

## Episode 5: Fair's Fair

**Val Moyer:** we're kind of focusing once again on gender and sex as this place where unfair advantage happens and kind of exclusively looking at trans girls as holding unfair advantage, but we're not talking about all of these other forms of unfair advantage that are more like baked into our society as a whole.

**Sara Gras:** I'm Sara Gras and this is Season 1 of Hearsay from the Sidelines, a show about the place where law, sports and culture intersect brought to you by Culture in Sports and Seton Hall Law School's Gaming, Hospitality, Entertainment and Sports Law program. This is Episode 5: Fair's Fair. If you've been listening to the show from the beginning, you may remember that many of the laws targeting trans athletes in scholastic sports that I talked about in Episode 2 had names like, "Fairness in Women's Sports," or "Protection of Women and Girls in Sports." These are part of the narrative that athletes identified as male at birth have an unfair athletic advantage over athletes assigned female at birth. This argument is not new – as Prof. Dara Purvis highlighted in Episode 2, the same one was made more than 40 years ago when a boy wanted to join a girls soccer team and girls wanted to play Little League. But the fact that courts then weren't buying it hasn't stopped anyone from resurrecting the argument to justify the exclusion of trans athletes. This doesn't exactly surprise me – so many people, both male and female, seem to simply accept the relationship between sex-based biological difference and athletic performance as immutable fact. And that's what this episode is about – what's the basis of this argument? Is there any real evidence that the inclusion of transgender athletes compromises fairness in sports? Even if there is some physical advantage, does it translate to some sort of tangible special benefit at the expense of cis women and girls?

There are plenty of studies and data points cited – in the court filings and state bills, in the media, by special interest groups – so some might say, yes, absolutely. A male body, particularly one that has gone through puberty, is so physically different from the female body that allowing trans girls to play against cis girls would be fundamentally unfair and deprive them of the benefits of sports. But this is such an oversimplification, both of fairness in athletics and of biology. Much of the Hastings Center Report, "Examining the Ethics and Impacts of Laws Restricting Transgender Youth-Athlete Participation," that Val Moyer co-authored critically examines the claim that trans exclusion protects fair competition.<sup>1</sup> I asked Val to talk more about this question of fairness as it was addressed in the article, starting with the issue of physical advantage that so many people seem to believe science unambiguously establishes.

**Val Moyer:** There's a lot of complexity and research that is going into this question. But it's also it's very unclear right now and there is not a clear consensus that trans women and again, all these studies have been done with adults, have or retain an athletic advantage. So science does not unambiguously support the sex-based criteria. Even when we talk about hormone levels, which particularly are often used as a metric at the elite level, even that is not well grounded in science. And there is a huge assumption that someone who is assigned male at birth will always outcompete someone who's assigned female at birth. And we tend to think of athletic capacity as this like polar opposites between male and female assigned bodies. But that's not the case. So even when we look at that elite level, the performance gap between male and female athletes is something like 10 to 12%. So yeah, that's a significant gap when you're looking at exact times at the Olympics or whatever. But that also tells us that there is a huge overlap in

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<sup>1</sup> Valerie Moyer, et. al., *Examining the Ethics and Impacts of Laws Restricting Transgender Youth-Athlete Participation*, HASTINGS CTR. REP. 6 (May-June 2023), <https://doi.org/10.1002/hast.1484>.

athletic performances among just different, differently sexed bodies, right? And so I think it's also important just to note that sex itself is a spectrum. So people have intersex traits that don't neatly fit into the male and female categories. But even beyond those kind of what we think of as sex characteristics, height, body type, all of those things are really variable. And they don't always compute with athletic performance, right? So there's sort of like these body composition things about hormones and height and oxygen capacity. But that doesn't always translate exactly to athletic advantage in any given sport, especially when we're talking about youth where they might be trying out sports for the first time. There's room for a ton of improvement or they might have a huge growth spurt in one year. So really when we try to entrench these sex differences. I think it especially falls apart in youth sports where there's just a huge range of bodies to begin with and athletic ability on top of that. So I think we need to really think carefully about what that means and what sex eligibility does in these spaces.

**Sara Gras:** One issue Val raises that I thought was really critical to highlight is that the entire notion of sex as a biological binary with men and all their manly attributes on one end and women with all their feminine attributes on the other end is just not supported by science. I was fortunate to be connected with Professor Maayan Sudai by a colleague to help me make sense of how biological difference informs this debate. Maayan is an Assistant Professor of Law and of Women and Gender Studies at the University of Haifa, as well as a Director of a Team at Harvard's GenderSci Lab and occupies a unique space that is especially relevant to this project. She researches and writes on how the interplay between legal and scientific conceptions of sex and gender shape the creation of law and policy.

**Maayan Sudai:** We're used to say that males have XY chromosomes and females have XX chromosomes. And the Y chromosome is really important. We know that it's important and necessary for the development of testes, which is a strong indication of biological maleness and creating the hormones that testosterone needed to masculinize a body. And so this idea that developed in the 60s and 70s was that the Y chromosome is the seed of maleness. You know, throughout the end of the 20th century, in the 1990s, it was discovered that it's not just the Y chromosome, but a certain gene called the SRY gene that is usually found on the Y chromosome. And that gene was the gene that was considered as responsible for the development of testes, they called it like a master switch. So the existence of this SRY gene on the Y chromosome was the determining factor of whether the fetus would develop as male or female. So this was the theory that was also very popular in, you know, culture, in our culture. But this theory is at this point somewhat outdated because it was discovered that recent studies in genetics discovered that it's not just that the SRY gene is responsible for the development of testes, is that it's actually working and interacting with other important genes, at least 25 other genes that are not located on the Y chromosome. These genes also influence the development of you know, reproductive organs such as ovaries and testes and the anatomic or morphology of genitals. And so it was further discovered that fragments of the Y chromosome, including the SRY gene, were also found in XX females. So this is to say that the SRY gene can also appear in, you know, not on the Y chromosome.

And these XX females actually develop male anatomy. I'm not gonna go into the exact, you know, different syndromes that there are, but there are many that also, you know, regardless of the SRY gene can also present genetic makeup that diverts from the XX, XY dimorphism. So for example, there is XXY or a syndrome with a missing X chromosome, these conditions are usually tested prenatally. But I'm kind of making trying to make the point that genes are not a clear-cut definition that determines biological sex. It's really a complex choreography between several genes that operate in a balance, and it means that biological maleness or femaleness cannot be associated with a certain chromosome or the

existence of a certain gene. Now here's how it affects genitals. You know the genetic makeup usually determines how the gonads will develop and gonads produce hormones, the hormones either masculinize or virilize the body and the development of genitals. It's quite a complex process which I'm really simplifying now to you, but you can imagine that when things don't always occur the way we expect it to, it causes differences of sex development. And with regard to the question how often does it happen, of course there's a dispute between two poles of the discussion and it really depends on how you define differences of sex development. But I can say that researchers from Brown University found that about 1.7% of all life births did not conform to the ideal of absolute sex, which what is this absolute sex ideal? It means matching quote unquote gonads, chromosomes, and genitals, which means having XX with ovaries and vagina versus having it XY with testes and penises. So 1.7 of all births sort of divert from that absolute sex ideal.

**Sara Gras:** What this tells us, then, is that external appearance, genetic testing, and all the ways babies are assigned sex at birth is not entirely dispositive – there are far more deviations from what is considered standard than most people realize. Neuroscience has also evolved and Maayan points out that it is no longer generally accepted that expressions of gender, both consonant and inconsonant to sex assigned at birth, can be ascribed to particular brain structure or chemistry.

**Maayan Sudai:** We have this idea or this ideal maybe that boys and girls are wired differently. This is the metaphor that's commonly used. If you look at the medical history of this idea, it started with kind of experiments on rats in the 1960s, that these rats were injected with sex hormones and their behavior was, you know, observed in the lab. And what the scientists then noticed was that exposure to sex hormones doing fetal development influences gender expression in areas of sexuality, cognition, temperament, mental health, etc. So this kind of ignited the theory and idea of male brain and female brains and that exposure to sex hormones in the pre-natal phase really influences the way gender expression, they called it brain organization but they actually meant gender expression, people behave, their interests, what they like, the toys that they prefer, the colors they prefer, and so forth and so forth. So there are two very prominent, brilliant researchers that I want to highlight in that context. One is Dr. Rebecca Jordan Young, and the other is Dr. Daphna Joel. Both are actually coming from different academic backgrounds and disciplines, but both, kind of showing their own weaknesses that this theory has, evidentiary weaknesses and I would say empirical weaknesses of this theory. I'll explain a little bit about what Joel shows. So Joel actually goes through scans, brain scans of hundreds of people. And that examined...she examined these documented differences between what was assumed to be male brains and female brains. And what she showed in her analysis was that brains that she compared did not comprise a valid scientific distinction between males and females, and that brains were vastly heterogeneous in their characteristics and this is how she developed a new theory called the brain mosaic showing that these distinctions between male and female brains are really hard to justify.

**Sara Gras:** To be clear, Joel's research should not be interpreted to mean that gender identity or expression is not innate or that it is some a choice that individuals make – it's just that there doesn't appear to be anything physically observable within the brain as an organ that causes it. What Maayan takes away from this science is that we shouldn't get hung up on where these aspects of our identities originate from a legal standpoint – and that we should ask why it even matters.

**Maayan Sudai:** Right, so you're basically asking me the nature-nurture question, whether I think there's a biological origin or not. I think that there might be, but it's probably so elusive and complex and it's

comprised of a very intricate and idiosyncratic interaction between these factors that it's definitely non-predictable. If it's not predictable and it's...you know, somewhere along the terrain of between choice and faith. So why are we occupying ourselves so much with that question? I have stopped asking this question long ago, and I'm just really, I have, you know, red lights when I see people overly relying on one theory or the other. I'm always, you know, just leaving a question mark at the end of the sentence and leaving room for the possibility that we may never know and also it's not maybe that important.

**Sara Gras:** But if the results of scientific studies are viewed in isolation or interpreted by those who don't really understand the broader implications, their findings can be misapplied. Maayan co-authored a piece published in 2022 that addresses the issues that arise when scientific studies are used to inform policies and lawmaking.<sup>2</sup> We discussed how the same ideas about testosterone and performance being used to justify trans exclusion now have already been used to justify excluding cis women who deviate from what is considered average or standard biologically.

**Maayan Sudai:** I'll talk about the science that supports these exclusionary decisions gladly. But it would need for me, I would need to go back to two famous cases that happened in the last previous years of two athletes, female athletes.

One is Castor Semanya and the other is Dutee Chand. These were like top athletes, runners that won medals in international competitions, athletic competitions. And both of them challenged the testosterone rule, what I called in that paper the testosterone rule, which was at the time, you know, people, females with higher testosterone levels, higher than 10 animals cannot compete in the female competitions and that basically excluded them from competing and they challenged this rule in the court of arbitration, which you call CAS. So what CAS asked the IAAF, which is the World Athletics Governing Body, was to provide sufficient convincing empirical evidence that endogenous testosterone levels do provide a competitive advantage in sports and athletics, which they did not have at the time. At the time that the case was discussed, they had mostly cases or evidence about exogenous testosterone and how testosterone taking externally can improve athletic advantage, but not testosterone that was produced naturally. So the IAAF had two years to kind of find the evidence and they initiated a big study that looked over more than 2,000 athletes in track and field competitions and they tried proving this relationship between high testosterone levels and success in athletic performance and competitions.

Um... They...divided the athletes to three groups, tertiles with a group of testosterone levels in their blood. And they found that in five events, which was 400 meters running, 400 meter hurdles, 800 meters running, hammer throw and pole vault, they found what they called to be significant advantage to the group of female athletes with a higher testosterone levels. How significant? The margins were 2.73%, 2.78%, 1.78%, 4.53%, and 2.73% respectively. So I'll give you a little context. The agreed gap in performance between males and females is about 10 to 12%. So that explains perhaps like a fifth, slightly more in one case. And the study concluded that this proves that females with high testosterone levels enjoy a significant competitive advantage in these events, which I repeat is just like five events.

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<sup>2</sup> Maayan Sudai et al., *Law, Policy, Biology, and Sex: Critical Issues for Researchers*, 376 SCIENCE 802 (May 2022), available at [https://www.science.org/doi/10.1126/science.abo1102?url\\_ver=Z39.88-2003&rfr\\_id=ori:rid:crossref.org&rfr\\_dat=cr\\_pub%20%20pubmed](https://www.science.org/doi/10.1126/science.abo1102?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%20pubmed)

Here's the thing with science, results often need to be interpreted, and when results don't point to a clear direction or conclusion, then interpretation and rulemaking becomes more complicated and becomes more dependent. The caste decision at the time that required the IAAF to produce evidence accepted these evidence and upheld the rule and reinstated the testosterone rule which was made even more harsh. Instead of 10 nanomoles, it was now 5 nanomoles. So if you have a female athlete that has above 5 nanomoles, you can't compete in the female international competitions. However, just recently, I think it was a month ago, a very important other court, which was the European Court of Human Rights, discussed the Caster Semenya case, which brought her case in this human rights court and the chamber found that Semenya had been discriminated and that her right to privacy had been violated and on the scientific basis they thought that they called the scientific reliance here or the scientific evidence was sparse, right? That it does not, the evidence that we have do not provide the empirical validity needed to uphold this rule. And so you see how different courts arrive at different conclusions about the same evidence. In one case it upholds the rule, in the other case it's not enough. And so what I'm getting here is that while I do think that data and evidence and science is important and science should be, no, data and evidence should be sought after, I'm not saying it's irrelevant or out of the question or not helpful, but we also should always examine and consume them with a critical eye, interpret them very carefully, be aware of these overgeneralizations and jumping to these broad conclusions, and just keeping them with a grain of salt. Always be sensitive to context. I'm saying that about every consumption of scientific knowledge in law and policymaking, but specifically and very importantly in areas which are politically and culturally contested. And so I think that the fact that courts make different decisions also expose or highlight the fact that there are so many non-biological, non-scientific, non-factual considerations that also play out in this discussion very importantly. Like the other stuff that we care about, they're also part of our consideration, which is fairness and questions about inclusion, about respect to people, about opportunities about the purpose of sports and all these other considerations which are very important as well.

**Maayan Sudai:** So I talked mostly about the science about, you know, female athletes with DSD, so females with higher testosterone levels. This somewhat overlaps with questions about trans athletes, although trans athletes, like female athletes, have to be monitored. Their testosterone levels are monitored and lowered to a certain level, which also, you know, really affects badly on their performance. Do we know how much it affects badly on their performance? I mean, there are some studies, but the study and the scientific knowledge in this area of transport is quite limited. I don't know of any solid study that shows to a certain conclusion.

What we usually hear is anecdotal, about anecdotal cases of very successful trans athletes. You know, whether it's Leah Thomas or Laurel Hubbard, you get these names and, you know, occasional scandals in the media about how female athletes overpower and dominate, you know, cisgender female athletes. But I haven't seen this, again, proven scientifically in a convincing way. I'm not closing the door on the option that could be proven, but the way it's being handled now from the knowledge that I'm trying to gather in this topic, I don't know of any such convincing studies or any like-serious report that shows evidence to that direction.

**Sara Gras:** As Maayan highlights, there is virtually no substantial research on trans athletes, particularly youth athletes. But many of the state bills I talked about in Episode 2 cite biological "facts" to support the need for exclusionary legislation from the same articles, so I thought it might make sense to take a closer look at these.

I'll start with the one I find most absurd which is a piece by Neel Burton called, *The Battle of the Sexes*, from Psychology Today's website.<sup>3</sup> First of all, this is not even an article – it's a blog post, a one-page listicle written by a psychologist/philosopher that compares human men and women for the benefit of an alien arriving on earth and attempting to determine the superior sex. The author states that:

Men are physically stronger than women, who have, on average, less total muscle mass, both in absolute terms and relative to total body mass. The greater muscle mass of men is the result of testosterone-induced muscular hypertrophy. Men also have denser, stronger bones, tendons, and ligaments.

But he also concludes that the alien would likely “find that biological advantages and disadvantages are more or less equally distributed between the sexes.” There are no sources cited in this piece and I doubt even a middle-schooler would categorize it as scientific research.

The second is a New York Times article from 2008 called, *Men, Women and Speed. 2 Words: Got Testosterone?*<sup>4</sup> The premise of this article, which, again, is a popular media piece that mentions but does not cite any specific studies, is that female athletes, despite the benefits of “more experience, better training and stronger coaching,” have not closed the performance gap with male athletes, at least not in sports like cycling, running, and swimming. The reason, according to the doctors and researchers quoted in the piece is testosterone which disadvantages women with more body fat, lower red blood cell production, and a lower proportion of Type 2 muscle fibers. According to Dr. Benjamin Levine, these add up to “biological factors that cannot be overcome,” through training, talent, and competitive drive. This argument appears to be supported by an actual academic article, *Women and Men in Sport Performance: The Gender Gap Has Not Evolved Since 1983*, published in the Journal of Sports Science & Medicine in 2010 and also cited in some of the bills.<sup>5</sup> Researchers for this article did not do any actual independent research – they utilized a data set that included 82 events from five Olympic disciplines: track, swimming, speed skating, track cycling and weightlifting, and compared world records and best performance in each. I could spend a lot of time diving deeply into the numbers here – or I could point out the obvious problem with applying this research to kids playing sports in school. These kids are not elite athletes. They are kids – playing sports with their peers for fun, for excitement, for socialization. They are all different sizes at varying levels of development and are likely far more heterogeneous in their makeup, on average, than the top athletes in any sport. As for the all-powerful testosterone, as Maayan highlights, even courts have disagreed on the science here. For a much deeper dive into the work of scholars who focus explicitly on what is science and what is simply cultural belief about testosterone, I highly recommend the book, *Testosterone*, by Dr. Katrina Karkazis and Dr. Rebecca Jordan-Young.<sup>6</sup> As they highlight in a New York Times opinion piece summarizing some of the key points from the book, “complex patterns of mixed, positive and negative relationships with testosterone are

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<sup>3</sup> Neel Burton, *The Battle of the Sexes*, PSYCH. TODAY: HIDE AND SEEK BLOG (July 2, 2012), <https://www.psychologytoday.com/us/blog/hide-and-peek/201207/the-battle-the-sexes>.

<sup>4</sup> Gina Kolata, *Men, Women and Speed. 2 Words: Got Testosterone?*, N.Y. TIMES, (Aug. 22, 2008), available at <https://www.nytimes.com/2008/08/22/news/22iht-22testosterone.15533354.html>.

<sup>5</sup> Valerie Thibault et al., *Women and Men in Sport Performance: The Gender Gap Has Not Evolved Since 1983*, 9 J. SPORTS SCI. MED. 214 (2010), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3761733/>

<sup>6</sup> KATRINA KARKAZIS AND REBECCA M. JORDAN-YOUNG, TESTOSTERONE: AN UNAUTHORIZED BIOGRAPHY (2019).

found throughout the literature,” and do not correlate with superior performance, even in track and field.<sup>7</sup>

Another source cited both in the bills and in other legal scholarship that I want to mention is Doriane Lambelet Coleman and Wickliffe Shreve’s piece, *Comparing Athletic Performances: The Best Elite Women to Boys and Men*, that appears on the Duke Law Center for Sports Law and Policy’s website.<sup>8</sup> Using data from the International Association of Athletics Federation (now called World Athletics) website, the authors compare top women’s results to the boys’ and men’s results across multiple standard track and field events. This side-by-side data appears to show that even boys under 18 are outperforming top female track and field athletes. The authors don’t describe their exact methodology, so rather than try to recreate it, I took my own look at the data. I pulled the top 100 scores for U.S. women and men in the under 20 category (ages 18 and 19) for 2023 in the 100m outdoor event. When viewing the data in a spreadsheet, I noticed a couple things. First, some athletes appeared in the list multiple times because they had times submitted from different meets. Second, these times were obtained across multiple meets throughout the season – so different conditions, different timing. Finally, when I pulled the 100m times for men under 18, there were only 56 total entries, 40 for different individuals in 2023. The top U20 womens time was 10.89 seconds - the U20 mens time was 10.06 and the U18 time was ALSO 10.06 - because the athlete listed as first, Christian Miller, was the same. If you remove Christian Miller from the U18 category, the best time was 10.22. I also averaged the top 10 times in each category after removing all duplicate athletes, leaving only their best times. I counted Christian in both categories for this stat – and yes, the top 10 males under 18 DID have better average times than the top 10 females by about .8 seconds – 10.4 vs. 11.25 seconds. But when I averaged the bottom 10 from each category, that gap closed considerably to .42 seconds with U18 men averaging 11.27 and U20 women averaging 11.69. Are the mens times still faster? Yeah – a bit. But these times are snapshots of a handful of athletes based on their best performance. Athletes are not machines – their performance varies across time and location, based on countless variables. Let’s take 2020 Olympic Gold Medalist, Elaine Thompson-Herah. She won the 100m at the Tokyo games with a time of 10.61. But the day before at the same Games, she ran it in 10.82. Less than a month prior, she ran it in 11.03.<sup>9</sup> That’s also a gap of .42 seconds. So when Coleman and Shreve assert that “this differential [between male and female performance] isn’t the result of boys and men having a male identity, more resources, better training, or superior discipline. It’s because they have an androgenized body,” I find that a bit hard to swallow.

One of the scholarly sources cited in the exclusionary legislation that focuses on transgender athletes specifically is an article by Joanna Harper that appears in the *Journal of Sporting Cultures and Identities*.<sup>10</sup> This article, also linked from the Duke Law Center for Sports Law and Policy’s website, summarizes the results of a very limited study on transgender women runners that compared their times prior to and following treatment that suppressed their testosterone production. Harper found

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<sup>7</sup> Katrina Karkazis and Rebecca M. Jordan-Young, *The Myth of Testosterone*, N.Y. TIMES, (May 3, 2019), available at <https://www.nytimes.com/2019/05/03/opinion/testosterone-caster-semenya.html>.

<sup>8</sup> <https://law.duke.edu/sports/sex-sport/comparative-athletic-performance>

<sup>9</sup> All times come from World Athletics, available at <https://worldathletics.org/athletes/jamaica/elaine-thompson-herah-14285956>.

<sup>10</sup> Joanna Harper, *Race Times for Transgender Athletes*, 6 J. SPORTING CULTURES IDENTITIES 1 (2015), [https://cgscholar.com/bookstore/works/race-times-for-transgender-athletes?category\\_id=cgrn](https://cgscholar.com/bookstore/works/race-times-for-transgender-athletes?category_id=cgrn).

that all eight runners had much slower race times after medical transition.<sup>11</sup> When an age grading formula was applied to their times, virtually all had scores after transition comparable to their scores prior. So what does this tell us? It's hard to generalize a study with only eight participants and limited to the sport of outdoor distance running. It could be interpreted as suggesting hormone suppression may effectively level the playing field for trans women in the sport – but it's certainly not conclusive. More importantly, as the author states, she makes "no claims as to the equality of performances, pre and post gender transition, in any other sport."<sup>12</sup> But that's the problem – not only has it been used for that purpose, it has also been cited to support the assertion that younger trans girls who may not be able to access hormone suppression treatments, absolutely cannot fairly play with cis girls.

**Maayan Sudai:** Yeah, so it's like the politics of inferences, right? You don't have, usually you won't have a scientific study talking about exactly what you wanna find. So you have to draw from other studies. And this is where the critical margin or critical space that you have to maintain. Like if you wanna examine how trans, female trans athletes perform in sports, then you know, you would sometimes see that people go to studies that talk about, you know, athletic differences between males and females. So comparing, you know, biological males to female trans athletes, right? So that's the inference that they're making in order to make the point that people born as biological males have advantages and so forth and so forth. But that's not just inappropriate, that's just wrong.

**Sara Gras:** Hormones are not the only complex dimension of athletic performance. Val and her co-authors also addressed an aspect of sports in their article that gets talked about much less frequently in the debate about fairness which is privilege and class advantage.

**Val Moyer:** Yeah, so I think there's been a lot of great critiques of fairness from critical sports studies scholars. So seeing fairness not as a given, but as like this elusive ideal that may never really be able to be achieved even in sports. I think that's because there are certain types of advantage that we don't focus on, that we think...or that is not part of the discussion. And so that comes from things like having access to top-notch facilities in which to train. Does your school have a weight room for your sports? Things like that. Does your school have a swimming pool that you can access? But even beyond that, things like nutrition, I go to air quality. Do you have...can you safely move outside of your home? And so that's where we start to see class and race and geographic location come into this debate, in addition to things like gender and sexuality, where like if your local sports team, even at the youth level is like super homophobic, that's an access issue, right? That's an issue where you might not feel comfortable in that space. If the sport is super white, that might change who participates in it and feels comfortable participating in it. So those small like atmosphere sports culture things to like the big like do you have the structures that you need to participate in sports and keep getting better.

And so I didn't talk about this in the report, but I often use think of myself as an example. So I grew up in a suburb that was really outside of Washington, DC, and Virginia that was really designed around being able to walk and have access to pools and things like that for its residents. And, you know, it was pretty diverse, but at the same time, I did swim team every single summer, and my parents had the time to, you know, drive me to swim practice and go to all the meets. I played soccer, you know, classic suburban soccer leagues in the fall and the spring. And so what that means or what that translates to is

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<sup>11</sup> *Id.* at 4.

<sup>12</sup> *Id.* at 8.



by the time I get to high school, I have an endurance capacity, right? And so we start to see how those kind of structures that we think of as outward actually change your physical capacities as well and your athletic capacity. So I think those are the kinds of, when we talk about privilege and inequity and sports, that those kinds of advantages are not regulated. You can have a personal trainer to help you get really good at your sport and that might help you get to college, right?

And so when we, we're kind of focusing once again on gender and sex as this place where unfair advantage happens and kind of exclusively looking at trans girls as holding unfair advantage, but we're not talking about all of these other forms of unfair advantage that are more like baked into our society as a whole, and that might really drastically, you know, the percentages of advantage might drastically differ from someone who has access to sports from a young age versus someone who doesn't. And then I think it's important to keep, once we go to this like broad societal view, to also look at the very real day-to-day marginalization of trans kids who are trying to, you know, navigate school systems where they may or may not be accepted, feel comfortable in their bodies, and everyone's gender journey and trans experience is different but so it's not all that it's bad right but even in inclusive spaces I think it's important to keep those kind of broader systems of power in mind when we're talking about athletic advantage.

**Sara Gras:** The advantages afforded certain groups of students in accessing the many tangible benefits of interscholastic sports participation was highlighted in my conversation with performance coach and author Kirsten Jones, about the college recruiting process, something with which she has both personal and professional experience.

**Kirsten Jones:** So it was starting to get where they were recruiting them younger and younger and younger because there was this feeding frenzy of if we don't get the talent first, then we'll be last. But my joke is my 17 year old doesn't know what she wants for dinner tonight. How would she possibly know, or in the case 14 year old would know what they would wanna do for eight, 10 years later, right? So it got to be really, really crazy. So in 2017, the NCAA came out and said, you cannot recruit athletes before June 15<sup>th</sup> of their, summer before their junior year. So June 15th, you know, apparently there's, you know, people are waiting by their phones for their phone to ring and the best athletes will be taking numbers. And I mean, I've heard jokes of, well, we wait, we just see what all the calls that come in are. And then we decide, we prioritize who we're gonna call back. I mean, maybe that is happening for the top 1%, but essentially you can start reaching out to coaches. You can start going to camps at any age and you can email them and send them. You can go on and fill out their recruiting form. They just can't respond to you until you're eligible to be recruited. And then as soon as you're eligible to be recruited, they can start actively recruiting. I mean, they can respond by email, but they can't actively start picking up the phone and calling you. But of course that's happening. That's the official, right?

But...but they can talk to your club coach or they can talk to your high school coach. So there's the official version and then there's what's actually happening. It's still happening at, you know, you're seeing, again, I saw a girl the other day who's forgoing her senior year of high school and going straight to USC to play volleyball, which is pretty unheard of in women's, like that happens for men. You see that with basketball and those kinds of things. But now you're seeing that even for women where they're saying, oh, I'm gonna forego my senior year, which I'm not even sure how that worked out. That feels like you had planning in order to be able to graduate early, to be able to go to be eligible for college,

right? So that depends on your level and how good you are and your connections. I mean, a lot of it comes back to relationships.

**Sara Gras:** Established relationships with college coaches, club team coaches, sports camps. These are not advantages afforded to every student who wants to play sports. The kids Kirsten is referring to – they have parents who were college athletes or very professional high school coaches who have connections, they have the money to play on club teams and attend big name sports camps. They are not on equal ground with the majority of their peers. And even if their goal it ISN'T to get a scholarship or go pro, but just simply the opportunity to play in college, it's not a secret that coaches aren't recruiting athletes exclusively based on scores or times – they are building teams of students, considering how to foster a culture that is healthy and supportive for young athletes. So if an athlete loses a race, it doesn't mean they won't be recruited – their opportunity is not lost. While spots on college teams are certainly not available for everyone, they aren't as rare as professional opportunities – and they definitely aren't all going to the handful of trans girls who have gotten so much attention for performing well in their sports.

**Kirsten Jones:** So yes, and this is so fun for me when I have just gone through it twice with my sons getting recruited. So I've talked to probably, I don't know, over 50, 75 college basketball coaches, plus my connections through volleyball. And almost every coach will say, they're not looking at the score. And that's what most of the parents are obsessed with. We didn't win that game and now it means my kid's not gonna get recruited. They're either looking for athleticism. So you can watch a kid probably for five minutes and decide whether they're athletic enough or not. And then they're looking for a lot of the intangibles, their body language, their eye contact, their team, how good of a teammate are they? How, you know, what are their attitude? Are they coachable? Like, you know, I've talked to a few coaches that are like, in fact, I think I could mention his name, the Penn coach, basketball coach, he's amazing, Steve Donahue, and he told me a story of how he went and recruited this five-star kid. He would show up at the gym at 6 a.m. what they call open runs at prep schools and this five star and he was kind of giving half effort and he wasn't shaking his buddy's hands and he was getting out of the drill first and he goes and then you know by my third or fourth visit to go try to recruit this five star this kid next to him touching every line going up and high five and everybody asking you know what i could do coach getting feedback he's like i stopped recruiting the five star i started recruiting the one he goes the one i want is the one that I know every day in the gym is going to give me his best. And that's what I need to succeed, my culture to succeed, and for us to succeed as a team.

**Sara Gras:** If science doesn't give us simple answers and we acknowledge that success in athletics is about more than biology, where does that leave us in drawing eligibility lines? This is where the framework Professor Kim Yuracko suggests offers some clarity by keeping the focus on the benefits to the group rather than the individual athlete.

**Kim Yuracko:** The question when we come to the special benefits, we know they have to be distributed based on merit, but the question becomes what's the appropriate grouping? What are the appropriate eligibility categories to decide who wins? And that's really the core of this particular fight. The core of the particular fight going on right now is eligibility rules. And how do we draw the eligibility boundaries for the female, the female category. And that's where we've had a lot of sort of discussion, a kind of argument and rhetoric around sort of fairness, sort of what are the, where are the fair places to draw the lines. And I don't think that discussion thus far has been super useful. I don't think it's been really

fruitful. So I think when we say we have to focus on eligibility categories, what's the appropriate eligibility category to then determine merit? It's important then to think about, well, what is this female category meant to be doing? So we're trying to figure out how to draw eligibility lines. There's been all this sort of rhetoric about what's fair and what's not fair, but we only can figure out what's fair and what's not fair if we kind of know what that category is meant to do.

I do think it makes sense to think about the female category as an ability proxy category. That is, I do think that the reason why we separate out the female category from a unisex category is it is meant to be a proxy for a level of ability that is different from the men's category and really in most cases inferior to a group that is going to lose at least the elite in the men's category. So if we think about it as an ability category, that gets us a little bit, gets us to help a little bit. But then we're still faced with a really hard question of is there any sort of real kind of plausible convincing way to say that eligibility lines need to be drawn sort of here instead of here, like sort of in one place versus another and is one more fair than another. And I think this is where a lot of the sort of the debate has kind of gotten bogged down. That is, those arguing for inclusion, I think say sort of rightly, there are a lot of outliers among biological women. And so why is it that the eligibility line for this ability category of female should be drawn in such a place that will exclude transgender girls when outlier sort of cisgender girls are included. On the other side, those arguing for exclusion say, look, this is an ability category and we have to draw lines somewhere and we're going to draw lines in places that sort of match, let's say, the overwhelming majority, particularly when you get to testosterone, you have a non-overlapping categories of testosterone for biological females and biological males. We're going to draw the lines, the ability category lines at a particular testosterone level that is non-overlapping for biological women and biological men. I think it's extremely difficult to make a convincing argument that eligibility lines should be drawn or need, based on concerns of fairness, to be drawn in any particular place by looking only at what seems fair to particular, to existing athletes or to participants. That is, I don't think any existing participants, any individuals have any kind of fairness claim to have eligibility lines drawn in any particular way.

I think it is as fair or unfair to say that a five foot tall woman has to play basketball against a six five foot tall woman, as it is to say that a five foot tall woman has to play basketball against a six foot tall transgender woman. I mean, I just, I don't think that individual athletes have any entitlement to have lines drawn in any particular place. And they certainly have no entitlement to have lines drawn in a way that's going to make their likelihood of winning better. Now, they do, I think, have some entitlement to have lines not shifted really quickly and to have sort of expectations if they have been practicing under particular expectations not to have lines sort of shifted without notice. But I don't think they have, there's kind of a strong fairness claim that lines have to be drawn in a particular place based on any claims of individuals. But I do think, though, there is this third level of concern which is not just the benefits that the individuals get, but this benefit, the group benefits that I was talking about previously. And I think to the extent that we as a society are concerned about maximizing group benefits, not only for sort of men, let's say both cisgender and transgender men, for cisgender women and also for transgender women and girls. So to the extent that we're concerned about group benefits, I do think a concern about group benefits can help guide us in thinking about the fairest way to draw the eligibility lines so as to maximize group benefits. So again, just to sort of restate, I think it's really hard to make an argument that eligibility lines for female sports should be drawn in a particular place based only on a focus on sort of individual rights and individual participants. But I do think a focus on group benefits can

help us think about where eligibility lines should be drawn so as to maximize the group benefits that both trans and cis genders, girls, women and men get from the way sports are divided.

**Sara Gras:** While Kim’s argument does not give us a straightforward answer, it’s clear that if the relevant federal regulations are amended as proposed, it will not be permissible to simply exclude trans kids from athletics simply because there are broad, general biological differences between boys and girls. As I mentioned in Episode 4, I am struggling to envision how sex-related criteria for athletics will be assessed, particularly with these arguments about fairness swirling around the public consciousness. Maayan’s 2019 piece, *Toward a Functional Analysis of ‘Sex’ in Federal Antidiscrimination Law*, offers an approach to understanding sex discrimination based on the acceptance of “sex” as having many constitutive elements, one of which is gender identity, but without deciding that any one element is definitively more important than the other.<sup>13</sup> In this piece she considers the specific issue of discrimination against transgender students in school bathrooms drawing on the bona fide occupational qualification analysis used in employment law.

Under Title VII, the federal law prohibiting discrimination in employment on the basis of sex, religion, or national origin, there is a narrow exemption that recognizes that in some extremely rare instances a person's sex, religion, or national origin may be reasonably necessary to a particular job.<sup>14</sup> In reviewing the Equal Employment Opportunity Commission’s guidance on the BFOQ exemption, the parallels between this analysis and the language of the proposed Title IX regulations are apparent and suggests that this may be one way to approach an analysis of whether sex-related athletic criteria is discriminatory. For example, the Commission’s guidance states that:

The BFOQ exception fails if the "characteristic" is in reality a stereotypical assumption about the excluded sex...if an employer has a policy that no women may work on the loading dock of a warehouse because no woman can lift 100 pounds and the lifting of 100-pound crates is necessary to the employer's normal business operation, a showing that at least some women can lift crates weighing 100 pounds would defeat the BFOQ claim in favor of males. Strength is not a characteristic peculiar to the male sex; and the ability to lift 100-pound crates depends on strength, not on being male.<sup>15</sup>

Maayan utilizes this analysis in the context of policies excluding trans students from using the bathroom aligned with their gender identity to “check the strength and rationality of the relationship between the objectives of the policy and the particular essential characteristic identified by the alleged discriminator.” If the proffered reason for the bathroom policy is privacy and safety, then she notes that the privacy analysis must be based on particular privacy conditions – are there partitions? How high? Are there alternatives for students who want more privacy? The same is true of the safety justification – under a BFOQ framework, an employer cannot exclude employees of one sex out of concern for the safety of the other sex without convincing empirical proof. In the school bathroom context, one could look at other schools with inclusive bathroom policies for evidence of safety issues or look at whether

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<sup>13</sup> Maayan Sudai, *Toward a Functional Analysis of Sex in Federal Antidiscrimination Law*, 42 HARV. J. L. GENDER 421 (2019), available at <https://journals.law.harvard.edu/jlg/wp-content/uploads/sites/88/2020/05/Toward-a-Functional-Analysis-of-22sex22-in-Federal-Antidiscrimination-Law.pdf>

<sup>14</sup> EEOC, Guidance CM-625, § 625.1, <https://www.eeoc.gov/laws/guidance/cm-625-bona-fide-occupational-qualifications>.

<sup>15</sup> *Id.* at § 625.4.

there were any incidents that occurred prior to the implementation of the policy when, presumably, students were using the bathroom that aligned with their gender identity. I asked how she might apply that analysis to exclusion of transgender athletes in schools.

**Maayan Sudai:** So as you noticed, my framework that I suggested that really tries to kind of shift away from the ontological discussion about what sex is, given that I think that the definition of sex is so contingent, you know, so, you know, culturally, geographically, politically, and historically contingent. And I thought when I saw the, you know, court documents in this green case about bathrooms, there was so much energy invested in arguing about what sex means. And I thought that was pointless. So I thought, let's shift the energy or the core of the debate into the question whether or not this like sex discriminating rule makes sense or not? And I'm open to the answer that it might make sense in certain situations and conditions. And so this is why I tried adopting a very inclusive understanding of sex, that it's not comprised of fixed elements, not biological, not psychological, and that it can really vary according to context. And, you know, again, just not talk about what sex is and talk about what sex does in a certain context. And so when you see a distinction based on sex, whether it's assigned sex at birth, whether it's gender identity or anything related to that, in my framework that satisfies the condition on the basis of sex. It's really hard to satisfy this condition in my framework given that I want to move on to the next stage and ask whether it's justified or necessary. And, you know, given that I don't think that sex can have a fixed definition or that would... I'm not sure that it would be productive in legal or in sex and gender jurisprudence.

So here's how it would probably go. So in the next stage when you say, okay, it's discriminating kind of on the basis of sex or whatever legal doctrine you need to use, we need to show or we'll ask, with allowing female with high testosterone levels or higher than average female testosterone levels, undermine the ability to conduct a sport competition? So that would be like a functional question. And if you do apply this functional test in the narrow functional way that sex works and I do not deny the existence of sex or the existence of biological differences. But honestly, if you apply the narrow technical functional test, then you would strike down a lot of discriminatory practices. Because if you think about it, what could possibly hinder or what kind of sports females with higher testosterone levels can't do. They basically, technically, they can compete against other women and they can compete against other males as well. But this is where kind of fairness gets into the picture. And it's commonly agreed that fairness is an essential core part of sport and sport competitions. And if we can't conduct a fair competition, if we use the BFOQ, which is the bona fide exemption, then you can't quote unquote do the job. If you can't create or you can't generate a fair competition, then it's really undermining the purpose or the main occupation that we're trying to do here.

So, but the courts do interpret the BFOQ defense very narrowly, and they try to ask whether the discrimination, the discriminating practice maintains important features. So they often ask whether it's based or established on valid empirical facts and not just based on what we think, stereotypes, or what is convenient for the employer. Applying this to our context, it means that you can't infer or hypothesize that females with higher testosterone levels would harm fairness. You would have to really clearly show that they have an unfair advantage. So that's one thing, how I take the kind of questions or guidance that I want to take from the BFOQ analysis. And courts also ask or check if that's discriminatory practice is the last means to achieve the goal and applying this to our context again you'd have to ask is there an alternative to maintain fairness that would not go through exclusion of females with higher testosterone levels or you know from competing at all and I think that the answer for you know, this question is also

no and so I think that the function functionality test really it would it would, it would really, how to say, it would justify very limited cases of discrimination and it would force people who discriminate to really go into, you know, the details of discrimination. Why are we doing it? What are we trying to preserve? What are we trying to protect? What evidence do we have to show, is the risk of harm, you know, really material and all these things that we tend to assume sometimes and we let people assume that we really have to justify these things and I want this framework to kind of put most of the energy into answering these questions and just get better informed decisions.

**Sara Gras:** I was curious whether, based on her knowledge of sex-difference science and understanding of discrimination law, whether there's any type of evidence or proof Maayan could envision that would legitimately justify exclusion of trans youth from athletic participation consonant with their gender identity.

**Maayan Sudai:** Right, so exclusion, like overall exclusion of trans athletes, especially in schools, I don't think that's an appropriate goal in any scenario. But I would, I think it's a good question to try to pick my brain and ask myself, you know, what kind of evidence would encourage me to reconsider the way we include trans athletes in sports, sex segregated sports, I guess. And so, because, so, if I saw this, you know, convincing study that shows a clear and significant relationship between a certain biological factor and like performance which is more than like the 2 or 3 percent. Something like really significant. That would make me definitely rethink the issue. But from what I'm seeing so far in the field of sports science, I don't think there's one biological factor or even two biological factors. It would be really hard to isolate the impact of just one or two factors. Like you know there's hormone production, bone density, there is lean body mass ratio, there's levels of hemoglobin, there's so many things that impact athletic performance and it changes from one sport to the other. So I'm very sceptic that this kind of evidence could produce itself. However, I think that if I see like alternatively, if I see again a report or a study that shows again empirically convincing way that trans athletes or I guess female athletes like really consistently and not anecdotally dominate and overpower female athletes in a certain sport. If I would see that convincingly you know being happens happening consistently, then again, it would be worthwhile rethinking how to align, better align inclusivity with fairness. And I think that solutions should and can be creative, but anyway, they need to be respectful. And I don't, I don't see myself ever justifying exclusion, you know, total exclusion of trans athletes nor even creating separate games for trans athletes. I don't see myself supporting that kind of structure.

**Sara Gras:** After doing the research for this episode, I am more certain than ever that there is currently no legally sufficient evidence out there to support the need to exclude trans kids from scholastic sports on the basis of fairness. Yes – there may be trans girls out there who are fast and strong – and they may beat their cis peers sometimes. But the truth is that there are trans male athletes beating cis men too – when I first started thinking about this show, I saw an article about college fencer, Bobbie Hirsch, who transitioned before the 22-23 academic year fencing on Wayne State's NCAA mens team. When I looked at Bobbie's records, he won 37% of his matches during the season. Yes, this is fewer than the 43% he'd won on the women's team the prior year, but only by 3 – and all, presumably against cis men.<sup>16</sup> Lia Thomas, who so many had railed against for being unbeatable by cis women swimmers, was beaten by trans male competitor, Iszac Henig, who had not, at the time undergone any hormone treatment so that

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<sup>16</sup> Bobbie Hirsch, <https://fencingtracker.com/p/100175312/Bobbie-Hirsch/history>.

he could complete the year swimming on the women's team.<sup>17</sup> If your objection to these examples is that they are outliers and exceptional circumstances, my response would be to ask you how many trans high school athletes you can name winning championships off the top of your head. If there's more than one who I haven't already discussed on this podcast, I'd be very surprised.

There are all types of kids in the heterogeneous world of high school sports and very little meritocracy. Some kids have been playing their sport since preschool, encouraged by athlete parents, coached on a private team. They are taller or more flexible or more coordinated, just naturally. Some gifted high school athletes will get recruited to play in college by virtue of their skill while others will be sought out because of their drive. A handful of others will play because their parents made a donation large enough to build a new gym. Some may decide not to play at all.

The bigger question to me is why anyone cares so deeply about the possible loss of opportunity for a few athletes that they would support denying an entire group of young people the opportunity to play the sports they love, to be a part of something that could literally be the difference between life or death. The next episode of the show will examine the current culture surrounding youth sports and how this has been leveraged to fuel the moral panic about trans athletes.

*Hearsay from the Sidelines* is a collaboration of [Seton Hall Law School](#) and [Culture in Sports](#); All research and writing by Sara Gras; music by [SuperKnova](#); produced by Sara Gras and Dr. Jeremy Piasecki, Executive Director of Culture in Sports. Links to all available academic and primary legal sources, media, music, transcription, and other materials mentioned in this episode are available on the Hearsay from the Sidelines show page, [hearsayfromthesidelines.com](https://hearsayfromthesidelines.com). And if you like this show, check out [cultureinsports.com](https://cultureinsports.com) where you'll find more articles, shows, webinars, summits, and courses for sports leaders of all levels.

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<sup>17</sup> Conor Skelding, *Lia Thomas Dominated by Fellow Ivy League Transgender Swimmer Iszac Henig*, N.Y. POST (Jan. 8, 2022), <https://nypost.com/2022/01/08/lia-thomas-defeated-by-fellow-transgender-swimmer-izac-henig/>.