Jean-Baptiste Lamarck (French naturalist), 1744-1829, father of the concept of "**inheritance of acquired traits**": individual members of a species could adapt to their environment of their own free will and then pass that adaptation to their offspring. For example, if I spent my life improving my flexibility so that I could wrap my ankles around my head, it would be possible that I could pass this adaptation (superior flexibility) on to my offspring as a trait they would be born with. If your father did not have use of his legs and therefore developed heightened upper body strength, he would pass this trait (superior upper body strength) to his offspring. Modern scientists generally discredit this theory, **Lamarckism** – although many agree that Lamarck was an important early thinker in evolutionary theory.

Thomas Malthus (economist, demographer), 1766-1834, believed that the growth of population exceeds growth of food supply; therefore, there must be population control. Since he and others believed that the poor create the greatest "burden" on society, society should check population growth (especially among the lower class) and "punish" the poor for their contribution to societal ills (poor houses, etc.)

Charles Darwin (anthropologist/biologist), 1809-1882

Darwin's theories were taking root in an era of rapid technological change (**Industrial Revolution**) and the **growth of an underclass in England and Germany**, along with a great deal of **unprecedented immigration**. In an attempt to address the challenges that economic change and disparity caused society, social scientists began to consider the notion of "**social Darwinism**" – the notion that some people are successes and some are failures, that the failures create a drain on society, and should not only be separated and eliminated, but as a "species," eradicated.

This thinking lies behind the eugenics movement. (eugenics: eu = good; gen = birth)

Gregor Mendel, father of genetics (1822-1884)

→ **Read** Micklos, David. "Eugenics Research Methods." *Image Archive on the American Eugenics Movement*. EugenicsArchive.org. Dolan DNA Learning Center. Cold Spring Harbor. Laboratory. N.d. http://www.eugenicsarchive.org/html/eugenics/essay 3.html>.

Francis Galton (anthropologist, mathematician; Darwin's cousin), 1822-1911, is considered the **father of eugenics in England**, where there was strong social class system, rooted in hereditary status, and increasing poverty as a result of the changing economic structure of the Industrial Revolution.

"positive eugenics" = promoting procreation among the healthiest and most intelligent (Galton's preference)

- Polygamy
- Scientific mating

"negative eugenics" = ridding society of undesirables, those with bad genes ("germ plasmas")

- Segregation
- Sterilization
- Euthanasia
- → **Read** Galton, Francis. "Africa for the Chinese." Letter to the Editor. *The Times*. 5 June 1873. http://galton.org/letters/africa-for-chinese/AfricaForTheChinese.htm.

- → **Read** "The Bell Curve Sparks Controversy." *Evolution: In the Name of Darwin*. WGBH Educational Foundation and Clear Blue Sky Publications, Inc., 2001. http://www.pbs.org/wgbh/evolution/darwin/nameof/page03.html>.
- → **Read** Lombardo, Paul. "Eugenic Laws Against Race Mixing." *Image Archive on the American Eugenics Movement*. EugenicsArchive.org. Dolan DNA Learning Center. Cold Spring Harbor. Laboratory. N.d. http://www.eugenicsarchive.org/html/eugenics/essay 7.html>.

Consider this quote from a trial judge's decision in the 1958 case of *Loving v. Commonwealth of Virginia*:

Almighty God created the races white, black, yellow, malay ["mixed"] and red, and he placed them on separate continents. And but for the interference with this arrangement there would be no cause for such marriages. The fact that he separated the races shows that he did not intend for the races to mix. (qtd. in Lombardo, "Eugenic Laws")

→ Read Lombardo, Paul. "Eugenic Sterilization Laws." *Image Archive on the American Eugenics Movement*. EugenicsArchive.org. Dolan DNA Learning Center. Cold Spring Harbor. Laboratory. N.d. http://www.eugenicsarchive.org/html/eugenics/essay 8.html>.

Consider this quote from Supreme Court Justice Oliver Wendell Holmes, Jr., in the 1927 case of *Buck v. Bell*:

It is better for all the world, if instead of waiting to execute degenerate offspring for crime or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind . . . Three generations of imbeciles are enough. (qtd. in Lombardo, "Eugenic Sterilization")

Eugenics Comes to America

- 1906, John Harvey Kellogg, a promoter of eugenics in America, founds the Race Betterment Foundation in Battle Creek Michigan
- 1910, Charles Davenport, considered the father of eugenics in America, founds the Eugenics Record Office
- 1920s, American Eugenics Society (AES) founded; promotes "Fitter Families Contest."

Finally, consider these quotes from the film, *Homo Sapiens 1900*:

"In man's effort to define himself, he continually encounters new obstacles to overcome."

"Man, who he is and what ultimately shapes him, is shrouded in a mystery."

"Man has created a civilization which isolates him from nature and imprisons him in a conflict between pressing forward and moaning for the past, a concept driven by the concept of endless progress: that knowledge can eternally open new doors" [emphasis added].

And, consider: why did *Homo Sapiens 1900* begin with a clip from *Frankenstein*? Be sure you can find the connection between Prometheus, Faust, Frankenstein, Darwin, and eugenics, and, ultimately, *forbidden knowledge*.