

A NIGHT AT THE MOVIES

Science and Ethics in the Cinema

July 18, 2007

Chosen for coverage of a scientific or ethical topic, these films are also easily accessible commercial titles available for purchase or rental OR are available online in streaming video. NOTE: Teachers are responsible for determining whether the programs are appropriate for use (in whole or part) in their classrooms or by their individual students. The Bioethics Research Library is making no recommendation with regard to use, only bringing titles and resources to the attention of teachers.

Ethics: Star Trek: The Next Generation (1992), color, Episode 116, Stardate 45587.3

Suddenly paralyzed from the waist down with no chance of recovery, Lt. Worf asks his friend Riker to assist him in the Klingon ceremonial suicide. A neurogeneticist tells Worf about a dangerous experimental surgery that could return his mobility or kill him. When he is reminded by Riker that his young son Alexander must assist in his suicide ceremony, Worf chooses to undergo the risky surgery instead.

Topics: assisted suicide, experimental procedures, professional-professional relationships, cultural pluralism, obligations and responsibilities to others

Human Experimentation: From Tuskegee 1932 to Today (April 27, 2005), 23 minutes (segment will be shown), color, available in streaming video online at <http://researchchannel.org/prog/displayevent.aspx?rID=4000> [Online Video Resource]

Mary Starke Harper, Ph.D., R.N., was a student nurse during the federally-funded study of untreated syphilis among African American men in Tuskegee, Alabama. At the time of this program (April 2005), she was 85 years old and the last surviving health care member from the Syphilis Study. Dr. Harper spent her long career in the federal government assisting in efforts to create more ethical practice for research using human participants. An expert in mental health and long-term care, Dr. Harper served as a consultant and grant reviewer, advised presidents and testified before Congress. She spoke about the history of human experimentation at the University of Virginia, Newcomb Hall Theater in Charlottesville, VA on April 27, 2005.

In this clip, she focuses on the importance of people being involved in scientific research and the myopic view of science and researchers in long failing to include women, minorities, and older persons in research. This program was made at the end of a day-long visit to the University of Virginia and after receiving chemotherapy the day before to treat the cancer from which she later died. Despite these facts, a great deal of her wit and passion for research shine through. The transcript is available at <http://www.virginia.edu/uvanewsmakers/newsmakers/starkeharper.html>.

Topics: research ethics, history of research, research ethics, scientific method, responsibility of individuals to participate in science, need for inclusivity in research, attitudes to research

See also **Deadly Deception: The Tuskegee Study of Untreated Syphilis in the Negro Male** (1993), \$19.95, NOVA, color and black and white, available from WGBH PBS at 800-949-8670 <http://shop.wgbh.org>. (not shown today)

Documentary treatment of the U.S. Public Health Service study of untreated syphilis among men in Macon County, GA. This research ran for 40 years, until it was uncovered by a reporter. Subjects were never told that they had syphilis, never received treatment from the Study when one became available, and were prevented from receiving treatment from outside sources.

The Island (2005), color, 216 minutes (segment will be shown), directed by Michael Bay and starring Ewan McGregor and Scarlett Johansson.

Told they are “survivors” of a catastrophic event that contaminated the earth leaving it uninhabitable by human beings, human clones live underground unaware of their real identity and purpose. Commercial “products” grown for clients above ground, most clones or agnots serve as replacement organ and tissue sources, while some bear children for childless couples. All aspects of their lives are closely monitored and regimented; they live in hope of being selected for the lottery to go to the “Island,” the only paradise untouched by the contaminants. Agnots are grown in artificial wombs, supported by nutritional supplements, and indoctrinated by memory implantation and holographic suggestion. An insect and a defect in the neuronal patterns of the Echo class of clones, leads one to escape into the real world and discover the subterfuge. This is an adventure science fiction movie.

Topic links: human development and embryology; organ transplantation; cloning; genetics

Dirty Pretty Things (2002), 97 minutes (segment will be shown), color, directed by Stephen Frears, written by Steven Knight, and starring Audrey Tautou and Chiwetel Ejiofor, Miramax Films.

Nigerian Okwe, an ex-surgeon, now works as a taxi driver and porter at a West London Hotel after his escape to England to avoid threats to his life. He becomes friends with Senay, a young woman from Turkey working as a chambermaid. Senay is just one of the many illegal immigrants working at the hotel. Despite the essential role they play in the national economy, all of these people struggle to support themselves in low-wage, low-status jobs that make them invisible to the eyes of most people. Additionally, the need to avoid the attention of legal authorities often makes illegal immigrants vulnerable to unscrupulous people. When Okwe and Senay accidentally discover that a thriving black market in human organs operates at the hotel, the pressures on each of them are immense. The organ market is fueled by greed and desperation - both in persons who need organs to live and persons willing to donate organs in exchange for a forged passport they hope will lead to better lives.

Topics: organ transplantation, altruism, selling organs, immigration

Sloan Science Cinémathèque & Museum of the Moving Image, (ongoing),
<http://www.movingimage.us/science/>

The Alfred P. Sloan Foundation offers prizes to students at six leading film schools who make films about science. This online site provides access to streaming video of award winning short films that incorporate science and technology – very cool!! Click on “Short Films.” See also the interesting articles and stories about related topics.

We are viewing part of a short film titled “The Pros and Cons of Breathing,” (2004, 22 minutes, AFI) directed by Seth Manheimer, written by Bill Balas, and produced by Christopher Aagaard. The young man in this film has cystic fibrosis and is waiting for a lung transplant. Feeling that he has little to lose, he decides to rob a group of drug dealers to see what fate has in store for him. As it unfolds, the story has a couple of surprises and twists in store. In information provided on the Sloan website, Balas states that he wanted to portray a strong, decisive person with cystic fibrosis because he thinks that CF sufferers are typically portrayed as sad, weak persons who deserve pity. According to Balas this portrayal is particularly”offensive, especially considering what it takes just to endure an illness as destructive as cystic fibrosis.” See the film entry in the Internet Movie Database for more information about the actors involved.

Topics: organ transplantation, cystic fibrosis, terminal illness, fate
Warning: gun violence, portrayal of Russian roulette, murder

Twilight of the Golds (1997), color, 90 minutes (segment will be shown), starring Jennifer Beals, Faye Dunaway, Brendan Fraser, and Garry Marshall; supporting actors Rosie O'Donnell and Jack Klugman

The Golds are ecstatic with the news that their daughter and her doctor-geneticist husband are expecting their first child. Their son looks forward to being an uncle, but an unexpected revelation of the genetic predisposition of the unborn child brings about difficult conversations and unexpected and unfortunate challenges to family love and acceptance. The fact that genetics can test for sexual orientation as intimated in the film, is incorrect.

Topics: genetic testing, interaction of genetics and the environment,
pre-implantation genetic diagnosis (PGD), sexual orientation

The Madness of King George (1995), color, 110 minutes (segment will be shown), starring Nigel Hawthorne, Helen Mirren, and Ian Holm.

King George II of England suffers the sudden onset of multiple physical and mental symptoms around the time the American colonies declare their independence from England. Court physicians are mystified but, nevertheless, employ methods of assessment, diagnosis, and treatment in vogue at the time. These include blood-letting, cupping, and analysis of bowel

movements. One has great sympathy for the patient laboring under both the symptoms of illness and those side-effects caused by efforts to cure.

Topics: mental health treatment, history of medicine, mind-body connection, physician-patient relationship, porphyria

Offspring (2001), Barna-Alper Productions, available at fairly low cost (about \$30.00) from Barry Stevens, email him at barrystevens@canada.com.

Documentary film-maker Barry Steven's quest to find his anonymous, sperm-donor father, takes viewers through the early history of donor insemination (DI) (previously termed artificial insemination by donor or AID) and the evolving social views about the practice and resulting children. Genetic testing is used as a tool to find "donor siblings" and to unravel this biological mystery. The film is filled with humor, but deals with serious ethical issues, such as society's role in causing intentionally anonymous parentage and the related loss of genetic/health information and what constitutes ethical behavior in the face of infertility. Other poignant questions are raised about of self identity and the nature of the parent and child relationship. NOTE: Stevens has released an updated version of this program called Bio-Dad (2009).

Topics: artificial insemination, gamete donation, IVF, adoption, personal identity, genetics and health

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Program prepared for high school science teachers participating in the Northwest Association for Biomedical Research (NWABR) workshop on Ethics in the Science Classroom, July 18, 2007, Pack Forest, Eatonville, WA. NWABR is located in Seattle, Washington, and offers many other online resources related to bioethics education for high school students (<http://www.nwabr.org>)
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