Viewpoint: What defines a female athlete? Law professor, former runner's case for why Caster Semenya's testosterone levels critical in determining if she should compete with women



he Court of Arbitration for Sport (CAS) [April 30] upheld the International Association of Athletics Federation's (IAAF) regulations governing eligibility for the women's category in international elite athletics competition. In effect, CAS decided the question "who is a woman" for purposes of elite sport. And it ratified the IAAF's preferred answer: A woman in sport is anyone whose legal identity is female—whether they personally identify as such or not—and who has testosterone (T) levels in the female range.

That may seem like a mere technical ruling. But as I'll explain in this article, the ramifications are profound for female athletics everywhere—a cause that has been central to my life and to the lives of millions of girls and women worldwide.

The female range for testosterone is categorically different from the male range. In general, males have 10 to 30 times more T than females. Most females, including most elite female athletes, have T levels in the range of 0.5 to 1.5 nanomoles per liter (nmol/L). For men, typical values are 10 to 35 nmol/L. The reason there is a gap, with no overlap between the ranges, is that beginning in puberty, the testes produce a lot more T than ovaries and adrenal glands combined. And so the IAAF maximum of 5 nmol/L for women has been set, generously, to reflect the upper bound of T levels that can be produced even by polycystic ovaries.

No single tool is perfect for these purposes, but testosterone comes pretty close. Sport already tests for T levels as part of standard anti-doping controls, and it is much less intrusive than other diagnostic techniques used to determine sex. Most importantly, it's the best single physiological marker for sport's purposes. That's because the primary reason for the sex differences in the physical attributes that contribute to elite athletic performance is exposure to much higher levels of testosterone during male pubertal growth.



Margaret Wambui and Francine Niyonsaba, Olympic 800m, Rio de Janeiro, 2016.

Those physical attributes include power generation, aerobic power, body composition and fuel utilization. Compared to females, males have greater lean body mass (more skeletal muscle and less fat), larger hearts (both in absolute terms and scaled to lean body mass), higher cardiac outputs, larger hemoglobin mass, larger VO2 max (i.e. a person's ability to take in oxygen), greater glycogen utilization, and higher anaerobic capacity.

The result of this differential is the performance gap between males and females that justifies the existence of a women's category in competitive sports. That gap typically extends to 10-12%. Without an eligibility rule based in sex-linked traits, we wouldn't see female bodies on any podium. Equally important, without such an eligibility rule, it's unlikely that societies could continue legally to sustain separate girls and women's only sport. The set-aside is premised on inherent biological differences between the sexes. If that basis were eliminated, it's unclear how the classification would pass muster under standard legal anti-discrimination analysis.

As is now widely known, the IAAF's rule was challenged by Ms. Caster Semenya, a multiple World and Olympic Champion in the 800 meters. She is an "affected athlete" under IAAF regulations, which list the specific differences of sex development (DSDs) that are of concern to sport. These cases all involve "46, XY" disorders, whereby individuals with one X chromosome and one Y chromosome in each cell (apattern normally typical of males) may have external genitalia that are not distinctively male or female; nevertheless, they have testes which produce bioavailable T in the normal male range.

Athletes who are legally identified as female, who have one of the listed 46, XY conditions, and who wish to compete in certain events restricted to females, are required to drop their T levels into the female range (i.e., under 5 nmol/L), in consultation with their physician and using the means of their choice. Usually, a birth control pill will do. Should they choose not to reduce their T levels, affected athletes can compete in different events, or in the male category, or in non-IAAF events. Ms. Semenya has already made clear that, going forward, she expects to compete in the 5000 meters as a female.

Since the regulations are about sex classifications, the arguments the parties made at CAS were necessarily based in applicable anti-discrimination law. Thus, Ms. Semenya argued that the regulations are discriminatory and that the discrimination cannot be justified as necessary to meet sport's goals for the women's category, or proportional in the way they are tailored. In turn, the IAAF responded that the regulations are not discriminatory, but that if they are, such discrimination is necessary and proportional given the IAAF's goals. The material that follows is adapted from the arguments that I and others put forward to the CAS on behalf of the IAAF.

The goals of elite competitive sport are to identify and showcase the best athletes, to produce economic, political, developmental, and health-related benefits for stakeholders and society, and to foster progressive social and political change. Sport is widely seen as adding enormous value in each of these respects.

The IAAF's mission and agenda mirror these goals. The IAAF regulates competition internationally and administers some of its own events for the purpose of establishing the hierarchy of athletes in each specialty. It celebrates the champions. And it parlays those competitions and champions into business opportunities that feed money back into all levels of the sport *and* into political opportunities related to its progressive goals.

One of the most important aspects of this last agenda item is empowering girls and women through athletics. In this respect, the IAAF has embraced as its own the progressive public policy mandate of many governments around the world. Specifically, the decision to carve out and equally to support separate men's and women's competition categories, reflects the widely-held view that girls and women are entitled to parity with boys and men in the distribution of sporting opportunities and the highly valued goods that flow from participation in this institutional setting. The continuing commitment to equality among the sexes in this sphere also reflects the data that show that empowering girls and women has exponential benefits for society.

These benefits are well-understood. As I have written elsewhere, they include financial, psychological,

and political benefits for individual champions; for their governments, leagues, companies, teams and communities; and for the "vast majority of athletes—both development and elite athletes—[who] benefit from the institutional structures established to cultivate the champions and the enterprise."

In the United States, the commitment to provide equal opportunities to girls and women in sport is based in Title IX of the Education Amendments of 1972. As Donna de Varona of the Women's Sports Foundation and Brooke-Marciniak of Ernst & Young have explained, "Title IX ... requires us to invest in male and female athletes equally. Title IX prohibits discrimination on the basis of sex, in any education program or activity receiving federal financial assistance—fortunately for the development of women's sport, this law also included athletic programs."

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The author, right, at an 1500m event in the mid-1980s

My own story is a testament to the power of mandatory set-asides for female sport and to the value they create for girls and women that would not exist otherwise. I was the first female recipient of a full track scholarship to Villanova University in 1978, six years after Title IX passed into law. I was recruited because I was one of the best under-18 (U18) female half-milers coming out of U.S. high schools that year.

Because even mediocre boys could and did run faster, had Title IX not forced colleges to create programs and set-aside funds for girls, I wouldn't have gotten that scholarship. And because my family was poor, I might never have gone to college. My life story would have been altered in innumerable ways. Most importantly for present purposes, I would not exist as someone with the leadership skills and experience to advocate either for clean sport or for equality for females. I would not exist as someone who could give back, certainly not in the way that I do as a law teacher, and certainly not in this global context. Title IX powered this outcome.

Importantly, it did this not only by affording me that first scholarship, but also by providing me with the same chance as the best boys coming out of high school at securing the longer-term benefits of participation in elite sport. Winning gave me confidence, including on a stage. Training for long-term goals taught me time management, independence, and goal orientation. Losing made me resilient. And traveling made me tough and sophisticated about the world, including about how to make my voice heard in traditionally male spaces. The same is true for many other girls and women for whom elite sport has also been something of an equalizer in a world that has long privileged boys and men.

It matters that girls and women are afforded opportunities equal to boys and men, including in elite athletics. It matters because this is the only way sport can achieve its empowerment goals.

One can argue that empowering girls and women in particular shouldn't be a focus for sport or for any institution. One can argue that there are other laudable goals, that girls and women aren't the only marginalized sub-populations, that the allocation of scarce resources should be made differently. But until these arguments persuade policymakers to renege on existing commitments, it remains not only a legitimate policy choice but also a mandate.

Like other policy moves that involve big cultural shifts, the commitment to treat female athletes equally took years to take hold, and although it's rarely questioned today, it remains fragile. For example, the percentage of girls and women taking part in sport has increased, but it's still smaller than the percentage of boys and men. The most recently collected statistics show that participation by middle-school U.S. girls is actually *decreasing*. Funding for and promotion of boys and men remains higher, not only because their participation rates are higher but also because their events are more popular.

There are exceptions, but it's still true that, as a society, we commit to female sport because we *have* to, while we commit to men's sport because we *want* to. There is no doubt that if someone proposed a change in the eligibility rule for the men's category that threatened to dismantle it and the goods it produces for the participants, their sponsors, and fans, this proposal would go nowhere.

As we work to cement our hard-won, enormously valuable equality, Title IX and similar laws and policies around the world have, and continue to be, an important prod and protection, barring sex discrimination that isn't based in inherent biological differences and encouraging affirmative measures for females when either inherent differences or continuing disparities make clear they are necessary. Importantly, legal efforts to reform sex discrimination law by erasing "sex" and replacing it with "identity" or "gender identity" haven't (yet) succeeded in changing this basic framework. Biological sex remains an important legal

classification, including in relevant domestic and international law; and inherent biological differences between the sexes <u>remain</u> an essential feature of sex discrimination law in particular.

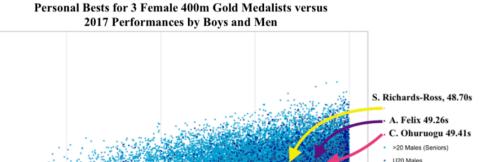
It is well-understood by physical scientists, and by athletes, coaches and governing bodies, that if elite sport didn't set aside, maintain and support a separate category for girls and women based on inherent differences between the sexes, the best athletes—the ones we see and celebrate—would always be boys and men.

Specifically, if it were decided that eligibility for the women's category should be based on identity rather than gonadal sex—or if we adopted the theoretical proposition that because some males identify as females, some females have testes—it would be impossible to achieve parity of opportunity in this realm of society, and for sport to meet its associated goals. Despite the arguments of some social scientists who prefer theory to facts, this is not a legitimately debatable proposition.

For example, as my colleague Wickliffe Shreve and I have <u>shown</u>, just in the single year 2017, Olympic and World Champion Allyson Felix's lifetime best in the 400 meters of 49.26 seconds was surpassed over 15,000 times by boys and by men. This overwhelming dominance by male-bodied athletes over female-bodied athletes is not the result of culture, resources, training or gender identity. Rather, it is the result of having male gonadal sex, specifically testes and bioavailable testosterone in the male rather than the female range. Even non-elite male-bodied athletes, including boys, can and do routinely surpass the very best female athletes. When we compare the latter two groups—the best elite females against non-elite boys and men—the performance gap is small but collectively determinative.

To illustrate this point, Jeff Wald, Wickliffe Shreve, Richard Clark, and I developed the visual that appears below, taking three of our sport's best-known female stars, all of whom are multiple Olympic and World Championship gold medalists who, because of their role-model status, continue to produce valuable goods for themselves and for the IAAF: Sanya Richards-Ross, Allyson Felix, and Christine Ohuruogu. We placed each of their individual *lifetime* bests in the 400 meters in the sea of male-bodied performances run just in the single year 2017.

As expected, the figure shows that Richards-Ross, Felix, and Ohuruogu would lose to the very best senior men that year—Wayde van Niekerk, Fred Kerley, and Isaac Makwala—by a margin of about 12%. But it also shows that even at their absolute *best*, Richards-Ross, Felix, and Ohuruogu would go on to lose to literally thousands of other boys and men, including many whose times wouldn't place them in the sport's elite male echelons.



Finish time, in seconds

To be clear, our claim is not that an identity-based eligibility rule would introduce this enormous sea of boys and men into women's competition. Rather, it's that biologically male athletes—however they identify—don't have to be elite to surpass even the very best biologically female athletes. And it doesn't take a sea of them to obliterate the females' competitive chances at every level of competition. If only a very small sub-set turn out to identify as women, we will be overwhelmed.

U18 Males

This is not a theoretical proposition. At least two sets of natural experiments make clear that this would be the eventual outcome if entry into the women's category isn't conditioned on gonadal sex, or at least on testosterone levels as their least intrusive proxy.

First, inspired by the Obama administration's suggestion—contained in the form of "guidance" from the Departments of Justice and Education—that sex classifications might be replaced with gender-identity classifications in school settings, the state of Connecticut's public high school athletic association recently decided that transgender girls must be permitted to compete on their school athletic teams based solely on their gender identity. There is no requirement that they first start on puberty blockers or be on gender-affirming hormones.

With this new rule in place, in June 2018, two trans girls who had previously competed as boys dominated the competition at Connecticut's girls track and field championships. One "took first place in both the 100 and 200 meter dash, while [the other] finished second in the 100." In the process, according to one widely shared media report, they reportedly "inspired multiple other transgender entrants." But of course, as various parents pointed out, they also displaced "the girls who work really hard to do well and qualify for" the next-level regional competitions.

Because moving on to the next level is the basis for additional competitive experience and exposure, these displacements are inevitably significant. This season, the faster of the two continues easily to beat the females in the field. Her times are within but not near the top of the range run in the parallel boys'

events.

A second example: Going into the 2016 Rio Olympic Games, South African exercise scientist Ross Tucker explained that because the IAAF's previous testosterone-based eligibility rule was not in force, Caster Semenya basically had a 100% chance of winning gold in the women's 800 meters. In his words: "There is no more certain gold medal in the Rio Olympics than Semenya. She could trip and fall, anywhere in the first lap, lose 20m, and still win the race...She is proof of the benefit of testosterone to intersex athletes."

Ms. Semenya proved Dr. Tucker right, of course; but the effect of the testosterone rule's suspension was even more powerful than even he had predicted: Her 100% chance of winning gold turned into a 100% win share for the three suspected 46, XY DSD athletes in the race, and a 0% share for the biological females in the field. (Note that two of the three—Ms. Semenya and Francine Niyonsaba of Burundi—have publicly acknowledged that they are affected by the regulations and thus that they are 46, XY males with DSD. As of this writing, the third, Margaret Wambui of Kenya, has not made a similar acknowledgment; however, she and the Kenyan press have hinted at her status on a number of occasions.) In other words, it is likely that no biological female won a medal in that event at the last Olympics. At least one study suggests this is a decades' long pattern, reporting a "presumed...over-representation of [46, XY DSD athletes of] approximately 1,700-fold at the podium level."

Some have argued that the dominance of the 46, XY DSD athletes in women's events is not necessarily due to their T levels. It is said, for example, that advocates for the regulations are incorrectly essentializing testosterone, and that T is no more determinative of outcomes in sport than are other physical and physiological traits like height or wingspan. These critiques have no basis in fact. As I wrote in the journal *Law and Contemporary Problems*, the differences between male-bodied and female-bodied performances

hold even when we adjust for the fact that the best elite athletes are "freaks of nature" and that their success can be largely attributed to their unusual physical traits. Sex, specifically testes and their effects, matter in ways that other biological differences among athletes do not. For example, swimmer and multiple Gold Medalist Missy Franklin is six feet two inches tall with a wing span of six feet four inches. Her world record in the 200 meters backstroke, set at the 2012 Summer Olympics in London, is 2:04.06. Ryan Lochte's world record, set at the 2008 Olympics in Beijing, was a full nine seconds faster at 1:53.94. If Franklin had been in that race, at her best she would have been about a half a lap behind Lochte when he finished, even though they are the same height and have just about the same wingspan. In a world in which competitors were categorized by height and wingspan (or just height or just wingspan) instead of sex, Franklin would not have had a world record; she would not have been on the podium; in fact, she would not have made the team. In those circumstances, we might not even know her name.

There are those who <u>recoil</u> at this kind of analysis because it implicitly recognizes that elite sport celebrates the athletic body, including the athletic male body in the men's category and the athletic female body in the women's. From their perspective, the latter isn't a legitimate goal or effect because, among

other things, it privileges femininity. They say that testes and T levels in the male range should be treated like other special traits that sport properly celebrates. Accordingly, Ms. Semenya is special because she is a woman with testes, just like Missy Franklin is special because she is a woman with an unusually large wingspan. As an academic, I'm familiar with the game that is deconstructing established truths and then re-imagining the world differently. But this isn't the academy and it isn't a game. In the real world, the analogy has no merit.

Sport has *never* sought to celebrate testes as special in either the men's or the women's category. Precisely the opposite is true: Gonadal sex traits *define* the categories, and then each separate category sets out to isolate and celebrate other characteristics. In the men's category, testes and male T levels are perfectly normal and not at all special. Every single male in the category has them, and so the category isolates and celebrates different traits, like height and wingspan. And the women's category was developed to exclude competitors with testes and T levels outside of the female range, so that biological girls and women could have the chance—as biological boys and men do—to have their equally exceptional but non-gonadal traits isolated and celebrated. It is *within the categories* that a Usain Bolt and a Katy Ledecky are properly held out as indomitable superstars.

There are also those who <u>argue</u> that the focus on the female body is racist. This is truly absurd if you know our sport and the many fabulous black and brown women who are not only ubiquitous but also regularly celebrated. Perhaps because they know this, actual sports experts are more careful with such claims. They merely note that any implementation of a biologically-based eligibility rule will have a disparate impact on athletes from the so-called "global south" (i.e. poor countries in Asia, Africa, Latin America and the Caribbean).

It is a given that male-bodied athletes who identify as women will be impacted by the regulation since this is its design; but it's not at all obvious that there will be a disparate impact on those from the global south since the conditions at issue occur among all races and ethnicities. The subset of athletes from the global south might be made more visible by their federations' choices, but this outcome isn't inherent in the regulations and it doesn't tell us anything about the impacts on athletes from different regions whose experience isn't made public. Indeed, although the African National Congress has claimed that the regulation has "racial undertones," the organization has also argued that it "targets mainly those in East Europe, Asia and the African continent." In other words, their real claim seems to be about economics and not about race.

This is the truth about race and athletics: Because our sport is mostly populated at the elite levels by athletes of color, it is this group that will be most impacted however the women's category is defined. Assuming the regulations are implemented in their current state, with the IAAF using female T levels to set the boundaries of the category, the women who will benefit most will be biological females of color. If the regulations are somehow suspended or overturned, most of the women who will lose out will be biological females of color. There is discrimination either way, but it's about sex, not race. The women's 800 meters is a perfect example, as current results and rankings provide a strong indication that the podiums at the 2019 World Championships and 2020 Olympic Games are likely to be graced by athletes of color.

As an academic, I appreciate the value of intellectual inquiry that challenges our socially constructed

defaults. As someone born into a mixed-race family steeped in the civil rights movement—my father was black and my mother was white—I was nurtured to recognize the harm that social constructions about race and sex can do to subordinated individuals, groups and societies. As the wife of a black man and the mother of two black sons, my radar for both explicit and implied racism is finely tuned. As a woman, a feminist and a lawyer, I have an abiding commitment to anti-discrimination norms, and to race and sex discrimination laws in particular. As a humanist, I believe that each one of us has the right to self-identify.

But none of this confuses me about sex, sex traits, and their irrefutable salience in law and society. The reason there are policies against sex discrimination—including policies that encourage affirmative action for females—is because females have been subordinated across time and geography on the explicit basis of sex, and precisely because of our sex-specific biology. This includes the biology that determines the performance gap in elite sport.

The sex-based physical differences in strength, power and endurance that allow thousands of men and boys each year to surpass the performance of the single best female are the very same differences that make us especially vulnerable to stranger and domestic violence, including to sexual violence. This includes our different reproductive biology. For example, our endocrine cycles are the basis for menstrual-period segregations in many societies, and in sport these same cycles cause us to lose valuable iron stores and diminish our red blood cell counts and oxygen carrying capacity relative to boys and men. (It is to minimize these loses that we often choose to take birth control pills to regulate our cycles.) There is a lot that is beautiful, powerful even, about being female, including, and perhaps especially, our capacity to bear children. But this isn't an offset, it's just an also-distinguishing feature of our existence. It's all part of who we are and our identities.

And so, when we are told that 46, XY males with DSD who identify as female are no different from us because identity is all that matters, the effect is to erase our deeply significant, sex-specific experience both on and off the track. When we are told these things directly and indirectly by sports governing bodies, we feel betrayed. We also feel robbed: of the spots on the podium; of the psychic, financial, and professional goods that would have flowed from earning our places there; and of the opportunities to be role models for little girls who need to see strong, victorious females so that they can dream big dreams themselves. Social science literature focused on race and sex is replete with empirical evidence supporting the common-sense intuition that it matters that people can see successful role models who look like them. To quote Beyoncé, quoting Marian Wright Edelman: "You can't be what you can't see."

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When we are told that 46, XY males with DSD who identify as female are simply "women with hyperandrogenism," or "women with high T," we aren't fooled. We are just puzzled about why others are—or would want to pretend to be. Elite sport is in the business of bodies, what they can do, and how beautiful they are at their fittest. The movement to normalize and empower gender non-conforming people is enormously valuable, but this doesn't explain why we would want to replace sex with identity in this of all settings, since the effect of this move is not only to erase our distinguishing traits from the

conversation, but also—literally—our bodies from the podium.

Finally, when we are told that we are "ignorant" and "racist" when we notice that males with DSD have male secondary sex characteristics, the effect is to denigrate our well-honed, protective instincts and also our intelligence. The truth is that we know secondary sex characteristics well. We watched them develop over the course of our adolescences and, even on the track, we were witness to their effects on our relative performances: At 12 years old, we were the same or sometimes even faster than the boys, but over time, and certainly by age 18, those same boys were unreachable. For those brown girls and women among us—and we are plentiful in the women's 800—the effect of these charges of ignorance and racism, especially when they are leveled by white people, is itself racist: as though we somehow can't tell males from females, or as though we all look like men.

Whenever females in the field have dared to express their concerns about these various erasures, Ms. Semenya's public supporters can be counted on to launch aggressive public attacks, disingenuously charging them with ignorance, bigotry and a lack of sportsmanship. The effect for the females in the field is to censor their voices in their own spaces. It is to bully them into a new and ironic subordination: In a setting that was carved out for females so that they would be protected from athletic dominance by males, they are not permitted even to take note that this is happening. If their faces or body language betray even the slightest hint of unease, Ms. Semenya's supporters pounce with op-eds and Twitter storms loaded with personal attacks. And so, they learn to stand stoic at the end of each race, and to freeze their faces into what they hope is a wholly neutral, inoffensive expression. Some have sought to turn this forced silence and feigned neutrality into evidence that the female field is actually comfortable with the current state of affairs. This effort would be funny if it weren't so Kafkaesque. As Sarah Ditum wrote in The Economist last year,

[t]here is a word for a situation where women talking about female bodies is considered impermissibly antisocial, where describing the consequences of sexism for women is systematically impeded, where resources for women are redistributed to male users while resources for men are left in male hands, and where "male" and "female" are rigidly associated with masculinity and femininity. That word is not "progressive", "liberal" or any of the other terms usually associated with trans activism. The word is misogyny.

A particularly misogynistic form of the poor sportsmanship story is that the females in the field who express concern are sore losers who just aren't as talented as the biologically male athletes who beat them. Ms. Semenya's supporters were especially vicious to Great Britain's Lynsey Sharp, who was fifth in the women's 800 meters final at the Rio Olympics, after she vented her understandable frustration in her post-race press conference. Ignoring the fact that Ms. Sharp's performance would have earned her at least a bronze medal had a T-based eligibility rule been in effect, journalists wrote that she wouldn't have complained if she'd medaled, and that she didn't medal because she isn't as talented or doesn't work as hard as the three male-bodied athletes who did.

These critics betray their own ignorance when they say these things. They don't know that 18-year-old males routinely run in the 1:55 range, but that running this fast would be impossible even for the world's best 18-year-old female. They don't know that men's championship events are often run tactically but that

women's never are, at least not by the biological females in the race, because the latter don't have the explosive power to pull off late-race surges; or that, even at their peak, non-doped females can't plan to negative split—run faster in the fourth 200 meters than the second or third—in a world class race. It isn't awesome to watch athletes do these things in women's races; it's a universal tell.

Females who have specialized in the 800 meters do know these things, as well as our event's androgenplagued history: For a long time, the event was overwhelmingly dominated by women who were doping. In the current period, the spurious hormones are mostly the result of 46, XY males with DSD. In both cases, the athletes in question may or may not have known that they were being doped, or recruited for their DSDs, by their federations to increase their country's medal count. For the non-doped females on the track, though, the difference is mostly irrelevant.

Bullying people into silence isn't a respectable solution to policy disagreements. It's wrong to treat people as though their voice is illegitimate simply because you would prefer to control the narrative. In this space that's been set aside for our bodies precisely because they are different, it's especially insidious to try to disguise a new form of female subordination—"You can't talk about *her* body"—as progressive politics.

Although I'm not a trained empiricist, I did communicate at length with top female athletes and their teams as I prepared to testify at the CAS about this case. I wanted to be able—as accurately as possible—to describe the concerns they themselves did not feel free to express, either publicly or at the court. What I found was a lot of confusion about the science; deep hurt about being bullied into silence by false accusations of ignorance, racism, and bad sportsmanship; and a combination of pain and frustration about the competitive status quo.

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I did find a few top female athletes who were supportive of "women with high T" in the women's category. But I also found that the terms "women with high T" and "women with hyperandrogenism" have been widely misunderstood to mean "elevated levels of male sex hormones...in the female body." As one said, "Hyperandrogenism means they have problems with their ovaries, right?" When this misunderstanding is cleared up and they learn that the term "hyperandrogenism" has been mis-applied to cases of normal T levels in biological males who identify as women, the support disappears and what remains are questions about how and why they were led to think otherwise.

It is possible that there are currently active females in the field who understand the relevant biology and still support the idea of a women's category bounded only by gender identity. But at least at the elite level, where athletes and their families are making extraordinary sacrifices so that they can make teams, finals and podiums, it is more reasonable to presume that most are not.

As Sonia O'Sullivan <u>wrote</u> in 2016, "it actually feels like the majority of women athletes are being held to ransom, while the legal teams get their act together and make a decision on the future for women's sport—while the athletes in question continue to compete, winning medals, setting records and walking away with a substantial amount of prize money."

Almost everyone I spoke with was in this camp. Some have trans and intersex friends, and so care a lot

about a policy that does not require surgery of those whose identity doesn't conform to their biology. But as one told me, "our bodies just can't do what theirs can, and so if we're to be able to win medals, we need protection." Another put it this way: "We're not allowed to speak publicly about it because when we do, we are attacked for being horrible people. But we talk to each other, and I've never talked to another athlete in our events who isn't frustrated, devastated, and completely fed up."

Ms. Semenya is an extraordinary person. She is courageous, resilient and dignified. And as my longtime colleague Edwin Moses wrote recently in *Time* magazine, which featured her as one of its 100 most influential people of the year, "Caster Semenya has taught us that sex isn't always binary, and this has caused us to question the merits of distributing societal benefits according to 'male' and 'female' classifications...however [her case comes out], Semenya will have already made a singular historical contribution to our understanding of biological sex."

It is beyond doubt that this road has been a difficult one for her to travel. It was difficult for me to bear witness to her process—even as she remained unbelievably gracious throughout. Still, we must recognize that the underlying issue also has caused extraordinary harm to the females in the field; to the women's middle distances, including their commercial and developmental aspects; and to the IAAF, which has expended significant resources trying to protect the women's category for its intended purposes.



Doriane Coleman, J.D.

The stakes were always much higher than these individual interests, of course, which is why the case gets so much attention. Ms. Semenya and Athletics South Africa were Claimants at CAS, and the IAAF was Respondent, but we were all really there negotiating the future of women's sport and the ability of the gender identity movement to use the female competition category to further its agenda.

If the Olympic Movement could continue to define the category using at least female T levels, the progressive project that is empowering girls and women through sport had a future. If it couldn't, that project would fail. The gender identity movement's goals are also important, and Ms. Semenya undoubtedly contributes to their achievement. But they didn't similarly ride on the outcome of her case. I applaud the CAS for making the right decision.

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