THE INTERSECTION OF WOMEN'S OLYMPIC SPORT AND INTERSEX ATHLETES: A LONG AND WINDING ROAD*

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INTRODUCTION

In August 2009, Caster Semenya, an eighteen-year-old runner from South Africa, was under suspicion after a victorious performance in the women's 800-meter event at the 12th IAAF World Championships in Athletics in Berlin. When Semenya was noticeably absent from a post-race news conference, an International Association of Athletics Federations ("IAAF") official took Semenya's place to address the developing controversy surrounding her win. The official spoke about what had been confirmed by the IAAF earlier in the day—that Semenya "was undergoing sex determination testing," also called gender testing. The IAAF's response to the young woman's performance was curious: it was unclear on what basis officials decided that the appropriate action was to test Semenya's status as a woman rather than to take other action such as testing for performance enhancing drugs.

The General Secretary of the IAAF and former Triple Jumper, Pierre Weiss, emphasized that gender testing was prompted by "ambiguity, not because we believe she is cheating." Elisa Cusma of Italy stated her issue with Semenya more vigorously: "These kind of people should not run with us.... For me, she's not a woman. She's a man." Cusma's accusations are hard to take literally. The fear was not that Semenya was biologically a man, but that she had a condition which would preclude her from fitting neatly into the binary sex categories used in athletic competition.

Semenya's case likely brought unique concern to her rivals given the

^{*} The authors would like to thank Maribel Nash for her help with this Article, as well as the rest of the Northwestern Law library staff for their research assistance.

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^{1.} Christopher Clarey, *Gender Test After a Gold-Medal Finish*, N.Y. TIMES, Aug. 20, 2009, at B13, *available at* http://www.nytimes.com/2009/08/20/sports/20runner.htm? r=0.

^{2.} *Id.* The International Association of Athletics Federations is the International Federation for the sport of track & field and, as such, serves as the governing body for the sport. *See About the IAAF*, IAAF, http://www.iaaf.org/about-iaaf/ (last visited Feb. 26, 2013).

^{3.} *Id*.

^{4.} Id.

^{5.} Id.

^{6.} Id.

statistical improbability that they previously had opposed such a competitor. However, athletes with similar conditions were not a new development in international competition, and less-than-sensitive handling of such cases was regrettably often the norm. In May 2011, perhaps spurred by the Semenya case, the IAAF announced new eligibility rules focusing on athletes' levels of androgenic hormones. Likewise, during the summer of 2012, the International Olympic Committee ("IOC") imposed similar regulations designed to address conditions that give athletes a "competitive advantage." These new rules provide the promise of a gentler review of athletes under suspicion of gender violations—one that treats such conditions as a health issue and maintains the fairness and integrity of competition without ostracizing competitors or subjecting them to undue scrutiny. If these rules are successful in doing this, many of the issues related to intersex athletes competing in Olympic sport will be resolved.

Part I of this Article reviews the IAAF regulations on gender. Part II of this Article discusses issues related to sex and gender. This section introduces the problem of defining gender and specific cases of athletes with Disorders of Sex Development (DSD). Part III discusses existing policies in Olympic sports that pertain to fairness and how they relate to the new policies of the IAAF and IOC. Part IV of this Article focuses on the history of sex testing in international athletic competition. Part V wrestles with the question of fairness, an essential consideration for any policy relating to international athletic competition. This Part discusses the potential for discrimination when defining the contours of what is within the normal range of variation for a female athlete.

I. A REVIEW OF GENDER REGULATIONS

A panel of medical experts assembled by the IOC in Miami Beach in January 2010 (the "January Panel") determined that cases of ambiguous sex should be treated as a medical issue. ¹⁰ In Berlin, IAAF officials may have speculated that Caster Semenya could have what is termed as "Disorder of Sex Development" ("DSD"). ¹¹ During its meeting, the January Panel found a need to promulgate a

^{7.} INT'L ASS'N OF ATHLETICS FED'NS, IAAF REGULATIONS GOVERNING ELIGIBILITY OF FEMALES WITH HYPERANDROGENISM TO COMPETE IN WOMEN'S COMPETITION 1 (May 1, 2011) [hereinafter IAAF REGULATIONS], available at http://www.iaaf.org/about-iaaf/documents/medical# hyperandrogenism-and-sex-reassignment.

^{8.} INT'L OLYMPIC COMM., IOC REGULATIONS ON FEMALE HYPERANDROGENISM (June 22, 2012), *available at* http://www.olympic.org/Documents/Commissions_PDFfiles/Medical_Commission/2012-06-22-IOC-Regulations-on-Female-Hyperandrogenism-eng.pdf.

^{9.} See generally IAAF REGULATIONS, supra note 7.

^{10.} Gina Kolata, *I.O.C. Panel Calls for Treatment in Sex Ambiguity Cases*, N.Y. TIMES, Jan. 21, 2010, at B23, *available at* http://www.nytimes.com/2010/01/21/sports/olympics/21ioc.html.

^{11.} See Peter A. Lee et al., Consensus Statement on Management of Intersex Disorders, 118 PEDIATRICS e488, e489 (2006), available at http://pediatrics.aappublications.org/content/118/2/e488.full.pdf+html.

standard for dealing with future cases of athletes with DSDs, though not addressing any particular athlete's condition. The January Panel emphasized that the purpose of any new guideline should not be to preserve a level playing field for all female athletes in competition, but rather should be the health of the athlete with the disorder. Dr. Joe Leigh Simpson of Florida International University, a noted scholar on DSDs, reiterated that the January Panel did not discuss fairness with respect to permitting athletes with DSDs to participate in athletic competitions such as the Olympics or other competitions governed by the IAAF. In Simpson's view, the emphasis of the panel was geared toward inclusion: "The entire concept was that these individuals should be allowed to compete."

The January Panel recommended that when an athlete is diagnosed with a DSD, she be given the option to treat the disorder, although the treatment may not always be necessary.¹⁶ The January Panel did not further outline specific cases in which treatment would be necessary.¹⁷

This review was the beginning of an amendment process that would ultimately change the way that the IAAF handled the issue of intersex athletes. In May 2011, the IAAF's announcement of new regulations focused on hyperandrogenism. The new rules provide "for a medical assessment" to obtain information relevant to an eligibility determination. The information is then presented to an expert panel for further recommendation.

Although the new rules require previously diagnosed athletes to notify medical managers prior to events, there are also requirements to protect athletes from speculative accusation: first, the IAAF Medical Manager at an event is required to have "reasonable grounds" for belief that a case may exist before initiating a review; and second, provisional competition status may be available during reviews, all of which are conducted in confidence.²²

The overhaul retained the IAAF rationale of fairness in competition as a reason for concern in such cases—review panels are to recommend eligibility

- 12. Kolata, supra note 10.
- 13. *Id*.
- 14. *Id*.
- 15. Id.

- 17. Kolata, supra note 10.
- 18. See Int'l Ass'n of Athletic Fed'ns, HA Regulations: Explanatory Notes 2 (2011) [hereinafter IAAF Explanatory Notes], available at http://www.iaaf.org/about-iaaf/documents/medical.
 - 19. See id. at 1-2.
 - 20. Id. at 2.
 - 21. Id. at 2-3.
 - 22. Id.

^{16.} *Id.*; *see also* Press Release, Int'l Olympic Comm. Med. Comm'n, Summary of Conclusions Reached at Gender Symposium (Jan. 21, 2010) [hereinafter Press Release, Summary of Conclusions], http://www.olympic.org/content/news/media-resources/manual-news/2010/01/21/press-release-summary-of-conclusions-reached-at-gender-symposium.

where the athlete's androgen levels are found to be outside the female range or where the athlete can demonstrate that a medical condition prevents her from obtaining advantage from higher androgen levels.²³ But the process effectively institutionalizes an approach focusing on the therapeutic needs of athletes with irregular conditions—one which precludes reviewers from actually prescribing treatments and, instead, merely establishes eligibility or non-eligibility and then assists athletes in determining what steps would be necessary to meet eligibility standards.²⁴

II. VARIOUS PROBLEMS IN SEX AND GENDER

A. Gender and Sex Are NOT Synonymous

The term "gender test" is actually somewhat of a misnomer. Sex refers to the biological attributes of an individual that can be categorized as male, female, or something that is not typically either male or female, such as a DSD.²⁵ Gender, on the other hand, is a social construct.²⁶ There may be a biological component to gender, but it is possible for a person who is biologically a woman to have male gender and vice versa.²⁷ "[S]ocial scientists . . . [separate] 'gender' into two basic ideas, 'gender roles' and 'gender identities.""²⁸

Gender roles are constructs—male as hunter/provider and female as nurturer/homemaker.²⁹ Like actors in a play, individuals may aspire to assume traditional paradigms. Gender identity refers to a person's "internal feeling of being a" male or female.³⁰ An example is a person who undergoes surgery to alter his or her biological sex. This could be viewed as a method of bringing the individual's sex into alignment with his or her gender identity.³¹ In a vast majority of the population, biological sex and the traditional concept of gender are in agreement. Although biology is not a complete determinant, there is likely some biological basis for this agreement. Even a rudimentary understanding of the concepts of sex and gender illustrates why the two terms should not be used

^{23.} Id. at 3.

^{24.} *Id.* at 2-4. The panel in Miami certainly contemplated that such rules would be promulgated following their effort. *See* Press Release, Summary of Conclusions, *supra* note 16.

^{25.} See The Social Construction of Sex and Me, ALICE DOMURAT DREGER, http://www.alicedreger.com/social construction.html (last visited Mar. 11, 2013) [hereinafter ALICE DREGER].

^{26.} *Id.*; *see also* Canadian Acad. of Sport Med., Gender Verification Subcomm. Position Statement: Sex Testing (Gender Verification) in Sport 6 (Jan. 1997) [hereinafter CASM, Position Statement], *available at* http://www.casm-acms.org/forms/statements/GendereVerifEng.pdf.

^{27.} ALICE DREGER, *supra* note 25; CASM, Position Statement, *supra* note 26.

^{28.} ALICE DREGER, supra note 25.

^{29.} Id.

^{30.} Id.

^{31.} See Jerry L. Dasti, Note, Advocating a Broader Understanding of the Necessity of Sex-Reassignment Surgery Under Medicaid, 77 N.Y.U. L. Rev. 1738, 1741 (2002).

interchangeably. In addition to it being inaccurate to use the word gender synonymously with the word sex, doing so likely perpetuates negative social norms.

B. Intersex Issues

1. Name-Calling—The Implication of the Term "DSD".—For the remainder of this article, the term "Disorders of Sex Development" or DSD will be used sparingly. Although this is a technical term used by the International Athletics Foundation and the IOC, ³² many in the DSD community reject this term due to its use of the word "disorder." Instead, they use the term "intersex," which will be used for the remainder of the Article. The Intersex Society of North America ("ISNA") has stated, "Intersex itself is not a disorder, rather a variation."

The origin of the term DSD is the Consensus Statement on Management of Intersex Disorders, which was developed by the Lawson Wilkins Pediatric Endocrine Society in conjunction with the European Society for Paediatric Endocrinology. It was thought that the term DSD was proposed with the intent to standardize the nomenclature within the intersex community and discourage the use of such terms as, "intersex, pseudohermaphroditism, hermaphroditism, sex reversal, and gender-based diagnostic labels [that] are particularly controversial." There is no doubt that the term DSD was not meant as an insult to the intersex community. However, people who do not see the condition as any sort of disorder or abnormality that requires medical normalization have taken issue with this term. To an extent, the designation of sex into male and female categories is likely an oversimplification. There are variations due to a multitude of conditions that an individual may knowingly or unknowingly possess that undermine traditional classifications of men or women. Some have gone so far as to state that sex is a "continuum" that is not susceptible to discrete

- 32. See Press Release, Summary of Conclusions, supra note 16.
- 33. Why Is ISNA Using "DSD"?, INTERSEX SOC'Y N. Am. (May 24, 2006, 9:02 AM), http://www.isna.org/node/1066.
 - 34. Id.
 - 35. Id.
 - 36. Lee et al., *supra* note 11, at e488.
 - 37. *Id.* (internal quotations marks omitted).
- 38. See Ellen K. Feder & Katrina Karkazis, What's in a Name? The Controversy over "Disorders of Sex Development," HASTINGS CTR. REP. 33, 33-36 (2008).
- 39. Elizabeth Reis, *Divergence or Disorder: The Politics of Naming Intersex*, 50 PERSP. IN BIOLOGY & MED. 535, 537 (2007), *available at* http://pages.uoregon.edu/healarts/studies/alternatives/Alt Divergency or Disorder PBM.pdf.
- 40. See SUZANNE J. KESSLER, LESSONS FROM THE INTERSEXED 12-14 (3d prtg. 2002); Jessica L. Adair, In a League of Their Own: The Case for Intersex Athletes, 18 SPORTS LAW. J. 121, 125-29 (2011) (discussing the various intersex conditions and the prevalence of intersex in the American population).

categorization.⁴¹ In the current state of medical knowledge, this argument may go too far. At any rate, it is established that there is a percentage of the population that does not fit neatly into the categories of male or female.⁴² Many intersex individuals choose to identify themselves as either male or female for gender purposes.⁴³ This is often because the physical appearance of an intersex individual will often lean heavily toward that of either a male or female.⁴⁴

- 2. The Scope of Intersex.—Intersex is not one specific condition but, rather, encompasses a number of conditions. The Consensus Statement defined DSDs, which are synonymous with intersex conditions such as "congenital conditions in which development of chromosomal, gonadal, or anatomic sex is atypical." The ISNA defines "intersex" as "a general term used for a variety of conditions in which a person is born with a reproductive or sexual anatomy that doesn't seem to fit the typical definitions of female or male." The ISNA website identifies no less than sixteen separate conditions that qualify an individual as intersex. The list is as follows:
- 5-alpha reductase deficiency
- Androgen Insensitivity Syndrome (AIS)
- Aphallia
- Clitoromegaly
- Congenital Adrenal Hyperplasia
- gonadal dysgenesis
- hypospadias
- Klinefelter Syndrome
- micropenis
- mosaicism involving "sex" chromosomes
- [Mayer-Rokitansky-Hauser-Syndrome] (MRKH) (Mullerian agenesis,
- 41. GERALD N. CALLAHAN, BETWEEN XX AND XY: INTERSEXUALITY AND THE MYTH OF TWO SEXES 108 (2009).
- 42. Anne Fausto-Sterling considers it "extremely difficult to estimate the frequency of intersexuality." Anne Fausto-Sterling, *The Five Sexes: Why Male and Female Are Not Enough*, *in* SEXUALITY AND GENDER 468, 469 (Christine L. Williams & Arlene Stein eds., 2002). She cites the psychologist John Money who has estimated that intersexuals may constitute as many as 4% of births. *Id.*; *see also* Adair, *supra* note 40, at 125-29 (discussing the various intersex conditions and noting a 1.7% rate of occurrence).
- 43. See April Herndon, Why Doesn't ISNA Want to Eradicate Gender?, INTERSEX SOC'Y N. Am. (Feb. 17, 2006, 1:28 PM), http://www.isna.org/faq/not_eradicating_gender.
- 44. See id.; see also Milton Diamond & H. Keith Sigmundson, Management of Intersexuality: Guidelines for Dealing with Individuals with Ambiguous Genitalia, 151 ARCHIVES PEDIATRICS & ADOLESCENT MED. 1046, 1046-50 (1997), available at http://www.hawaii.edu/PCSS/biblio/articles/1961to1999/1997-management-of-intersexuality.html.
 - 45. Lee et al., *supra* note 11, at e488.
- 46. What Is Intersex?, INTERSEX SOC. N. Am., http://www.isna.org/faq/what_is_intersex (last visited Mar. 11, 2013).
 - 47. *Id*.

vaginal agenesis, congenital absence of vagina)

- ovo-testes (formerly called "true hermaphroditism")
- Partial Androgen Insensitivity Syndrome
- Progestin Induced Virilization
- Swyer Syndrome
- Turner Syndrome. 48

This list of diverse conditions hints at the difficulty of categorizing intersex athletes since each condition affects the human body in a unique fashion.⁴⁹ In fact, all that can truly be said about a person with any of the above conditions is that he or she does not have a typical reproductive or sexual anatomy.⁵⁰

C. What Is Sex Anyway?

In the nineteenth century, there were only five classifications of sexual anatomy: (1) female, (2) male, (3) female pseudohermaphrodite, (4) male pseudohermaphrodite, and (5) true hermaphrodite.⁵¹ Pseudohermaphrodite was the term used for a person whose physical appearance was at odds with his or her gonads.⁵² A true hermaphrodite was a person with both male and female external genitalia.⁵³ The word hermaphrodite, which at one time was used to describe some intersex conditions, is a reference to the son of Hermes and Aphrodite in Greek mythology.⁵⁴ This son (or daughter) was both fully male and fully female.⁵⁵ Although a person may have both male and female external genitalia, it is impossible for a person to be "fully male and fully female."⁵⁶ In addition to the inaccuracy of the word "hermaphrodite," many individuals consider the term "stigmatizing and misleading."⁵⁷

There are at least six criteria to determine a given individual's sexual status: "(i) sex chromosome constitution; (ii) sex hormonal pattern; (iii) gonadal sex, i.e. testes or ovaries); (iv) internal sex organs; (v) external genitalia; [and] (vi)

^{48.} *Intersex Conditions*, INTERSEX SOC'Y N. AM., http://www.isna.org/faq/conditions (last visited Mar. 16, 2013).

^{49.} See Adair, supra note 40, at 124-28.

^{50.} Id.

^{51.} Eric Vilain et al., *We Used to Call Them Hermaphrodites*, 9 GENETICS IN MED. 65, 65 (2007), *available at* http://www.nature.com/gim/journal/v9/n2/pdf/gim200711a.pdf.

^{52.} *Id*.

^{53.} *Id*.

^{54.} See Is a Person Who Is Intersex a Hermaphrodite?, INTERSEX SOC'Y N. Am., http://www.isna.org/faq/hermaphrodite (last visited Mar. 21, 2013) [hereinafter ISNA, Intersex]; see also OVID's METAMORPHOSES bk. IV, at 346-88 (Anthony S. Kline trans., 2000), available at http://ovid.lib.virginia.edu/trans/Metamorph4.htm#478205198.

^{55.} OVID's METAMORPHOSES, supra note 54.

^{56.} ISNA, Intersex, supra note 54.

^{57.} Id.

secondary sexual characteristics."⁵⁸ Considering the vast number of molecules involved in each of these stages and the various ways in which one can be either a man, woman, or intersex, it is not difficult to understand why atypical cases exist or why the governing authorities of sport should be careful in their approach to sex testing. Put bluntly, numerous historical examples of callously handled cases that implied guilt before testing even began necessitated the need for the new IAAF rule.⁵⁹

III. FAIRNESS: AMBIGUITY, SUSPICION, AND THE FUNDAMENTAL PRINCIPLES OF OLYMPISM

A. Sex Stereotyping at the Olympics

"The founder of the modern [Olympic] Games, Pierre de Coubertin, . . . was opposed to women's participation throughout his term as International Olympic Committee (IOC) President." He believed that for men, "success in sport competition demonstrated personal worth and prepared one to serve the nation." This personal worth came from the social value of domination of others, which was an inappropriate goal for women. The Olympics developed around sports, such as track and field, that emphasized "distance travelled over time, distances jumped in length and height, and weight moved." These quantitative measurements became fused with the idea of masculinity. As a result of the marriage of masculinity and sports that focused on statistical measurement, "sport leaders rejected the efforts of [women to join track and field events, which were] considered the most important part of the Olympic program."

Fortunately, the Olympics eventually allowed female competitors in track and field in 1928.⁶⁶ However, society's thoughts on women's sports did not change as much through social movement and changed attitudes, as through necessity.⁶⁷ During the Cold War years, the desire to compete with the Soviet Union and associated Eastern Bloc nations had the unexpected effect of creating

^{58.} Arne Ljungqvist, *Gender Verification*, *in* WOMEN IN SPORT 183, 188 (Barbara L. Drinkwater ed., 2000). Ljundqvist also includes gender roles and gender identity among the criteria that determine a person's sexual status. For purposes of keeping biological sex and gender separate, the seventh and eighth of these criteria have been excluded.

^{59.} See, e.g., Clarey, supra note 1.

^{60.} Kevin B. Wamsley, *Promising Practices: Working with Transitioning/Transitioned Athletes in Sport Project, Social Science Literature on Sport and Transitioning/Transitioned Athletes* 8 (2008), http://50.6.145.77/e/wp-content/uploads/2013/02/Wamsley_lit_review2.pdf.

^{61.} *Id*.

^{62.} Id.

^{63.} *Id.* at 9.

^{64.} Id.

^{65.} Id.

^{66.} ALLEN GUTTMANN, WOMEN'S SPORTS: A HISTORY 139 (1991).

^{67.} See Wamsley, supra note 60, at 11.

more opportunities for U.S. women in sports. ⁶⁸ In 1952, the Soviet Union came to the Olympics "with a full team of male and female athletes." ⁶⁹ In order to compete, the United States put aside its traditional notion of the unsuitability of women in certain sports. ⁷⁰ The medal count was more important than preservation of social norms. ⁷¹ Women were allowed into sports that previously were closed off to them. ⁷² These increased opportunities came with an increased suspicion that female athletes were masculine, and in some cases, a suspicion that men were posing as women. ⁷³ This is the era that gave rise to sex testing. ⁷⁴ Although women were allowed to compete to "serve the nation," as Pierre de Coubertin so aptly put it, they were not embraced in this role to the same extent as men. ⁷⁵

Instead of encouraging women to compete in "masculine" measurement-type sports, the Olympics worked to channel women into certain sports that society found more appropriate for females. Sports such as "fencing, swimming, tennis, figure skating, and gymnastics" that emphasized abilities "such as grace, rhythm, and artistry" were the order of the day. According to Wamsley, focusing women on sports that were considered more feminine constituted a "strategic initiative[]." In hindsight, this strategic initiative was an early indicator of the issues that would later come about relating to gender and sport.

B. Overriding Concerns: Human Dignity

- 1. The Stigmatizing Effects of Sex Testing: Empirical Examples.—
- a. Stella Walsh.—Stella Walsh, also known as Stanisława Walasiewicz, competed in both the 1932 and 1936 Olympics.⁷⁹ In 1932, she won the 100-
 - 68. Id. at 11-13.
 - 69. Id. at 11.
 - 70. Id.
 - 71. See id. at 11, 15.
 - 72. Id. at 11.
- 73. *Id.* at 13; *see also* Adair, *supra* note 40, at 132-34 (discussing the history of sex verification tests in the Olympic Games).
 - 74. Wamsley, supra note 60, at 12-13; see Adair, supra note 40, at 132-34.
 - 75. Wamsley, *supra* note 60, at 8, 11-12.
- 76. *Id.* at 11, 13; *see also* Louis J. Elsas et al., *Gender Verification of Female Athletes*, 2 GENETICS IN MED. 249, 250 (2000), *available at* http://www.nature.com/gim/journal/v2/n4/pdf/gim2000258a.pdf.
 - 77. Wamsley, *supra* note 60, at 11.
 - 78. *Id.* at 10-11.
- 79. Robert Ritchie et al., *Intersex and the Olympic Games*, 101 J. ROYAL SOC'Y MED. 395, 395 (2008), *available at* http://jrsm.rsmjournals.com/content/101/8/395.full.pdf; Vanessa Heggie, *Sex Testing and the Olympics: Myths, Rumours and Confirmation Bias*, GUARDIAN (Aug. 2, 2012, 10:21 AM), http://www.guardian.co.uk/science/the-h-word/2012/aug/02/sex-testing-olympics-myths-rumours-confirmation-bias.

meters dash.⁸⁰ Walsh had muscle and facial features that were deemed more characteristic of the male sex than the female sex.⁸¹ As a result, other competitors and the popular media called her "Stella the Fella." This was before the time of sex testing, so she competed despite the suspicions. In 1980, Walsh was shot and killed in a bank robbery. A post-mortem examination [of her corpse revealed that she had] ambiguous genitalia and abnormal chromosomes. Her specific intersex condition was never ascertained. Her specific intersex condition was never ascertained.

b. Santhi Soundarajan.—Stella Walsh was likely aware of her intersex condition since it expressed itself externally.⁸⁷ It is unclear whether Santhi Soundarajan was aware of her intersex condition when she was stripped of her medals after a sex test determined that she was not a biologically typical woman.⁸⁸ However, she had AIS,⁸⁹ which later became one of the conditions that the IAAF considered not to deem an advantage if the AIS is complete or near complete; however, at the time, there were no such concessions.⁹⁰ Soundarajan won the silver medal in the 2006 Asian Games in the 800-meter event.⁹¹ Some report that she attempted suicide in September 2007 due to her despair upon the announcement that she was not a typical female, but this report is inconsistent with other accounts.⁹² She took a veterinary drug and subsequently required

- 81. *Id*.
- 82. Id.
- 83. Id.
- 84. Ritchie et al., supra note 79, at 396.
- 85. Id; see also Adair, supra note 40, at 133.
- 86. Ritchie et al., supra note 79, at 396; Adair, supra note 40, at 133.
- 87. See The Sad Story of India's Santhi Soundarajan, DAILY TIMES, Jan. 10, 2007, http://www.dailytimes.com.pk/default.asp?page=2007\01\10\story_10-1-2007_pg2_17 [hereinafter India's Sad Story]; see also Adair, supra note 40, at 133; Paul Farhi, Olympic Champion Blurred Gender Line, SANTE FE NEW MEXICAN, Aug. 22, 2008, http://www.sfnewmexican.com/World News/Olympic-champion-blurred-gender-line#.Ukiv1fvMex.
- 88. See India's Sad Story, supra note 87; TNAA Says Santhi Not to Blame, NDTV SPORTS (Dec. 20, 2006, 5:30 PM), http://sports.ndtv.com/othersports/athletics/item/18651-tnaa-says-santhinot-to-blame.
 - 89. Adair, *supra* note 40, at 136.
- 90. See Int'l Ass'n of Athletics Fed'ns, IAAF Policy on Gender Verification, at pt. A.6(a) (2006) [hereinafter IAAF Policy on Gender Verification], available at http://oii.org.au/wp-content/uploads/iaaf_policy_on_gender_verification.pdf.
- 91. *India's Sad Story, supra* note 87; V. Narayan Swamy, *Asiad Silver Medallist Santhi Soundarajan Labours at Brick Kiln*, TIMES OF INDIA, July 24, 2012, http://articles.timesofindia.indiatimes.com/2012-07-24/off-the-field/32826736_1_santhi-soundarajan-brick-kiln-gender-test.
- 92. Athletics: India's Sex Test Failure Runner Attempts Suicide, AFP, Sept. 5, 2007 [hereinafter Athletics: India's Runner], http://afp.google.com/article/ALeqM5gsvybOwz6ZX BrBkZmOeUBOdl4XTA; Swamy, supra note 91.

^{80.} Ross Tucker & Malcolm Collins, *The Science and Management of Sex Verification in Sport*, 21 S. AFR. J. SPORTS MED. 147, 148 (2009).

emergency assistance.⁹³ The Indian government issued a statement that Soundarajan's attempted suicide was "due to personal and domestic reasons and it had nothing to do with sports or any government action."⁹⁴ Others report that her attempted suicide stemmed from familial infighting over the \$40,000 that the Indian government awarded her to show its support in the wake of the failed test.⁹⁵ After the incident, Soundarajan opened a sports academy where she now trains underprivileged children.⁹⁶ Upon learning of Caster Semenya's predicament, Soundarajan expressed her support for her fellow 800-meter athlete with the comment, "She is a woman and that's it, full stop."⁹⁷

c. María José Martínez-Patiño.—A Spanish hurdler, María José Martínez-Patiño, was raised as a girl. She passed a sex test and competed at the 1983 World Track and Field Championships. At the time, a woman who passed the sex test was given an official Certificate of Femininity that would prevent the athlete from having to submit to sex tests at every competition. It was important, however, to bring the certificate to competitions and, Martínez-Patiño failed to do just that in 1985 at the World University Games in Kobe, Japan. Martínez-Patiño underwent another Barr body test, but this time there was a problem. In addition to the Barr body test, she was asked to undergo further karyotype testing. Unfortunately, the results of such testing were not available until after the competition, so she was not allowed to compete in Kobe. Team doctors advised her to fake an injury and withdraw from the event.

While back home in Spain, Martínez-Patiño attended all of her doctors' visits alone, not wanting to burden her parents with the matter. Doctors discovered that she had an XY karyotype and androgen insensitivity. She appeared completely female with both breasts and a vagina, but she was subsequently barred from athletics when she competed again at the Spanish National

^{93.} Sex-Test Failure Attempts Suicide, FOX SPORTS (Sept. 6, 2007, 12:00 AM), http://www.foxsports.com.au/story/0,8659,22373013-23210,00.html.

^{94.} Athletics: India's Runner, supra note 92 (quoting the state's sports secretary, M. Raman).

^{95.} Sex-Test Failure Attempts Suicide, supra note 93.

^{96.} Nilanjana Bhowmick & Jyoti Thottam, *Gender and Athletics: India's Own Caster Semenya*, TIME (New Dehli), Sept. 1, 2009, *available at* http://www.time.com/time/world/article/0,8599,1919562,00.html.

^{97.} Id.

^{98.} María José Martínez-Patiño, *Personal Account: A Woman Tried and Tested*, 366 LANCET S38, S38 (2005).

^{99.} Id.

^{100.} See id.

^{101.} Id.

^{102.} Id.; see also Adair, supra note 40, at 135.

^{103.} Martínez-Patiño, supra note 98.

^{104.} Id.

^{105.} Id.; Adair, supra note 40, at 135.

^{106.} Martínez-Patiño, supra note 98.

^{107.} Id.

Championships in 1986.¹⁰⁸ Before the race, officials again had asked her to fake an injury and retire.¹⁰⁹ Instead, she competed, and officials leaked the information about her condition to the press.¹¹⁰ In addition, she was expelled from the athletes' residence, her scholarship was revoked, and her times were erased from the record books in Spain.¹¹¹ Aside from this professional exile, Martínez-Patiño lost much more, as some of her friends and her fiancé abandoned her.¹¹²

Amidst this humiliation and turmoil, instead of hiding from the media, she embraced it as a medium for her cause. 113 Publicity of her case helped end chromosome-based testing. 114 In 1988, she was reinstated to compete in the Olympic Trials. 115 She narrowly missed qualifying for the 1992 Olympic Games in her home country, missing by ten-hundredths of a second. 116 Emblematic of the destruction that can be unleashed upon a person's life when private sex test results are revealed to the public, María José Martínez-Patiño's story is also a reminder that any balancing of interests when considering the fairness of allowing intersex athletes to compete should properly consider empirical evidence. For Martínez-Patiño, no physical advantage resulted from her AIS. 117 Any proponent of a categorical ban on intersex athletes should ask of the purpose of such a ban if an individual's condition does not give an advantage, and he or she has been raised and lived as a male or female since birth.

2. Fundamental Principles of Olympism: Human Dignity and Inclusion.— The value of human dignity is embodied in the second Fundamental Principle of Olympism, which states, "The goal of Olympism is to place sport at the service of the harmonious development of humankind, with a view to promoting a peaceful society concerned with the preservation of human dignity." This principle articulates that sport is at the service of the development of man (or woman). The fourth Fundamental Principle of Olympism states, "The practice of sport is a human right." It goes on to state that "[e]very individual must have the possibility of practising [sic] sport, without discrimination of any kind." This principle expresses a policy of inclusion. Any categorical ban on

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108. Id.
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^{109.} Id.

^{110.} Id.

^{111.} Id.

^{112.} Id.

^{113.} *Id*.

^{114.} *Id*.

^{115.} Id.

^{116.} Id.

^{117.} Id.

^{118.} INT'L OLYMPIC COMM., OLYMPIC CHARTER 10 (2011) [hereinafter OLYMPIC CHARTER], available at http://www.olympic.org/Documents/Olympic_Charter_en.pdf.

^{119.} Id.

^{120.} Id.

^{121.} Id.

intersex athletes would be in violation of this principle. However, the "possibility" of competing at the Olympics does not rule out requiring alternative treatment of an intersex condition before admission to competition or the establishment of a separate division for intersex. Nevertheless, these principles in concert seem to identify certain values to practice while engaging in an Olympic sport—establishing a level playing field to accommodate the inclusion of intersex competitors in Olympic competition in a manner that does not place barriers to their participation in a way as artificial as mere suspicious appearance.

C. Within the Normal Range of Variation

Any future decision to include or exclude intersex athletes from competition will make a statement about the acceptable normal range of variation for a female athlete. It may not be possible to precisely define the bounds of what is and what is not female. One method of defining the normal range of variation is by gauging whether an intersex competitor's abilities exceed those of a biologically typical female. This method of defining an acceptable range effectively deems advantages due to intersex conditions as being unfair. If, however, there are mitigating reasons to believe that intersex competitors are within the normal range of variation for women, then any advantage should be accepted as natural and fair. Defining an acceptable range of variation for female athletes in a manner that does not take into account athletic ability poses a great danger of prejudice and an overreliance on outmoded sex stereotypes.

It is hard to imagine that traditional stereotypes of acceptable female appearance will not play some role if this review is relegated to case-by-case testing. In sports, we must defend the IAAF's "reasonable grounds" safeguard against the possibility of perpetuating traditional sex stereotypes and ensure that it upholds the Principles of Olympism and inclusion.

D. Semenya's Ambiguous Appearance

Before the 2009 World Championships in Berlin, Caster Semenya was told to report for a doping test; however, this test was unlike any other drug test. ¹²⁴ Without her permission or consent (she was eighteen years old at the time), Semenya was examined physically—her legs were put in stirrups and her

^{122.} Meg Handley, *The IOC Grapples with Olympic Sex Testing*, TIME (London), Feb. 11, 2010, *available at* http://www.time.com/time/world/article/0,8599,1963333,00.html (paraphrasing Eric Vilain's remarks that exhaustive clinical and psychological tests may never conclusively establish a universal cutoff for the definition of man and woman).

^{123.} See id.

^{124.} See NBC Sports: Olympic Segment with Mary Carillo (NBC television broadcast Aug. 11, 2012); see also Adair, supra note 40, at 122-23, 135-38 (discussing intersex athletes and referencing Caster Semenya's experience); Katrina Karkazis et al., Out of Bounds? A Critique of the New Policies on Hyperandrogenism in Elite Female Athletes, 12 AM. J. BIOETHICS 3, 3 (2012), available at http://www.katrinakarkazis.com/out_of_bounds_ajob.pdf (referencing Caster Semenya's experience).

genitalia examined; this was not a doping test, this was a sex test. However, the test in South Africa was inconclusive, and the IAAF ordered a second test. This second test took place in a Berlin hospital the day before the 800-meter final of the 2009 World Track and Field Championships. Semenya easily won in Berlin, and controversy ensued. It would be mid-2010 before the IAAF, citing the conclusion of medical experts, cleared Semenya to compete once again as a woman.

Pierre Weiss pointed to "ambiguity" as the basis for Caster Semenya's Berlin sex test. Important to note is that the purpose of gender testing, as outlined by an IOC working group that met twice in 1991, was only "to ensure that men [did] not masquerade as women. In fact, in 2000, Arne Ljungqvist, the Chairman of the IOC Medical Commission, Is opined that "the purpose of gender testing [was] *not* to identify ambiguous cases. However, the IAAF did not believe that Semenya was cheating; therefore, sex verification tests were not administered due to a belief that Semenya was a man masquerading as woman. Thus, it seems that the former gender testing policy, at least in practice, was no longer confined to cases of suspected men posing as women.

Mariya Savinova, the runner who finished fifth, told journalists that she did not believe Semenya would pass a gender test, saying, "Just look at her." Indeed, Semenya's muscles were much more developed and defined than the other runners in the race. Her six-pack abdominals would be the envy of many male professional bodybuilders. If the "ambiguity" to which Weiss was referring was that Semenya's physical appearance brought into question her biological sex, Weiss must have meant that her "masculine" appearance was beyond the normal range of variation for a female athlete. But relying on physical appearance alone is clearly imprecise. Further, initial evaluations based

- 125. Karkazis et al., supra note 124, at 4.
- 126. See id.
- 127. *Id*.
- 128. Id. at 4-5.
- 129. Id. at 5.
- 130. Clarey, supra note 1.
- 131. Ljungqvist, *supra* note 58 (noting that although there were no major conclusions reached about the purpose of gender testing, the sole purpose of preventing male impostors could be identified from the minutes of both meetings).
- 132. *Professor Arne Ljungvist*, OLYMPIC.ORG, http://www.olympic.org/professor-arneljungqvist (last visited Mar. 19, 2013).
 - 133. Ljungqvist, *supra* note 58.
 - 134. Clarey, supra note 1.
 - 135. *Id*.
 - 136. See id.
- 137. Caster Semenya's Gender Questioned, JUDICIARY REP. (Aug. 20, 2009), http://www.judiciaryreport.com/caster semenya gender questioned.htm.
- 138. Clarey, *supra* note 1; Ann J. Curley, *Expert: Gender Testing 'Imperfect' for Female Athletes*, CNN (Aug. 8, 2012, 9:04 AM), http://cnn.com/2012/08/08/health/athletes-gender-testing.

on masculine visual cues run the risk of discrimination against athletes who do not exemplify traditional female stereotypes.

Likely, the only two pieces of information available to the other runners were Semenya's physical appearance and her performance in the event. ¹³⁹ Semenya's time was short of the World Record even though her victory was by a wide margin of over two seconds. ¹⁴⁰ If it is accepted that the current World Record holder in the 800-meter event and all of those with faster times than Semenya are females, then this performance alone should not create suspicion. The IAAF cited the relative newness of Semenya to adult competition and her dramatic improvements in performance as additional reasons for its suspicions and subsequent sudden decision to subject her to gender testing. ¹⁴¹ Unless there are allegations that Semenya underwent some gender change to accelerate her improvement, it is unclear how dramatic improvements in performance are less of a feminine feature than a masculine one. Granted, this is not the first time Semenya had been accused of not being entirely female. ¹⁴² However, this may only mean that she has long been the subject of informal sex stereotyping.

IV. HISTORY OF SEX TESTING

A. The Early Years

The original purpose of sex testing in women's sport was to root out men masquerading as women. One possible case was Dora Ratjen, who competed in the 1936 Olympic Games for Germany in the high jump event. Ratjen finished fourth in the Olympics and went on to set a world record at the European Championships two years later. Some have alleged that Dora Ratjen, although raised as a female, was born a male and forced to compete as a female by the Nazi regime. Dora (also Herman) Ratjen's case is controversial because her genitalia had reported abnormalities, and therefore it was unclear whether she was a typical male disguised as a female for the purpose of gaining an athletic advantage. What is certain is that she was registered as Dora Ratjen at birth

^{139.} See Clarey, supra note 1; see also Adair, supra note 40, at 122 ("Semenya's 'muscular physique, running style and recent stunning improvement in [running] times' prompted the [IAAF] ... to order ... tests." (first alteration in original)).

^{140.} Clarey, supra note 1.

^{141.} Id.

^{142.} See Ross Tucker, Caster Semenya: Male or Female?, SCI. SPORT (Aug. 19, 2009), http://www.sportsscientists.com/2009/08/caster-semenya-male-or-female.html.

^{143.} Ljungqvist, *supra* note 58. Ljundqvist also includes gender roles and gender identity among the criteria that determine a person's sexual status. *Id.* For purposes of keeping biological sex and gender separate, the seventh and eighth of these criteria have been excluded.

^{144.} Tucker & Collins, supra note 80.

^{145.} Id.

^{146.} Id.

^{147.} Id.

and raised as a girl, and by all accounts she seemingly continued to live as a female. At worst, Dora Ratjen was a case of a typically male athlete in biological terms who lived a large portion of her life such that her gender could indeed be called female. Ratjen's experience is part of a wider debate than Caster Semenya's. Any argument for inclusion of athletes, such as Ratjen (if she was biologically male), disregards the biological advantages that a person with a typical male biology is likely to have and focuses on the social fairness of including or excluding typical biological males who are bona fide gender female. 150

The accusations that Dora Ratjen was a man posing as a woman, and additional accusations of men competing as women in the 1936 Berlin Games and later in the 1960 Rome Olympic Games, prompted the IOC and IAAF to establish sex verification procedures. Beginning at the 1966 European Track and Field Championships in Budapest and the 1967 Pan American Games in Winnipeg, sex verification via physical inspection was instituted for all female competitors. These early sex tests are now referred to as "nude parades" due to the crude and humiliating nature of the procedure. At the 1966 Commonwealth Games in Kingston, Jamaica, the IOC required gynecological examinations for all female athletes. The humiliating nature of these kinds of tests led to the adoption of the sex chromatin test, also known as the Barr body test.

B. The Barr Body Test

This new test was introduced in the 1968 Mexico City Olympic Games. ¹⁵⁶ The Barr body test, also called the "sex chromatin test" or "buccal smear test," involved a microscopic examination of cells scraped from the inner lining of an athlete's cheek. ¹⁵⁷ Under typical circumstances females have two X chromosomes, and men have one X chromosome and one Y chromosome. ¹⁵⁸

- 148. Id.
- 149. See id.
- 150. The Canadian Association of Sport Medicine recommends that "[i]ndividuals who were raised as females and are psychologically and socially females from childhood should be eligible to compete in women's competition regardless of their chromosomal, gonadal and hormonal sex." CASM, POSITION STATEMENT, *supra* note 26, at 8.
 - 151. Tucker & Collins, supra note 80, at 148-50.
- 152. Joe Leigh Simpson et al., *Gender Verification in the Olympics*, 284 JAMA 1568, 1568 (2000).
 - 153. Adair, *supra* note 40, at 133.
 - 154. Simpson et al., supra note 152.
 - 155. Id.
 - 156. Tucker & Collins, supra note 80; see Adair, supra note 40, at 133-34.
 - 157. Ljungqvist, supra note 58, at 185.
- 158. Tucker & Collins, *supra* note 80; *see also* Albert de la Chapelle, *The Use and Misuse of Sex Chromatin Screening for 'Gender Identification' of Female Athletes*, 256 JAMA 1920, 1920-23

During prenatal development, the second X chromosome in the typical female is deactivated "to form a Barr body in the nucleus of cells." Typical males do not have a second inactive X chromosome and thus do not have any Barr bodies. 160 If a sex chromatin test is positive for Barr bodies, then a test subject has more than one X chromosome. 161 If the test is negative for Barr bodies, then an individual has only one X chromosome. 162 The presumption of those using the Barr body test is that a male with XY chromosomes will test negative for Barr bodies, and a female with XX chromosomes will test positive for the Barr bodies and should be granted permission to compete as a woman. 163 Furthermore, there is a presumption that typical male or female chromosomes produce typical male or female genitalia. 164 Conditions present in intersex individuals challenge these assumptions. 165

To illustrate this, one need only consider a few examples of more common intersex conditions. With Turner's syndrome, it is common for a person to be missing an entire sex chromosome. Those with Turner's syndrome have a female appearance, but since such individuals lack the second X chromosome typical in females, their cells will not have Barr bodies, and the sex chromatin test will consider them males. The issue with Turner's syndrome athletes is that, although they are not typically female, they do not have a Y chromosome as do typical males. A second problematic example for the Barr body test is Klinefelter syndrome. Athletes with Klinefelter syndrome will appear to be typical males, but the Barr body test will admit them into female competition. Because Klinefelter individuals have an XXY karyotype, they will not only have a second X chromosome, and thus a Barr body, but also a Y chromosome. The result of the use of Barr body tests on athletes with Turner's syndrome and Klinefelter syndrome is that those who look like females and do not have a Y chromosome (Turner's syndrome) are banned from competition, while those with

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(1986).
159. Tucker & Collins, supra note 80.
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160. Id.

161. *Id*.

162. *Id*.

163. *Id*.

164. Adair, supra note 40, at 125, 134.

165. Tucker & Collins, *supra* note 80, at 148-49; *see also* Arne Ljungqvist & Joe Leigh Simpson, Commentary, *Medical Examination for Health of All Athletes Replacing the Need for Gender Verification in International Sports: The International Amateur Athletic Federation Plan, 267 JAMA 850, 851 (1992).*

166. Tucker & Collins, supra note 80.

167. Id.; see also de la Chapelle, supra note 158, at 1922.

168. Tucker & Collins, supra note 80.

169. Id.

170. Id.

171. Id.

a male appearance and a Y chromosome (Klinefelter syndrome) are admitted. 172

A third condition, mosaicism, would lead to inconsistent Barr body test results. Those with mosaicism have multiple karyotypes in different cells. The Some cells may have XX karyotypes, and others may have XY karyotypes. The Cone can imagine the confusion upon multiple tests. Another common form of mosaicism is XO (O stands for the absence of a chromosome) and XY cell combinations, the Which would still be problematic even though the Barr body test for such individuals would be consistently male due to the absence of the second X chromosome.

Further, merely detecting the existence of a second X chromosome ignores that the presence of a Y chromosome alone does not necessarily confer an athletic advantage. Individuals with complete or partial androgen insensitivity ("AIS") have an XY karyotype but do not have a typical response to androgens (male hormones) due to mutations causing an atypical function in androgen receptors. These individuals have testicles, which can be internal, that produce a normal level of testosterone for a male. Even though typical male levels of androgens are produced, because of a mutation, their androgen receptors are "partially or completely insensitive to" this testosterone. The result is "the development of secondary female characteristics and musculature. Individuals with partial or complete AIS may appear as females and be raised female. The Barr body test would root out these athletes as unfit for female competition, although it is possible that they may not have any athletic advantage from the presence of a Y chromosome.

C. Polymerase Chain Reaction and the End of Compulsory Sex Testing

The IAAF ceased the practice of compulsory sex testing in 1991, but the IOC continued to screen female participants.¹⁸⁴ The IOC, however, replaced the Barr body test with a Polymerase Chain Reaction ("PCR") test that detects the Sex-

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172. See id. at 148-49.
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^{173.} Id. at 149.

^{174.} Id.; see also Ljungqvist & Simpson, supra note 165.

^{175.} Tucker & Collins, supra note 80, at 149.

^{176.} Id. at 148-49.

^{177.} See id.

^{178.} Id. at 149.

^{179.} Id.

^{180.} Id.

^{181.} Id.

^{182.} Id.

^{183.} Id. at 148-49.

^{184.} Ritchie et al., *supra* note 79, at 397; Samantha Shapiro, *Caught in the Middle: A Failed Gender Test Crushed Santhi Soundarajan's Olympic Dreams*, ESPN (Aug. 1, 2012, 2:49 PM), http://espn.go.com/olympics/story/_/id/8192977/failed-gender-test-forces-olympian-redefine-athletic-career-espn-magazine.

Determining Region Y ("SRY") gene, which is found on the male chromosome. The product of the SRY gene was thought to be necessary for the development of testicles in males. Now, however, the SRY test is considered inaccurate because testicular development requires other genes or, in some cases, a person with testes may lack the SRY gene entirely. Additionally, the SRY gene can "exist on the X-chromosome as a result of translocations during meiosis." The PCR test for the SRY gene was used during the 1992 and 1996 Olympics. 189

In 1999, the IOC ended compulsory sex testing. The current Chairman of the IOC Medical Commission, Arne Ljungqvist, has cited several reasons for the discontinuation of compulsory sex testing, including that

genetic tests . . . will not fulfil[] the aims of gender verification in sport, not even as screening methods. There is no single and adequate laboratory method for screening for gender. Although physical examination has been proposed as the only adequate method for gender verification in sport, it has proved unworkable. It is suggested that the close media coverage of today's elite sport and the current drug-control procedures when properly followed will together serve as a sufficient deterrent to attempts by males to masquerade as female athletes. ¹⁹¹

While compulsory sex testing was ended, the IOC reserved the right to test in cases of suspicion. 192

D. Current Policies

1. The IAAF and the International Olympic Committee.—To understand the current policies, one must understand the athletic organizations being discussed and their relationship to one another. "The International Olympic Committee is the supreme authority of the Olympic Movement." It "oversees the entire Olympic movement and creates rules that the rest of the movement must follow." Under the IOC, the National Olympic Committees ("NOCs") are the

^{185.} Richie et al., *supra* note 79, at 397; *see also* Adair, *supra* note 40, at 132-35 (discussing the history of sex testing at Olympic Games).

^{186.} Ritchie et al., supra note 79, at 397.

^{187.} Id.

^{188.} Tucker & Collins, supra note 80, at 149.

^{89.} Id.

^{190.} See Adair, supra note 40, at 134-35; Shapiro, supra note 184.

^{191.} Ljungqvist, *supra* note 58, at 191-92.

^{192.} Shapiro, supra note 184.

^{193.} *The Organisation*, OLYMPIC.ORG, http://www.olympic.org/about-ioc-institution (last visited Mar. 19, 2013).

^{194.} Daniel Gandert & Harry Epstein, *The Court's Yellow Card for the United States Soccer Federation: A Case for Implied Antitrust Immunity*, 11 VA. SPORTS & ENT. L.J. 1, 3 (2011); accord Edward E. Hollis, III, Note, *The United States Olympic Committee and the Suspension of Athletes:*

member nations' individual organizing bodies. ¹⁹⁵ They focus on their respective nation's development and pursuit of sports of all kinds, as well as participation in the Olympic Movement. ¹⁹⁶ Selection of athletes and teams for participation in the Olympic Games is the responsibility of the NOCs. ¹⁹⁷ Also under the IOC, the International Federations ("IFs") are the global administrators of a particular sport as recognized by the IOC. ¹⁹⁸ With broad-spectrum responsibility for a sport and its athletes, the IFs, as one of their primary functions, maintain the "integrity" of the sport. ¹⁹⁹ The International Association of Athletics Federations ("IAAF"), as an IF, is the international governing body for the sport of track and field. ²⁰⁰

2. The IAAF Policy.—The new IAAF policy on eligibility for women's competition preserves the practice of not requiring compulsory sex testing, but furthers the protection from potentially invasive testing even when suspicion arises. The "reasonable grounds" for review standard provides several instances which could trigger a review, including the following: (1) "an athlete making an approach to the IAAF or her National Federation;" (2) "results [from] a routine pre-participation or other medical examination;" (3) results from a drug test; and (4) the receipt of confidential information by IAAF officials. Notably, however, the explanatory notes to the new policy require such triggering information to come from "a reliable source." Ostensibly, a rival competitor's mere accusation would not suffice.

Even prior to the new regulations, the IAAF maintained the noteworthy position of requiring more than solely laboratory testing to make a sex

Reforming Grievance Procedures Under the Amateur Sports Act of 1978, 71 IND. L.J. 183, 185 (1995).

^{195.} Gandert & Epstein, *supra* note 194, at 2; OLYMPIC CHARTER, *supra* note 118, at 55-62. 196. *Id*; *see* PAUL C. WEILER & GARY R. ROBERTS, SPORTS AND THE LAW: TEXT, CASES, OBLEMS 1044-45 (3d ed. 2004); GLENN M. WONG, ESSENTIALS OF SPORTS LAW 27-31 (4th ed.

Problems 1044-45 (3d ed. 2004); Glenn M. Wong, Essentials of Sports Law 27-31 (4th ed. 2010).

^{197.} See James A. R. Nafziger, International Sports Law 21-23 (2d ed. 2004).

^{198.} Id.

^{199.} *International Sports Federations*, OLYMPIC.ORG, http://www.olympic.org/content/the-ioc/governance/international-federations/ (last visited Mar. 18, 2013).

^{200.} INT'L ASS'N OF ATHLETICS FED'NS, CONSTITUTION art. I, at 7 (centenary ed. Nov. 1, 2011), available at http://www.iaaf.org/about-iaaf/documents/constitution#iaaf-constitution. Article I of the Constitution states, "The International Association of Athletics Federations (IAAF) is the world governing body for the sport of Athletics." *Id.* at 7. The constitution includes the sport "Track and Field" in its definition of "*Athletics*." *Id.*

^{201.} IAAF REGULATIONS, supra note 7, at 1-2.

^{202.} Id. at 3.

^{203.} IAAF EXPLANATORY NOTES, supra note 18, at 1-2.

^{204.} See IAAF REGULATIONS, supra note 7, at 3 (indicating "reliable source[s]" that an IAAF medical manager can use to reach the "reasonable grounds" standard). Note that there is no explicit reference to a competitor athlete. *Id*.

determination in its 2006 regulations.²⁰⁵ Additional requirements for formulating an opinion on an athlete's sex included a medical evaluation before a panel of at least five experts—a gynecologist, an endocrinologist, a psychologist, an internal medicine specialist, and an expert on gender/transgender issues.²⁰⁶ In all cases, the IAAF advised that if testes were present, the organs "should be removed...to avoid malignancy."²⁰⁷ This policy foreshadowed the January Panel's recommendations of treating disorders.²⁰⁸ While it raised the issue of intersex athletes as disordered rather than within the acceptable variation of healthy females, the advised removal of typically male gonads avoided the issue of fairness in competition by means of treating all such conditions as health concerns. Further, the IAAF policy specifically delineated some conditions it believed to be permissible in women's competition because these conditions confer no physical advantage.²⁰⁹

In its list of conditions that should be allowed, the IAAF included AIS (complete or almost complete), gonadal dysgenesis, and Turner's syndrome—under tests before the 2006 policy, competitors may have been barred from competition for having one of these conditions. In a second section involving "conditions that may accord some advantages but nevertheless [are] acceptable," the IAAF named three conditions: "Congenital adrenal hyperplasia;" "Androgen producing tumors;" and "Anovulatory androgen excess (polycystic ovary syndrome)."

Subsequent changes in 2011 explicitly repealed the IAAF Gender Verification Policy.²¹² These changes "set out to formulate a reasonable and suitably adapted approach . . . to the management of [hyperandrogenism]."²¹³ The repeal of the IAAF Gender Verification Policy and the introduction of the 2011 IAAF regulations had the effect of potentially reintroducing some ambiguity, while at the same time offering a promise of marginal progress in removing previous standards that may have had detrimental or regressive effects. The IOC subsequently took similar action.

3. The IOC's Adoption of a Similar Policy.—The IOC adopted regulations similar to those of the IAAF in the month preceding the 2012 Summer Olympic Games.²¹⁴ These regulations seek to address conditions that may "confer a competitive advantage" by focusing on testosterone levels and androgen

^{205.} See IAAF POLICY ON GENDER VERIFICATION, supra note 90, pt. 8.

^{206.} Id. pt. A.4.

^{207.} Id. pt. A.6(a).

^{208.} See Kolata, supra note 10 ("Members of the [January] panel said that their concern was with sports federations' responsibility for athletes with medical disorders. Athletes' health might be endangered if their disorders are not diagnosed and treated ").

^{209.} IAAF POLICY ON GENDER VERIFICATION, supra note 90.

^{210.} Id.

^{211.} Id. pt. A.6(b).

^{212.} IAAF EXPLANATORY NOTES, supra note 18.

^{213.} IAAF REGULATIONS, supra note 7.

^{214.} INT'L OLYMPIC COMM., supra note 8.

reception rather than a verification of sex.²¹⁵ These new regulations, entitled IOC Regulations on Female Hyperandrogenism, place the responsibility of ensuring compliance with the regulations on the NOCs.²¹⁶ Per the language of the IOC regulation, this responsibility is not one of passively addressing questions of eligibility but rather of "actively investigat[ing] any perceived deviation in sex characteristics."²¹⁷ As a result of this delegation of proactive responsibility, the IOC Medical Commission Chairman, Arne Ljungqvist, indicated an expectation that the IOC regulations would not be an issue at the 2012 Summer Olympic Games.²¹⁸

The regulations indicate the procedure for initiating and conducting an investigation, as well as the consequences, if an athlete is determined to have a condition that "confers a competitive advantage." The following individuals can request an "investigation": the athlete, herself; "a Chief NOC Medical Officer;" an IOC Medical Commission member or OCOG Medical Officer; or "the [IOC Medical Commission] Chairman." Should a female athlete have hyperandrogenism which results in an advantage, she may be disqualified from the Games. Should a female athlete or related personnel refuse to cooperate with an investigation, she "may be provisionally suspended." In both instances, sanctions may be imposed on the "team physician and/or *any* relevant person in the [investigated] athlete's entourage. Such determinations of ineligibility, provisional suspension, and/or sanctions are appealable to the Court of Arbitration for Sport.

While providing a workable framework for addressing possible concerns of female athletes possessing a competitive advantage, the IOC regulations are not free from criticism. Vagueness is one of those criticisms—specifically, that the regulation lacks a precise hormonal range identified as either acceptable or unacceptable.²²⁵ According to Arne Ljungqvist, this lack of precision was

^{215.} *Id.* para. 8.E; *see also* Juliet Macur, *I.O.C. Adopts Policy for Deciding Whether an Athlete Can Compete as a Woman*, N.Y. TIMES, June 24, 2012, at SP6 [hereinafter Macur, *I.O.C. Adopts Policy*], *available at* http://www.nytimes.com/2012/06/24/sports/olympics/ioc-adopts-policy-for-deciding-whether-athletes-can-compete-as-women.html?_r=0.

^{216.} INT'L OLYMPIC COMM., supra note 8, at 2.

^{217.} Id.

^{218.} Juliet Macur, *Sex-Verification Policy Is Criticized as a Failure*, N.Y. TIMES, June 26, 2012, at B12 [hereinafter Macur, *Sex-Verification Policy*], *available at* http://www.nytimes.com/2012/06/26/sports/olympics/critics-say-olympic-sex-verification-policy-is-a-failure.html.

^{219.} INT'L OLYMPIC COMM., supra note 8, at para. 8.J.ii.

^{220.} Id. para. 6.A.

^{221.} Id. para. 8.J.ii.

^{222.} Id. para. 8.H.

^{223.} Id. para. 8.I (emphasis added).

^{224.} Id. para. 8.L.

^{225.} Alice Dreger, *The Olympic Struggle Over Sex*, ATLANTIC (July 2, 2012, 1:13 PM), http://www.theatlantic.com/health/archive/2012/07/the-olympic-struggle-over-sex/259321/.

intentional and was to allow for flexibility when handling cases that may arise. 226 The language used in the sanctions referenced above suggests that the IOC has a similar desire for the flexibility to respond as it sees fit.²²⁷ Second, the regulations do not address treatment(s), if any, which, if pursued, may allow a female athlete to compete. 228 However, Arne Ljungqvist was noted as saying that athletes who "choose to medically lower [their] testosterone level to below the m[e]n's range [may become] eligible to compete."²²⁹ A third criticism is that this new regulation may conflict with the existing "Stockholm Consensus" by possibly allowing those with female hyperandrogenism to maintain a higher androgen level than allowable for athletes who have transitioned from male to female. 230 Fourth, is the proposition that testosterone does not convey and is not a proper indicator of athletic ability or competitive advantage.²³¹ Additionally, testosterone can "vary widely depending on time of day, time of life, social status and—crucially—one's history of athletic training."²³² There is also the suggestion that the testosterone in hyperandrogenous women is naturally occurring and, thus, not akin to cheating. 233 Furthermore, there is the proposition that hyperandrogenism is a "biological variation" and is similar to acceptable variations found in other athletes—ranging from conditions that allow for greater endurance and long limbs to genetic variations affecting growth and blood flow for muscles. 234 Finally, there is the criticism that the regulations are an attempt to "police femininity". 235 since concerns regarding female athletes are often raised due to the fact that they do not conform to an idealized female athletic appearance.²³⁶

While criticisms may abound, the regulations draw support from some medical professionals as a practical solution to a complex situation.²³⁷ By

- 226. See Macur, Sex-Verification Policy, supra note 218.
- 227. See generally INT'L OLYMPIC COMM., supra note 8.
- 228. Macur, I.O.C. Adopts Policy, supra note 215.
- 229. Macur, Sex-Verification Policy, supra note 218.
- 230. Dreger, supra note 225.
- 231. See Karkazis et al., supra note 124, at 8, 11.
- 232. Rebecca Jordan-Young & Katrina Karkazis, *You Say You're a Woman? That Should be Enough*, N.Y. TIMES, June 18, 2012, at D8, *available at* http://www.nytimes.com/2012/06/18/sports/olympics/olympic-sex-verification-you-say-youre-a-woman-that-should-be-enough.html; *see also* Alice Park, *Woman Enough?*, TIME, July 2, 2012, http://olympics.time.com/2012/07/02/how-the-ioc-tests-for-gender/.
 - 233. See Karkazis et al., supra note 124, at 11-12.
 - 234. Id.
- 235. Stephanie Findlay, *Olympics Struggle with 'Policing Femininity*,' STAR.COM (June 8, 2012), http://www.thestar.com/sports/london2012/article/1205025--olympics-struggle-with-policing-femininity.
- 236. *Id.*; *see also* Karkazis et al., *supra* note 124, at 4, 7; Josh Tapper, *London 2012: IOC Gender Testing Policy Challenged*, STAR.COM (June 14, 2012), http://www.thestar.com/sports/london2012/article/1211580--london-2012-ioc-gender-testing-policy-challenged.
 - 237. See Eric Vilain, Gender Testing for Athletes Remains a Tough Call, N.Y. TIMES, June

focusing on testosterone, where the typical male range exceeds the female range by a factor of ten, the regulations received praise for narrowing in on a truly differentiating factor between men and women.²³⁸ Despite being imperfect, the regulation is an attempt at creating a fair environment for competition.²³⁹

4. What This Means for Caster Semenya.—IAAF regulations (and, by extension, the new IOC regulations²⁴⁰) allow an athlete, under the care of her personal physician, to lower her androgen levels in order to qualify and compete, with the athlete subsequently subject to ongoing monitoring by the IAAF.²⁴¹ While there is speculation, due to her more feminine appearance, that Caster Semenya undergoes some type of hormone treatment to comply with IAAF regulations, it is not confirmed.²⁴² Speculation aside, Caster Semenya qualified to compete in the Summer 2012 Games.²⁴³

Representing South Africa, Semenya was her country's flag bearer in the opening ceremony of the Games and was anticipated to win a medal in the 800-meters. She won a silver medal. However, in spite of official clearance to run and a second place victory—rather than first place—Semenya continued to face criticism. In fact, what spurred questions for some was her second place victory; Semenya was asked at a press conference if she had intentionally lost the gold to avoid controversy. Semenya denied the allegations and expressed happiness with her second place finish at her first Olympics.

In an interview with NBC Sports, which aired the day of the women's 800-meter final of the 2012 Olympic Games, Semenya expressed that her focus was

^{18, 2012,} at D8 [hereinafter Vilain, *Tough Call*], *available at* http://www.nytimes.com/2012/06/18/sports/olympics/the-line-between-male-and-female-athletes-how-to-decide.html? pagewanted=all (Eric Vilain is a doctor and geneticist and an advisor for the IOC's regulation.); *see also* Helen Shen, *IOC Rule on Testosterone Test Sparks Debate*, BOSTON GLOBE, June 29, 2012, http://www.bostonglobe.com/lifestyle/health-wellness/2012/06/29/new-olympic-rules-will-check-testosterone-for-challenged-female-athletes/WBUICAG26rq2Vjic1NFbjO/ story.html (citing Dr. Joshua Safer, Boston Medical Center endocrinologist and transgender care expert).

^{238.} Shen, *supra* note 237 (citing Dr. Joshua Safer, Boston Medical Center endocrinologist and transgender care expert).

^{239.} See Macur, Sex-Verification Policy, supra note 218; see also Vilain, Tough Call, supra note 237.

^{240.} See INT'L OLYMPIC COMM., supra note 8.

^{241.} IAAF REGULATIONS, supra note 7, at 13-14.

^{242.} Findlay, supra note 235.

^{243.} See Macur, I.O.C. Adopts Policy, supra note 215.

^{244.} Associated Press, *Semenya Advances to 800-Meter Final at Olympics*, CNSNEWS.COM (Aug. 9, 2012), http://cnsnews.com/news/article/Semenya-advances-to-800-meter-final-Olympics.

^{245.} John Pye, *An Olympic Silver Will Do for Now, for Semenya*, ASSOCIATED PRESS, Aug. 11, 2012 [hereinafter *Olympic Silver*], *available at* http://summergames.ap.org/article/Olympic-silver-will-do-now-Semenya.

^{246.} Id.

^{247.} Id.

^{248.} Id.

on the future, not the past.²⁴⁹ Seemingly staying true to her focus and undeterred by the criticism of her second place victory at the 2012 Olympics, Semenya indicated her intention to run again in the 2016 Olympic Games in Rio de Janeiro.²⁵⁰

V. FAIRNESS: EXISTING REGULATIONS THAT MAY SERVE AS A BASIS FOR FUTURE POLICY

A. A Ubiquitous Issue

Existing measures in Olympic sport to establish and preserve a level playing field are not surprising. The Paralympic classification system is a detailed set of standards that seeks to quantify athletes' abilities to ensure a level playing field. The Paralympic model illustrates that it is possible to take a group of competitors with diverse abilities and group them in a way that preserves the principles of inclusion and fairness. Doping regulations serve to keep athletes from using prohibited substances and methods that afford them unfair advantages. The determination that an athlete may possess advantages that are permissible and fair is implicit in defining what does and does not constitute doping. Finally, the inclusion of transsexual athletes in Olympic competition may suggest to some that women's Olympic events should not be limited only to those who were born typical XX females. Even though the inclusion of transsexual athletes is conditional, it is encouraging to note that the IOC has

- 249. NBC Sports, supra note 124.
- 250. Olympic Silver, supra note 245.
- 251. Elizabeth Bressan, *Striving for Fairness in Paralympic Sport: Support from Applied Sport Science*, 26 CONTINUING MED. EDU. 335, 337 (2008), *available at* http://www.cmej.org.za/index.php/cmej/download/780/900.
 - 252. Id. at 335.
- 253. See WORLD ANTI-DOPING AGENCY, WORLD ANTI-DOPING CODE 13, 14 (rev. 2009) [hereinafter Anti-Doping Code], available at http://www.wada-ama.org/Documents/World_Anti_Doping Program/WADP-The Code/WADA Anti-Doping CODE 2009 EN.pdf.
- 254. See J. Savulescu et al., Why We Should Allow Performance Enhancing Drugs in Sport, 38 BRIT. J. SPORTS MED. 666, 666-70 (2004), available at http://bjsm.bmj.com/content/38/6/666.full.pdf+html.
- 255. See Medical Commission: IOC Approves Consensus with Regard to Athletes Who Have Changed Sex, Olympic.org (May 17, 2004), http://www.olympic.org/content/news/media-resources/manual-news/1999-2009/2004/05/17/ioc-approves-consensus-with-regard-to-athletes-who-have-changed-sex/ (including two PDF links titled "Explanatory note to the recommendation on sex reassignment and sports" and "Statement of the Stockholm consensus on sex reassignment in sports"); INT'L ASS'N OF ATHLETICS FED'NS, IAAF REGULATIONS GOVERNING ELIGIBILITY OF ATHLETES WHO HAVE UNDERGONE SEX REASSIGNMENT TO COMPETE IN WOMEN'S COMPETITION 1 (May 1, 2011), available at http://www.iaaf.org/about-iaaf/documents/medical#hyper androgenism-and-sex-reassignment.

adopted specific standards for admission.²⁵⁶

B. Useful Examples from Other Realms

1. Paralympics.—The classifications used in the Paralympics illustrate that those with ostensibly diverse skill levels can participate on a level playing field.²⁵⁷ "In 1948, Sir Ludwig Guttman organi[z]ed a sports competition involving [disabled] World War II veterans."²⁵⁸ The first Paralympics in 1960 grew out of this early competition.²⁵⁹ The "para" in Paralympics stands for "parallel" or "equal to" and not "paraplegic" as many may falsely believe.²⁶⁰ At the 2008 Beijing Paralympics, there were 3951 competitors from 146 countries.²⁶¹ Competitors at the Paralympics may have any number of disabilities, including blindness or visual impairment, amputated limbs and similar impairments, spinal cord injuries, motor impairments resulting from cerebral palsy, traumatic brain injury or stroke, and other disabilities.²⁶² Because of the multiple ways in which Paralympic athletes are disabled, the games employ a very complex classification system in the interest of placing competitors of similar ability in the same class.²⁶³

Each sport may have a different classification system. ²⁶⁴ Cycling, for example, has the following rules regarding competitors: the cycling competitions for both road and track are open to amputees, those with cerebral palsy, and the visually impaired. ²⁶⁵ The competition is also open to those athletes with other disabilities, called the *les autres* class—those with dwarfism, multiple sclerosis, and congenital deformities. ²⁶⁶ All of those who are visually impaired compete in one class against one another "on tandem bi[cycle]s with a sighted lead rider." ²⁶⁷ Amputees, those with spinal cord injuries, and *les autres* athletes compete within one of the following LC classes: ²⁶⁸ "LC1: [r]iders with upper limb disabilities[;] LC2: [r]iders with disabilities in one leg but who can pedal normally; LC3: [r]iders with an impairment in one lower limb (they usually pedal

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256. See generally id.
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^{257.} Bressan, supra note 251, at 337-38.

^{258.} Id. at 335.

^{259.} Id.

^{260.} Id.

^{261.} *Beijing 2008 Paralympic Games*, OFFICIAL WEBSITE OF THE PARALYMPIC MOVEMENT, http://www.paralympic.org/Paralympic-Games/beijing-2008 (last visited Mar. 21, 2013).

^{262.} Bressan, *supra* note 251, at 335.

^{263.} Id.

^{264.} Id.

^{265.} Id. at 336 tbl. I.

^{266.} Id.

^{267.} Id.

^{268.} *Id.* "LC" stands for "Locomotor Disabilities." *Paralympic Games—Cycling and Handcycling*, APPARELYZED, http://www.apparelyzed.com/london-paralymic-games/disabled-cycling.html (last visited Mar. 24, 2013).

with one leg only); [and] LC4: [r]iders with impairments affecting both legs."²⁶⁹ The classification system in cycling significantly differs from the classification systems in other sports because of the obvious differences in the abilities required to perform each sport. Each system was organized in conjunction with sports scientists "with expertise in biomechanics, sports physiology and motor control."²⁷⁰ Officials are open to challenges by athletes who feel that they have been misclassified.²⁷¹ In addition, some athletes with disabilities, such as Liz Hartel, who won silver medals in dressage in 1952 and 1956, have been able to compete in the Olympics.²⁷² Hartel had polio and required assistance to mount and dismount her horse.²⁷³ Marla Runyan was legally blind and competed in the track and field competition in the Olympics in the 1500-meters distance, coming in eighth out of all female competitors.²⁷⁴ Both Hartel and Runyan would have qualified for the Paralympics.²⁷⁵ Most recently, Brian McKeever, a visually impaired Canadian cross-country skier, was selected for both the Olympic and Paralympic teams.²⁷⁶

There is a strong movement in the Paralympics away from classification based on type of disability and toward classifications based on functional assessment of an athlete's ability.²⁷⁷ Currently, some sports, such as cycling, rely in part on a functional assessment of an athlete's disability by a panel of qualified classifiers.²⁷⁸ This assessment is geared toward measuring the degree that an athlete's impairment will impact his or her performance in a specific sport.²⁷⁹ The Athletics Classification Project, conducted by the Paralympics, is a multi-year project that was undertaken to establish a new system of classification entirely based on the functional capabilities of athletes.²⁸⁰ Each athlete will be physically assessed, but the core of the process will be a set of standardized "tests developed specifically to evaluate the impact of factors such as loss of range of movement, loss of strength and increased muscle tone on ability to run, throw, jump or push a wheelchair."²⁸¹ The extensive effort that the Paralympics continues to exert in the interests of developing fair classifications for its athletes—based on individual ability—stems from its recognition that the

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269. Bressan, supra note 251, at 336, tbl. I.
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^{270.} Id. at 336.

^{271.} Id. at 337.

^{272.} Id.

^{273.} Id.

^{274.} *Id*.

^{275.} *Id*.

^{276.} Steve Kelley, *Sight-Impaired Skier Brian McKeever Makes Olympic History*, SEATTLE TIMES (modified Feb. 20, 2010, 4:02PM), http://seattletimes.com/html/stevekelley/2011133447_kelley/20.html.

^{277.} Bressan, supra note 251, at 336-38.

^{278.} Id. at 336.

^{279.} Id.

^{280.} Id. at 337.

^{281.} Id.

circumstances of each athlete's disabilities and abilities are unique. 282 It is important to note that even in the Paralympics, with its complex and comprehensive system of classification designed to keep the playing field level, men do not compete against women. This classification is so deeply ingrained in our culture that even under unique conditions it cannot be divorced from sports.

Still, it naturally follows that if the IOC/IAAF and various governing authorities decide that certain intersex conditions may confer athletic advantage, they could choose to quantify these advantages in a system similar to the Paralympic classification system.²⁸³ By choosing to ascertain the functional ability of each athlete in a comprehensive manner, the governing authorities could escape criticisms of unfairness towards biologically typical female athletes.

Although quantifying ability, if possible, would level the playing field, one criticism is that it could ignore the aspect of sport that produces the thrill of David and Goliath type match ups—the notion that not all advantages are unfair. At the Olympics, the existence of varying levels of athletic talent alone is seemingly not enough to institute a system of complete equality.

2. Doping.—

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282. Id. at 335-36.
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^{283.} See supra Part B.1.

^{284.} ANTI-DOPING CODE, *supra* note 253, art. 2.1, at 19.

^{285.} Id. art. 2.2, at 21.

^{286.} Id. art. 2.3, at 22.

^{287.} Id. art. 2.4, at 23.

^{288.} Id. art. 2.5, at 23.

^{289.} Id. art. 2.6, at 24.

^{290.} Id. art. 2.7, at 25.

^{291.} Id. art. 2.8, at 25.

is harmful to the health of an athlete; or (3) "violates the spirit of sport." When a substance or method fulfills at least two of these three conditions, it can be placed on the list of prohibited substances and methods that is promulgated by WADA every year. Furthermore, Article 4.3.2 allows WADA to include a substance or method on the *Prohibited List* if "there is medical or other scientific evidence, pharmacological effect or experience that the substance or method has the potential to mask the *Use* of other *Prohibited Substances* or *Prohibited Methods*."

Banned substances are subject to a "therapeutic use exemption" ("TUE"), which allows an athlete to use a banned substance for medical purposes. An athlete must apply for a TUE through his or her physician, and the medication should not produce any additional enhancement of performance. Moreover, the medication should be the only possible method of treating the competitor's ailment. Moreover, the medication should be the only possible method of treating the competitor's ailment.

Three main traditional arguments support doping control.²⁹⁸ First, the user of a banned substance or method receives an unfair advantage.²⁹⁹ Second, the use of banned substances endangers the user and other athletes by the creation of unnatural force or speed.³⁰⁰ Third, if banned substances were permitted, other athletes would feel compelled to use them to escape disadvantage.³⁰¹ That a substance or method presents an undue danger to athletes is a strong argument for its exclusion. Moreover, it is reasonable to think that if dangerous performance-enhancing substances were not banned, nearly every athlete would want to use these substances to avoid being at a disadvantage. Only unfair advantage presents a truly elusive rationale among the counterarguments.³⁰² Advantages in themselves are not unfair and the task of drawing a line between those advantages that are allowable and those that are not can often be an unwieldy exercise.

b. Permissible and impermissible advantages.—One method used to root out

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292. Id. art. 4.3.1, at 32-33.
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^{293.} Id. art. 4.3.2 cmt., at 33.

^{294.} Id. art. 4.3.2, at 33.

^{295.} Id. art. 4.4, at 34-35.

^{296.} Eduardo H. De Rose, *Doping in Athletes—An Update*, 27 CLINICS IN SPORTS MED. 107, 120 (2008).

^{297.} Id.

^{298.} SPORTS ETHICS: AN ANTHOLOGY 191, 191 (Jan Boxill ed., Blackwell Publishing 2003) (2002).

^{299.} Id.

^{300.} Id.

^{301.} Id.

^{302.} The psychologist Michael Lavin rejects all three rationales as incomplete and cites a third, perhaps overriding, concern—public disapproval. *Id.* at 193. It is more important that these substances and practices are widely accepted as reprehensible rather than the fact that they are actually unfair. Lavin says that doping regulations work to enforce and perpetuate widely accepted ideals. *Id.*

unfair advantage is to distinguish between those advantages that are natural versus those that are enhanced. One need only look at the sport of basketball to understand that certain bodies are more or less suited for enhanced performance in certain sports. Shaquille O'Neal did not achieve a height of over seven feet by training and nutrition alone. Some competitors are fortunate to be born with conditions that aid their performance by no action of their own.

An extreme example is Finnish skier Eero Maentyranta, who won three gold medals in the 1964 Olympics. Maentyranta had a genetic anomaly that gave him the advantage of having "40-50% more red blood cells than average." Having more red blood cells allows a human to carry more oxygen to cells, increasing muscle performance. Erythropoietin ("EPO") is a naturally occurring hormone that has the effect of enhancing red blood cell production, but the anti-doping rules ban the practice of injecting or otherwise consuming EPO to boost natural levels. Therefore, if an athlete competing against Maentyranta wanted to use EPO to place himself on equal footing with his Maentyranta, who is a naturally gifted competitor, this athlete would be found in breach of doping rules.

A competitor may also use permitted substances and methods in concert with training to develop a fair advantage. WADA aimed to further define permissible use of technologies to enhance performance in its Ethical Issues Review Panel Report on artificially induced hypoxic conditions—a practice that simulates altitude training. In this report, WADA described the term "spirit of sport" by stating that "the spirit of Olympic sport . . . celebrates natural talents and their virtuous perfection. Here, again, the concept of natural versus unnatural advantages is invoked. With respect to the use of performance enhancing substances and methods, WADA distinguishes "between technologies and expert systems that operate on the athlete as merely a passive recipient, versus technologies with which the athlete actively interacts as part of the process in training and competition to enhance performance." This report, which was part of WADA's abandoned effort to place altitude simulators on its prohibited list, while a useful attempt at developing a concrete policy, did not put the issue

^{303.} Savulescu et al., *supra* note 254, at 667.

^{304.} Id.

^{305.} Id.

^{306.} Id. at 666-67.

^{307.} See WORLD ANTI-DOPING AGENCY, MINUTES OF THE ETHICS AND EDUCATION COMMITTEE MEETING 9 (Apr. 27-28, 2006), available at http://www.wada-ama.org/Documents/About_WADA/EducationCommittee_Minutes/WADA_EducationCommittee_200604.pdf; WORLD ANTI-DOPING AGENCY, MINUTES OF THE WADA EXECUTIVE COMMITTEE MEETING 33-37 (May 13, 2006), available at http://www.wada-ama.org/Documents/About_WADA/ExecutiveCommittee_Minutes/WADA ExecutiveCommitteeMinutes 200605 EN.pdf.

^{308.} VERNER MØLLER, THE ETHICS OF DOPING AND ANTI-DOPING: REDEEMING THE SOUL OF SPORT? 108 (2010) (quoting World Anti-Doping Agency, Ethical Issues Rev. Panel, Artificially Induced Hypoxic Conditions to Modify Performance (Apr. 21, 2006)).

^{309.} Id.

of fairness to rest.³¹⁰ Although in many cases the line between fair and unfair methods may coincide with the active versus passive technologies paradigm, there are numerous instances in which an athlete must expend effort to realize performance enhancement from a prohibited substance.³¹¹

In any case, there is little debate that advantages with which a competitor was born are permissible. If this is the case, then the question with regard to intersex athletes is not whether their advantages are fair, but whether it is fair to include athletes who may not be within the normal female range of variation. The difference in these two statements lies in that if one accepts that intersex athletes are within the normal range of variation for females, then they must be accepted without alteration because their advantages would be natural gifts—like Maentyranta's.³¹² Natural gifts are not typically deemed to be permissible advantages when the sex line is breached. However, the categorical exclusion of all athletes who are not biologically typical females is inconsistent with the current IAAF/IOC policies.³¹³ The IAAF/IOC policy regarding post-operative transsexuals demonstrates the belief by the governing authorities that there is a workable method of including transsexuals in Olympic sport and that such inclusion is an important goal.

c. Transsexuals in sport.—In 1974, Dr. Richard H. Raskind "was an accomplished male tennis player" who ranked third in the East and thirteenth in the nation in the men's thirty-five-and-over class. Raskind, although he was born, raised, and had biologically lived his life for over thirty-five years as a man, identified with the female gender. He underwent sex reassignment surgery and became Renee Richards. After biologically becoming a woman, Richards continued to play tennis. As Renee Richards, she entered nine tournaments, and of those nine tournaments, she won two and was the runner-up in three.

^{310.} See Doriane Lambelet Coleman & James E. Coleman, Jr., *The Problem of Doping*, 57 DUKE L.J. 1743, 1756-57 (2008).

^{311.} *Id.* One wonders how such a two-pronged categorization would look upon "hybrid enhancements," such as the use of steroids in baseball: an increase in a slugger's strength would seem impermissibly passive, yet his use of that strength channeled into a home run swing would seem a practiced art. *See id.* at 1747-48.

^{312.} See CASM, POSITION STATEMENT, *supra* note 26, at 8-9 (stating that female athletes with certain intersex conditions, "such as congenital adrenal hyperplasia, incomplete androgen insensitivity or chromosomal mosaiicism, should be accepted as [within] the normal range of variation" like those "who have grown to extreme heights").

^{313.} See IAAF REGULATIONS, supra note 7, at 1, 13-14; INT'L OLYMPIC COMM., IOC REGULATIONS ON FEMALE HYPERANDROGENISM, supra note 8; see also IOC Med. Comm'n, Statement of the Stockholm Consensus on Sex Reassignment in Sports (Dec. 11, 2003), http://www.olympic.org/Documents/Reports/EN/en_report_905.pdf.

^{314.} Richards v. U.S. Tennis Ass'n, 400 N.Y.S.2d 267, 268 (App. Div. 1977).

^{315.} Id. at 267-68.

^{316.} Id. at 267.

^{317.} Id. at 268.

^{318.} Id.

In 1977, she sought to compete in the United States Open tennis tournament, but she encountered a significant impediment.³¹⁹ Because the United States Tennis Association ("USTA") had asked her to submit to a Barr body test, which she could not pass due to her XY karyotype, she was prevented from competing.³²⁰ Richards claimed that the USTA had violated New York State Human Rights Law and the Fourteenth Amendment of the U.S. Constitution by unfairly requiring that she submit to a sex chromatin test, which effectively prevented all male-to-female transsexuals from competing in the women's division.³²¹ In her words, the Barr body test was, "insufficient, grossly unfair, inaccurate, faulty and inequitable by the medical community in the United States for purposes of excluding individuals from sports events on the basis of gender."³²²

The USTA submitted an affidavit by Dr. Daniel Federman, who at the time was a "professor and Chairman of the Department of Medicine, Stanford University School of Medicine."³²³ He opined that surgery could not reverse the skeletal structure or height that a male-to-female transsexual would have attained through male puberty.³²⁴ This was an advantage that could not be erased by mere medical procedure. Federman went on to point out that some features of sexual identity could not be changed, including the nuclear and chromosomal composition. 326 Gonadal and ductal structures, external genitalia, and hormone balance could be altered by surgery and drugs.³²⁷ Other attributes of sex, including psychological and social sex, are subjective and independent of medical procedure. 328 Richards submitted numerous affidavits that she did not have a physical advantage over other competitors, including an affidavit by Billie Jean King. 329 The court agreed with Richards. 330 Consistent with the IOC's 1990s stance on the purpose of sex testing, the court stated that the only justification for sex tests was to prevent fraud.³³¹ In addition, the court stated that there was "overwhelming medical evidence that [Richards was] now female." 332 But, the court did not strike down the Barr body test because the test "appear[ed]

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319. Id. at 268, 270.
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^{320.} Id. at 268.

^{321.} Id.

^{322.} Id.

^{323.} Id. at 269.

^{324.} Id.

^{325.} Id. at 269-70.

^{326.} Id.

^{327.} Id. at 270.

^{328.} Id.

^{329.} Id. at 272.

^{330.} *Id.* at 273 ("[T]his court finds defendants and each of them in violation of plaintiff's rights under the Human Rights Law and, . . . plaintiff's application for a preliminary injunction is granted in all respects.").

^{331.} Id. at 272.

^{332.} Id.

to be a recognized and acceptable tool for determining sex."³³³ However, it did mention that there were other factors that should be considered such as "external genital appearance, the internal organ appearance, gonadal identity, endocrinological makeup and psychological and social development of a female."³³⁴ The court seemed to assume still that there was a "true sex" to be determined by these tests.³³⁵

Richards, in her autobiography, while addressing her acceptance into sport as a woman, said that every time she lost a match it "served to inform the public that [she] was not an unbeatable behemoth out to prey on helpless little girls." It seems that Richards, an elite athlete, felt she had to lose in order to participate at all. Although the *Richards* case is not binding on the IOC or any International Federation, it should serve as an illustration of sex discrimination and potential legal issues that may arise in the years ahead.

The IOC has adopted the IAAF's policy on transsexuals.³³⁷ The policy is notable for its concrete conditions for entry. First, for those who surgically change sex from male to female before puberty and undergo hormone therapy, status as a transsexual will not prevent entry.³³⁸ Second, for those who had sex change surgery after male puberty, two years of continuous hormone treatments following surgery are required before an endocrinological evaluation is conducted.³³⁹ Ongoing hormone treatments are also required for this second group.³⁴⁰ Before handing down these regulations, the medical experts were consulted extensively.³⁴¹ The sharp lines drawn by these rules are an example of the type of system that may be developed regarding intersex athletes.

The treatment of transsexuals in sport provides a partial model for how the IAAF and IOC could deal with intersex athletes. Treating intersex as a medical condition sets the upper boundary of fairness at transsexual. Thus, if one accepts the policy regarding transsexuals as fair, then there is no need for a categorical ban on intersex athletes. However, linking transsexuals and intersex is faulty because it ignores the essential difference between the two—choice. Transsexuals have chosen to undergo surgery to match their biology with their gender identity.³⁴² An intersex person, on the other hand, does not believe

^{333.} Id. at 272-73.

^{334.} Id. at 271.

^{335.} See Yael Lee Aura Shy, "Like Any Other Girl": Male-to-Female Transsexuals and Professional Sports, 14 Sports Law. J. 95, 99 (2007).

^{336.} *Id.* at 100 (quoting Renée Richards with James Ames, The Renée Richards Story: Second Serve 350 (1983)).

^{337.} See Statement of the Stockholm Consensus on Sex Reassignment in Sports, *supra* note 313.

^{338.} See IAAF POLICY ON GENDER VERIFICATION, supra note 90, pt. A.5.

^{339.} Statement of the Stockholm Consensus on Sex Reassignment in Sports, *supra* note 313.

^{340.} Id.

^{341.} See IAAF POLICY ON GENDER VERIFICATION, supra note 90, Background.

^{342.} See Noa Ben-Asher, The Necessity of Sex Change: A Struggle for Intersex and Transsex Liberties, 29 HARV. J.L. & GENDER 51, 51-52 (2006).

himself or herself to have a contradiction between biology and psychology.³⁴³ Intersex individuals prefer to be accepted as normal variations of men or women.³⁴⁴

C. Approaching the Problem from Multiple Angles: Possibilities and Pitfalls

Paralympic classifications, doping regulations, and standards for transsexual admission to competition in Olympic competition provide excellent examples of the resolution of the fairness issue in Olympic sport. Unfortunately, no combination of the methods used in these three realms offers a flawless solution to the issue of intersex athletes. Considering the major potential courses of action illuminates underlying normative principles such as the level playing field, gender stereotyping, and Fundamental Principles of Olympism—inclusion and non-discrimination.

Take regulatory possibilities at various points on the spectrum. If the IOC and IFs were to allow intersex athletes to compete without administering sex testing for either the purpose of medical treatment or fairness to typical biological females, they would be making a bold statement with regard to inclusion of all athletes. Intersex athletes could either be admitted under the idea that their participation is presumptively fair or that there are overriding concerns such as inclusion and the undesirability or impossibility of defining the boundaries of "female." Allowing all intersex competitors would avoid the problems of defining what is fair at the cost of the more than minimum possibility that some athletes would have an advantage due to an intersex condition. Such a policy would alleviate the need for all sex verification procedures.

Alternatively, officials could require universal sex testing. Either intersex athletes could all be asked to undergo normalizing procedures without determining whether or not their condition confers athletic advantage, or the athletes could be asked to undergo medical procedures only after it was determined that they have an advantage (A detailed study could seek to establish which conditions may or may not confer advantage.). This is not unprecedented. The IAAF has adopted measures in the past with respect to AIS (complete or almost complete), gonadal dysgenesis, and Turner's syndrome based on the conclusion that these conditions do not confer athletic advantage.³⁴⁵ A policy that required an intersex individual to undergo an operation without a separate determination of whether the athlete's specific condition conferred advantage would go great lengths to establish a level playing field; however, it would simultaneously make the statement that intersex conditions provide an unfair advantage and that intersex athletes may not be within an acceptable normal variation of biological females.

Conceivably, universal sex testing could even be used to categorically

^{343.} Id. at 51-54, 54.

^{344.} See id. at 72.

^{345.} IAAF POLICY ON GENDER VERIFICATION, supra note 90.

exclude all intersex athletes from women's competition. True, such a change would negate complaints from typical biological females about a level playing field. However, exclusion of those who may not have an advantage due to their intersex conditions would seem presumptively unfair. Additionally, total exclusion would further marginalize intersex individuals and rob them of the opportunity to participate in the Olympic Games as dignified members of society. The creation of an intersex-only division would be of little consolation as certain athletes may still have conditions that confer advantage over other intersex conditions. Moreover, this kind of segregation would send the message that typical biological women are worth protecting from unfair advantage, but other intersex athletes are not. Many intersex individuals do not wish to have their conditions revealed to the world, and a separate division would require them to do so or surrender the privilege of participation. Lastly, an intersex-only division would emphasize the condition rather than the individual and might have the effect of creating an exploitative circus atmosphere. At this point, a categorical ban on intersex athletes seems highly unlikely.³⁴⁶

A fourth possibility would, instead, create finer distinctions within the classification system that now exists. Much like the Paralympic model, a functional assessment of ability could be followed by classification. This could be done with or without regard to sex. To create open divisions without regard to sex may be problematic as men would flood the ranks and comprise a high percentage of limited spots in competition. However, if women were to defeat men in open divisions with regularity, this would do wonders to annihilate gender stereotypes. Still, at this time, there is reason to believe that the women's division of Olympic sport should have some protection from male competitors. Competitive classes based on functional ability in women's sport, although seemingly fair, may be unnecessary. This course of action still does not eliminate arguments from those who are grouped with intersex competitors and lose to them, but classification based on similar ability would implicitly color such complaints as "sour grapes."

D. Cautious Optimism

Line drawing at some level will be inescapably tied to the achievement of some semblance of the ideal of equality, but there is reason to believe the hormone-level focused amendments to the IAAF rules form a good start. Through focus on confidentiality and appropriately careful language, eschewing the use of "gender verification" and "gender policy," the rules incorporate an institutional respect for the sensitivity of such investigations. Yet this focus does not sacrifice fairness to typically female athletes: "The burden of proof shall be on the athlete to establish . . . that she derives no competitive advantage "³⁴⁸

This balance is essential to navigating the challenge for governing authorities

^{346.} See Kolata, supra note 10.

^{347.} See IAAF REGULATIONS, supra note 7, at 1-2.

^{348.} Id. at 12.

of being fair to athletes both within and outside of traditional definitions of gender and sex.³⁴⁹ Further, the IAAF amendments acknowledge that regulation in this area must take into account future scientific knowledge and, thus, positively portray the regulations as part of a "living document."³⁵⁰

VI. FINAL ANALYSIS: RAMIFICATIONS OF THE NEW IAAF AND IOC RULES

Undoubtedly, the new rules will still provide fodder for criticism in some areas, most notably a sociological objection to treating DSDs as a medical issue because of the fear of labeling individual competitors as abnormal. Granted, there may be valid health concerns in some instances, such as the cited potential for cancerous tumors in cases of internal testes.³⁵¹ However, there may also be cases in which medical treatment is unnecessary for the health of the competitor.³⁵² In fact, treatment itself may cause health issues, such as the removal of functioning gonads, which may lead to a later onset of osteoporosis unless an individual follows a strict hormone replacement regimen.³⁵³

While the new regulations of the IAAF have the potential to prevent cases like Semenya's, there is room for them to be further amended. It is clear from the humiliation an athlete endures when selected solely because she resembles a male to some degree, and is then subjected to dehumanizing former procedures such as nude photo requirements, that this type of indignity is inconsistent with the Fundamental Principles of Olympism.³⁵⁴ The Sixth Fundamental Principle of Olympism states that "[a]ny form of discrimination with regard to a country or a person on grounds of race, religion, politics, *gender* or otherwise is incompatible with belonging to the Olympic Movement."³⁵⁵ To the extent that the new rules conform to this principle, they should be applauded.

^{349.} See Kolata, supra note 10 ("[W]e have to balance fairness to female athletes [with] fairness to other competitors." (quoting Dr. Joe Leigh Simpson of Florida International University)).

^{350.} IAAF EXPLANATORY NOTES, supra note 18, at 4 (internal quotation marks omitted).

^{351.} IAAF POLICY ON GENDER VERIFICATION, *supra* note 90 (noting that in cases of gonadal dygenesis, "gonads should be removed surgically to avoid malignancy").

^{352.} Congenital Adrenal Hyperplasia (CAH) Medical Risks, INTERSEX SOC'Y OF N. AM., http://www.isna.org/faq/medical_risks/cah (last visited Mar. 23, 2013) ("Congenital Adrenal Hyperplasia (CAH) is the only one of all the various causes of intersex that can actually cause a medical emergency."); see also Intersex, MENSTUFF, http://www.menstuff.org/issues/byissue/intersex.html (last visited Mar. 23, 2013) (noting that, although some intersex conditions give rise to health issues, "[s]urgically 'correcting' the appearance of intersex genitals will not' cure these health issues).

^{353.} *Osteoporosis*, INTERSEX SOC'Y OF N. Am., http://www.isna.org/node/724 (last visited Mar. 21, 2013).

^{354.} See OLYMPIC CHARTER, supra note 118, at 10.

^{355.} Id. at 11 (emphasis added).

CONCLUSION

The new regulations provide optimism that there will not be unnecessary resistance to change. This may be the best aspect of the amendments. Assuredly, going forward, detailed standards for intersex athletes based on medical concerns must identify specific ailments that may arise or otherwise risk being viewed as arbitrary. Because intersex conditions are diverse, formulating legitimately detailed regulations will be arduous. In the alternative, standards for intersex athletes must address the fairness question. Fortunately, existing standards may serve as the basis for either a new classification system or the extension of current policies. However, it may be possible that any athletic advantages that an intersex competitor may possess are of the natural and, therefore, permissible kind.

There are two main possible sources of discrimination to be wary of in future formulations. First, officials must guard against the "reasonable grounds," which must be raised for an athlete to be investigated, becoming a front for suspicion based on the fact that an athlete's appearance is outside traditional concepts of femininity. Second, officials must remain aware that exclusion of intersex athletes as outside the normal range of variation carries risks of isolation and ostracization.

Additionally, in defining the contours of "woman," the IOC and governing authorities must be mindful of inadvertently adopting traditional sex stereotypes. There may be no way to sharply define the normal range of variation. The IOC's new rule does not include a specific range of acceptable testosterone levels, meaning there is no precise upper limit for acceptable testosterone levels in women. In addition, the Fundamental Principles of Olympism and human dignity serve as reminders that a level playing field is only part of the appropriate balance. The flexible approach adopted by the IAAF and IOC, allowing athletes to consult with medical experts privately, is a positive step in establishing the appropriate guidelines.