

Andrew Phipps
Director of HR
Date: November 20, 2024

Re: Enforced misinformation from University of Auckland Equity Office

We write with serious concerns over indications that the University of Auckland's Equity Office is attempting to override both academic freedom and the scientific content of a lecture in a course taught in Semester 2 of 2024.

The lecture was titled "Women and Education" in EDUC 106: History of Education and Society, and was taught in September 2024 by Professor Elizabeth Rata. This lecture covered historical topics such as the progress of women's rights, and Prof. Rata concluded with three slides on modern debates about sex and gender.

Apparently, one or a few students complained about this material. It appears that no details of the complaint have been shared, and there have been no communications or social media postings suggesting a controversy. Nevertheless, Prof. Rata was sent the following message on Friday, October 25¹, via her Head of School:

I have received an instruction from the Equity office that a correction is needed:

Here is their suggested wording:

EDUC 106 Correction

It is a scientific fact that human biological sex is not binary. This statement is necessary to correct the statement made in an EDUC 106 lecture that "the curriculum refers to three sexes where biologists would say that's not scientific, there are only two sexes." This is inaccurate because the biological sex of some people is neither female nor male.

For more information, visit the [United Nations Human Rights Office of the High Commissioner](#).

OR

EDUC 106 Correction

It is a scientific fact that human biological sex is not binary. The biological sex of some people is neither female nor male.

¹ Semester 2 lectures ended on Friday, October 18. Examinations ended Monday, 11 November 2024.

For more information, visit the [United Nations Human Rights Office of the High Commissioner](#).

They state that: "The university has a moral obligation to provide accurate information to the affected students, in line with our values of excellence and integrity. Thank you for your attention to this matter."

Professor Rata replied that she would not alter her slides or send out a correction, as such would be inaccurate. Subsequently, on November 7, her Head of School suggested, "*Ideally, you might offer students a variety of things to read in a Canvas announcement*" and then said, "*But if not I will need to do this.*" However, this has not yet occurred as of this writing.

These attempted interventions are inappropriate on the grounds of both science and academic freedom. We begin with the scientific issue. Prof. Rata's comment that the "*curriculum refers to three sexes*" was a reference to the NZ Ministry of Education's 2019 Relationships and Sexuality Education Guidelines.² In the Glossary, these Guidelines give this definition: "*Sex: The biological sex characteristics of an individual (male, female, intersex).*" Rata stated, "*biologists would say that's not scientific, there are only two sexes,*" but the Equity Office states, "*This is inaccurate because the biological sex of some people is neither female nor male.*" This latter statement is incorrect. Biological sex is defined by reference to gametes. There are only two types of gametes in humans and millions of other animals. As Arnold et al. (2024) stated in *Nature*,

*Sex has been with us since our species originated as a result of sexual reproduction. The division of humans and other mammals into two sexes, female and male, derives from the fact that each individual is created by the union of a sperm and an egg. On the basis of the type of germ cell (gamete) that reproducing individuals are able to produce, there are only two sex categories in mammals (Intersex is not a third category with respect to the type of gamete individuals can produce.) Indeed, understanding of how the mammalian genome evolved and how it functions is based on the foundation of sexual reproduction.*³

² Ministry of Education (2019). *Relationships and Sexuality Education: A guide for teachers, leaders and boards of trustees (years 1–8; years 9–13)*. Accessed November 1, 2024. <https://newzealandcurriculum.tahurangi.education.govt.nz/relationships-and-sexuality-education-guide/5637155086.p>

³ Arnold, Arthur P.; Klein, Sabra L.; McCarthy, Margaret M.; Mogil, Jeffrey S. (2024). Male-female comparisons are powerful in biomedical research - don't abandon them. *Nature*. 629(8010), 37-40. doi: <http://dx.doi.org/10.1038/d41586-024-01205-2>

Goymann et al. (2023) write in *BioEssays*, "*Biological sex is binary, even though there is a rainbow of sex roles: Denying biological sex is anthropocentric and promotes species chauvinism*," stating "*the rejection of biological sex seems to be based on a lack of knowledge about evolution and it champions species chauvinism, inasmuch as it imposes human identity notions on millions of other species.*" They continue,

As explained above, every sexually reproducing species produces two distinct types of gamete, which are either large (eggs in animals, ovules in plants) or small (sperm in animals, pollen in plants). There are no "speggs" or "pollules" (gametes of intermediate size), nor five different biological sexes as postulated by Fausto-Sterling, nor are the male and female sex "context-dependent categories with flexible associations to multiple variables".[6] All there is are two reproductive strategies based on two distinct categories of gametes that fuse to make offspring.[9, 17, 35] As Joan Roughgarden, a biologist who identifies as a transgender person, put it: "[...] 'male' means making small gametes, and 'female' means making large gametes. Period!"[36] Moreover, it is important to note that the fundamental definition of the biological sexes (based on gamete size) must be distinguished from any operational usage of the term, for example that based on chromosomes or genes, etc., because fundamental and operational definitions are not equivalent.⁴

Sex denialism has recently become rampant inside and outside the academy, with strained attempts to deny the sex binary (the most prominent ones are rebutted in the above citations). While these statements may be well intentioned, they are misguided attempts to coopt biology to support particular societal and political positions regarding culturally constructed genders. Organismal biology does not care what positions humans take. While gender (in the modern academic usage of the term) is socially constructed, like money, claimed racial categories, numerous cultural conventions, etc., sexes have been produced by evolution. They pre-date not just modern social categories but the existence of mammals.

For evolutionary biologists, sex is a core concept, and one of the most studied. The relevant terminology is well worked-out. Studying evolutionary biology without sex would be like studying physics while ignoring gravity.

We include further discussion of some confusions that commonly arise in these discussions below.

The 1.7% intersex statistic

⁴ Goymann, W., Brumm, H., & Kappeler, P. M. (2023). Biological sex is binary, even though there is a rainbow of sex roles: Denying biological sex is anthropocentric and promotes species chauvinism. *BioEssays*, 45, e2200173. <https://doi.org/10.1002/bies.202200173> For internal citations, see original.

The Equity Office's "correction" for students is supported by a citation from the United Nations Human Rights Office of the High Commissioner (OHCHR). However, the OHCHR page does not in fact say "*The biological sex of some people is neither female nor male.*" Instead, it discusses "intersex traits", claiming that "*Intersex people are born with sex characteristics (such as sexual anatomy, reproductive organs, hormonal patterns and/or chromosomal patterns) that do not fit typical binary notions of male or female bodies. Experts estimate that up to 1.7 percent of the population are born with intersex traits.*" As a matter of logic, merely having atypical traits does not add up to being "neither male nor female," and as we will see below, as a matter of evidence, the vast majority of people who are being swept in by this overbroad and negative definition are unambiguously either male or female and are completely unaware someone would claim they are intersex.

The UN OHCHR statement about 1.7% of humans having intersex traits is not supported by citation. The source for the "1.7% intersex" statistic is a much-criticized paper by Anne Fausto-Sterling and students in 2000.⁵ This statistic has gained credibility through sheer repetition by activists and institutions, along with catchy phrases (e.g. "*intersex is more common than red hair*"). However, Fausto-Sterling's statistic was debunked soon after it was published. One critique wrote "*Blackless et al. (2000, chief researcher, Anne Fausto-Sterling) suggest that as many as 1.728% of live births are sexually nondimorphic. In this letter, I will outline several errors and oversights in that article and propose that their estimate is **incorrect by an order of magnitude**, and concludes "the numerous errors and omissions made by Blackless et al. suggest that they were too keen to find a relatively high incidence of sexual nondimorphism."*⁶

Another critique states,

Reviewing the list of conditions which Fausto-Sterling considers to be intersex, we find that this one condition—late-onset congenital adrenal hyperplasia (LOCAH)—accounts for 88% of all those patients whom Fausto-Sterling classifies as intersex (1.5/1.7 = 88%). From a clinician's perspective, however, LOCAH is not an intersex condition. The genitalia of these babies are normal at birth, and consonant with their chromosomes: XY males have normal male genitalia, and XX females have normal female genitalia. The average woman with this condition does not present until about

⁵ Melanie Blackless, Anthony Charuvastra, Amanda Derryck, Anne Fausto-Sterling, Karl Lauzanne, Ellen Lee (2000). How sexually dimorphic are we? Review and synthesis. *Am J Hum Biol*, 12(2):151-166. [http://dx.doi.org/10.1002/\(SICI\)1520-6300\(200003/04\)12:2<151::AID-AJHB1>3.0.CO;2-F](http://dx.doi.org/10.1002/(SICI)1520-6300(200003/04)12:2<151::AID-AJHB1>3.0.CO;2-F)

⁶ Carrie L. Hull (2003). Letter to the Editor: How sexually dimorphic are we? Review and synthesis. *Am J Hum Biol*, 15(1):112-115. <http://dx.doi.org/10.1002/ajhb.10122>

24 years of age (Speiser et al., 2000). Men with LOCAH present later, if ever: Many go through life undetected or are discovered only incidentally (Holler et al., 1985).⁷

Many of Fausto-Sterling's other included conditions are also clearly either male or female. The number of cases that actually correspond to what most readers think of when they hear the term "intersex", where the genitals are sufficiently ambiguous that expert diagnosis is required, is about 100 times lower than Fausto-Sterling's statistic, i.e. about 0.018%.

In her replies to these critiques, Fausto-Sterling neither defends the 1.7% statistic nor refines it to a justifiable figure⁸. Instead, Fausto-Sterling concedes the statistic is as useful as a political tool. In the 2020 revised edition of Fausto-Sterling's 2000 book *Sexing the Body*, she introduced another condition, hypospadias, which was not mentioned in Blackless et al. (2000). The 2020 edition cites a ~1% rate of hypospadias in some populations, apparently to revive a number around 1%. This ignores the fact that hypospadias is a *male* condition (in which the meatus is not at the tip of the penis⁹). and most hypospadias are mild.

Yet another problem with reviving Fausto-Sterling's debunked pseudostatistic is that the term "intersex" is outdated and unclear, and should be avoided in favour of updated terminology. It survives within activist terminology, mostly due to forced-teaming with a variety of conditions via Fausto-Sterling's overly broad definition. The term "intersex" blends hundreds of distinct diagnostic conditions. That term and several others ("hermaphrodite", etc.) were replaced by the term "Disorders of Sex Development" (DSD) in 2006 with a Consensus Statement that was published concurrently in three major journals, the *Journal of Pediatric Urology*, the American Medical Association's journal *Pediatrics*, and the BMJ's journal *Archives of Disease in Childhood*.¹⁰ The

⁷ Leonard Sax (2002). How common is intersex? a response to Anne Fausto-Sterling. *Journal of Sex Research*, 39(3):174-8. <http://dx.doi.org/10.1080/00224490209552139>

⁸ Anne Fausto-Sterling (2003). Response. *Am J Hum Biol*, 15(1):11-1165.

<http://dx.doi.org/10.1002/ajhb.10122>; Anne Fausto-Sterling (2020 [2000]). *Sexing the Body: Gender Politics and the Construction of Sexuality*. Updated edition. New York: Basic Books.

⁹ <https://starship.org.nz/guidelines/hypospadias/>

¹⁰ I.A. Hughes; C. Houk; S.F. Ahmed; P.A. Lee; Lawson Wilkins Pediatric Endocrine Society (LWPES)/European Society for Paediatric Endocrinology (ESPE) Consensus Group (2006). Consensus statement on management of intersex disorders. *Journal of Pediatric Urology*, 2(3), 148-162. <https://doi.org/10.1016/j.jpuro.2006.03.004>

Lee PA, Houk CP, Ahmed SF, Hughes IA; International Consensus Conference on Intersex organized by the Lawson Wilkins Pediatric Endocrine Society and the European Society for Paediatric Endocrinology. (2006). Consensus statement on management of intersex disorders. International Consensus Conference on Intersex. *Pediatrics*. 118(2):e488-500. <http://dx.doi.org/10.1542/peds.2006-0738>

Hughes IA, Houk C, Ahmed SF, Lee PA; LWPES Consensus Group; ESPE Consensus Group. (2006). Consensus statement on management of intersex disorders. *Archives of Disease in Childhood*. 91(7):554-63. <http://dx.doi.org/10.1136/adc.2006.098319>

second sentence of this Consensus Statement states, "*It is estimated that genital anomalies occur in 1 in 4500 births*" (0.022%). A more recent paper on the genetic causes of DSDs shows how they are discussed in a scientific framework:

DSD are congenital conditions in which development of chromosomal, gonadal, or anatomical sex is atypical (Hughes et al. 2006). DSD covers a wide spectrum of different phenotypes with hypospadias being the most common defect with an average of 1 in 250-350 male births. In addition, 1 in 4,500 babies worldwide is born with significant ambiguous genitalia (Hughes et al. 2006) and significantly, DSDs account for 7.5% of all birth defects. Furthermore, DSD phenotypes are often associated with other syndromes, such as Mayer-Rokitansky-Kuster-Hauser syndrome, Smith-Lemli-Opitz syndrome or genitopalato-cardiac syndrome (Porter 2008; Sultan et al. 2009).¹¹

We submit that the Equity Office's directive to pass along the UN OHCHR's claims as a "correction" would *misinform* students and only escalate controversy. The Equity Office asks for excellence and integrity. Academic integrity demands that academics define sex correctly. It is not for administrators to cite and enforce misleading and tendentious activist talking points.

Academic Freedom Concerns

Prof. Rata's lecture was not a dogmatic or even detailed statement on sexes. It noted, accurately, that there is a societal "great debate" regarding sex and gender. This debate is playing out in education as well as elsewhere, and a central issue is whether biological sexes are real and/or important, or whether social constructivist concepts should dominate. While Prof. Rata's opinion was apparent, she mentioned both sides. This was her role as an educator, and consistent with the academic freedom of a professor to encourage critical thinking.

University administrators attempting to overrule academics, and spread inaccurate pseudoscience, raises serious issues of national and international concern. Around the world, academics have been targeted – harassed or worse by students and administrators – for presenting mainstream science on the sex binary. For reasons that remain to be explained, female academics appear to be the most targeted. Highly publicised cases include evolutionary biologist Carole Hooven at Harvard¹² and

¹¹ Stefanie Eggers & Andrew Sinclair (2012). Mammalian sex determination -- insights from humans and mice. *Chromosome Research*, 20:215-238. <http://dx.doi.org/10.1007/s10577-012-9274-3>

¹² Carole Hooven (2024). "Carole Hooven: Why I Left Harvard." *The Free Press*, January 17, 2024. <https://www.thefp.com/p/carole-hooven-why-i-left-harvard>

education professor Christy Hammer at the University of Southern Maine¹³. On broader issues concerning sex and gender, philosophy professors Kathleen Stock in the UK and Holly Lawford-Smith at the University of Melbourne have been targets of harassment, along with many others. Each case resulted in media uproar and reputational damage to the institutions involved. This would have been avoided if administrators had clarified that academics have academic freedom to state and teach a scientifically informed view, even on matters that are currently the subject of societal controversy, and even if some students or activists disagree.

Students receiving a full education deserve to be exposed to diverse viewpoints and ongoing debates among scholars. They should not receive "corrections", which are themselves inaccurate, handed down from non-scholarly bodies in university administrations. As Harvard legal scholar Cass Sunstein said recently, "*universities should seek to promote safe spaces not for feelings, but for a wide range of ideas.*"¹⁴ Questions surrounding sex and gender, as well as numerous other hot-button topics (such as conflicts involving religion, politics, war, colonialism, law, etc.) should be the subject of free academic discussion, and the institution and its officers should remain neutral in such debates. The purpose of a university is to provide a forum for discussion among scholars and students,¹⁵ not for potentially ill-informed administrators to police the views of scholars and students based on whatever ideology is currently fashionable. Anyone who thinks that such interventions are acceptable should consider how they would feel if an election, governmental decision, a scandal, etc., produced different university administrators who tried to enforce an ideology different from theirs.

Signed,

Nicholas Matzke, Senior Lecturer, School of Biological Sciences
Kendall Clements, Professor, School of Biological Sciences

¹³ Jennifer Gingrich (2022). The University of Southern Maine Must Support Professor Christy Hammer and Biological Fact. Change.org petition. October 1, 2022. <https://www.change.org/p/the-university-of-southern-maine-must-support-professor-christy-hammer-and-biological-fact>

Troy R. Bennett (2022). Students demand USM replace professor for allegedly saying there are only 2 sexes. *Bangor Daily News*, September 29, 2022. <https://www.bangordailynews.com/2022/09/29/portland/usm-professor-two-sexes/>

According to a November 16, 2024 social media post, after 3 investigations over 2 years, the "Maine Human Rights Commission has now cleared Christy of all charges. MHRC ruled that saying there are two sexes was not inherently discriminatory, that sex realism is a valid viewpoint, and that educators must be permitted to express controversial opinions in the classroom."
https://x.com/fem_mb/status/1857526905479770406

¹⁴ This is an oft-repeated statement by Sunstein, here quoted in the summary of an upcoming event: "Free speech on campus." Hosted by the London School of Economics and Political Science. <https://www.lse.ac.uk/Events/2024/12/202412051500/Sunstein>

¹⁵ The classic statement of this principle is the University of Chicago's 1967 Kalven Report. See: "Report on the University's Role in Political and Social Action." November 1, 1967, <https://provost.uchicago.edu/reports/report-universitys-role-political-and-social-action>

Tony Hickey, Professor, School of Biological Sciences
Anthony Poole, Professor, School of Biological Sciences
Russell Gray, Professor, School of Psychology
Garth Cooper, Professor, School of Biological Sciences
Peter Hunter, Distinguished Professor, Auckland Bioengineering Institute¹⁶
David Cumin, Senior Lecturer, School of Medicine¹⁶

¹⁶ I would like to make it clear that I am not an expert in this field. I'm signing this letter because I think it is very important in a research-led university that statements about scientific issues should be left to scientists with the appropriate expertise. Proposing a viewpoint on the basis of social acceptability is entirely counter both to our commitment to scholarship and to our government-mandated commitment to academic freedom.

Section 267(4)(a)-(c) of the [Education and Training Act 2020](#) states that academic freedom, in relation to an institution, means:

- (a) the freedom of academic staff and students, within the law, to question and test received wisdom, to put forward new ideas, and to state controversial or unpopular opinions;
- (b) the freedom of academic staff and students to engage in research;
- (c) the freedom of the institution and its staff to regulate the subject matter of courses taught at the institution.

I think that the inclusion of 'institution' in the phrase 'the institution and its staff' covers the role that a head of Department has in ensuring course quality. It is entirely inappropriate for the university's administrative staff to be telling academic staff what they can and cannot teach.