Gendercide and Sex-Selection: Does it happen in Canada?
A Discussion Paper

Introduction
Toward the end of the 20th and into the 21st century, census data in China revealed a steady increase in birth sex-ratios. The natural sex-ratio at birth of male per female children is approximately 106 males to every 100 females, but the Chinese Association of Social Sciences (CASS) revealed that the sex-ratio for the generation born between 2000 and 2004 was 124 males per 100 females. Similarly, forty-one provinces in India boasted sex-ratios above 125 in 2001, revealing a dramatic increase from 1991 in which only the province Punjab had a sex-ratio of over 120. Polls carried out in South Korea, Taiwan, Pakistan, Yemen and former Soviet Union states, as well as in the Balkans, likewise yielded increasingly unbalanced sex-ratios.

The shocking statistics have provoked increasing concern in the local governments and within the international medical and academic communities about the decrease of females in Asian countries. The cultural emphasis on having male heirs coupled with advancements in ultrasound and abortion technology appears to have triggered the sex-selection of millions of unborn female children through abortion. The “worldwide war on baby girls,” as designated by The Economist in a recent article, is resulting in an unprecedented deficit of females. The wide-spread extermination of unborn female children and infants in preference for male children has been recognized as gendercide; the intentional, systematic murder of a particular gender according to Mary Anne Warren’s 1985 book Gendercide: The Implications of Sex-Selection. And, the international community is now preparing for the effects of gendercide on the next generation.

Lest sex-selection be considered solely a foreign phenomenon, Andrea Mrozek, writing in the Western Standard in 2006, uncovered that unnatural sex-ratios appear in Canada as well. According to Statistics Canada, the sex-ratio in a number of immigrant communities reflects the unbalanced ratios found in regions of Asia. The existence of sex-selection in Canada raises concerns regarding Canadian abortion practices, the permission of sex-selection in Canada, and Western cultural assumptions that might perpetuate gender biases. Western cultural sensibilities are largely offended by gendercide and sex-selection. However, in the absence of Canadian legislation on abortion, it is not legally possible to curtail the decision to abort an unborn child on the basis of gender discrimination.

Technological advances in in vitro fertilization technology now enable parents who possess sufficient funds to use pre-implantation genetic determination (PGD) technology to conceive their preferred gender. While the use of in vitro fertilization to select the sex of a baby is illegal in Canada under the Assisted Human Reproduction Act except in cases where the transmission of a genetic disease is at risk, there is growing evidence that Canadians are taking advantage of “family planning” or “balancing” services in the United States that utilize PGD technology. The family planning industry does not differentiate between families who are selecting the sex of their child because of a bias toward males or a desire for “family balancing,” or having a child of the opposite sex from one’s other children in order to create one’s desired family structure. An examination of sex-selection in Canada reveals that as the cultural emphasis in freedom of choice grows, ethical questions arise concerning the extent of freedom and its potential to also perpetuate cultural prejudices, discrimination, and injustice.
A Brief History of Gendercide and Sex-Selection

India

By the time *Lancet*, a prestigious British medical journal, published in 2006 its alarming study of the effects of parental preference for males in India, sex-selective abortions had been illegal in the country for 12 years. However, the combination of persisting prejudices against female heirs and advanced ultrasound and abortion technology which enabled the inexpensive abortion of unwanted foetuses had already caused a deficit of approximately 10 million girls. Deeply embedded cultural practices and beliefs—such as paying for a daughter’s dowry in marriage or a son’s ability to carry on the family name—perpetuated the prejudices against females. In the 1980s when abortion services became increasingly available, clinic slogans testified to the prejudices propelling their practice: “Pay 5,000 rupees today ($110), save 50,000 rupees tomorrow,” the equivalent of a daughter’s dowry.

India’s kinship system is largely patriarchal, or more specifically, “patrilineal” because families pass on their name and assets through the male line. Within this social system, a female cannot gain financial independence and must rely on her father or husband for economic support; therefore there is significant pressure for a daughter to marry. To complicate matters, tradition maintains the family’s requirement to pay a dowry for their daughter’s marriage. As a result, the financial burden of having a daughter exponentially increases and further reduces the value of females in the society.

According to a report provided by the United Nations Population Fund, until the mid 20th century when nutrition and protection against epidemics improved, women in India suffered from a high mortality rate at all ages. Even when general life expectancy rose after the 1920’s, “men reaped more benefits … than did women.” A history of infanticide or neglect of female children exists in India, perpetuated by the traditional elevated status of men in the culture. But with the introduction of ultrasound technology that provided prenatal sex screening, sex-ratios increased exponentially. Dr. Monica Das Gupta highlights that as the accessibility sex-selective technology improved, there was “a shift from postnatal to prenatal discrimination.” Furthermore, the efficiency of ultrasound and abortion techniques made abortion a standard practice for sex-discrimination, and people generally consider abortion “far less physically and psychologically painful than a pregnancy followed by infanticide or later infant or child deaths.”

The correspondence between skewed sex ratios and the availability of ultrasound and abortion technology suggests that technology, rather than allowing the population greater freedom as is often argued in defence of modernization, becomes a dominant means through which cultural prejudices and discriminations are enacted and perpetuated.

In India, the affluent regions of Maharashtra, Punjab and Gujarat feature the worst sex ratios; revealing that wealthy, well-educated families carry the same cultural preference for a son, but are increasingly economically mobilized to achieve that goal. As *The Economist* summarizes, “modernisation and rising incomes make it easier and more desirable to select the sex of your children.”

The regions in India which feature the most balanced sex-ratios are the areas in which there exists a less rigid construction of gender. In South India, women are freer to maintain a “mutually supportive relationship” with their parents after marriage, therefore reducing the difference between the value of a daughter and a son, and subsequently lowering the son preference. The social and legal independence of women is likewise increased in these regions, and women have the opportunity to achieve a level of economic independence and stability. In regions where women are entirely dependent on their families and then their husbands for economic support, they become financial burdens according to the patrilineal society.

The government of India and many Indian feminists groups have made significant efforts to raise awareness of the devastating effects of gendercide through abortion, and to eliminate the cultural practices such as the dowry that perpetuate the degradation of women. Dr. Farhat Moazam argues that a
social system in which women are regarded as inferior is "an affront to standards of propriety and higher-order sensibilities," and is harmful to women, men and children. But as Moazam argues for the equality of women, she warns against what she refers to as "liberal Western feminism" that "opposes the prohibition of sex-selection in the name of autonomy." Her critique and other analogous arguments have become central to the North American debate surrounding sex-selection. In other words, she highlights the danger of the freedom of choice to include the choice to abort female children on behalf of a cultural preference for males. Moazam suggests that only through the recognition of universal moral principles that equally protect females and males from harm can the prejudices or cultural relativism that condones oppressive practices are undermined.

China

The recent history of gendercide and sex-selection in China reveals similar cultural prejudices toward females as found in India. In addition to advancements in ultrasound technology, government sanctioned reproduction restrictions and the one child policy have caused millions of unborn females to be aborted. Census data reveals a dramatic increase in gender disparity toward the end of the 20th century and into the 21st. The sex ratio in China for the generation born between 1985-1989 was recorded as 108 per 100, compared with a ratio of 124 to 100 between 2000 and 2004. While 108 is just outside of the natural range, 124 is "biologically impossible without human intervention," and according to CASS data from January 2010, the ratio remains dangerously skewed at 123 boys per 100 girls.

China criminalized sex-selective abortion in 1995, but the practice reportedly continues widely because of the preference for male heirs and the difficulty of monitoring to determine whether an abortion is carried out for sex-selection. According to an analysis of 2005 census data, males under the age of 20 exceeded females by more than 32 million in China, and, also in that year, 1.1 million more boys were born than girls. As a result, the researchers anticipate that China will see "steadily worsening sex ratios in the reproductive age group over the next two decades." China’s reproduction restrictions are considered a major contributing factor to the unbalanced sex ratios, and census data reveals that the “one child policy” exasperates the existing preference of male heirs. There are three types of restrictions throughout China’s various provinces. The most restrictive regulations are in “type 1” provinces in which only 40% of couples are allowed a second child, but generally only if the first child is a girl. In type 2 provinces, “everyone is allowed a second child if the first child is a girl” or if the parents experience “hardship” (a definition which is interpreted by local officials). Type 3 provinces allow second and, sometimes, third children, irrespective of the child’s sex. The provinces that have type 2 restrictions feature the highest sex-ratios, especially among second born children if the first child is a girl. The lowest ratios are in type 3 provinces in which restrictions are lightest. Type 1 provinces have moderate sex-ratios in comparison, although these numbers are still outside of the natural range. Researchers suggest that higher levels of education among both men and women in these wealthy provinces are leading to the decrease of traditional values which encouraged a preference for sons. Furthermore, couples in these wealthy regions tend to have greater economic security through pensions, which decreases the need for males heirs who are culturally expected to provide for their parents in old age.

While there is evidence to suggest that among the educated upper class in China the preference for males is decreasing, there remain cultural systems and traditions that favour the role of men over women in society. The society is patrilineal, and religious traditions such as ancestor worship further emphasise the role of sons in “ensuring the welfare of departed souls.” Sons have the responsibility of taking care of aged parents, and securing one’s place in the afterlife.

Interestingly, elderly women in Chinese culture reputedly have significant autonomy and influence within their families, arguably even more than elderly men. However, this status is dependent on having the support of her grown sons, again showing cause for son preference. A similar pattern is found in India, and encourages the binding of a mother to her son, even at the expense of the son’s bride: “the successful self-assertion of women in such a kinship system is at the expense of younger women, which helps perpetuate the cycle of female subordination.”
Within some regions in China, there exists kinship systems which allow females greater autonomy, and within these populations the sex-ratios are more balanced. Among the non-Han and other ethnic minorities, “the less rigidly patrilineal kinship systems show little or no son preference.” However, other minority groups and the Hans, who constitute the majority of China’s population, have strongly patrilineal systems.

Overall, the cultural preference for males has created a deficit of females and produced a generation of “bare-branches” in China, the demographic of single men currently reaching adulthood with no prospects of marriage because of the disproportionate sex-ratios. Ironically, the value of males in patrilineal societies is dependent on being married and having children in order to achieve social status and success. Therefore, these young men have no place within the current societal structure, and the surplus of socially displaced males has led to an increase in crime in many regions of China. Furthermore, the persisting prejudice for male heirs exasperates the discrimination against females in the culture; according to the World Health Organization, female suicide rates in China are among the highest in the world. Some argue that the cultural pressure for a mother to abort or kill baby daughters has led to this phenomenon.

In response to the dramatic gender disparity that currently exists and threatens to increase, the Chinese government, like other Asian governments, has launched the “care for girls” campaign to counter sex imbalance. The campaign includes changing laws to permit females to inherit wealth and property and promoting gender equality through education. While it will take at least a generation to begin to balance the sex ratio, the ratio has ceased to increase and in some areas, has decreased. South Korea, which was the first country to report unbalanced sex-ratios, is also the first country to confirm lower ratios; nationwide, the ratios dropped from 115 to between 110 and 100 over the past decade, most likely resulting from changes in public policy that decreased son preference. Likewise, ratios in China are gradually decreasing, possibly due to government incentives to raise daughters. As The Economist concludes, “modernisation not only makes it easier for parents to control the sex of their children, it also changes people’s values and undermines those norms which set a higher score on sons.” But, researchers warn that although the sex-ratios are equalizing, efforts to bring down sex-ratios should not be relaxed because the adverse effects of past discrimination has yet to play out completely; therefore discrimination against girls still needs to be addressed “through measures such as media outreach, education, legislation, and direct incentives.”

Gendercide and Sex-Selection in Canada

In 2006, The Western Standard published an article by Andrea Mrozek that highlighted unbalanced sex-ratios in immigrant communities in Canada that mirror those discovered in Asian reports. In Surrey, B.C., where one third of the community is from India, the sex-ratio had increased to 110 by 2000. Likewise in Coquitlam, B.C., where there is a large population of Chinese immigrants, the ratio in 2000 was an unnatural 116 males per 100 females. Mrozek’s study provoked studies across the country that revealed immigrant communities in Ontario and Quebec also had unbalanced sex-ratios.

As the communities began to question the cause of the unbalanced ratios, researchers warned that the data alone does not prove the occurrence of sex-selection. Economics professor Mukesh Eswaran, at the University of British Columbia, points out that the sample sizes from which the statistics of sex-ratios were gathered in Canada were not as thorough as the Indian and Chinese studies. Furthermore, provincial governments are not prepared to disclose birth information necessary to make definitive conclusions, and in most provinces, abortion statistics are classified with the reasons for abortion not recorded. In B.C. specifically, the government passed Bill 21 in 2001 which tightly restricts access to abortion information. But, the cultural pressure to have a male heir remains an evident factor in choosing to procure an abortion. One abortion technician, who remains anonymous because of the confidentiality of abortion procedures, explained to The Western Standard that while the reason for an abortion is not officially recorded, abortions are often procured with the “sudden involvement of a husband” after a gender determining ultra-sound.
While Asian countries have taken proactive measures to restrict sex-selective abortions and to alter the cultural prejudices that lead to son preference, Canadian legislation and public policy is not currently equipped to address the question of sex-selection through abortion. As a result of the Supreme Court of Canada decision in *R. v. Morgentaler* in 1988, there are no legislative limitations on abortion in Canada, and therefore gender based abortions cannot be ruled out. Furthermore, while the 1994 Royal Commission on Reproductive Technology recommends that prenatal sex determination for the purpose of sex-selective abortion "not be available for use," the *Assisted Human Reproduction Act*, passed in 2004 as a follow-up to the Commission report, only restricts sex-selection *in vitro*, not *in utero*. Therefore "the aborting of foetuses of one sex until the foetus of the preferred sex has been conceived" is legitimate under the current void in legislation.

In the absence of government legislation concerning abortion, medical groups in Canada have informally self-restricted sex-selective abortions in response to the increasing sex-ratios in some Canadian communities. The Society of Obstetricians and Gynaecologists of Canada (SOGC) issued a statement in 2001 that declared the determination of the gender of an unborn child for the purpose of sex-selection was "inappropriate." Their decision was echoed by the College of Physician and Surgeons in Ontario in 2004, who similarly determined that using an ultrasound for sex-selection was "contrary to good practice." But while the SOGC stresses that ultrasound testing for the purpose of determining a child’s gender “should not be used to accommodate societal preferences,” without legislation, the non-binding and non-enforceable statement is easily overridden, especially since hospitals do not monitor or control ultrasounds and abortion services.

In an effort to reduce sex-selective abortions in British Columbia, the BC College of Physicians and Surgeons has barred doctors from divulging the gender of an unborn child younger than 24 weeks to parents, unless there are medical reasons to do so. Late term abortions are still legal in Canada, and therefore abortions can and are performed until full-term. But, according to Canadian Medical Association (CMA) policy, the termination of pregnancy after foetal viability is monitored more carefully because of the increase of risk to the mother, and due to the fact that after a gestation period of 22 weeks or more, the unborn child is capable of independent existence and, even in the case of a terminated pregnancy, may still be born alive. Therefore, CMA states that post-viability abortions may be limited to "exceptional circumstances" and recommends that a patient should at least consult her physician before proceeding. While the policy of the BC College of Physicians and Surgeons does not replace the need for federal jurisdiction on sex-selection, it does attempt to limit sex-selective abortions by withholding the gender of a child until 24 weeks after which abortions should be monitored more closely.

The informal efforts to restrict sex-selection have caused a spectrum of responses. According to a 1993 report released by Canada’s Royal Commission on New Reproductive Technologies, public opinion in Canada is strongly opposed to gender based abortions; 90 per cent of Canadians are uncomfortable with sex-selective abortions of either gender. But, as bio-ethicist Brendan Leier at Edmonton’s Stollery Children's Hospital explains, there is no legislation to support these values. As an interim solution, Leier supports doctors withholding the gender of a child, but other doctors argues that concealing information violates the ethical obligation of doctors to provide their patients with information upon the patients’ requests. Other opponents label the withholding of the child’s sex to prevent sex-selection “paternalistic.” Additionally, the Abortion Rights Coalition of Canada (ARCC) insists that abortion remains a woman’s irrevocable right, and if she chooses to abort on the basis of gender, she should be free to do so. Overstressing the right to freedom of choice in the case of sex-selection ignores the reality that the societal prejudice against females is influencing women’s choices, and therefore the choice is not free, but culturally pressured. In addition, at issue is a legal void not a legislated right. If Canada as a country upholds the equal value of all peoples under *Charter* rights, it should follow that the federal legislation opposes cultural prejudices that are harmful to women and men alike. Furthermore, the criticism ignores the more contentious question of whether it is paternalistic for the federal government to permit cultural practices that specifically discriminate against females.

As researchers of gendercide and sex-selection in Asia have emphasised, sex-selection through the abortion of unborn female children increases the risk of all women in society and makes women more vulnerable to discrimination. The prejudice for male heirs is harmful, physically and emotionally, to
women, many of whom are already vulnerable to discrimination in their cultures. Baldev Mutta, executive
director of the Punjab Community Health Services in Ontario’s Peel region stresses that young mothers
from India, especially Punjab where studies have shown the prejudice for male heir is very strong, face
intense pressure to have male children. Mutta states that he has no doubt female feticide is prevalent
among Punjabis in Canada, evidenced by the many women who seek help from the Punjab Community
Health Services because of the domestic abuse they suffer on account of not producing male heirs. Mutta
relates that one woman who approached him for help was forced by her family to have two abortions
because they were girls, and had recently discovered she was pregnant with another female child.
Cases like those recounted by Mutta are not infrequent, and another counsellor explains that she has
encountered dozens of cases where the woman is forced to have multiple abortions for sex-selection; in
one case, the woman was threatened to be sent back to India if she did not comply. Mutta stresses that
males and females need to be educated about the danger of male preference to eliminate the cultural
“indoctrination” of male preference. But in the absence of Canadian legislation against sex-selection, or
against coerced abortions, it can become difficult for the discriminated females to resist the cultural
pressure to abort unborn female children.

Bill C-510 on Coerced Abortions
One recent federal private member’s bill would have offered legal protection to women being coerced to
have an abortion because of the gender of the child. Bill C-510 proposed an amendment to the Criminal
Code of Canada, section 264.2, making it a criminal offense to coerce a woman to procure or attempt to
procure an abortion for herself. Winnipeg South Member of Parliament Rod Brunoooge who proposed
the bill in April 2010 explains, “There are many stories of women being threatened and coerced into
having abortions against their will. If a woman resists, such coercion may escalate into violence, and even
murder. No woman should ever feel intimidated to have an unwanted abortion. This bill would help protect
a pregnant woman who does not want to terminate her pregnancy.”

The definition of “coercion” as defined by the bill did not include counselling and other forms of speech protected under The Charter of Rights and Freedoms. Under the bill, it would still have been legal to procure an abortion during all nine months of pregnancy, but the bill would have strengthened the protection in the Criminal Code against assaults and uttering threats by specifying that pressuring a woman to procure an abortion against her will is a criminal offense.

Bill C-510 was inevitably met with opposition. One prominent criticism, voiced by the Abortion Rights
Coalition of Canada (ARCC), was that a law should instead exist that criminalizes coercion not to have an
abortion. Coercion not to have an abortion would be a comparable infringement on women’s rights, but
the right to procure an abortion unimpeded already exists in Canada, due to the legislative void created
by the Supreme Court of Canada decision in R. v. Morgentaler (1988). Additionally, a women’s sole
choice in the matter of abortion is upheld through the decision in Tremblay v. Daigle (1989) where the
Supreme Court of Canada established that, “no court in Quebec or elsewhere has ever accepted the
argument that a father’s interest in a foetus which he helped create could support a right to veto a
woman’s decision in respect to the foetus she is carrying.” This decision is most frequently interpreted in
regards to a woman’s ability to obtain an abortion without hindrance, although it could also apply to a
woman seeking protection from pressure to have an abortion. However, as evidenced in the cases of
sex-selection in Canada, cultural prejudices increase the risk of a mother being coerced into aborting
female children. Bill C-510 would have recognized and protected women who are at an increased risk for
discrimination and abuse by providing additional legal protection to help fill a void in Canadian legislation
concerning sex-selection. Bill C-510 was defeated by a vote in the House of Commons in December
2010.

In-vitro sex-selection in Canada
Just as the availability of new ultrasound technology highlighted the issue of sex-selection and forced
governments internationally to examine more closely the cultural motivators behind the use of the new
technologies, advancements in in vitro fertilization technology introduce a series of novel concerns
regarding sex-selection in Canada. In Canada, it is illegal under the Assisted Human Reproduction Act to
select the sex of a child in vitro, except to prevent or treat a sex-linked disorder or disease. But, a
growing number of people are open to the idea of sex-selection through pre-implantation genetic
determination (PGD) which implants embryos of the desired sex into the mother’s womb. Through PGD
and in vitro fertilization, parents can select the gender of their baby without abortion, thus removing sex-selection from the contentious pro-life vs. pro-choice debate. Furthermore, a couple can procure the procedure out of the country if they are willing to pay for the process. In 2006, Dr. Jeffery Steinberg, who runs a chain of fertility institutes in the United States, stated that at least 70 Canadian couples have travelled to the Los Angeles or Las Vegas clinics to obtain the $18,000 (USD) procedure. While the clinic advertises “family planning services,” highlighting the right of parents to balance their families with children of the desired sex, 60% of the patients are foreign, many from China and India who want male heirs. While Steinberg argues he is empowering women by allowing them to choose the sex of their child, the practice still encourages gender discrimination.

Furthermore, even the desire to “complete” one’s family through sex-selection is not without ethical complexities. For those who believe life begins at conception, the issue is not whether sex-selection takes place pre- or post-implantation but whether embryos are being destroyed.

Family planning has become a business, and as such it is shadowed with the language of consumer rights. Amanda Mitchison with The Guardian highlights that the Western cultural belief that parents have the right to choose the sex of their child has led, in some cases, to a pathologic need to satisfy one’s desire for a specific gender. An international website that discusses sex-selection, in-gender.com, features a forum where women suffering from “Gender Disappointment” can write in and express their grief and disappointment in having a child of the “wrong” gender. In one recent forum post, a woman wrote that she was contemplating becoming pregnant and aborting the child if it wasn’t a girl; the replies were supportive, underlining the sense of self-entitlement that grows unchecked as child rearing becomes increasingly commodified. And, for those who cannot afford the services offered by in vitro fertilization clinics abroad, abortion remains a valid option to acquiring one’s desired end, in this case, a child of a certain gender. The long term consequences of a consumerist attitude applied to childbirth, also evident in the recent discussion in Canada concerning surrogate pregnancy contracts and rights and in other issues surrounding the genome project, are yet to be seen.

**Conclusion**

The issues surrounding gendercide and sex-selection are multi-tiered. In cultures where there is a strong preference for male heirs, sex-selection procured through abortion to prevent having girls has led to a dangerous shortage of females. As technology continues to advance, sex-selection can also be procured through prenatal sex determination and in vitro fertilization, although this method is currently limited to those who can afford the procedure. Consequently, wealthy upper classes in cultures such as China and India are no less disposed to prefer males. Statistical data actually reveals that many upper-class regions boast higher sex-ratios because the families are economically mobilized to act on their personal preference and perpetuate cultural prejudices and discriminations.

Another aspect of the issue of sex-selection appears in Western European and North American culture in the emphasized claim to freedom of choice which includes choosing one’s family constitution and the gender of one’s children. Again, wealth enables one to act upon one’s preferences and desires, as evidenced by the multi-million dollar family planning industry in the United States, but the cultural belief in an inherent right to choose affects individuals in all economic strata.

Currently, Canada does not permit in vitro sex-selection on the basis of gender. For those who cannot afford to procure in vitro prenatal sex determination internationally, abortion is an unrestricted option for sex-selection in Canada. While freedom of choice remains a near sacrosanct belief of some Canadians, it is important to recognize that choices can be influenced by powerful cultural trends. The study of sex-selection in Canada reveals that as the cultural emphasis on freedom of choice grows, ethical questions arise concerning the extent of freedom and its potential to also perpetuate cultural prejudices, discrimination, and injustice; these concerns should cause all involved in government, directly and indirectly, to consider the multifarious effects of societal changes and trends in light of the current legislation and the rights and freedoms it upholds.
Endnotes

6 Ibid.
10 Ibid.
12 Ibid.
14 Ibid.
15 Ibid.
21 Ibid.
22 Ibid.
23 Ibid.
24 Ibid.
25 Ibid.
26 Ibid.
28 Ibid.
29 Ibid.
30 Ibid.
31 Ibid.
33 Ibid.
34 Ibid.
42 Ibid.
43 Ibid.
48 Ibid.
49 Ibid.
51 Ibid.
54 Ibid.
57 Ibid.
58 Ibid.
64 Ibid.
67 Ibid.
While *in vitro* fertilization opens up a plethora of concerns related to the genome project, in the context of this paper, only the ethical and social consequences of *in vitro* sex-selection will be discussed.