

Race and Health part 1

Erik: "Roses are red / Barack is half-black / If you can't drink milk / you have to go back."

Jim: Erik, what the hell is that?

Erik: It's a poem I found on the internet.

Jo: You're not just supposed to read random crap you find on the internet out loud. Didn't they teach you that in "How to Be a History Professor 101"?

Erik: There's a "How to be a history professor class?"

Jim: We have them in anthropology! Don't you guys in history?

Jo: Yeah, that lesson is week three, entitled "Don't Read Random Crap You Find on the Internet Out Loud." Maybe you were sick that ... semester.

Erik: I just thought it would be a good poem to start our little mini series on race and health with.

Jim: That's a terrible poem. And did we even do regular introductions? I swear, we take a month off and all discipline goes out the window.

Jo: You're right. ... Cue the intro music!

Guitar intro, Hi, I'm Jo. And I'm Erik.

Jim: And I'm Jim, and this is Speaking of Race -- a show where two scientists and a historian discuss the long and messy story of race and science.

Jo: I want to know why Erik picked that terrible poem.

Erik: Early in 2017, someone anonymously posted that poem in one of those weird white-supremacist corners of the so-called dark web and attached a map to it. The map purportedly showed the evolutionary spread of tolerance to lactose in dairy products.

Jim: Ah, the "dairy diaspora" from the middle east starting 10 or 11,000 years ago....

Jo: Wait. I don't get it. Why would white supremacists care about milk consumption? It's not just because cows' milk is white, is it?

Erik: It's stupid. But it's not quite that stupid. The map was ripped from a 2013 review article published in Nature showing that lactase persistence -- the ability among some people to consume milk without a problem -- evolved as populations herded milk-producing mammals. As you move north and west through Europe, it becomes more common because that's where the ability for adults to digest whole milk was most adaptive, spreading the gene far and wide. So lactose tolerance "appears" to be a trait affiliated with northern and western Europeans. These guys are saying if you can't tolerate the lactose in milk, you aren't welcome in the USA because you're not white enough.

Jim: Yeah, northern and western Europe, but also pockets in extreme west Africa, the central Arabian peninsula, and Northeast India. But I want to hear more about why you brought it up.

Erik: So a bunch of mid-20s white supremacist guys --

Jo: -- why am I not surprised. --

Erik: -- decided to film themselves having a milk chugging party in the snow with their shirts off so you can see their neo-nazi tattoos. As they show by flexing their pecs, lactose intolerance is a malady that affects non-whites. It caught on. Your alt-right friend Richard Spencer decided to change his twitter profile to sport a glass of milk emoji. The phenomenon became so widespread in the white supremacist twitter-verse that just last year the New York Times tracked down geneticists to take a position in this so-called "debate."

Jo: Listeners should see my eyeballs rolling.

Jim: Yep, it's another example of how health and race stuff gets all mixed up and how half-truths and total BS get turned into common knowledge about health and race. Today, we're going to begin a discussion about the roots of some of these modern misconceptions about race and health. It will take us ... a few episodes to get there.

Jo: Yeah, this is an old story. And there's a lot to say. You might remember that last year Hilary Green spoke with us about the implications of white physicians' willful denial of black physiology. The physicians promoted misconceptions that Africans could tolerate more pain, be resistant to tropical disease, and work more with less food.

Erik: This was specifically how Alabama physicians like J. Marion Sims were able to justify purchasing slave women and conducting painful gynecological surgeries on them without bothering to find a way to dampen the pain.

Jim: They were basically lab animals to Sims. And that was consistent with the polygenic beliefs of Sims and many other American scientists and physicians during the first half of the nineteenth century.

Jo: Remind us what that polygenism word means again....

Jim: Just that the races are different species with different origins. So blacks and aboriginal peoples had their own lines of descent and were fundamentally alien creatures compared to Europeans. In the US, especially, it served as a kind of justification for the brutality of slavery and the near-genocide of Native Americans.

Erik: Ironically, many of the most well known polygenic physicians of the US — including Sims and Josiah Clark Nott, the physician honored here at the University of Alabama, and Samuel Cartwright of Louisiana — often did their surgical work on black bodies so they would know how to do them on white bodies.

Jo: I guess their polygenic science was only used when needed.

Erik: Still, they came up with crazy medical ideas because of it. In 1851, Cartwright famously discovered the malady "drapetomania" -- an illness that caused a slave to try to escape from the master ([Cartwright, 1851](#)).

Jim: How do you treat ... you know ... doing what just about any slave would want to do?

Erik: Cartwright suggested it came about from masters being too harsh.

Jo: So, “be nicer” was his treatment for this “disease”?

Erik: That. Or whipping. Or cutting off both big toes to make running away more difficult.

Jim: In other words, Cartwright very much depicted Africans as subhumans who had to be kept controlled through the right balance of violence and provision of basic needs. Slaveholders had to construct this kind of awe and fear among their captives because this would keep slaves essentially caged without literal cages. Later in this episode we'll see how powerful and long lasting those ideas were.

Jo: But even these ideas from the mid-19th century didn't just come out of nowhere, right?

Erik: Of course not. It's difficult to tell how old they are.

Jim: But we shouldn't let listeners believe that these issues are just as old as humanity itself.

Jo: Sure, saying these ideas are really old sometimes makes people believe that somehow race and racist science are “natural” and can't be changed because they're based on biological facts, which isn't true.

Jim: So old. But I think we can say with some precision who some of the major promoters of these ideas were in the recent past.

Jo: Okay, where should we start?

Early American misconceptions

Jim: We were just discussing the nineteenth century notion that black bodies were less susceptible to pain, which made them better suited than white bodies for pack animal and lab animal sorts of tasks.

Jo: Right, this seems to also be the starting point for modern views that people of African descent are better athletes, since a lot of athletics takes the ability to just keep grinding away without feeling pain.

Jim: And of course we talked about race and athletics in an earlier podcast ([Bindon, Peterson, & Weaver, 2017](#)). But that view was not a universal one. Go back just a century before Nott and Cartwright, and you find Thomas Jefferson advocating something different. Erik, want to read the quote?

Erik: Sure. Jefferson's 1785 Notes on the State of Virginia was one of the most prominent books to come out of the new United States and was widely cited in Europe as a positive example of the American political experiment. But if you dig into the parts where Jefferson discusses slavery and race, you find Jefferson combined polygenism and white physical and mental superiority to justify not emancipating slaves. Here's the quote: “I advance it therefore as a

suspicion only, that the blacks, whether originally a distinct race, or made distinct by time and circumstances, are inferior to the whites in the endowments both of body and mind ([Jefferson, 1801 \[1797\]](#)).”

Jo: What I find striking is how ... let's say flexible ... physicians and scientists could be when discussing disease and race. Sometimes they emphasized the suitability of Africans for hard labor in locations where tropical disease was rampant. But other times, these white figures downplayed the vitality of the black body.

Erik: Flexible is one word for it.

Jim: Jefferson would have been familiar with the works of physician Benjamin Rush, the founding father of American psychiatry and one of America's leading enlightenment scholars and educators.

Jo: Wait a second. I've heard of Benjamin Rush. And I thought that -- unlike Jefferson -- Rush vehemently opposed slavery and views about African inferiority.

Jim: That's right. Ironically, though, he ends up becoming one of the sources for the idea that blacks feel less pain that feeds into the work of Cartwright, Josiah Nott, and other polygenic physicians.

Erik: I don't get it. How did that happen?

Jim: It starts with a man named Henry Moss. Moss was a free-born African American who fought in the Revolutionary War. He claimed that he had been born dark skinned but by the age of 38 he was almost entirely depigmented and made money displaying himself around the country. On July 23, 1796, he was at the Black Horse Tavern on Market Street in Philadelphia. We know that because Benjamin Rush visited Moss there and pasted the advertisement for the display in his diary ([Yokota, 2004](#)). Though now we speculate that Moss's depigmentation was derived from a form of vitiligo, Rush had a different idea. Dark skin color, Rush said, came from leprosy, and he thought that Moss's depigmentation was due to a partial cure of leprosy ([Rush, 1799](#)).

Jo: Um, what?!

Jim: Yeah, I know. From there Rush made the leap that all Africans were diseased as part of their birthright.

Erik: So he thought dark skin meant leprosy?! How was that supposed to support his anti-slavery stance?

Jo: And why leprosy? That doesn't even make sense.

Jim: First, I have to remind you that Rush calls it "The Leprosy", like "The Facebook."

Jo: That's what all the cool kids were calling it....

Jim: Rush thought he had good reasons for connecting leprosy to dark colored skin. He offered a report from Spain, a Biblical account or two, reports from Bougainville's Pacific voyages, and an illustration of a Negro man from Virginia. He also recounted claims that Negroes feel very

little pain (he tells an amputation anecdote) -- which is a symptom seen in leprosy (to the extent that there's an expression that a person "has no more feeling than a leper").

Jo: Aaaaahhhhhhh. Right, they're talking about the neuropathy that comes with advanced leprosy. So there's where the notion that Africans don't feel pain gets made to seem like it's some kind of valid medical observation.

Jim: He goes on! Lepers are supposed to have "strong venereal desires." And swollen lips and noses are often symptoms of leprosy. Rush even takes wooly hair to be a symptom of leprosy, relying on a tenuous connection to in-grown hair in leprosy Poles.

Erik: I still don't get how this was supposed to help the cause of anti-slavery that Rush supported.

Jim: Rush believed that by combating skin-color essentialism, he was combating slavery—in spite of the fact that he was a slave owner!

Erik: So if he should show that black skin was a result of a disease, and if that disease was able to be treated, you could undercut the argument that black skin meant destined-for-slavery.

Jim: Precisely. In 1799, he wrote that the Henry Moss case was one nail in the coffin of ignorant arguments that dark skin was divine judgement or proof that Africans could withstand harsh, disease-ridden climates ([Rush, 1799](#), p. 297).

Jo: So now I see the irony. In drawing on the notion that dark skin was a kind of leprosy that made it harder to feel pain, Rush thought he was destroying arguments for the enslavement of Africans. Instead he just ended up feeding into a stereotype about the black bodies being less susceptible to pain that -- like Hilary Green related -- even impacts the treatment of African American patients by white doctors today ([Green, 2018](#)).

Erik: Benjamin Rush had such an outsized effect on American medicine and made Philadelphia the most important medical training school for American physicians. I can see how people like Samuel Cartwright, Josiah Nott, and many other prominent physicians, who all trained in Philadelphia, could carry these misconceptions about blackness and disease far and wide.

Jim: It's hard to get a man to understand something when his salary depends on his not understanding it.

Post Darwin/Civil War/polygenism

Jo: Sure, so this relationship of race and medicine might have been acceptable during the era of slavery and polygenism. But, let's turn now to after that. By the 1860s or 1870s Charles Darwin had demonstrated scientific monogenism and the US finally joined the British Empire and outlawed slavery. So, things changed dramatically, right?

Erik: We could debate whether Darwin really ended the monogenism-polygenism debate another time. I tend to think he didn't.

Jo: Well, polygenism was falling out of favor though, right?

Jim: Remember when we brought it up in our series, it was in the context of anthropology in the 1960s and 70s! So there has been way too much continuity of thought. For the 19th century, take John F. Miller for instance ([J. F. Miller, 1896](#)).

Erik: I don't think I know that name.

Jim: He was superintendent of North Carolina's insane asylum for African Americans and his writings were very much in the vein of Cartwright and Nott, except that his writings came after the war. He gave this address in 1896 called, "The Effects of Emancipation upon the Mental and Physical Health of the Negro of the South," and -- guess what he thought the effects of freedom were ...

Jo: Good...?

Jim: They were bad, Jo, very bad. According to Miller, diseases like tuberculosis and insanity were very rare among African slaves before emancipation. But by the 1890s, freed African-Americans were much sicker with both.

Erik: This is just racism, right?

Jim: Well, Miller claimed not. He called himself "the negro's friend" and said he was without any personal antipathy toward slaves. Miller's observations about rising sickness come from his 40 years of living in slaveholding society and conversations he had with friends and colleagues, as well as census data about the number of African Americans enrolled in asylums.

Jo: I'm not sure about that methodology, but what did Miller say about the reason for the rising rates of illness?

Jim: Too much freedom.

Jo/Erik: What!?

Jim: Yeah, under slavery, food, shelter, clothing, and medical treatment were provided. Afterwards, not so much. The intellectual demands of freedom, like having to take care of oneself and follow laws, were just too much for African minds. Miller blamed 'licentiousness' and untreated lung ailments like bronchitis for weakening African constitutions and making them susceptible to tuberculosis. So then: worry about day-to-day needs, plus licentiousness, plus physical ailments like bronchitis, equals insanity.

Jo: So the idea is that Africans can't be trusted to take care of themselves, it seems.

Erik: I'm catching a hint of the development of the Lost Cause narrative here -- that things were better for everyone under slavery.

Jim: And even the old ideas of Josiah Nott and Samuel Cartwright that black bodies and minds are made to be in a state of slavery like pack mules, given their higher pain tolerance, less need for medical care, ability to work longer with less food, and all that other crap.

Jo: But I also hear in Miller the idea that Africans are physically weaker than Europeans -- closer to Jefferson than to Cartwright. Again, there's that "flexibility" -- physicians and scientists could

emphasize the suitability of Africans for hard labor in locations where tropical disease was rampant. But other times, these white figures downplayed the vitality of the black body.

F. L. Hoffman, “Vital Statistics of the Negro”

Jim: That’s a good segue way into talking about one of the most influential medical documents toward the turn of the twentieth century. This is one that almost never gets talked about.

Jo: Grey’s Anatomy! You know I love that show. There was this one episode that --

Erik: Jo! That’s a TV show. And it’s not even based on Henry Gray’s actual anatomical textbook from the 1860s.

Jim: No, that definitely wasn’t where I was going. I’m referring to the 329 pages published in the Journal of the American Economic Association by an unknown statistical clerk at Prudential Life Insurance in 1896. It took up two entire issues of the journal -- that’s how important they thought it was.

Erik: It’s not fair. It takes forever to get one article published in a single issue, let alone having them devote entire journal issues to one person’s statistics ideas!

Jo: That sounds much less exciting....

Jim: Let me try to spice it up for you. The author, Frederick Ludwig Hoffman, was born in Germany in 1865 but his schooling was cut short by the death of his father, who was an accountant, and so young Frederick had to help hold the family together. He was a failure at virtually everything he tried and in 1884 after losing a job on his first day at it he was homeless. Luckily for him, a relative loaned him enough money to get to America and put him in contact with Germans in New York and Cleveland.

Jo: You’re right, this is good. I’m a sucker for sad-German-immigrant-in-Cleveland stories!

Jim: After saving up money from a menial job in Cleveland, he took off to see his new country. He rode the rails like a hobo, picking up work when needed until he settled into a job as a clerk for Standard Oil.

Erik: -- This is where we really need the “bum bum buuuuum” sound. Because whenever Standard Oil is in the story, something bad is about to happen. --

Jo: -- Don’t interrupt the German-immigrant-hobo-from-Cleveland story!

Jim: Hoffman moved from Standard Oil into the insurance industry when he took a job in Waltham, Massachusetts. His traveled as an agent selling policies to cover burial expenses in poor neighborhoods. Several of his trips -- he was no longer traveling like a hobo, Jo --

Jo: Oh!

Jim: -- his trips took him south, where Hoffman encountered African Americans. Soon after, he published his first article, “Vital Statistics of the Negro,” in 1892. Someone at Prudential Life

Insurance Company read it and -- because they were hoping to expand insurance to poor blacks in the South -- they offered him a job in their statistical division in 1894 ([Sypher, 2000](#)).

Jo: Well. This immigrant story just gets better and better! But I have no clue what this has to do with race and medicine.

Erik: And I still want to know how a former rail-riding hobo takes over two issues of an academic journal.

Jim: That 329-page blockbuster was "Race Traits and Tendencies of the American Negro" published in 1896 ([Hoffman, 1896](#)). And the reason he wrote it was because state governments were beginning to regulate insurance companies like The Prudential. Hoffman's article was an initial step to help Prudential get around those regulations.

Jo: Which regulations?

Jim: In 1884, Massachusetts passed a law that stopped insurance companies from giving fewer benefits to black policyholders who were paying the same premiums as white ones. Connecticut and Ohio followed with similar laws within five years. New Jersey and New York did the same in the early 1890s.

Jo: Ok, ya, that sounds very fair.

Jim: Prudential turned to statisticians like Hoffman for a solution that got them off the hook. Hoffman's "Race Traits and Tendencies" claimed that African Americans were essentially uninsurable ([Wolff, 2006](#)). He dug deep to find tables and records of births and deaths and illnesses. He reviewed anthropometric data focusing on lung size, considered effects of race crossing, and came to the conclusion that while the white population had been improving in health and longevity since the Civil War, African Americans were diminishing in every area that would involve insurance claims.

Jo: Whoa, wait, that's not fair!

Jim: Using Hoffman, Prudential argued that any agency that offered African Americans equal benefits would lose money. It was unfair, then, to force companies to comply with states laws.

Erik: That's an obvious violation of the anti-discrimination statutes in the Fourteenth Amendment. These corporations were undercutting the Constitution for financial gain.

Jim: I'm shocked, I tell you, SHOCKED!

Jo: But I want to know more about former-Cleveland hobo Hoffman -- was he just a racist? Did he manipulate those data?

Jim: That's a funny story. He tried to address that. Here's a quote from his preface to "Race Traits and Tendencies": "Being of foreign birth, a German, I was fortunately free from a personal bias which might have made an impartial treatment of the subject difficult."

Erik: Ha! There's that "I'm not a racist" stuff! People confuse a lack of personal animosity toward people of other skin tones with being not-racist. Many white slave owners claimed to love their

black slaves yet still defended the social, political, and economic institutions that oppressed them.

Jo: We should talk about the differences between racial animosity and institutional racism in a future episode. But I still want to know about Hoffman. Jim, does that mean he really was trying to find objective data?

Jim: Not to be difficult, but I'm just going to lay out the evidence and let you make up your own mind. In his big ol' manuscript he spent 6 pages extolling the virtues of the Aryan race, leading off with this statement. I think Erik has to read this....

Erik: "It is not in the conditions of life, but in race and heredity that we find the explanation of the fact to be observed in all parts of the globe, in all times and among all peoples, namely, the superiority of one race over another, and of the Aryan race over all." ([Hoffman, 1896](#), p. 312)

Jo: Pretty pretty racist, I'd say.

Jim: But wait! There's more! Here's the conclusion of this not-racist German immigrant just "sticking to the facts." Erik?

Erik: "All the facts brought together in this work prove that the colored population is gradually parting with the virtues and the moderate degree of economic efficiency developed under the regime of slavery. All the facts prove that a low standard of sexual morality is the main and underlying cause of the low and anti-social condition of the race at the present time. All the facts prove that education, philanthropy and religion have failed to develop a higher appreciation of the stern and uncompromising virtues of the Aryan race. The conclusion is warranted that it is merely a question of time when the actual downward course, that is, a decrease in the population, will take place."

Jo: I think that answers my question. It sounds just like that North Carolina guy we just talked about a second ago, John F. Miller.

Jim: But, Erik, you've got to keep reading, because he says something really important at the end.

Erik: Okay. "Instead of making the race more independent, modern educational and philanthropic efforts have succeeded in making it even more dependent on the white race at the present time than it was previous to emancipation. ... Unless a change takes place, a change that will strike at the fundamental errors that underlie the conduct of the higher races towards the lower, gradual extinction is only a question of time" ([Hoffman, 1896](#), p. 329).

Jo: So if white people attempted to offer more educational opportunities and raised more money to help former slaves and their families, African Americans would go extinct?! I mean, I've heard of "tough love" but this seems obviously self-serving.

Jim: For the most part, it was very well-received. Here's a blurb from a review in the American Statistical Association: "It is a most thorough and painstaking compilation" ([Dawson, 1896](#), p. 142). This reviewer endorses Hoffman's findings of the inferior status of blacks and their general decrease since emancipation. Another professor at Yale praised the research based on modern anthropology and statistics! There was very little pushback. But one of those who did push back was the Harvard-trained African American sociologist William Edward Burghardt DuBois.

Jo: W.E.B. DuBois! One of the founders of the NAACP!

Erik: We should be sure to cover DuBois in a future episode.

Jim: Another negative review of Hoffman came from the Howard University mathematician and astronomer Kelly Miller.

Erik: Another person we should cover in the future.

Jim: DuBois and Miller were prominent enough that people paid attention to what they had to say. (Miller's 36 page review was No. 1 in the Occasional Papers series of the American Negro Academy.) Each of them carefully refuted Hoffman's findings section by section. They really didn't like Hoffman's use of 1890 census data ([DuBois, 1897](#); [K. Miller, 1897](#)).

Erik: 1890 was the first US census to use punch cards to quickly sort and tabulate data as a sort of forerunner of computerization.

Jim: But censuses are not free of bias! That's a lesson we should remember for the 2020 census. The questions asked and the categories on the form can make the data good or it can make it terrible. The 1890 census that Hoffman used was the first and only one where census takers had to label people as black, mulatto, quadroon, or octoroon. Guess what criteria they used to do it....

Erik: I'm going to guess a very good, thorough set of criteria.

Jim: Nah, they just looked.

Erik: That's bunk.

Jo: Yeah, that census was particularly bad because those categories refer to how much black blood a person supposedly has. So a "mulatto" would have one black and one white parent; a quadroon would have one black grandparent, and an octoroon would have one black great grandparent. And census takers had to make that call based on external appearances.

Erik: Obvious problems there.

Jim: DuBois also perceptively criticized Hoffman for failing to stratify the data by socioeconomic status. That would show that many of the ailments Hoffman was laying at the feet of race were actually due to dire socioeconomic conditions. These were the same socioeconomic conditions that urban African Americans were sharing with the lowest economic class of recent immigrants from southern and eastern Europe. In other words, IT WASN'T RACE, but social and economic context that was behind Hoffman's alarming conclusion about black extinction.

Erik: And I don't recall any social theorist of that era thinking southern or eastern European immigrants were going extinct!

Jim: What's even crazier is that Hoffman himself had made this point!

Jo: What? Hoffman knew that socioeconomic conditions and not race were the real factor in the poor health outcomes of African Americans?

Jim: I know it sounds crazy, but listen to the review of “Race Traits and Tendencies” by Howard University mathematician Kelly Miller: “The same author, [Hoffman], who in 1896, wrote: ‘It is not in the condition of life, but in the race traits and tendencies, that we find the cause of excessive mortality,’ in 1892 affirmed: ‘The colored population is placed at many disadvantages which it cannot very well remove. The unsanitary condition of their dwellings, their ignorance of the laws of health, and general poverty are the principal causes of their high mortality.’ The Frederick L. Hoffman of 1892, according to the general judgment, is much nearer the true analysis than the Frederick L. Hoffman of 1896” ([K. Miller, 1897](#), p. 34).

Erik: So let me get this straight. In 1892, Hoffman wrote the essay “Vital Statistics of the Negro,” in which he noted that too little sanitation and too much poverty were the cause of high mortality among African Americans. But four years later, after Prudential put him on the project, Hoffman decided that it was blackness itself that was to blame for poor health. So much for “sticking to the facts.”

Jim: “It is difficult to get a man to understand something when his salary depends upon his not understanding it.”

Jo: I’m having deja vu.

Jim: DuBois finishes his review like this: “To sum up briefly, the value of Mr. Hoffman's work lies in the collection and emphasis of a number of interesting and valuable data in regard to the American Negro. Most of the conclusions drawn from these facts are, however, of doubtful value, on account of the character of the material, the extent of the field, and the unscientific use of the statistical method” ([DuBois, 1897](#), p. 133).

Jo: Wow—hope I never get reviewed like that! But, Jim, you said that Hoffman’s work was super-influential. Even after reviews like these?

Jim: By 1901, Prudential created a whole statistical department and put Hoffman at the head of it.

Jo: What? Even after he was shown to be improperly using statistics?

Erik: It kind of makes sense. Numbers seem science-y. Hoffman was offering a numerical justification for the things corporations, led exclusively by white people, wanted to hear.

Jim: Hoffman’s work is also important because it pushed back against state governments who wanted to force companies to respect equal rights regardless of race.

Jo: But how does this relate to race and health, specifically?

Erik: As we’ll see in future episodes, when governments extend civil rights to non-white groups, there’s almost always a white backlash.

Jim: And what better way to make it seem legitimate and “not racist” than by tying the backlash to some biological trait essential to non-whites. If some physician or statistician says, ‘that’s just the way these things are,’ many judges and legislators will just defer to those medical experts -- especially when it’s what they wanted to believe anyway.

Jo: And if the explanations given by those medical experts can be so flexible, I guess they can defend ... well ... just about whatever they want.

Erik: On that note, I think we've chewed on our listeners ears for long enough for one episode. Where do we go next?

Jim: How about we take on the classic racial disease, sickle cell anemia?

Jo: Oooo! That's gonna be good.

Sources:

- Bindon, J.R., Peterson, E.L., and Weaver, J. (2017, 12/20/2017). *Race and Athletics* [Retrieved from <http://speakingofrace.ua.edu/podcast/race-and-athletics>]
- Cartwright, S. A. (1851). *Report on the diseases and physical peculiarities of the Negro race*. [New Orleans].
- Dawson, M. M. (1896). [Race Traits and Tendencies of the American Negro, Frederick L. Hoffman]. *Publications of the American Statistical Association*, 5(35/36), 142-148. doi:10.2307/2276196
- DuBois, W. E. B. (1897). [Race Traits and Tendencies of the American Negro, Frederick L. Hoffman]. *The Annals of the American Academy of Political and Social Science*, 9, 127-133.
- Green, Hilary (2018, 9/30/2018). *Slavery Ideas About Black Bodies, Interview with Hilary Green* [Retrieved from <http://speakingofrace.ua.edu/podcast/racism-and-black-bodies>]
- Hoffman, F. L. (1896). *Race traits and tendencies of the American Negro* (Vol. 11): American Economic Association.
- Jefferson, T. (1801). *Notes on the State of Virginia*. Boston: David Carlisle.
- Miller, J. F. (1896). *The Effects of Emancipation upon the Mental and Physical Health of the Negro of the South*: Academic Affairs Library, University of North Carolina at Chapel Hill.
- Miller, K. (1897). *A review of Hoffman's race traits and tendencies of the American Negro* (1 ed.): American Negro Academy.
- Rush, B. (1799). Observations Intended to Favour a Supposition That the Black Color (As It Is Called) of the Negroes Is Derived from the Leprosy. *Transactions of the American Philosophical Society*, 4, 289-297. doi:10.2307/1005108
- Sypher, F. J. (2000). The Rediscovered Prophet: Frederick L. Hoffman (1865-1946). *Cosmos*, 10, 17-22.
- Wolff, M. J. (2006). The myth of the actuary: life insurance and Frederick L. Hoffman's race traits and tendencies of the American negro. *Public Health Reports*, 121(1), 84.
- Yokota, K. A. (2004). Not Written in Black and White: American National Identity and the Curious Color Transformation of Henry Moss. *Common-place*, 4(2). Retrieved from Common-place website: <http://www.common-place-archives.org/vol-04/no-02/yokota/>