

Dear Educational Provider,

You are receiving this letter because someone in your school community is concerned about a biology lab exercise that may be exposing some vulnerable students to potential harm. I hope that after you learn more about it, you will be persuaded to stop this type of testing from being conducted at your school. Sex chromosome testing is done as a biology lab exercise where students use their own tissue to examine and learn about sex chromosomes (XX and XY). Sometimes this test is also called a Barr body test or a karyotype test. This test may seem like a simple and interesting way to learn about chromosomes, and for many students it is, but it can present a difficult situation for students born with atypical chromosomes.

Most of us learned in biology class that all males are born with XY chromosomes and all females are born with XX chromosomes. This is the lesson that the Barr body test is meant to demonstrate. However, there are exceptions to this general rule. For example, some girls are born with XY chromosomes as a result of a condition known as complete androgen insensitivity syndrome (CAIS). While their sex chromosomes are XY, the genes carried in their chromosomes cause their bodies to develop as female. While CAIS is the most common, there are several other medical conditions in which people have unusual sex chromosomes – girls with XY or XO chromosomes, boys with XX or XXY, and several other variations.

Chromosome testing can expose children with these conditions to the school and their peers, revealing their private medical information and sometimes leading to bullying or other problems. Some students may know about their condition and dread this lab exercise. The psychological impact of knowing this and living in fear of being exposed can be very traumatic. Others might not be aware of their difference and learn about it in this shocking and embarrassing way.

Additionally, students that have been subjected to this type of testing may have claims based in Equal Protection, violation of state and federal privacy laws, and sex discrimination under Title IX. For all of these reasons, we ask that you consider the unintended consequences of sex chromosome testing and stop conducting these tests. As an alternative lesson, you might want to teach about the true diversity of sex chromosomes in humans.

For help with planning, the Intersex Society of North America has a great lesson plan available for free at: http://www.isna.org/files/teaching_packet.pdf.

For more information on CAIS and other sex chromosome variations please see <http://aisdsd.org/fact-check/>. For more about intersex youth, see www.interACTadvocates.org. If you have any other questions or concerns, please feel free to contact me at info@interACTadvocates.org. Thank you for your time.

Sincerely,



Kimberly Zieselman, JD
Executive Director