

What is your Body Worth?

The Ethics of Commodifying Human Tissues

[MUSIC PLAYING]

MARINA: William Kabasenche is the assistant professor of philosophy at Washington State University. He earned his PhD at the University of Tennessee. And in addition to philosophy, he's been a participating faculty member in the WSU Center for Reproductive Biology. He's the co-director of the ethics committee of Pullman Regional Hospital and director of WSU Global Campus's Bioethics Graduate Certificate, which is online and course-based. So he's just the best expert you could possibly have for this topic.

WILLIAM KABASENCHE: We'll see.

MARINA: All right. Well, we'll go ahead and get started.

WILLIAM KABASENCHE: All right, Marina. Thank you very much for joining us tonight. So let's see. We'll skip the getting to know each other. We actually know each other a little bit.

But here's a question that you can type an answer to, OK. So how much is your body worth? That's the title of the talk. And well, before I say any more, why don't you answer with A, B, C, or D. I assume you can see the slide. Let us know if you can't see the slide that says "how much is your body worth?"

And then, option A is \$900,000. Option B is \$250,000. Option C is \$3 billion dollars. And option D is priceless. Marina says she can see the slide. And she doesn't know. Well, you've got to pick one of them.

And in different ways, more than one of these could be a right answer. So you actually have a decent chance of getting a right answer. [LAUGHS] "I think D." OK, good. That sounds like the kind of response that you might hear a lot in an ethics course.

So in one context, I'll argue for D. I'll say you're right. That's the right answer. In another context, I'll show you why C is actually the market value at least for one particular person, whose case we'll talk about.

And then, in a book that I read a few months ago by Scott Carney called The Red Market-- actually, is it The Red Market or The Blood Market? I always forget. Yeah, The Red Market. Carney argues-- and I have a reference later on in the presentation, so you'll be able to see that. Carney argues that \$250,000 is probably the on average best answer, if you actually wanted to give A, B, or C as your answer, and not D, and say that your body is priceless. And so, there's no price that can adequately express its worth.

So Carney says \$250,000 for the average, typically for an American, who's generally in good health. If, after you die, they were to sort of cut you up and sell the parts-- [LAUGHS] sounds kind of gruesome when you say it that way-- \$250,000 is what your family could get for different body parts. But as I said, we'll talk a bit about C. And we'll also talk about D as potential answers to this question.

So I want to look at three different sort of cases and use each of them as a lens to think about three different sorts of questions. So the first question-- what's the value of your gametes? This is an advertisement from an organization up in Spokane, NW Cryobank. And this organization has actually been putting ads in the Daily Evergreen. I haven't seen one in the past semester or two. But before that, I saw them every semester, starting when I came in the fall of 2007.

And there was no good way to copy the ad. But basically, it talks about fulfilling someone's lifelong dream by donating an egg. And then, the rest of the text reads, fulfill your lifelong dreams with the money we'll give you-- \$16,000 we'll give you. So we're going to talk a bit more about the prospect of selling gametes, right.

Typically, this is called "egg donation." In fact, you see it right there on the slide. But it's not donation at all. It's selling, right. So a number of bioethicists argue that it's better to call this "egg vending" than "egg donation." We'll talk a little bit about that case.

And this is another ad. To show you the extremes that this can go, this is an ad that was placed in the Stanford newspaper. So williamn@alumni.stanford.edu is seeking a high-achiever egg donor. And another, similar ad-- an ad that was almost exactly like this, in terms of asking basically for an egg from an ideal student at Yale-- promised \$50,000 to \$100,000 for the right egg donor.

And so, this is a more recent ad, this one from Stanford. But it's illustrating the same idea, right-- that there's quite a market, as it turns out, in the United States for selling eggs. And so we'll talk more about how you may determine the price of an egg, for instance. So that's one case we're going to look at.

Another case is represented by these two images. The gentleman on the left-- on my left-- with the goatee, his name is John Moore. And the gentleman on the right in the lab coat is Dr. David Golde, or "Gold-ee"-- I'm not sure how he says his name. And I'll tell an interesting story about John Moore. He's actually got an interesting genetic variation that makes his tissues worth \$3 billion on the market. So that's where one of the answers in the multiple choice came from.

And in the last case-- actually, this is the first case we'll talk about-- but, if you've read this year's common reading book, *The Immortal Life of Henrietta Lacks*, then you might know a little bit about Henrietta's story. If not, I'll tell you a little bit about it. And hopefully it will intrigue you. And you'll be interested in going to read the book. It's a really interesting read. So we're looking in more depth at that quote in just a second and talk about some of the ethical issues related to that, as well.

So three issues that I want to talk about tonight-- one is informed consent, which, Marina, I know you already know something about because you've been in the biomedical ethics course. The second issue is a set of issues, really surrounding commercial value for human tissues. And the specific question I want to think about, with respect to commercially-valuable tissues is, who has a right to the money that's available to be made on these commercially-valuable tissues? So that's the second sort of issue we'll talk about.

And then the third, I'm going to label it "expressive value." In other words, we'll be thinking about questions like, what does it say, what does it express about a person, to say that you're willing to pay upwards of \$100,000 for one of her eggs-- for a set of her eggs? And by contrast, what might it express about the value of other people if you're not willing to pay \$100,000 for their eggs?

So those are the three ethical issues that I want to look at. All of them are related to the idea of commodification. And to commodify something is just to put it on a market-- to give it a kind of market value.

So for instance, when we go to the store and we pay the market price for groceries at Safeway, or for a car at the car dealer, or for a new iPad, or something like that, we're buying things on a market. And all the objects that we buy and sell on a market are commodities. And so, when you put something on the market, you're commodifying it. That's where that term comes from.

So these are three different instances of commodifying human tissues. And there are obviously some interesting ethical questions, I think, really to each one of them. So we'll buzz in.

So Henrietta Lacks lived in the first part of the 20th century. She was born in a time when segregation was still very much a part of our country's history. She grew up very poor. It's almost hard to overstate how poor her family was.

She married a cousin of hers, which was actually not uncommon during that time. She grew up in Virginia. And after marrying, she moved with her husband to the Baltimore area where she spent most of her life. There were more job opportunities for both Henrietta and her husband in Baltimore. And so she moved there.

And she became sick around the age of 30. She started noticing some unusual symptoms. And so she went to Johns Hopkins Hospital. At that time, Johns Hopkins Hospital was one of the few hospitals in the area, and even in the country, that would offer free care to people who couldn't otherwise afford health care. And so, she went there because that was the hospital that she could essentially afford to go to.

And when she went there, she was diagnosed with cervical cancer. And so, the doctors tried a number of different treatments. And among the things that happened while she was being treated for cancer at Johns Hopkins, was that the doctors-- including Dr. Gey, G-E-Y, who's mentioned in this quote-- Dr. Gey took some cells from Henrietta's cervix.

And, in the course of trying to figure out how to treat her cancer, he made a pretty remarkable discovery. And the discovery was that her cells were immortal, to use the language that was being used by the scientists at the time. And what this means, basically, is that her cells would replicate. They would just continue dividing. And they never died.

Actually, that's not completely accurate to say it like that. Cells would die. But before they did, the cells would divide and so there was a continuous source of living cells.

And so, she's an unusual case in that respect because, most of us, if you were to take a tissue culture, a cell culture from us, the cells would die after a while. And so, what Henrietta's cells represented was basically a huge new set of opportunities for biomedical researchers. They could now culture cells and use them for all kinds of purposes.

And indeed, these cells were instrumental in the development of the vaccine for polio, which was killing many people through the middle of 20th century. They were used to develop a whole host of different vaccines for other killer diseases. They were used in an almost infinite number of science experiments that depended on having a stable and consistent cell culture. And in other words, the scientists want to be able to control for things like the genetic makeup of a cell.

Henrietta Lacks' cells-- these came to be referred to as "HeLa cells"-- H-E-L-A, for the first two letters of her first and last name. And these HeLa cells, because they're all genetically identical, because they all come from the same individual, they represent an opportunity to basically create well-controlled conditions for doing experiments on cells. And so basically, it's really not overstating the case to say that Henrietta Lacks-- her cells revolutionized biomedicine in the second half of the 20th century and on into the 21st century.

In fact, although I've never actually talked to a scientist about this specific question on campus, I can say almost with certainty that there are HeLa cells on WSU's campus. And I say that just because they're everywhere in the world-- literally, in the world. And as it turns out, a lot of money has been made off of them.

Unfortunately, Henrietta died shortly after this cell culture was taken. The doctors were not able to successfully treat her cancer. So she passed away. And her family thought that was the end of things. They never knew that the cells had been taken. And they never knew, up until about the mid-1970s, well after her death-- a few decades after her death-- that these cells had any significance.

So in the intervening time, a number of companies were started. A number of people made a lot of money. A whole bunch of people benefited in a whole lot of ways. And her own family didn't know this until a Rolling Stone expose article in the mid-'70s.

And then, Rebecca Skloot's book, *The Immortal Life of Henrietta Lacks*, sort of develops the story in much, much more detail. And she spent a lot of time with family members and gets

their perspective. That's right, Rolling Stone, investigative journalism at its best-- right next to an article on the latest pop star or something like that.

So that brings us to this quote, right. So Bobbette, who is one of Henrietta's daughters, she says, "You know what is a myth? Everybody always saying Henrietta Lacks donated those cells. She didn't donate nothing." And Skloot tries to stick very close to the actual manner of speaking in Henrietta's family. So Bobbette is African-American, as was her mother. "She didn't donate nothing. They took them and didn't ask." She inhaled a deep breath to calm herself. "What would really upset Henrietta is the fact that Dr. Gey never told the family anything. We didn't know nothing about those cells and he didn't care."

So this is pretty remarkable. And the family was completely unaware of everything that had been going on. So there's a revolution going on in biomedicine. And they are completely unaware of it.

People are making, as I've already emphasized, money off of these cells. Her family remains in poverty. I mean, she has family members even today who can't afford health care of their own. And so, I mean, there's a kind of awkward tension between, on the one hand, the fact that all of this benefit has been gained-- and the other hand, the fact that Henrietta never gave anything like informed consent to the taking and the use of these cells, right.

So, this raises the question that, Marina, I know you already appreciate the significance of. Well, what's informed consent? And why is it a fundamental ethical requirement for both health care practice, which we have talked about, and biomedical research, which we'll start talking about on Friday of this week.

So that's a picture of the Nazi doctors on trial. And the reason I put that picture in the presentation is because it was when the world discovered in the mid-1940s what the Nazi doctors had been doing. Basically everybody reacted in horror.

The Nazi doctors had engaged in all kinds of experimentation. They did horrible things-- graphically horrible things. They would give people gunshot wounds or knife wounds, and then basically see whether they healed on their own. They would dunk people in cold water or expose them to intensely high levels of radiation to see how they recovered, or if they recovered. They attempted to sew together genetically identical twins to see if they could create a conjoined twin. They had twins having sex with one another to see if the offspring were healthy or in what ways they weren't healthy. All host of really horrific experiments.

And so, at the Nuremberg Trials, which is where this picture was taken-- yeah, sheesh-- at the Nuremberg Trials, a number of these doctors were convicted and actually executed for the things that they did. And one of the things that came out of that was the Nuremberg Code. And this code was basically a code of research ethics.

And the very first thing-- literally, the first sentence of the code-- and this won't be a direct quote. But this is essentially what it says-- researchers should never do any research on experimental subjects without getting their consent. And so, if for no other reason, a researcher should want to get informed consent just so that they don't become, in effect, like the Nazi doctors who basically ignored anything like informed consent and did all kinds of horrible things to patients without getting their consent in anything.

So there are two features of informed consent. The first part is the informed part. And that has to do with this question. What information is material? What information is relevant to your health care decisions? To your life decisions? To any decisions you might make to participate in research?

So for instance, we could ask in the context of the Henrietta Lacks case, what kind of information would Henrietta want to have had if she was going to make a truly informed decision to, say, donate her cells to biomedical research. So what kind of information would you need to know? That's sort of the first part of informed consent.

And basically, the way to answer that question is to ask, maybe, what kind of information would I want to know if I was going to be a participant in this research? Doesn't mean that the participant in research has to understand everything that the researcher does. But they have to understand enough to understand the significance of the decision that they're making.

And then, the second part of informed consent is the consent part. And then so the question I pose here is, under what conditions can you make a decision that represents you? That really reflects your identity and your values? What you want to do with your life?

So, if someone coerces you, or if someone lies to you, or if someone manipulates you, you made a decision, sort of. But it's not really a decision that is made under voluntary or consensual conditions. And so, that doesn't have anything like the kind of power of a decision that you make where you are truly free to make the decision that represents your values and represents what you want to do with your life-- or your cells, if you're Henrietta Lacks.

So I like this little picture. It says, "I think I voted." I think that picture was created in the context of some of the recent controversies in the United States about whether votes were being properly counted.

But, Marina, you know that I used in class the example of someone who covers her eyes, and backs into a voting booth, and just pulls a lever at random. And in one sense, we say, well, yeah, that person voted. But in another, more important sense, I think it's more important we say they really didn't vote, because that wasn't a meaningful act. They didn't act with anything like an informed understanding of what they were doing. And so, informed consent, meaningful autonomy, is about making decisions that really do reflect values, really do reflect what you want to do, as opposed to just sort of blindly choosing, as someone would do if they backed into a voting booth and called that their vote. Not exactly a vote.

So among many other things that we might learn from the Henrietta Lacks case, one of them is that biomedical researchers should be much, much more careful about getting the informed consent of any potential participants in research. And in Henrietta Lack's case, this means that, again, among many other things, the researchers should have asked her, can we take some of your cells-- not just to provide you with therapy for your cancer-- but can we take cells that we hope to be able to use for research purposes? And additional questions might be, well, what kinds of things are you willing to let us do with your cells?

So informed consent is one part of the ethics of commodification. Because if nothing else, the Henrietta Lacks story tells us that people shouldn't get to take your bodily tissues and use them without your knowledge, without you being able to decide whether you want to participate in that. And that, of course, also leads us into the next question, which is, and maybe you should get to decide whether or not you benefit from the use of your cells.

So let's move on now to a second case. So as I said earlier, John Moore, the gentleman with goatee on the left, he got the leukemia unfortunately in the mid-1970s. And so he went to a doctor at the UCLA Medical Center-- Dr. David Golde, who's the gentleman on the right in the lab coat. And in the course of treating Moore's leukemia, Dr. Golde took a number of tissues because he was trying to understand the origin of the cancer. And he was trying to figure out how best to treat the cancer as it existed in Moore's body.

And so he took a whole bunch of tissues. And eventually, he actually invited Moore to fly to LA. Moore, actually, I'm pretty sure he lived in Washington state at the time, maybe in the Vancouver area. And so, he invited Moore to fly at least twice down to LA.

Moore was under the impression that he was flying down for additional observation and treatment for his cancer. But in reality, Golde was actually taking additional tissue samples because he'd made an important discovery. Moore's cells contained a genetic variation that basically led them to overproduce something called lymphokines, which are essentially a booster for the immune system.

And so, Golde realized that he could make a lot of gold with these cells. He realized that if he could extract and purify the lymphokines, this particular protein, he could create an immune booster that he could sell in the market. And I don't know if he was the original one to make an estimate of the market value of if this was done during the ensuing court case, but eventually, it was determined that the market value for Moore's tissues was \$3 billion.

And so we've got two things going on in this case. We've got one, the thing we've already seen the Henrietta Lacks case. Moore had no idea that he was participating in biomedical research that was commercially valuable. He just didn't know that. He thought he was receiving treatment for cancer. And he thought that was the only thing that was going on.

But now, a second question is, well, who should benefit from the \$3 billion worth of lymphokines that are in Moore's body and then, eventually, in Golde's lab, as well. Golde and

some of his colleagues, they made a patent claim on this particular set of tissues. And when Moore found out what was going on and realized that Golde and his colleagues had patented his tissues and were already making a decent amount of money off of it, he sued.

He brought a lawsuit. And This lawsuit went all the way to a Supreme Court in California. And the Supreme Court made two separate rulings on the case.

On the one hand, they ruled in Moore's favor. And they said Dr. Golde was guilty of malpractice, which is to say, he misled Moore about why he was bringing him in. Moore thought it was for treatment. In reality, it was for something else. And so, the California Supreme Court ruled that that counted as malpractice. And so, Moore won an award from malpractice.

However-- and now, this is the real kicker-- the California Supreme Court ruled in favor of Dr. Golde and UCLA because eventually the patents were put in UCLA's name. The California Supreme Court ruled in Golde and UCLA's favor, saying that Moore had no commercial interest in his tissues once they left his body, right. So in other words, once they were out of his body, even in a context where he didn't know the precise reasons why they were leaving his body, even still, they argued he had no proprietary right. He had no property claim.

Part of the lawsuit that Moore had brought was to say, this is sort of like someone is stealing their property, right. So if someone were to break into your house, and steal some of your electronic equipment, and then sell it on the black market or on Craigslist or whatever, you could bring a claim against that person and say, hey, this person benefited from my property. They didn't have a right to sell what was my property. If anyone has a right to benefit from the sale of that property, it's me, because it's my property.

So that's the kind of claim that Moore was making. And the California Supreme Court rejected that claim, which is pretty remarkable. That's crazy if you're observing.

So this raises, I mean, this question, right. So who has the right to benefit from commercially-valuable tissues? And I want to say that there are three possible answers to this kind of question.

The first answer, maybe the most obvious one, right-- if you react like I initially do to the John Moore case-- you think, well, if anybody should benefit, it should be Moore himself. After all, this came from his body. These lymphokines wouldn't exist if it were not for the fact that Golde was taking them from Moore's body. So he won a certain kind of genetic lottery, Moore did, in that he was born, sadly, with genes that would predispose him to have leukemia, but, happily, in another perspective, with genes that way makes his lymphokines far more commercially valuable than those in your body or mine, so far as I know.

And, so, one answer to the question of who should benefit from these really valuable lymphokines is you say, well, John Moore should. He's the one who was the donor of these

tissues. Now, I have a decent amount of sympathy for that kind of answer. It sounds right, in a certain way, to say, yeah, if anybody is going to benefit, it ought to be Moore. After all, these are his bodily tissues. And they were taken without his consent and without his knowledge. And that seems like a problem.

But on the other hand, if we think about the kinds of things for which patents or proprietary rights are given, those things are usually entities where the person seeking an intellectual property right, or a patent right, they've made some sort of investment. So for instance, if I write a book or an article-- or I just sent off an author permission document today for an article I've written, and in that kind of case, we would say that, well, because it's my intellectual work, I should be the one who retains a proprietary right to it. And in this case, I was actually signing that right away, giving it to the journal where the article's going to be published.

But let's say that I write a book. Let's say that I wrote the book, *The Immortal Life of Henrietta Lacks*. Well then, this is a bestseller. It's a New York Times bestseller. I should benefit from it in the sense that the money that's there to be made on this particular book should be money that I get.

And so, that's in a case where I've actually made an intellectual contribution. I've done something to make that book be of value. And under those conditions, intellectual property law is pretty clear that I ought to be the beneficiary. After all, I've made the contribution.

But ironically, Moore didn't really do anything. He didn't arrange to have this particular genetic configuration. He wasn't there telling his parents which genes to give him. And his parents actually had no control over it. I mean, really, nobody had any control over the fact-- nobody made any intentional decision. Nobody could take any responsibility in any meaningful, intentional sort of way for Moore ending up with these really valuable lymphokines in his body.

So it's a little funny to say that he should benefit, because he didn't really do anything. Now, you might say, well, he kind of won the lottery. And I suppose there's something to that. But in another sense, what he did or didn't do is pretty different from what happens when intellectual property rights are generally given.

And so, at that point, Dr. Golde might say, yeah, anyway, I'm the one who did all the work here. After all, I extracted these tissues. I purified the gene sequence. And I was able to start to collect these lymphokines. And so, I did all the work here. And I should benefit, Golde might say.

So in other words, the second possible answer is one that says, well, maybe the researchers should be the one to benefit. After all, they did the work. Moore didn't really do any work.

All he did was be lucky enough to be born with what turned out to be very commercially-valuable tissues. But he didn't do anything. And he's certainly not responsible. It's not like he wrote a book. It's not like he did anything for which he should claim intellectual property.

But the researchers can say that they did something. And so, they could say, well, I think I have a good claim. I think I have a right to benefit because, after all, I did the work. And I have some sympathy for that view, too. But I think there's something odd about that view, as well.

And the oddness is this. Golde could be a very, very competent-- indeed it seems like he is-- was-- a very competent biomedical researcher. But the fact of the matter is, is he could work a lifetime and never gain the benefits that he actually did gain from having run into and sort of stumbled upon Moore's tissues.

So in other words, although he's a skilled biomedical researcher, the fact that he stumbled onto these valuable tissues has nothing to do with his skill, whatsoever. He too, just like Moore, seems to have won the lottery, in the sense that he just happened to be in the right place at the right time. And it's not clear that, just the fact that he stumbled onto these valuable tissues means that he should benefit from them.

In other words, his investment, the work that he did, he could have done all through his life for other sorts of reasons, and never happened to stumble on to tissues that are worth \$3 billion. So there's something funny about giving him the credit, because he just sort of got lucky. Right, he could use all of his skills, and nonetheless would have, in another context, in another world, he never would have run across Moore and his valuable tissues. And so, all of his skills would never have necessarily given him any particular commercial benefit.

So there's a third answer that, as I thought about these issues, I kind of warmed up to. What if we said that in those rare cases where somebody has, like Henrietta Lacks or John Moore, commercially-valuable tissues, what if we said that nobody should benefit commercially from the use of those tissues? And in a sense, that means everybody could benefit from the tissues in another sort of way.

Actually, I want to check to see what's coming in the next slide, so. If we were to say that, we'd have a model for thinking about commodifying human tissues that essentially said, some kinds of things shouldn't be commodified. So in a way, this is sort of like answer D to the multiple-choice question I posed at the beginning of the presentation. Maybe nobody should benefit from these. And if that were the case, then everybody could benefit, in the sense that the cost of taking advantage for patients of these tissues could perhaps be much lower.

And so, to think about this kind of option, we can think about a not-for-profit model. And the Mayo Clinics, as it turns out, are the leaders in this area. And Marina, you may recall, we talked about the Mayo Clinics just briefly when we talked about access to health care and health care costs.

So the Mayo Clinics are all not-for-profit organizations. And so, what that means is, people who work there, they make money. They have a salary.

But it's not like there's a set of stockholders who then make any additional profit that's generated by the clinic. If there's any additional profit generated, it's actually returned to the patients, or it's reinvested in improving equipment at the clinic. So in other words, everybody makes the salary that they signed the contract to make at the beginning of the year. But nobody makes an excess profit on top of their original salary.

And so, what they do, is they provide us an example, right. And they show us that health care can be provided in a not-for-profit setting. And as you may know, the Mayo Clinics are very, very good at what they do. They are among the best health care providers in the country.

And so, if someone were to try to say, well, if you don't have the prospect of making a big profit, you just won't be motivated to do a good job. And I think the Mayo Clinics are sort of a counter-example to that. They show it's not necessarily the case. The work that's done at the Mayo Clinics is top notch. And nobody there is making a profit on top of the salary that they signed a contract for originally, right.

And so, to my mind, this kind of corrects an odd imbalance in the Lacks and Moore cases. In both of these cases, on the one hand, both Henrietta and John sort of got lucky through no effort or no sort of contribution of their own. They just happened to be carrying or possessing these tissues in their body. And on the other hand, as I've already pointed out, the biomedical researchers who, literally, in both cases, stumbled onto these tissues, it's not as if the work that they did would have had any value were it not for the fact that they actually had these tissues.

So in other words, if we go back for a second to this last slide, and we think about the first two answers-- the donor of the tissues or the researchers-- if there is a good case to be made for each of them, maybe the way to break the tie is to say, neither of them should get a benefit. And this is what we could achieve with a not-for-profit model, where we say that nobody benefits. When these kinds of issues are discovered, they should be used in a not-for-profit context.

So for instance, if a corporation is going to be created to disseminate the benefits of HeLa cells or disseminate the benefits of the lymphokines in John Moore's body, that should be a not-for-profit corporation, right. Sometimes, I mean, again, to address the motivation question, sometimes one of the arguments in favor of creating property rights or intellectual patents is to say that this will motivate researchers to do biomedical research. However, a counter-perspective goes like this. It says, look, much research is justified by being in the public interest. And so, in many cases, what we want is scientists who are committed to benefiting the public as a whole, and not necessarily motivated just to get rich themselves.

And there's another case that sort of illustrates this a little bit. So right now, the US Supreme Court-- the national Supreme Court-- is considering the case of Myriad Genetics, which is a company in Utah. And they discovered a pair of gene sequences that are strongly correlated with breast and ovarian cancer. And so, they placed a patent on those gene sequences and the tests for them.

And that means that anybody who is going to take this gene test to find out whether they have the genes that might predispose them to breast cancer or ovarian cancer, they have to pay a large sum of money. And it goes directly to Myriad Genetics, the corporation. And they make a lot of money off of this. They're currently worth a few billion dollars on the basis of these tests.

And so a group of scientists actually sued Myriad Genetics. And the reason they sued was because they realized that the fact that Myriad Genetics holds the patent means that they were restricted from doing research on this gene sequence. And so, the scientists reasoned-- they've argue this way in court-- and this case has enough merit that it's gone all the way to the Supreme Court. They argued that they could maybe create a more effective test. They could maybe create a more efficient, less costly test if they were allowed to do research without having to pay huge amounts of money to Myriad just to do research.

So in other words, these are scientists who are claiming that they could do what's sometimes referred to as "public interest science." Rather than trying to make a lot of money off of it, they would do it just in order to improve the test and to improve health care delivery to patients. And they're claiming in this lawsuit that they're motivated to do so, that they don't need to make the kind of profits that Myriad Genetics is currently making in order to do this research.

And so, their lawsuit is basically a demonstration of the fact that scientists can indeed be motivated by public interest. And they don't need to be motivated by the prospect of making a huge profit if they stumble onto a valuable human tissue or something like that. So this is kind of the case for a not-for-profit approach to commercially-valuable tissues. Rather than giving all the money to the donors, or all the money to the researchers, or even attempting to split the money between the two-- rather we should create not-for-profit organizations that would disseminate the benefits of this particular research, just like the Mayo Clinic does.

All right, so the last sort of case that I want to consider-- and, Marina, we'll actually talk about this in a bit more detail in the course later on. So you'll get to hear more about this. But again, so there was an advertisement in the WSU newspaper for a number of years. And it states very clearly that a woman at WSU who's responding to this ad could make up to \$16,000 selling, vending, her eggs-- not donating them, that's a misnomer I've already stated. Selling her eggs.

So \$16,000 kind of sounds like a good deal, right? When I first came to WSU, and the first semester I was teaching biomedical ethics, I was thinking about class. And literally right before class-- because I had read other accounts elsewhere-- I started to wonder whether there was any difference between the kind of money you could make selling WSU eggs, or what I've referred to as "Coug eggs," and the kind of money that women at Stanford could make selling their eggs.

And as it turns out, there's an interesting disparity, right. WSU eggs are worth up to \$16,000. Stanford eggs-- a similar ad, not the same company, but essentially the same kind of ad-- Stanford eggs are worth \$25,000 to do the very same thing.

So, this is to say that on the egg market, there's a big difference-- \$9,000 difference-- between WSU eggs, or Cougar eggs, and Stanford eggs. And you might think, well, what's the deal? I mean, it's not like the women at Stanford would be doing anything different from what I would be doing as a WSU student. How do you explain this difference?

So as it turns out, there's been a decent amount of research that's been done. And that research is showing that the leading determiner-- not the only determiner, but the leading determiner-- of the value of a woman's "donated" eggs-- really sold-- is basically her SAT score. In other words, the higher your SAT score, the more money you can get for your eggs on the open market.

Now there's an irony. I know, Marina, I see that you've typed "nature versus nurture," right. And so, you're right. There's a huge irony in this.

As it turns out, geneticists now understand that DNA-- your genetic makeup-- contributes much less than the typical person off street might think to your actual intelligence, to your actual SAT score. A person who receives a modest genetic inheritance but studies hard can score higher on an SAT or some other standardized test than a person who got a great genetic inheritance but is lazy and never used it, right. So there are definitely both genetic and environmental factors going on.

And the fact that people are willing to pay more for Stanford eggs than Cougar eggs, probably reflects the fallacy of genetic determinism. They've assumed, erroneously-- we know this-- that the genetics is going to determine how intelligent the child would be that they would have using this egg. And so, there's an irony in the fact that the whole practice is predicated on overestimating the significance of genetics and underestimating the significance of environment, and parental upbringing, and all that kind of stuff.

But nonetheless, even with that error being noted ironically, there is still the fact, which I think is pretty interesting, that Stanford eggs, or the women who donate their eggs, are perceived to be more valuable in the market than WSU women and the eggs that they might donate or vend, really. And so this leads us to what I refer to as the "ethics of perception."

OK, so you look at a person. Here's Megan Fox. Marina, this works a lot better with a more male-dominated audience. But there's Megan Fox from one of her movies. I think it's in Transformers.

And if you hadn't already figured it out, the first thought in most guys' minds when they see that picture is not, oh cool, she's a mechanic. In other words, when they perceive what's going on-- she's under the hood of a car. And so, if it were a male under the hood of a car, you might think, oh, he seems to know what he's doing. He's fixing cars.

But that's not the first thing that most men see when they look at a picture of Megan Fox like that, right. They're not thinking, oh cool, she's a mechanic. They're attracted to something else.

They're perceiving her in light-- I mean, in this case, it's a somewhat sexually provocative picture. She's got a lot of skin showing. She's bent over in a way that is maybe enticing. And she's got an alluring look on her face, right. So what does the typical male see in that picture? Well, they don't see, ooh, this is someone who can help me fix my car. They see a potential sexual partner or something like that.

And so, the question of, does it matter how I perceive you, is sort of getting at these issues, right. So many women are concerned about being objectified in the way that Megan Fox is being objectified in this picture. I mean, I feel a little guilty even having the picture in. But I think it makes the point pretty well that many people are going to look at a picture like this and immediately objectify her, make her a sex object. They're not at all interested in her mechanical skills. They don't care that she can fix that car. All they care about is the prospect of having sex with her or something like that.

And so, this is what I have in mind. I mean, this is sort of an entree into the ethics of perception. So here's a quote. Marina, you'll get to read this whole article later on in the course. But Elizabeth Anderson wrote an article called "Is Women's Labor a Commodity?" And she was thinking about surrogate motherhood, which is where one woman will actually gestate and give birth to a child, and then give that child up, essentially for adoption, to another couple.

And so, in the context of thinking about surrogate motherhood, she says this. She says that "To say something is properly regarded as a commodity--" Yes, Juno is a good example of this. "To say that something is properly regarded as a commodity is to claim that the norms of the market are appropriate for regulating production, exchange, and enjoyment." So in other words, if I say it's proper to regard cellphones or automobiles as commodities, I'm saying that it's fine for the norms of the market to regulate the production, exchange, and enjoyment of those things.

But what about women's bodies? Are they the sort of thing that should be placed on the market in the way that that picture from the previous slide sort of invites the leering observer to do? So, "The ideals which specify how one should value certain things are supported by a conception of human flourishing."

And then she says this. This is the kicker line, right. She says, "To fail to value things appropriately is to embody in one's life an inferior conception of human flourishing."

So in other words, what she's saying is, if you commodify things which should not be commodified, this is going to undermine your ability to flourish as a human being. It's perfectly fine to commodify those things that are appropriately placed on the market. But if you try to commodify things that should not be placed on the market, well, then you, in Anderson's view, run into trouble. Because she thinks that our flourishing depends on perceiving people in the right sort of way and relating to them and the right sort of way. So if you relate to Megan Fox only in terms of her sexual attractiveness, you kind of reduce her to something considerably less than who and what she actually is.

And so, there's a similar sort of concern that could be going on when women attempt to sell their eggs on the market, and when those eggs have a different market value placed on them, which is based on the perceived value of the woman-- the intellectual value or whatever of the woman who has donated the eggs. And so, to real quickly sort of lay of the terms of how this would go, we have to distinguish between things that are instrumentally valuable, right. So here's my glove. This is instrumentally valuable when it's cold out. And I'm going to ride my bike home later tonight, because it keeps my hands warm.

But a person is not instrumentally valuable. In other words, the value of a person is not just that they are useful to someone else. Rather, a person has intrinsic value. They're valuable in and of themselves. And their value goes well beyond the fact that other people might find value in them. So however much you may value me as a biomedical ethics teacher, if you do more than just value me instrumentally, as you should, this would be to value me as having intrinsic value.

So, to say that I have intrinsic value is to say that my value goes beyond my value to you, or my usefulness to you. And that's kind of the concern that's at play here, right. I mean, the worry is that when a woman is valued for her SAT score or for the fact that she has certain athletic or artistic abilities, and those are what parents seeking an egg want, in that context she's being valued instrumentally but not intrinsically.

And again, to go back to Anderson, "To fail to value something appropriately is to embody in one's life an inferior conception of human flourishing." So when we make that distinction, we can sort of get going on the train of thought that suggests that the way to properly value people is intrinsically. And that means that we can't necessarily place them on the market and say that they have value according to their usefulness to us, as couples do when they say that they're willing to pay more for Stanford eggs than they are for WSU eggs, for Coug eggs, right.

And so, a libertarian would say, well, you know, really, as long as there is consent involved, anything-- anything-- can have market value, even people, even sexual relationships. So many libertarians, for instance, would say that prostitution should be legal. And they would try to argue that it's ethical because they think, as long as it's consensual, as long as the woman who's serving as a prostitute gives consent, well then, there's nothing wrong with this, right.

But if a libertarian really thinks about what it is about relationships that makes them valuable-- so for instance, if they really came to appreciate what a relationship with intimacy is about, they would recognize that-- I forget it it's the Beatles or another old rock and roll band that they have a song, "Can't Buy Me Love." I'm sure it's the Beatles. And then there was a movie made. I think it was back in the '80s that this movie was made. It's pretty cheesy today. But the movie, *Can't Buy Me Love*, really gets at just the issue, right.

If someone were to try to come up to you and say, how much money do I have to pay you in order for you to be my boyfriend or girlfriend or whatever? They really don't understand the nature of that kind of relationship. If they think it's the sort of thing that if you just pay a person enough money, they could do it for you, right. Because there's a huge difference between

someone who's just doing it for the money and someone who actually does love and care about the person they're in a relationship with.

And to the extent that libertarians think that those kinds of relationships-- relationships of intimacy and friendship-- are an important part of the world flourishing. They have reason to care about expressive value. They have reason to care about what it expresses about another person if you say, I'm willing to buy your services on the open market.

So I mean, that's a brief argument. But it gives you a sense for why I think even libertarians should care about this issue of expressive value. What is expressed by the way that we value a person's gametes or other attributes that they have? And as I've already said-- and I kind of got ahead of myself a little bit-- but our flourishing is, in large part, dependent on having at least some of these kinds of relationships. And to the extent that that's the case, we have reason to be concerned about practices that fail to properly value people for their intrinsic value, and instead try to give them only an instrumental value.

So the test case here would be would be the well-concealed sexist. Imagine a person who is a sexist. He thinks that women are inferior to men. But he's also really tricky about it. He never lets on that this is the case. He never discloses his views, at least not among women.

So when he walks through life and looks at women, he views them in sort of diminishing terms. He looks at them as being inferior to him because they're women. Does it matter that he doesn't reveal this to the women that he talks with and maybe even enters into relationships with? Well, I want to say, I think it does matter. I think that the kind of relationship that he could have with a woman, given his sexist perceptions and his sexist views about women, is very different from the kind of relationship that a person could have who is happy to think of men and women as being equal, as having equal moral status, and not having any kind of sexist views that sees women as inferior in one way or another to men. And so, even a well-concealed sexist will suffer for his failure to properly perceive the value of the women around him.

So I mean, if the concern about expressive value makes sense in a case like this, then it definitely can make sense in some of these other cases. And of course, the most obvious sort of case, as I've already alluded to, is the gamete market. And these eggs that are bought and sold on this market are used typically in in vitro fertilization or artificial insemination, and then implantation into a surrogate mother, or something like that. So people are actually trying to have children using a practice that essentially reduces the women who are the source of the eggs to their market value.

Which is to say, the women are reduced to the value that they have as sources of intelligent children in the future, or something like that. Which is to say, that it seems like a practice like this, from my perspective, fails to properly perceive the value of the woman from whom the eggs come and also expresses a sort of dismissive or diminished value to these women, by suggesting that their value to the parents or to the hopeful couple is according to what kind of prospects they'll have for giving the couple an intelligent child, or an athletic child, or a child

with blue eyes and brown hair if that's what the couple is looking for. All of these are the kinds of things that couples can sometimes be seeking when they seek to buy gametes on the market.

All right. Actually, let me stop there. There are a few other things we could talk about. But, Marina, do you have any questions? So I'm looking at the chat box. And if you want to type anything in about any of the issues that I've raised, we could do that. So you're saying, not as of yet.

And then, I can just point to just a few other places where commodification of human tissues is sort of going on. So up until recently, there was actually an organization right down on Main Street, in Pullman, called Bio-Medics. And WSU students would pretty regularly go down there to sell blood plasma. So you may ask, well, what's that about? Right. And there are a few different issues.

Interestingly enough, there's a gentleman who's an anthropologist named Richard Titmuss. And he wrote a book, *The Gift Exchange*, that's the name of the book. And in this book, he argued that if people sell things, like blood, or blood plasma, or any other organs, he argued that this was actually decreasing the safety of the organ market. In fact, he showed-- he actually had evidence that when, in the earlier part of the 20th century, organizations started paying for blood donations, the rate of hepatitis in the donor blood pool actually went up. So then it was, the blood pool became less safe when it was on a market.

And so he argued, successfully, that there should be laws in place that basically prohibited the sale of any human tissue products. And this was debated in Congress. And eventually laws were passed that required that organs be donated only. That there could be no sale of an organ.

And so, there's kind of an odd juxtaposition, right. I mean, now WSU students were going down and actually making money donating-- again, the word "donor" is inappropriate here-- blood plasma. And so, one attempts to explain the difference between laws prohibiting the sale of blood and organs and the law allowing the sale of blood plasma. Because we could say that when the laws were passed, some of the people who are creating laws argue that since blood plasma is so readily renewed in the body, that it doesn't make sense to think of this as having anything like the kind of specialness or the preciousness of organs. And so, they tried to argue.

Now, I don't think that these arguments necessarily get at what one of Titmuss's most important concerns, which was actually that this is decreasing the safety. When people are motivated by money, they're willing to sell their blood or blood plasma even if they know it's not safe, because they're mostly out to make money. Titmuss's argument-- the other part of his argument was, if people donate these things, they do so for altruist reasons. They would have no reason to try to altruistically donate blood if they knew their blood was dangerous, so if they knew, for instance, that they had hepatitis.

But part of the justification is that blood plasma renews quickly. And the other part of the justification is that the compensation is for the time and effort of giving blood plasma, and not necessarily for the value of the plasma itself. And so, that was kind of part of the justification that was given for making an exception.

I'm not so sure that that's a legitimate sort of argument. I'm not sure if that really makes the case that blood plasma should be treated differently from other organs. But I had some people ask these questions about why is it that you can't sell organs, but you can sell blood plasma. And so, I did some research. And that's sort of roughly the story that I came up with.

OK, so I see that we've come up on 7:00. So I feel like I should let you go. Marina, again, I appreciate you participating. And as I said earlier, if you want to ask more questions, I'd be more than happy to talk with you. I'm grateful for your interest.