Readings for Race, Society, and Genetics Module BIOL 4201/5201

Tuesday, September 6 Race, Society, and Genomics (Topic 1: Instructor) <u>How the concept of race began and how it has evolved in the US</u>

Required Reading:

https://www.britannica.com/topic/race-human/The-history-of-the-idea-of-race

Additional resources: <u>https://time.com/5865530/history-race-concept/</u> <u>https://nmaahc.si.edu/learn/talking-about-race/topics/historical-foundations-race</u>

Tuesday, September 13 Race, Society, and Genomics (Topic 2: Group 1) <u>How race is perceived in the US today</u>

Required Reading:

<u>https://www.census.gov/topics/population/race/about.html</u> <u>https://www.nytimes.com/2021/02/18/learning/what-students-are-saying-about-race-and-racism-in-america.html</u>

Additional resources for presenters:

https://www.pewresearch.org/social-trends/2019/04/09/how-americans-see-the-state-ofrace-relations/ https://www.britannica.com/topic/race-human/Gobineaus-Essay-on-the-Inequality-of-Human-Races#ref234685 https://www.census.gov/library/stories/2021/08/improved-race-ethnicity-measures-revealunited-states-population-much-more-multiracial.html https://www.census.gov/library/stories/2021/08/2020-united-states-population-more-raciallyethnically-diverse-than-2010.html

Tuesday, September 20 Race, Society, and Genomics (Topic 3: Group 2)

What is scientific racism?

Required Reading:

https://www.genome.gov/about-genomics/fact-sheets/Eugenics-and-Scientific-Racism https://www.un.org/en/chronicle/article/ideology-racism-misusing-science-justify-racialdiscrimination

https://www.nejm.org/doi/pdf/10.1056/NEJM184308160290201

Additional resources for presenters:

https://www.britannica.com/topic/race-human/Building-the-myth-of-Black-

inferiority#ref234670

https://www.science.org/doi/full/10.1126/science.aac4951 https://www.smithsonianmag.com/science-nature/disturbing-resilience-scientific-racism-180972243/ https://library.harvard.edu/confronting-anti-black-racism/scientific-racism https://apa.nyu.edu/hauntedfiles/about/timeline/

https://www.washingtonpost.com/politics/2020/09/25/ice-is-accused-sterilizing-detaineesthat-echoes-uss-long-history-forced-sterilization/

Tuesday, September 27 Race, Society, and Genomics (Topic 4: Group 3)

The origins of modern eugenics - pre WWII

Required Reading:

NEJM 1934 sterilization-and-its-possible-accomplishments-1934.pdf https://illinois.pbslearningmedia.org/resource/2a62503d-31f6-4b17-9dab-0d496d3dc62a/using-primary-sources-to-examine-history-of-eugenics-video-ken-burns-thegene/ https://www.youtube.com/watch?v=JeCKftkNKJ0

Additional resources for presenters:

http://exhibits.hsl.virginia.edu/eugenics/2-origins/ http://exhibits.hsl.virginia.edu/eugenics/3-buckvbell/ http://www.eugenicsarchive.org/html/eugenics/essay9text.html https://embryo.asu.edu/pages/buck-v-bell-1927

Tuesday, October 4 Race, Society, and Genomics (Topic 5: Group 4)

History of Eugenics - post WWII

Required Reading:

https://www.smithsonianmag.com/science-nature/disturbing-resilience-scientific-racism-180972243/ https://ihpi.umich.edu/news/forced-sterilization-policies-us-targeted-minorities-and-thosedisabilities-and-lasted-21st

Additional resources for presenters: https://www.npr.org/2016/12/18/505000554/on-a-eugenics-registry-a-record-of-californiasthousands-of-sterilizations https://www.vox.com/the-big-idea/2017/3/28/15078400/scientific-racism-murray-alt-rightblack-muslim-culture-trump https://onlinelibrary.wiley.com/doi/abs/10.1002/ajpa.24150

Tuesday, October 11 Race, Society, and Genomics (Topic 6: Group 5)

Race, genetics, & medicine

Required Reading: Read Scientific American Article: <u>https://blogs.scientificamerican.com/voices/what-role-should-race-play-in-medicine/</u> Listen to Code Switch Podcast episode from June 15th 2022 "The impact of COVID-19, a million deaths in" on your favorite service or found at <u>https://www.npr.org/2022/06/14/1104978181/the-impact-of-covid-19-a-million-deaths-in</u>

Additional resources for presenters: https://www.jci.org/articles/view/150255 https://humgenomics.biomedcentral.com/articles/10.1186/s40246-022-00391-2 https://www.nejm.org/doi/full/10.1056/NEJMms2029562 https://www.nejm.org/doi/10.1056/NEJMms2031080

Tuesday, October 18 Race, Society, and Genomics (Topic 7: Group 6)

Genetic testing & Gene editing in humans

Required Reading:

https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1001663 https://qz.com/646436/prenatal-testing-is-about-to-make-being-pregnant-a-lot-morestressful/ https://www.npr.org/sections/health-shots/2019/05/02/719665841/why-making-a-designerbaby-would-be-easier-said-than-done

Additional resources for presenters:

https://www.cancer.gov/about-cancer/causes-prevention/genetics/brca-fact-sheet https://www.mprnews.org/story/2021/12/31/npr-first-sickle-cell-patient-treated-with-crisprgene-editing-still-thriving https://bpr.berkeley.edu/2021/07/25/crispr-and-the-spectre-of-eugenics/ https://www.nature.com/articles/530402a

Tuesday, November 1 Race, Society, and Genomics (Topic 8: Group 7)

Genetic ancestry : Human origins and ancestry

Required Reading: <u>https://journals.plos.org/plosgenetics/article?id=10.1371/journal.pgen.1008624</u> https://www.science.org/doi/10.1126/science.abm7530

Additional resources for presenters:

https://kids.frontiersin.org/articles/10.3389/frym.2020.00106 https://www.science.org/content/article/experts-question-study-claiming-pinpoint-birthplaceall-humans https://www.genome.gov/dna-day/15-ways/human-origins-ancestry https://learn.genetics.utah.edu/content/basics/haplotype https://sitn.hms.harvard.edu/flash/2017/science-genetics-reshaping-race-debate-21st-century/

Tuesday, November 8 Race, Society, and Genomics (Topic 9: Group 8)

Genetic ancestry : Direct to consumer testing

Required Reading: Read this short article: <u>https://medlineplus.gov/genetics/understanding/dtcgenetictesting/ancestrytesting/</u> Watch this video: <u>https://www.youtube.com/watch?v=Isa5c1p6aC0&list=PLxcqerfGTpXNkqq2aYQKsWc0U_BcPR</u> <u>9is&index=23</u>

Additional resources for presenters:

<u>Genetic Ancestry Testing with Tribes: Ethics, Identity & Health Implications</u> <u>https://www.cnbc.com/2018/06/16/5-biggest-risks-of-sharing-dna-with-consumer-genetic-testing-companies.html</u> <u>https://www.science.org/doi/full/10.1126/science.1150098</u>

Tuesday, November 15 Race, Society, and Genomics (Topic 10: Group 9) <u>Sex & gender</u>

Required Reading:

Intersex People and the Physics of Judgment | Cecelia McDonald | TEDxBoulder

Additional resources for presenters:

https://www.nytimes.com/2012/06/18/sports/olympics/the-line-between-male-and-femaleathletes-how-to-decide.html https://www.livescience.com/65412-caster-semenya-testosterone-gender-segregation.html https://www.youtube.com/watch?v=MiCftTLUzCI

Tuesday, December 6 Race, Society, and Genomics (Topic 11: Group 10) Anti-racism in science

Required Reading:

https://www.nature.com/articles/s41436-020-00937-6 https://www.wired.com/story/quashing-racist-pseudoscience-is-sciences-responsibility/

Additional resources for presenters:

https://www.sciencedirect.com/science/article/pii/S2666247721000336 https://www.gimjournal.org/article/S1098-3600(21)00774-7/fulltext https://lareviewofbooks.org/article/why-dna-is-no-key-to-social-equality-on-kathryn-paigehardens-the-genetic-lottery/