidan Quinn, Jane Adams, Pat Carroll. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

The House of Sand

2005. 115 minutes.

RATING: R for sexual content.

SUMMARY: Set in 1910 in Brazil, Áurea's fanatical husband has relocated his family to start a farm. Desperate and pregnant, Áurea tries to traverse the dunes back to the city with her aging mother, but they end up stranded.

QUESTIONS TO EXPLORE: What role do dunes play in the ecology of the landscape? How are dunes formed? What plants and animals survive best in dune habitats and why?

RESOURCES:

An article about the sand dunes of Brazil:

<https://www.nationalgeographic.com/magazine/2010/07/brazil-dunes/>

An article in Nature Education on the morphology of different types of dunes: <https://www.nature.com/scitable/knowledge/library/coastal-dunes-geomorphology-25822000>

A scholarly article about the specialized habitats of sand dunes and efforts to stabilize them:

<https://academic.oup.com/jpe/article/11/1/26/4817360>

An article about physicists who have created computer models to study a dune field: <http://revistapesquisa.fapesp.br/en/2013/04/17/the-secrets-of-the-lencois-maranhenses/>

About the habitats provided by sand dunes:

<https://www.ceh.ac.uk/our-science/projects/sand-dunes>



TALENT: Written and Directed by Andrucha Waddington. Co-written by Elena Soárez and Luis Carlo Barreto. Produced by Andrucha Waddington, Pedro Buarque de Hollanda, Pedro Guimarães, and Leonardo Monteiro de Barros. Photographed by Ricardo Della Rosa. Edited by Sérgio Mekler. Music by João Barone and Carlo Bartolini. Principal cast: Fernanda Montenegro, Fernanda Torres, Ruy Guerra. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: DVD

Valley of Saints

2012. 82 minutes.

RATING: N/A

SUMMARY: A young Kashmiri boatman tries to flee his war-torn, environmentally devastated homeland. When he crosses paths with a female scientist studying water pollution, their romance forces him to choose whether to abandon his fragile community or to stay and rebuild.

QUESTIONS TO EXPLORE: What are the strategies to restore a polluted body of water? In what ways can a polluted lake affect the ecosystem? What is the importance of creating eco-friendly tourism?

RESOURCES:

A report on water pollution in Kashmir:

<https://pulitzercenter.org/reporting/kashmir-venice-asia-canals-disappearing>

An article on tourism and pollution in Kashmir:

<https://www.chinadialogue.net/article/show/single/en/4948-Pollution-in-paradise>

An article in Science about strategies for addressing water

issues: <http://nebula.wsimg.com/b6a8fae04e315cd7f34c1f39c67af366?AccessKeyId=F22D37E4255246854A5F&disposition=0&alloworigin=1>

A scholarly article about climate change and water

resources: <http://nebula.wsimg.com/73fb2a6dc1e9eade04748181087da7b8?AccessKeyId=F22D37E4255246854A5F&disposition=0&alloworigin=1>

K-12 activities related to water pollution:

<https://extension.usu.edu/waterquality/educator-resources/lessonplans/wp/>



TALENT: Written and Directed by Musa Syeed. Produced by Nicholas Bruckman. Photographed by Yoni Brook. Edited by Ray Hubley and Mary Manhardt. Music by Mubashir Mohi-ud-Din. Principal cast: Mohammed Afzal, Gulzar Ahmed Bhat, Neelofar Hamid. Recipient of an NYU First Feature Film Award, a Film Independent Sloan Producer's Grant, and a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

Enigma

2001. 119 minutes.

RATING: R for mature content.

SUMMARY: Set during World War II in Bletchley Park, a mathematician races against time to crack a code used by German intelligence.

QUESTIONS TO EXPLORE: How did the work of codebreakers during World War II contribute to the development of computers? Why was the German Enigma code notoriously difficult to decode? What are the major uses of cryptography today?

RESOURCES:

A history of how the codebreaking machine gave rise to modern computing:

<http://www.computerhistory.org/revolution/birth-of-the-computer/4/82>

About Alan Turing and the Enigma code:

<https://www.iwm.org.uk/history/how-alan-turing-cracked-the-enigma-code>

An interview with a mathematician about Alan Turing:

<http://scienceandfilm.org/articles/2499/the-imitation-game-and-turings-legacy>

Theory and applications of modern cryptography:

<https://cs.stanford.edu/people/eroberts/courses/soco/projects/2004-05/cryptography/quantum.html>

An explanation of how cryptography is regularly used:

<http://www.laits.utexas.edu/~anorman/BUS.FOR/course.mat/SSim/life.html>

Explanation of and lesson plans about cryptography:

<http://www.math.cornell.edu/~mec/Summer2008/lundell/cryptomain.html>



TALENT: Written by Tom Stoppard, based on a novel by Robert Harris. Directed by Michael Apted. Produced by Mick Jagger and Lorne Michaels. Photographed by Seamus McGarvey. Edited by Rick Shaine. Music by John Barry. Principal cast: Dougray Scott, Kate Winslet, Saffron Burrows. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [iTunes](#) | [Amazon](#)

Hidden Figures

2016. 127 minutes.

RATING: PG for thematic elements and some language.

SUMMARY: Based on the true story of three female, African-American mathematicians working at NASA during the Space Race calculating trajectories for the first manned spacecraft to orbit Earth.

QUESTIONS TO EXPLORE: Why were human computers necessary at NASA? How did human computers and electronic computers work together? What is the role of mathematicians at NASA today, and on what major projects are they working?

RESOURCES:

Resources and activities for K-12 students from NASA:
<https://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/NASA-Modern-Figures-Toolkit.html>

A database stories of women in Science and Technology, including audio interviews:
<https://obamawhitehouse.archives.gov/node/311241>

Stories about women who worked as computers:
<http://thehumancomputerproject.com/>

NASA Engineers react to *Hidden Figures*:
<http://scienceandfilm.org/articles/3029/nasa-engineers-react-to-hidden-figures>

An interview with NASA's Chief Historian on *Hidden Figures*:
<http://scienceandfilm.org/articles/2843/nasas-chief-historian-bill-barry-on-hidden-figures>



TALENT: Written and Directed by Theodore Melfi. Co-written by Allison Schroeder, based on the book by Margot Lee Shetterly. Produced by Melfi, Peter Chernin, Donna Gigliotti, Jenno Topping, and Pharrell Williams. Photographed by Mandy Walker. Edited by Peter Teschner. Music by Benjamin Wallfisch, Pharrell Williams, and Hans Zimmer. Principal cast: Taraji P. Henson, Octavia Spencer, Janelle Monáe, Kevin Costner, Kirsten Dunst, Jim Parsons. Recipient of a San Francisco Film Society Sloan Science in Cinema Prize.

HOW TO WATCH: [Amazon](#)

The Imitation Game

2014. 114 minutes.

RATING: PG-13 for mature thematic material.

SUMMARY: During World War II, the British Intelligence Agency hire Alan Turing, a math prodigy, to decipher the Enigma code being used by German officers to encrypt radio messages. Turing and his team build a computing machine to help the Allies.

QUESTIONS TO EXPLORE: What does a “Universal Turing Machine” do and how does it relate to the Turing Test? What is the Turing Test’s relevance to the current field of artificial intelligence? How has military research advanced the field of computer science?

RESOURCES:

An interview with a mathematician about Alan Turing’s legacy:

<http://scienceandfilm.org/articles/2499/the-imitation-game-and-turings-legacy>

An episode of “Science Goes to the Movies” about *The Imitation Game*: <https://vimeo.com/122680358>

The series “Radiolab” discusses the Turing Test:
<http://www.radiolab.org/story/137466-clever-bots/>

A radio program about artificial intelligence tests:
<https://www.npr.org/2014/06/14/322008378/moving-beyond-the-turing-test-to-judge-artificial-intelligence>

A “Radiolab” show about Alan Turing:
<http://www.radiolab.org/story/193037-turing-problem/>

An online biography of Alan Turing and his relevance in the field of computer sciences:
<http://www.rutherfordjournal.org/article040101.html>



TALENT: Written by Graham Moore, based on the book by Andrew Hodges. Directed by Morten Tyldum. Produced by Nora Grossman, Ido Ostrowsky, and Teddy Schwarzman. Photographed by Oscar Faura. Edited by William Goldenberg. Music by Alexandre Desplat. Principal cast: Benedict Cumberbatch, Keira Knightley, Matthew Goode, Mark Strong. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

The Man Who Knew Infinity. 2015. 108 minutes.

RATING: PG-13 for some thematic elements.

SUMMARY: Based on the true story of the Indian mathematician Srinivasa Ramanujan whose work at the turn of the 20th century has revolutionized the field of pure mathematics.

QUESTIONS TO EXPLORE: What has been the relevance of Srinivasa Ramanujan's work to theoretical and practical scientific fields? What applications have resulted from Srinivasa Ramanujan's discoveries?

RESOURCES:

An article by mathematicians Ken Ono and Robert Schneider on why Ramanujan matters: <http://scienceandfilm.org/articles/2698/ken-ono-robert-schneider-why-ramanujan-matters>

Video of a discussion of the work of Srinivasa Ramanujan: <https://www.youtube.com/watch?v=2Gxh6YzAE3w>

An article reporting new insights from number theory into Ramanujan's work: <https://phys.org/news/2015-10-mathematicians-magic-key-ramanujan-taxi-cab.html>

An article about discoveries originating in Ramanujan's work: <http://discovermagazine.com/2015/jan-feb/15-a-beautiful-find>

An activity proposing three puzzles inspired by Ramanujan's work: <https://www.quantamagazine.org/three-puzzles-inspired-by-ramanujan-20160714/>

Interview with *The Man Who Knew Infinity*'s producer Jim Young: <http://scienceandfilm.org/articles/2695/ramanujan-the-man-who-knew-infinity>



TALENT: Written, Directed, and Produced by Matt Brown. Co-produced by Jim Young, Jon Katz, Edward R. Pressman, Sofia Sondervan, and Joe Thomas. Photographed by Larry Smith. Edited by JC Bond. Music by Coby Brown. Principal cast: Dev Patel, Jeremy Irons, Malcolm Sinclair. Recipient of a TFI-Sloan Filmmaker Fund Award and a Film Independent Sloan Producer's Grant.

HOW TO WATCH: [Amazon](#) | [iTunes](#)

Another Earth

2011. 92 minutes.

RATING: PG-13 for mature content.

SUMMARY: On the eve of the discovery of a duplicate Earth, the lives of an astrophysics student and a brilliant composer become intertwined.

QUESTIONS TO EXPLORE: What theories do physicists have about if and how parallel universes exist? How does the discovery of the Higgs Boson relate to the theory of the multiverse? How are scientists researching the origins of life?

RESOURCES:

A physics activity for middle and high-schoolers about parallel worlds:

http://www.pbs.org/wgbh/nova/education/activities/3513_manyworlds.html

Resources including lesson plans, videos, and further reading on the physics of the universe:

<https://www.learner.org/courses/physics/unit/text.html?unit=1&secNum=1>

Radio interview with a physicist about the Multiverse:

<http://www.radiolab.org/story/91859-the-multi-universes/>

World Science Festival panel on the Big Bang and Multiverse:

<https://www.youtube.com/watch?v=aUW7patpm9s>



TALENT: Written, Directed, Photographed, and Edited by Mike Cahill. Co-written by Brit Marling. Produced by Cahill, Marling, and Hunter Gray. Music by Will Bates and Phil Mossman. Principal cast: William Mapother, Brit Marling, Matthew-Lee Erlbach. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Madness and Genius

2003. 103 minutes.

RATING: N/A

SUMMARY: Jordan, a college student who is failing despite his nearly photographic memory, decides to steal his professor, Fred Donovan's, ideas. Fred conceived of a machine that could cure cancer, but is haunted by his work on the Manhattan Project.

QUESTIONS TO EXPLORE: Who were the principal scientists on the Manhattan Project and what did each contribute? What information about the atomic bomb was available to the public at the time it was being developed? What are the major scientific legacies of the Manhattan Project?

RESOURCES:

An interview with author Richard Rhodes (The Making of the Atomic Bomb):
<https://www.manhattanprojectvoices.org/oral-histories/richard-rhodes-interview>

A history page about the Manhattan Project:
<https://www.atomicheritage.org/history/manhattan-project>

A history of the Manhattan Project from the Department of Energy:
<https://www.energy.gov/sites/prod/files/The%20Manhattan%20Project.pdf>

A PBS documentary about about the history of nuclear weapons management:
<http://www.pbs.org/wgbh/americanexperience/films/command-and-control/>

An interview about government footage from the atomic age:
<http://scienceandfilm.org/articles/3069/false-truths-the-atomic-cafe-seen-today>



TALENT: Written, Directed, Produced, Edited, and Music by Ryan Eslinger. Photographed by Steve Huber. Principal cast: Tom Noonan, David Williams, David James Hayward. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Find out when it is available.](#)

Particle Fever

2013. 99 minutes.

RATING: N/A

SUMMARY: This documentary chronicles the discovery of the Higgs Boson by the Large Hadron Collider at the European Organization for Nuclear Research (CERN) in Switzerland.

QUESTIONS TO EXPLORE: What does the discovery of the Higgs Boson contribute to understanding the universe? How do theoretical and experimental physics aid each other? How have the theories of the Multiverse and Supersymmetry developed since the discovery of the Higgs Boson?

RESOURCES:

An article about what discoveries at CERN mean for physics: <https://www.quantamagazine.org/what-no-new-particles-means-for-physics-20160809/>

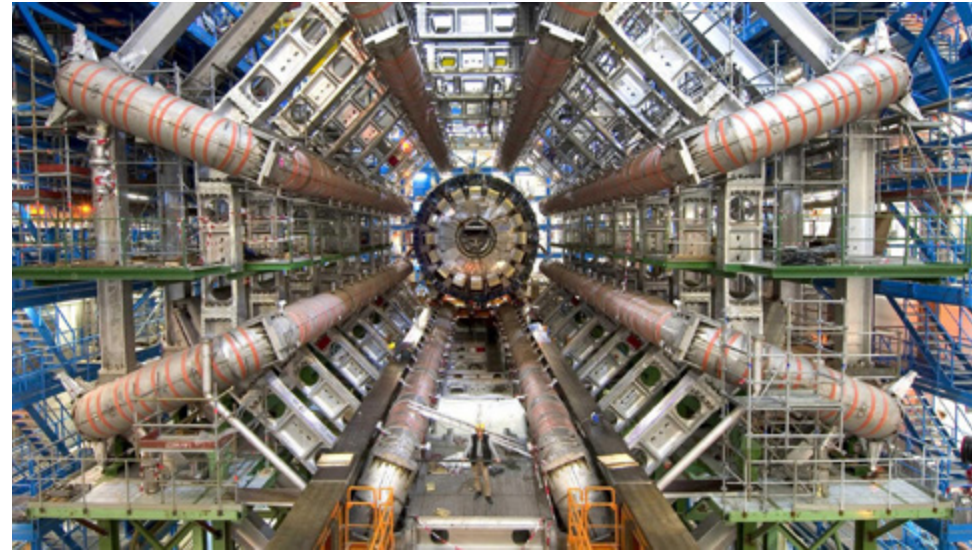
Video of a talk by physicists about *Particle Fever* and the Higgs Boson: https://www.youtube.com/watch?v=IkFslo_9FFE

A conversation amongst physicist about the origins of the universe: <https://www.youtube.com/watch?v=noJnAzh8hps>

Video of a World Science Festival program about the Large Hadron Collider: <https://www.youtube.com/watch?v=nkJNk5JM-Mg>

Updates about the Higgs Boson published by CERN: <https://home.cern/topics/higgs-boson>

An interview with *Particle Fever* producer and physicist David Kaplan: <http://scienceandfilm.org/articles/2442/particle-fever>



TALENT: Directed by Mark Levinson. Produced by Levinson, David Kaplan, and Andrea Miller. Photographed by Claudia Raschke-Robinson and Wolfgang Held. Edited by Walter Murch. Music by Robert Miller. Principal cast: David Kaplan, Fabiola Gianotti, Sherwood Boehlert, Nima Arkani-Hamed, Savas Dimopoulos, Monica Dunford. Recipient of a Sloan Feature Film Grant.

HOW TO WATCH: [iTunes](#) | [Amazon](#) | [YouTube](#)

Primer

2004. 77 minutes.

RATING: PG-13 for brief language.

SUMMARY: Two friends invent a form of time travel, but quickly discover negative consequences.

QUESTIONS TO EXPLORE: How does the field of theoretical physics consider the possibility of time travel? How might quantum research contribute to the understanding of time travel? What could be the ramifications of a time loop?

RESOURCES:

A lecture by physicist Stephen Hawking on space and time warps: <http://www.hawking.org.uk/space-and-time-warps.html>

A physicist gives a talk on time loops:
<https://www.youtube.com/watch?v=qGN2uWdD5Ow>

A presentation on the reality of time travel:
<http://scienceonscreen.org/programs/2016/the-reality-of-time-travel>

An interview with a theoretical physicist about time loops:
https://www.edge.org/conversation/paul_davies-time-loops

An article about quantum mechanics and time:
<https://www.quantamagazine.org/quantum-gravitys-time-problem-20161201/>



TALENT: Written, Directed, Produced, and Edited by Shane Carruth.
Photographed by Troy Dick. Music by Shane Carruth. Principal cast: Shane Carruth, David Sullivan, Casey Gooden. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

The Catcher Was a Spy

2018. 98 minutes.

RATING: N/A

SUMMARY: Based on the true story of Moe Berg—Major League Baseball player, Ivy League graduate, attorney who spoke nine languages—and a top-secret spy for United States who was tasked with researching German atomic energy advances during World War II.

QUESTIONS TO EXPLORE: What qualified Werner Heisenberg for the job of engineering an atomic bomb? How did scientists decide what materials to use to build a nuclear reactor? In what ways did the German atomic bomb project influence American nuclear arms development?

RESOURCES:

History of the German atomic bomb program:
<https://www.atomicheritage.org/history/german-atomic-bomb-project>

Oral histories about the German atomic bomb program:
<https://www.manhattanprojectvoices.org/subject/german-atomic-bomb-program>

Interview with *The Catcher Was A Spy* director Ben Lewin:
<http://scienceandfilm.org/articles/3033/interview-with-director-ben-lewin-on-the-catcher-was-a-spy>

The history of heavy water from the Atomic Heritage Foundation: <https://www.atomicheritage.org/history/heavy-water-reactors>

Primary sources related to the building of the atomic bomb:
<https://nsarchive2.gwu.edu/nukevault/ebb525-The-Atomic-Bomb-and-the-End-of-World-War-II/>

An article from NOVA about the German atomic bomb program: <http://www.pbs.org/wgbh/nova/military/nazis-and-the-bomb.html>



TALENT: Written by Robert Rodat, based on the book by Nicholas Dawidoff. Directed by Ben Lewin. Produced by Kevin Scott Frakes, Tatiana Kelly, Buddy Patrick, and Jim Young. Photographed by Andrij Parekh. Edited by Mark Yoshikawa. Music by Howard Shore. Principal cast: Paul Rudd, Jeff Daniels, Mark Strong, Sienna Miller, Guy Pearce, Paul Giamatti, Tom Wilkinson. Recipient of a TFI-Sloan Filmmaker Fund Award.

HOW TO WATCH: [Find out when it is available.](#)

Adam

2009. 99 minutes.

RATING: PG-13 for thematic material and language.

SUMMARY: Adam, a lonely man with Asperger's syndrome, develops a relationship with his upstairs neighbor Beth.

QUESTIONS TO EXPLORE: What genes have been shown to contribute to Autism? What are some cognitive difficulties and strengths of people with Autism spectrum disorder? What social interventions have been useful for people with Autism spectrum disorder?

RESOURCES:

A journal which publishes news and analysis related to Autism research: <https://spectrumnews.org/about/>

A video of a discussion between neuroscientists and psychiatrists about Autism: <https://charlierose.com/videos/15078>

Highlights of research findings related to Autism: <https://www.sfari.org/research/research-highlights>

A podcast interview about the genetics of Autism: <https://www.stitcher.com/podcast/carry-the-one-radio/e/44069900?autoplay=true>



TALENT: Written and Directed by Max Mayer. Produced by Tamar Gadish. Photographed by Seamus Tierney. Edited by Grant Myers. Music by Christopher Lennertz. Principal cast: Hugh Dancy, Rose Byrne, Peter Gallagher. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Experimenter

2015. 98 minutes.

RATING: PG-13 for thematic material.

SUMMARY: Based on the 1961 behavioral experiments that psychologist Stanley Milgram conducted to measure human conformity and willingness to obey authority.

QUESTIONS TO EXPLORE: Why was the Milgram experiment controversial? How did research methods change as a result of the Milgram experiment? How is this Milgram experiment relevant to the 21st century in which wars are fought often at a distance, using technology?

RESOURCES:

A review of Stanley Milgram's experiment on its 50 year anniversary: <https://www.psychologicalscience.org/publications/observer/obsonline/the-obedience-experiments-at-50.html>

A paper on obedience by Stanley Milgram: <https://www.birdvilleschools.net/cms/lib/TX01000797/Centricity/Domain/1013/AP%20Psychology/milgram.pdf>

An interview with a psychology professor about the Milgram experiment: <http://scienceandfilm.org/articles/2527/sundance-2015-the-notorious-milgram-and-zimbardo-experiments>

An interview about Stanley Milgram with a playwright: <http://scienceandfilm.org/articles/2658/interview-with-playwright-frank-basloe>

An article in Nature about obedience to authority: <https://www.nature.com/news/modern-milgram-experiment-sheds-light-on-power-of-authority-1.19408>

An interview with *Experimenter*'s director Michael Almereyda: <http://scienceandfilm.org/articles/2599/michael-almereyda-on-experimenter-the-sloan-interview~>



TALENT: Written, Directed, and Produced by Michael Almereyda. Co-produced by Danny Abeckaser, Fabio Golombek, Per Melita, Isen Robbins, Aimee Schoff, and Uri Singer. Photographed by Ryan Samul. Edited by Kathryn J. Schubert. Music by Bryan Senti. Principal cast: Peter Sarsgaard, Winona Ryder, John Palladino, Anton Yelchin, Kellan Lutz, Anthony Edwards, Jim Gaffigan. Recipient of a Sundance Sloan Lab Fellowship, a TFI-Sloan Filmmaker Fund Award, and a Film ilm Independent Sloan Distribution Grant.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

The Stanford Prison Experiment

2015. 122 minutes.

RATING: R for mature content.

SUMMARY: Set in 1971 and based on the true story of Dr. Philip Zimbardo's study of the psychology of imprisonment.

QUESTIONS TO EXPLORE: How have the methodologies for conducting experiments with human subjects changed since 1971? How have the results of Dr. Zimbardo's experiment been interpreted?

RESOURCES:

A discussion by Philip Zimbardo about his experiment:
<https://www.youtube.com/watch?v=e5ozpvrngvA>

An interview about Philip Zimbardo with a psychology professor: <http://scienceandfilm.org/articles/2527/sundance-2015-the-notorious-milgram-and-zimbardo-experiments>

A talk by a neuroscientist about the Stanford Prison Experiment and the psychology of power:
<https://www.youtube.com/watch?v=F4lOnTEH5L8>

TED talks by Philip Zimbardo on the psychology of power:
https://www.ted.com/speakers/philip_zimbardo

Narration of a slide show by Philip Zimbardo explaining the Experiment:
https://web.stanford.edu/dept/spec_coll/uarch/exhibits/Narration.pdf

A summary of findings from the Stanford Prison Experiment and their applications: <http://www.apa.org/research/action/prison.aspx>



TALENT: Written by Tim Talbott, based on the book by Philip Zimbardo. Directed and Edited by Kyle Patrick Alvarez. Produced by Lauren Bratman, Brent Emery, Lizzie Friedman, Karen Lauder, Greg Little. Photographed by Jas Shelton. Music by Andrew Hewitt. Principal cast: Ezra Miller, Tye Sheridan, Billy Crudup. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [iTunes](#) | [Amazon](#)

Beneath Hill 60

2010. 122 minutes.

RATING: R for mature content.

SUMMARY: Based on the true story of mining engineer Oliver Woodward who joined the first Australian Tunnelling Company during World War I.

QUESTIONS TO EXPLORE: What skills did Oliver Woodward have that made him such an important contributor to the war efforts? How did Australian soldiers during World War I monitor mines? What technologies were most important to Woodward's work during World War I?

RESOURCES:

An article about the Australian tunnelers:

<https://www.awm.gov.au/sites/default/files/phantom-soldiers-tunellers.pdf>

Information on the Australian tunnelers from the Australian War Memorial: https://www.awm.gov.au/wartime/44/page38_burness_white

Australian dictionary biography of Oliver Woodward:

<http://adb.anu.edu.au/biography/woodward-oliver-holmes-9185>

BBC report about discovering World War I tunnels:

<http://www.bbc.com/news/magazine-13630203>



TALENT: Written by David Roach. Directed by Jeremy Sims. Produced by Bill Leimbach. Photographed by Toby Oliver. Edited by Danny Cooper. Music by Cezary Skubiszewski. Principal cast: Brendan Cowell, Harrison Gilbertson, Steve Le Marquand. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

Computer Chess

2013. 92 minutes.

RATING: N/A

SUMMARY: Set in the early 1980s, a group of computer programmers take part in a tournament to see who can program a computer to beat a human chess player.

QUESTIONS TO EXPLORE: What are the challenges of creating a computer program with learning capabilities? How have computer chess programs advanced the field of artificial intelligence? What is deep learning and how can it be applied to developing programs to play turn-taking games?

RESOURCES:

A brief history of computer chess: <https://www.pcworld.com/article/2036854/a-brief-history-of-computer-chess.html>

A guide to historical computer chess games: <https://issuu.com/monofonus/docs/computerchessbooklet>

A history of computer chess from the Computer History Museum: <http://www.computerhistory.org/chess/>

An interview about turn-taking games with a computer scientist: <http://scienceandfilm.org/articles/2683/science-on-screen-prof-clare-congdon-on-computer-chess>

An online resource about artificial intelligence: <http://sitn.hms.harvard.edu/special-edition-artificial-intelligence/>



TALENT: Written, Directed, and Edited by Andrew Bujalski. Produced by Houston King and Alex Lipschultz. Photographed by Matthias Grunsky. Principal cast: Kriss Schludermann, Tom Fletcher, Wiley Wiggins. Recipient of a Sundance Sloan Feature Film Prize and a TFI-Sloan Filmmaker Fund Award.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Dopamine

2003. 79 minutes.

RATING: R for language, sexuality, and brief drug use.

SUMMARY: A San Francisco-based computer programmer falls in love with one of his creations.

QUESTIONS TO EXPLORE: What characterized the dotcom bubble in the United States? How do startups test their products? Why is beta-testing important?

RESOURCES:

Information page from the Computer History Museum about the Dot Com bubble:

<http://www.computerhistory.org/revolution/the-web/20/394>

A video interview with experts about the Dot Com bubble:

<https://youtu.be/OGmDytHPA-w>

Resources from the National Bureau of Economic Research about entrepreneurship:

<https://www.nber.org/themes/entrepreneurship/entrepreneurship.shtml>

An explanation of venture capital from the Harvard

Business Review: <https://hbr.org/1998/11/how-venture-capital-works>



TALENT: Written and Directed by Mark Decena. Co-written by Timothy Breitbach. Produced by Debbie Brubaker and Tad Fetting. Photographed by Robert Humphreys. Edited by Jessica Congdong. Music by Eric Holland. Principal cast: John Livingston, Sabrina Lloyd, Bruno Campos. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

Flash of Genius

2008. 119 minutes.

RATING: PG-13 for language.

SUMMARY: A college professor goes into legal battle with the Detroit automobile industry that he claims stole his idea for the windshield wiper. Based on a true story.

QUESTIONS TO EXPLORE: How did Robert Kearns invent the intermittent windshield wiper? What technology was crucial to the invention of the intermittent windshield wiper? What is the process of bringing an invention to market?

RESOURCES:

For teachers, a resource about patents and inventions:
<http://ipopng.gov.pg/wp-content/uploads/2016/01/Inventions-Patent.pdf>

New Yorker article about windshield wiper inventor Robert Kearns:
<https://www.newyorker.com/magazine/1993/01/11/the-flash-of-genius>

An article about how intermittent windshield wipers work:
<https://www.popularmechanics.com/cars/a10323/how-it-works-automatic-windshield-wipers-16663151/>

History of patents related to the windshield wiper:
<http://www.ipwatchdog.com/2014/11/09/the-evolution-of-wind-shield-wipers-a-patent-history/id=52085/>

An online science publication about inventions:
<https://www.sciencenewsforstudents.org/collections/invention-innovation>



TALENT: Written by Philip Railsback. Directed by Marc Abraham.
Produced by Gary Barber, Roger Birnbaum, and Michael Lieber.
Photographed by Dante Spinotti. Edited by Jill Savitt. Music by Aaron Zigman. Principal cast: Greg Kinnear, Lauren Graham, Alan Alda. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

Here

2011. 116 minutes.

RATING: N/A

SUMMARY: Cartographer Will Shepard travels across Armenia in order to create a new, more accurate satellite survey of the country. During his assignment, he starts a romance with an Armenian expatriate.

QUESTIONS TO EXPLORE: How has the use of satellites advanced cartography? What can scientists learn from satellite images of Earth?

RESOURCES:

Explanation from the U.S. Geological Survey about satellite images: https://pubs.usgs.gov/gip/AerialPhotos_SatImages/aerial.html

Facts about NASA satellites and their role observing Earth: <https://www.nasa.gov/centers/langley/news/factsheets/Satellites.html>

How to interpret satellite images from the NASA Earth Observatory: <https://www.nationalgeographic.org/activity/satellite-imagery-and-change-over-time/>



TALENT: Written and Directed by Braden King. Co-written by Dani Valent. Produced by Braden King, Taguhi Karapetyan, Lars Knudsen, and Jay Van Hoy. Photographed by Lol Crawley. Edited by David Bracker, Andrew Hafitz, and Paul Zucker. Music by Boxhead Ensemble and Michael Krassner. Principal cast: Peter Coyote, Ben Foster, Datekiv Kharibyan. Recipient of a Sundance Sloan Lab Fellowship.

HOW TO WATCH: [Amazon](#)

Marjorie Prime

2017. 99 minutes.

RATING: N/A

SUMMARY: In the near future, 86-year-old Marjorie spends her days with a computerized version of her deceased husband.

QUESTIONS TO EXPLORE: What are the ethical implications of trying to engineer A.I. with personality? How do social robots learn? In what ways can social robots be useful to humans?

RESOURCES:

A journal article about one of the world's most advanced AI robots: <http://adanewmedia.org/blog/2016/05/01/issue9-greene/>

An list of the top ethical issues with engineering artificial intelligence from the World Economic Forum: <https://www.weforum.org/agenda/2016/10/top-10-ethical-issues-in-artificial-intelligence/>

Interview with director Michael Almereyda: <http://scienceandfilm.org/articles/2839/marjorie-prime-exclusive-interview-with-michael-almereyda>

A *New York Times* article about robots being used for therapeutic purposes: <https://www.nytimes.com/2016/12/15/nyregion/robotic-therapy-cats-dementia.html>



TALENT: Written and Directed by Michael Almereyda. Based on the play by Jordan Harrison. Produced by Almereyda and Uri Singer. Photographed by Sean Price Williams. Edited by Kathryn J. Schubert. Music by Mica Levi. Principal cast: Jon Hamm, Geena Davis, Lois Smith, Tim Robbins. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

Operator

2016. 87 minutes.

RATING: N/A

SUMMARY: A programmer tasked with creating the ideal personality for an automated personality bases his work on his wife, thereby spiraling his life into chaos.

QUESTIONS TO EXPLORE: In what way can personality be programmed into a chatbot? How is learning programmed into bots? What technological advances have helped to progress the development artificial intelligence robots?

RESOURCES:

An NPR report on how chatbots develop personality:
<https://www.npr.org/sections/alltechconsidered/2017/03/10/519002884/it-has-to-have-a-soul-how-chatbots-get-their-personalities>

A timeline of AI and robotics from the Computer History Museum: <http://www.computerhistory.org/timeline/ai-robotics/>

A research paper on computational models of emotion:
<https://cse.sc.edu/~huhns/confpapers/E0143.pdf>

An article about how people use voice-enabled AI: <http://www.niemanlab.org/2017/09/the-future-of-news-is-humans-talking-to-machines/>

An interview with the the writers and director of Operator:
<http://scienceandfilm.org/articles/2657/behind-the-scenes-logan-kibens-sharon-greenes-operator>



TALENT: Written, Directed, Produced, and Edited by Logan Kibens.
Co-written by Sharon Greene. Co-produced by Aaron Cruze.
Photographed by Steeven Petittville. Music by Sage Lewis.
Principal cast: Martin Starr, Mae Whitman, Nat Faxon, Cameron Esposito, Christine Lahti. Recipient of a Sundance Sloan Lab Fellowship, and a Film Independent Sloan Fast Track Grant and Distribution Grant.

HOW TO WATCH: [Amazon](#) | [iTunes](#)

Robot & Frank

2012. 89 minutes.

RATING: PG-13 for some language.

SUMMARY: Set in the near future, a retired burglar gets a robot caretaker and he soon learns that the robot is a useful sidekick.

QUESTIONS TO EXPLORE: What are some ways that humans and robots interact effectively, and what are the limits of such communication? In what ways can robots provide care for the elderly, and what are the moral and ethical considerations for assigning robots those tasks? How are engineers and designers thinking about robot decision-making capabilities?

RESOURCES:

Scholarly article on the attitudes of older adults on robots as caretakers: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4512026/>

A lesson plan about robots and ethics based on *Robot & Frank*:
<http://www.teachwithmovies.org/snippets/sn-sci-robot-ethics-robot-and-frank.html>

Video of a discussion about advances in the field of robotics with an engineer: <https://www.youtube.com/watch?v=q-ZDPoj6Vrc>

Scholarly article about the efficacy of socially assistive robots:
http://robotics.usc.edu/~rossmead/docs/2012/2012WadeEtAl_JBR2012.pdf

Interview with human-robot interaction specialist:
<http://scienceandfilm.org/articles/2948/robot-friends-interview-with-dr-selma-sabanovic-on-her>



TALENT: Written by Christopher Ford. Directed by Jake Schreier. Produced by Lance Acord, Jackie Kelman Bisbee, Sam Bisbee, and Galt Niederhoffer. Photographed by Michael J. Lloyd. Edited by Jacob Craycroft. Music by Francis and the Lights. Principal cast: Frank Langella, Susan Sarandon, Peter Sarsgaard, Liv Tyler, James Marsden. Recipient of an NYU Sloan Production Award and a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [Amazon](#)

Searching

2018. 101 minutes.

RATING: N/A

SUMMARY: After his 16-year-old daughter goes missing, a desperate father searches for clues in an unfamiliar online landscape on her laptop.

QUESTIONS TO EXPLORE: What are some of the policies being created to protect consumer privacy in the digital world? Why should consumers care about sharing their personal online data with companies? What use is consumer data to technology companies?

RESOURCES:

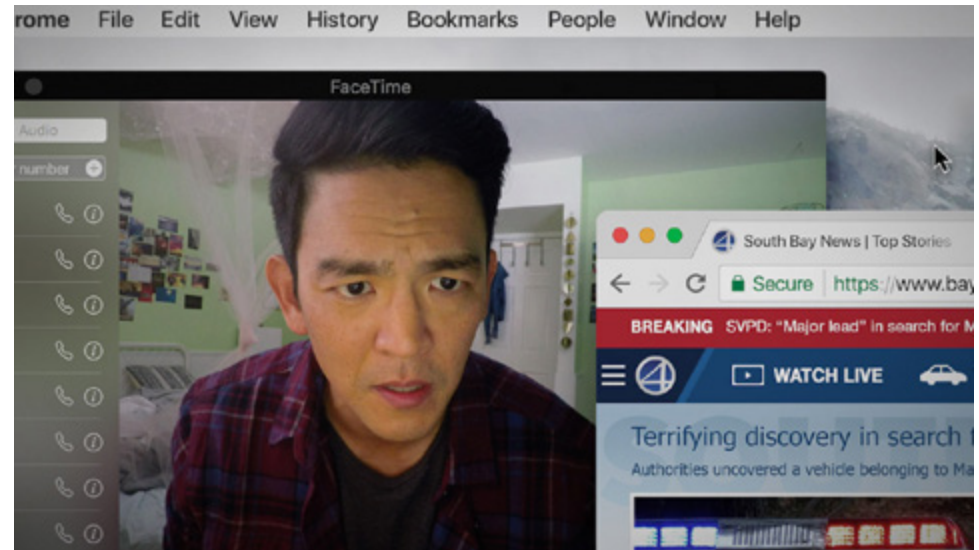
An interview with the filmmakers of *Searching*:
<http://scienceandfilm.org/articles/3034/sundance-sloan-winner-search-aneesh-chaganty-sev-ohanian>

An article by a professor of law about cybersecurity:
<http://scienceandfilm.org/articles/2900/the-tyranny-of-perfect-surveillance-lessons-from-the-circle>

A scholarly article about big data and regulatory oversight: <https://digital.law.washington.edu/dspace-law/bitstream/handle/1773.1/1318/89WLR0001.pdf?sequence=1>

A scholarly paper about privacy and ethics: http://policydatainfrastructure.com/uploads/4/4/1/6/4416489/privacy_protective_research_-_facilitating_ethically_responsible_access_to_administrative_data.pdf

An NPR station about technology and privacy:
<https://www.npr.org/sections/alltechconsidered/125106005/privacy-security/>



TALENT: Written and Directed by Aneesh Chaganty. Written and Produced Sev Ohanian. Produced by Natalie Qasabian, Timur Bekmambetov, and Adam Sidman. Photographed by Juan Sebastian Baron. Edited by Nick Johnson and Will Merrick. Music by Torin Borrowdale. Principal cast: John Cho, Debra Messing, Michelle La, Joseph Lee. Recipient of a Sundance Sloan Feature Film Prize..

HOW TO WATCH: [Find out when it is available.](#)

Sleep Dealer

2008. 90 minutes.

RATING: PG-13 for some violence and sexuality.

SUMMARY: In Mexico in the near future, people perform crucial jobs in the United States without crossing the border. Memo finds a digital factory that connects his nervous system to a robot based in the U.S., but the job comes with physical and personal costs.

QUESTIONS TO EXPLORE: What are the benefits and drawbacks of implementing networked technology in cities? What measures of success are used to determine how well humans and robots are interacting? What kind of jobs are likely to become automated and why?

RESOURCES:

A scholarly paper on the impact of robots in the job market: <https://www.brookings.edu/wp-content/uploads/2016/06/robotwork.pdf>

Video of a discussion between director Alex Rivera and human-robot specialist Wendy Ju: <http://scienceandfilm.org/articles/3014/science-on-screen-alex-riveras-sleep-dealer>

An overview of the impacts of ubiquitous computing: <https://pdfs.semanticscholar.org/3140/26b98e0ddc09b6e77ecae60a99306d852a87.pdf>

An interview between director Alex Rivera and economic analyst Mark Engler: http://fpif.org/science_fiction_from_below/



TALENT: Written and Directed by Alex Rivera. Co-written by David Riker. Produced by Anthony Bregman. Photographed by Lisa Rinzler. Edited by Rivera, Julie Carr, Madeleine Gavin, and Jeffrey Werner. Music by Tomandandy. Principal cast: Luis Fernando Peña, Leonor Varela, and Jacob Vargas. Recipient of a Sundance Sloan Feature Film Prize.

HOW TO WATCH: [iTunes](#) | [Amazon](#)

Small, Beautifully Moving Parts

2011. 73 minutes.

RATING: N/A

SUMMARY: On a road trip to California, a tech-obsessed pregnant woman takes a side trip to visit her estranged mother.

QUESTIONS TO EXPLORE: What are some of the pros and cons of increased use of technology for human communication? How does technology-mediated communication impact learning? How does technology-mediated communication impact empathy?

RESOURCES:

Publications by MIT professor Sherry Turkle, who specializes in the way technology impacts human relationships:

<http://web.mit.edu/sturkle/www/publications.html>

An interview about robots and empathy:

http://www.iasc-culture.org/THR/THR_article_2012_Spring_Nolan.php

A scholarly article about the impacts of technology on empathy:

https://www.researchgate.net/publication/278049745_Virtual_empathy_Positive_and_negative_impacts_of_going_online_upon_empathy_in_young_adults

An article on technology and learning:

<https://www.kqed.org/mindshift/8645>

A journal volume dedicated to technology and learning:

<http://www.irrodl.org/index.php/irrodl>



TALENT: Written, Directed, and Produced by Annie Howell and Lisa Robinson. Photographed by Charles Swanson. Edited by Jennifer Lee. Music by Xander Duell. Principal cast: Anna Margaret Hollyman, Rhasaan Oyasaba Manning, Josephine Clausen, Sarah Rafferty, André Holland, Susan Kelechi Watson. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Youtube](#)

The Diving Bell and the Butterfly

2007. 112 minutes.

RATING: PG-13 for nudity, sexual content, and some language.

SUMMARY: Based on the true story of Jean-Dominique Bauby, who at the age of 43 suffered a stroke leaving him paralyzed except for his left eye.

QUESTIONS TO EXPLORE: What is the neurological explanation of Locked-in syndrome? What makes recovery possible for people with Locked-in syndrome? How are brain-machine interface technologies used for people with paralysis?

RESOURCES:

A neuropsychologist explains the case of Jean-Dominique Bauby: <https://www.youtube.com/watch?v=0XvnZMb9ZoM>

A scholarly article on the use of brain-machine interface for paralysis:
<https://www.sciencedirect.com/science/article/pii/S1877065714018351>

Two neuroscientists discuss developments in communicated with people with Locked-in Syndrome:
<https://www.youtube.com/watch?v=iHJuOHpt3q4>

A discussion of the neurology of Locked-in Syndrome:
<https://www.youtube.com/watch?v=LeJFVK26GXQ>



TALENT: Written by Ronald Harwood, based on the book by Jean-Dominique Bauby. Directed by Julian Schnabel. Produced by Kathleen Kennedy and John Kilik. Photographed by Janusz Kaminski. Edited by Juliette Welfling. Music by Paul Cantelon. Principal cast: Mathieu Amalric, Emmanuelle Seigner, Marie-Josée Croze. Recipient of a Hamptons International Film Festival Sloan Feature Film Prize.

HOW TO WATCH: [Netflix](#) | [Amazon](#)

ACKNOWLEDGEMENTS

Sonia Shechet Epstein, who compiled this guide, is the Executive Editor of *Sloan Science & Film*. She produces all content for the site. For questions or comments please email **sloanfilm@movingimage.us**.

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Museum of the Moving Image the only museum in the U.S. dedicated to advancing the understanding, enjoyment, and appreciation of the art, history, technique, and technology of film, television, and digital media. Located in the historic Astoria Studio complex, the Museum presents innovative exhibitions, thought-provoking film series, education programs, and cutting edge digital media initiatives. Its education programs serves more than 50,000 students each year. The Museum has wide-ranging holdings of more than 130,000 film and media-related objects.

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