

Testimony in Opposition to H 7727

I write today in opposition to H 7727. This bill is based on a complete lack of understanding of the complexity of human biology and is simply designed to create an opening for bullying attacks on girls and women whose athletic prowess exceeds expectations or whose physical appearance does not conform to antiquated stereotypes of femininity.

The text of the bill shows a remarkable lack of understanding of basic human biology. Sex determination is an incredibly complex biological process that results in many bodies with characteristics that do not fit clearly into a male-female binaryⁱ. Children can be born with entirely gender-typical physical appearances that are altered at puberty or with physical bodies which do not match their chromosomal profiles, and in such circumstances will live entirely in their presumed gender for many years or their entire life while still being unable to “pass” the medical tests H 7727 proscribes. For instance, consider the case of someone born with Androgen Insensitivity Syndrome (AIS), which affects as many as 1 in every 40,000 births (so about 27 Rhode Islanders right now would be expected to have this condition). Individuals born with AIS may present with external genitalia that are entirely female in appearance while having XY chromosomes and producing testosterone. However, their bodies are unable to respond to the testosterone in any way, and thus even high levels of testosterone production may result in none of the performance benefits testosterone is purported to produce. Research has indicated that, when including chromosomal, hormonal, and anatomical features, as many as 2% of all human beings exhibit deviation from “expected” male or female bodiesⁱⁱ. Thus, it is clear that there is no simple test a doctor can perform that will clearly determine biological sex as male or female.

Bills like this force girls into invasive physical examinations which may present such significant costs in finances and time that families cannot afford to pursue them and which furthermore are not age-appropriate, as the American College of Obstetricians and Gynecologists does not recommend a pelvic exam (the exam that would determine reproductive anatomy) until girls reach adulthoodⁱⁱⁱ. In other states that have adopted legislation such as this, the laws have become little more than an excuse for parents whose children have lost competitions to attack the winners^{iv}. For all intents and purposes, such legislation is basically creating a new era of witch hunts.

The bill assumes that girls and women are always physically and athletically inferior to boys and men, citing an article from 40 years ago for the principle that women’s athletic prowess will never match those of men. But this is simply untrue. There are already competitive athletic events—particularly endurance sports like ultramarathons—in which women’s performance routinely exceeds men’s^v. Continuing global inequity in terms of media coverage, funding, political support^{vi}, physical self-concept^{vii}, stereotypes^{viii}; opportunities to participate in physical activity^{ix} make it impossible to determine to what degree observed differences in performance are in fact biological, rather than cultural and social. Indeed, these cultural and social barriers are so extreme that some research has found they—rather than physical ability differences—account for the lower levels of women’s participation in firefighting^x. Given the same physical and athletic socialization, starting at the earliest ages, gender-based performance gaps in a variety of sports (especially those relying on skills like resilience and endurance) would likely narrow.

Of course, it is also worth noting that even where there are overall average gender differences in performance, the highest-performing women will perform better than most men, while the lowest-performing men will perform lower than most women. The same is true of testosterone levels, and in fact, research has not even determined to what extent testosterone itself provides athletic advantage. Yet women with naturally-occurring higher levels of testosterone have faced humiliating bans from sports because of the assumption that their hormones confer unfair advantage^{xi}. We do nothing of the sort in relation to other forms of biological advantage: Michael Phelps's extremely long wingspan and lower lactic acid production^{xii}; Manute Bol's 10'3" vertical reach that enabled him to simply place the basketball in the basket^{xiii}; or world champion rower Pete Reed's lung capacity, the highest ever recorded in a human and twice that of the average male^{xiv}. These physical attributes presumably confer a far greater advantage than a gender-nonnormative level of testosterone, but no one has ever suggested folks be banned from basketball because they are simply too tall. Men, it seems, are permitted to excel on the basis of their physical endowments. Women who excel, on the other hand, face suspicion, suspicion that H 7727 would intensify as part of a campaign to always treat women as less than.

H 7727 purports to be designed to protect the participation of girls and women in sports. But it is clear from history and from looking at contexts across the United States that legislation like this does not protect the participation of girls and women in sports. Rather, it has a chilling effect^{xv} that will take away from the many benefits of physical activity noted in the bill. National organizations with expertise in this area, like the American Psychological Association, oppose such legislation^{xvi}. For these reasons, I urge that this harmful legislation be rejected.

Dr. Mikaila Mariel Lemonik Arthur

mmlarthur@gmail.com

Providence, RI 02906

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- i https://static.scientificamerican.com/sciam/cache/file/164FE5CE-FBA6-493F-B9EA84B04830354E_source.jpg
- ii [https://onlinelibrary.wiley.com/doi/10.1002/\(SICI\)1520-6300\(200003/04\)12:2%3C151::AID-AJHB1%3E3.o.CO;2-F](https://onlinelibrary.wiley.com/doi/10.1002/(SICI)1520-6300(200003/04)12:2%3C151::AID-AJHB1%3E3.o.CO;2-F)
- iii <https://www.acog.org/womens-health/faqs/pelvic-exams>
- iv <https://www.vice.com/en/article/pkgaj8/utah-parents-gender-check-anti-trans-sports>
- v See, for instance, <https://www.bbc.com/news/world-49284389>
- vi https://www.researchgate.net/profile/Kathryn-Myburgh/publication/234097869_The_Gender_Gap_in_Sport_Performance_Equity_Influences_Equality/links/oc960526f7179075dco00000/The-Gender-Gap-in-Sport-Performance-Equity-Influences-Equality.pdf
- vii See, for instance, <https://journals.humankinetics.com/view/journals/jmld/6/s2/article-pS440.xml> and https://idp.springer.com/authorize/casa?redirect_uri=https://link.springer.com/content/pdf/10.1023/B:SERS.0000011077.10040.9a.pdf&casa_token=oCN2IELJ-dEAAAAA:aZxC28W-SU2YkMBE03CuJHKPik7zKexioQEerDcDFGmRfS5v3MrVHKicI27edlePtubFV75r41WHh3EVTA
- viii See, for instance, <https://hal.science/hal-00947437/document> and <https://journals.sagepub.com/doi/pdf/10.1177/0044118X14553580>
- ix See, for instance, <https://onlinelibrary.wiley.com/doi/abs/10.1002/ajhb.23322>,
- x https://www.ideas42.org/wp-content/uploads/2022/04/I42Brief_NYCO-Case-Study_FDNY_CPAT.pdf
- xi <https://www.nytimes.com/2016/07/03/magazine/the-humiliating-practice-of-sex-testing-female-athletes.html>
- xii <https://www.scienceabc.com/sports/michael-phelps-height-arms-torso-arm-span-feet-swimming.html>
- xiii <https://www.washingtonpost.com/archive/local/1985/06/30/big-man-in-town/c5bc5c15-e45f-45cd-930c-3c3ae20d7b94/>
- xiv <https://worldrowing.com/2017/09/12/125-years-staggering-rowing-statistics/>
- xv <https://www.cnn.com/2024/02/15/opinions/utah-anti-trans-policies-danger-womens-sports-de-la-cretaz/index.html>
- xvi <https://www.apa.org/topics/lgbtq/transgender-exclusion-sports>