For Senator Molly Baumgardner

Chair, Senate Education Committee

H.B. 2238 Fairness in Women's Sports Act

IN SUPPORT

Introduction

- Good afternoon, Senators. My name is Autumn Caycedo. I am a former military family
 physician, retired hospitalist, and former collegiate rower who is involved with Save Women's
 Sports.
- 2) I am testifying in favor of the Fairness in Women's Sports Act.

Content

I have personally experienced the amazing transformation of Women's sports over the past 40 years. When I was in High School, there was no girls soccer. But Title IX ensured that I was allowed to try out and become the only girl on the boys team. The next year, 2 girls tried out along with me. The following year, 5 girls tried out. By 1989 so many girls were playing soccer that they finally started a girls team. Women's soccer participation has skyrocketed since then. It has been wonderful to witness how far the sport has come.

The same thing is now happening for girls wrestling. In middle school, my middle daughter had to start off wrestling boys, where she was at a huge disadvantage. The physiologic differences between men and women can be intimidating and deter women from participating, but after fighting hard for a league of their own, my daughter and her female classmates made up the first ever Women's wrestling team for Manhattan High School last school year. These girls can now compete fairly in a sport they love.

Since the introduction of Women's wrestling at the High School level, female athlete participation in this sport has flourished. United States of America Wrestling Kansas (USAWKS) voted into its bylaws that males and females would not wrestle one another. A letter to their members explained that "This is supported by data which has consistently shown that the greatest growth of female membership to happen when only gender specific wrestling permitted." Female athletes do not want to wrestle males. This is not surprising given that even within the same weight class, males have a lower percentage of body fat and more muscle. Male athletes also have significant advantages in hand size, grip strength, less joint laxity, and differing centers of gravity. These examples of Women's Sports exploding once sex as a category is protected is exactly why we need to pass this bill.

The reality is that identities don't play sports, bodies do. A male body has more fast twitch muscle fibers, bigger lungs, a larger heart, and higher red blood cell counts which enhance performance. In addition, even with testosterone suppression to 5nmol/l; the male athlete has 5 times the testosterone of the average female (range for women's testosterone 0.5-2.4

nmol/l). Essentially transgender athletes are legally doping with their elevated testosterone levels. If these facts don't convince you of male body privilege, watch a WNBA game compared to an NBA game and you can see the difference in speed and skill yourself despite the women using a 1 inch smaller ball and the 3 point arc being over 1 foot shorter.

This is also true of almost every other sport. Routinely younger boys can outperform more experienced female athletes. In 2017 a Boys 15 and under soccer team easily beat the Women's National team. Flo Jo's 1988 world record 100m time of 10.49 seconds still stands today. But there are dozens of High School age boys who run faster and hundreds of college men with better times. When a male bodied athlete crushes Flo Jo's record that has stood for over 35 years, women's records will no longer be attainable by actual women.

The physical and physiologic differences between males and females are undeniable. Competition categories exist to ensure fairness, safety, and the integrity of record performances. This is why a 22 year old assistant basketball coach cannot be allowed to identify as a Junior Varsity high school player and dominate the game. A 180 pound wrestler cannot identify as 100 pounds and join a lower weight class because the lighter wrestler would not only be disadvantaged, but also at risk for significant injury. There have already been injuries to female athletes from head to head competition with male bodied athletes. This season, my youngest daughter who won a spot on Anthony Middle School's varsity team sustained a gruesome elbow dislocation and fracture which required surgery in competition with a young man who overpowered her (wrestling is still co-ed in middle school). In 2020 World Rugby banned transgender women from competing in the female category secondary to the high risk of serious head and neck injuries to their female competitors. The video of the transgender athlete from Highlands High School in North Carolina spiking a volleyball into the face and seriously injuring an opponent went viral and made national headlines.

Closing

No one is banning transgender athletes from competition. Those athletes have every right to play sports and compete and should be encouraged to do so. However, the right to compete does not grant anyone the right to self identify into whatever category they so choose. My daughters have a right to safe and fair competition when they step onto the wrestling mat. Sex is a competition category that must be preserved or all the progress in women's sports over the past 40 years will be lost. Women's records will continue to be erased and girls will be **excluded** from the podium all in the name of "inclusion". Those who truly value women recognize this, and that is why we must pass the Fairness in Women's Sports Act.

Autumn H. Caycedo, MD 1008 Mill Valley Circle Manhattan, KS 66503

End Notes

- Women's Sports Found.; Title IX and the Rise of Female Athletes in America (Sept 2, 2016), https://www.womenssportsfoundation.org/education/title-ix-and-the-rise-of-femaleathletes-in-america/; see also Fred Bowen, Title IX Has Helped Encourage Many Girls To Play Sports, Wash. Post (June 20, 2012) (in 1972, 295,000 girls and 3.67 males competed in high school sports; for the 2010-2011 academic year, 3.2 million high school girls and 4.5 million high school boys participated in athletics).
- Ian Janssen et al.; Skeletal Muscle Mass and Distribution in 468 Men and Women Aged 18-88 Yr, 89 J. Applied Physiology. 81 (2001).
- 3. Dong Hoon Lee et al.; *Development and Validation of Anthropometric Prediction Equations For Lean Body Mass, Fat Mass and Percent Fat in Adults Using The National Health And Nutrition Examination Survey* (Nhanes) 1999-2006. 118 British J. Nutr. 858 (2017) (men average 11% less in body fat compared to women).
- 4. Kalypso Karastergiou et al.; **Sex Differences In Human Adipose Tissues- The Biology of Pear Shape**, 3 Biology of Sex Differences 13 (2012).
- 5. D. Leyk et al.; *Hand-grip Strength of Young Men, Women, and Highly Trained Female Athletes*, 99 Eur. J. App. Physiology. 415 (2007). (despite specific strength training the grip strength of women is rarely stronger than untrained men).
- 6. James R. Morrow Jr. & W.W> Hosler, *Strength Comparisons in Untrained Men and Trained Women Athletes*, 13 Med. Sci. Sports Exerc. 194 (1981) (untrained males are significantly stronger than female althetes).
- 7. Andrea E.J. Miller et al.; *Gender Differences in Strength And Muscle Fiber Characteristics*, 66 Eur. J. Appl. Physiology. 254, 261 (1993).
- 8. Stefan Pfaffenberger et al.; *Size Matters! Impact of Age, Sex, Height, and Weight on the Normal Heart Size*, 6 Circulation 724, 729 (1967) (neither body size nor clinical status fully compensate for the differences in heart size between men and women).
- Michelle A. Carey et al.; It's All About Sex: Male-female Differences in Lung Development and Disease, 18 Trends Endocrinology Metabolism. 308 (2007); se also Antonella Lo Mauro & Andrea Aliverti, Sex Differences In Respiratory Function, 14 Breathe 131 (2018) (sex differences in lungs begin prenatally)
- College of Arts & Sciences Forum, Running: Why Are Men Faster than Women?, Ohio State University (Mar 10, 2015), https://ohio-forum.com/2015/03/running-why-are-men-faster-than-women/.
- 11. William G. Murphy, *The Sex Difference in Haemoglobin Levels in Adults- Mechanisms, Causes, and Consequences,* 28 Blood Reviews 41 (2013).
- 12. Russell R. Pate and Andrea Kriska, *Physiological Basis of the Sex Difference in Cardiorespiratory Endurance*, 1 Sports Med. 87 (1984).
- 13. Hanjabam Barun Sharma and Jyotsna Kailashiya, *Gender Difference in Aerobic Capacity and the Contribution by Body Composition and Haeomoglobin Concentration: A Study in Young*

- *Indian National Hocky Players*, 10 J. Clin. And Diagn. Res. CC09 (2016). (even with similar training and competition levels males have better aerobic capacity)
- 14. Carole Hooven, T: *The Story of Testosterone: The Hormone That Dominates And Divides Us,* publisher Henry Holt and Co. (2021).
- 15. Emma N. Hilton &Tommy R, Lundberg, *Transgender Women in the Female Category of Sport: Perspectives on Testosterone Suppression and Performance Advantage*, 51 Sports Med. 199, 201 (2021).
- 16. 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).
- 17. Jerry W. Nieves et al.; *Males Have Larger Skeletal Size and Bone Mass Than Females, Despite Comparable Body Size*, 20 J. Of Bone and Mineral Res. 529 (2005).
- 18. John J. McMahon et al; *Sex Differences in Countermovement Jump Phase Characteristics*, 5 Sports 8 (2017) (males jump 24% higher than females).
- 19. Roger Gonzales, FFC Dallas Under-15 Boys Squad Beat The U.S. Women's National Team in a Scrimmage, CBS Sports (Apr 4, 2017), https://www.cbssports.com/socc/news/a-dallas-fc-under-15-boys-squad-beat-the-u-s-womens-national-team-in-a-scrimmage/.
- Women's World Records, Track & Field News, https://trackandfieldnews.com/records/womens-world-records/.
- 21. *Biography: Florence Joyner* (May 6, 2021), https://www.biography.com/athlete/forence-joyner .
- 22. Madison Williams, 22-Year-Old Coach Fired After Impersonating JV Basketball Player at Game, Sports Illustrated (Jan 31, 2023), https://si.com/amp/extra-mustard/2023/01/31/portsmouth-virginia-basketball-coach-fired-impersonating-jv-player-during-game
- 23. World Rugby Transgender Guideline (Oct 9, 2020), https://world.rugby/the-game/player-welfare/guidelines/transgender/women.
- 24. Jenny Goldsberry, Footage Shows Moment Female High School Volleyball Player Injured by Spike Form Trans Opponent, Washington Examiner (Oct 22, 2022), https://washingtonexminer.com/restoring-america/fairness-justice/district-forfeits-games-transgender-player.