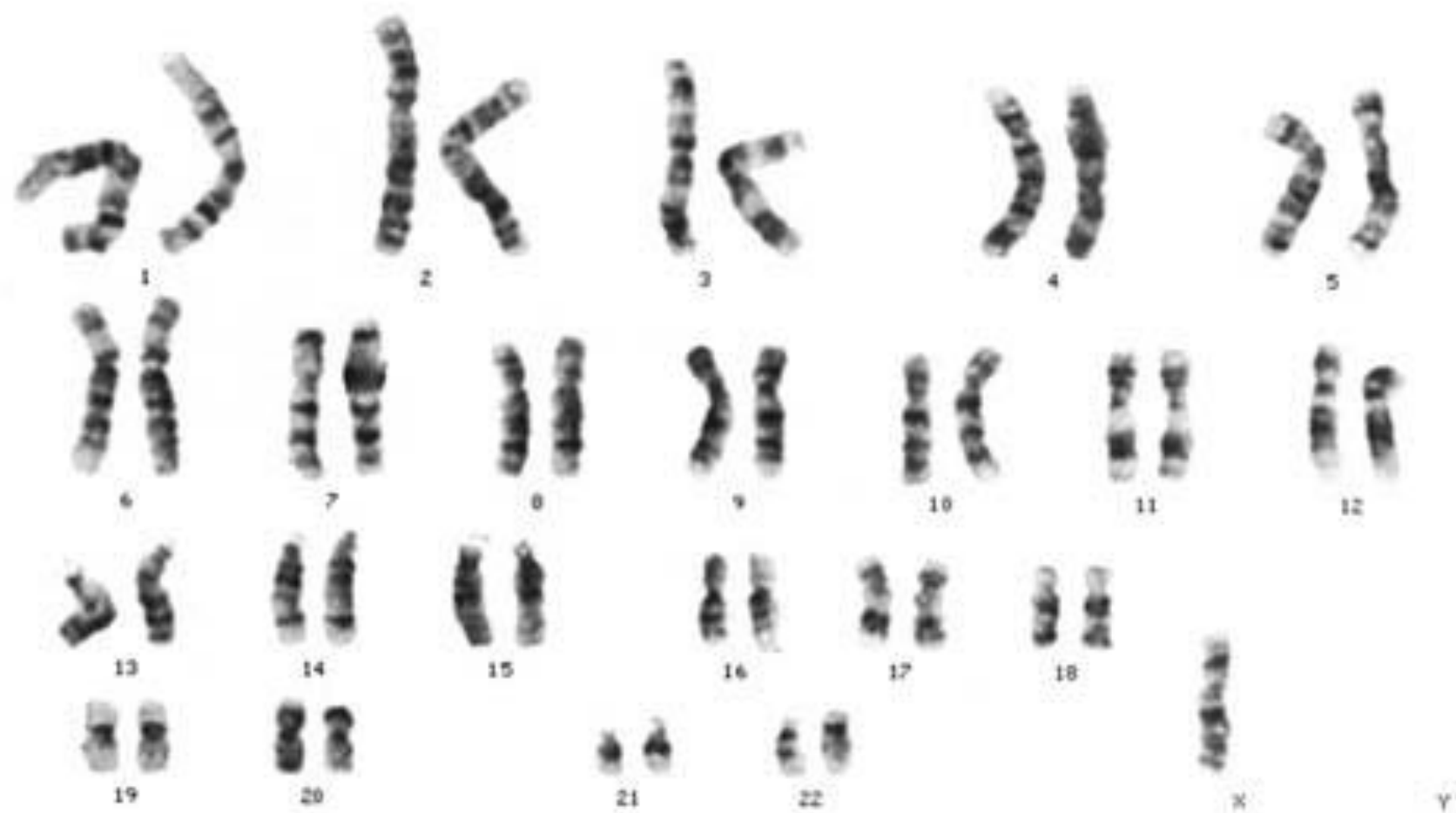


11.3 Chromosomes and Human Heredity

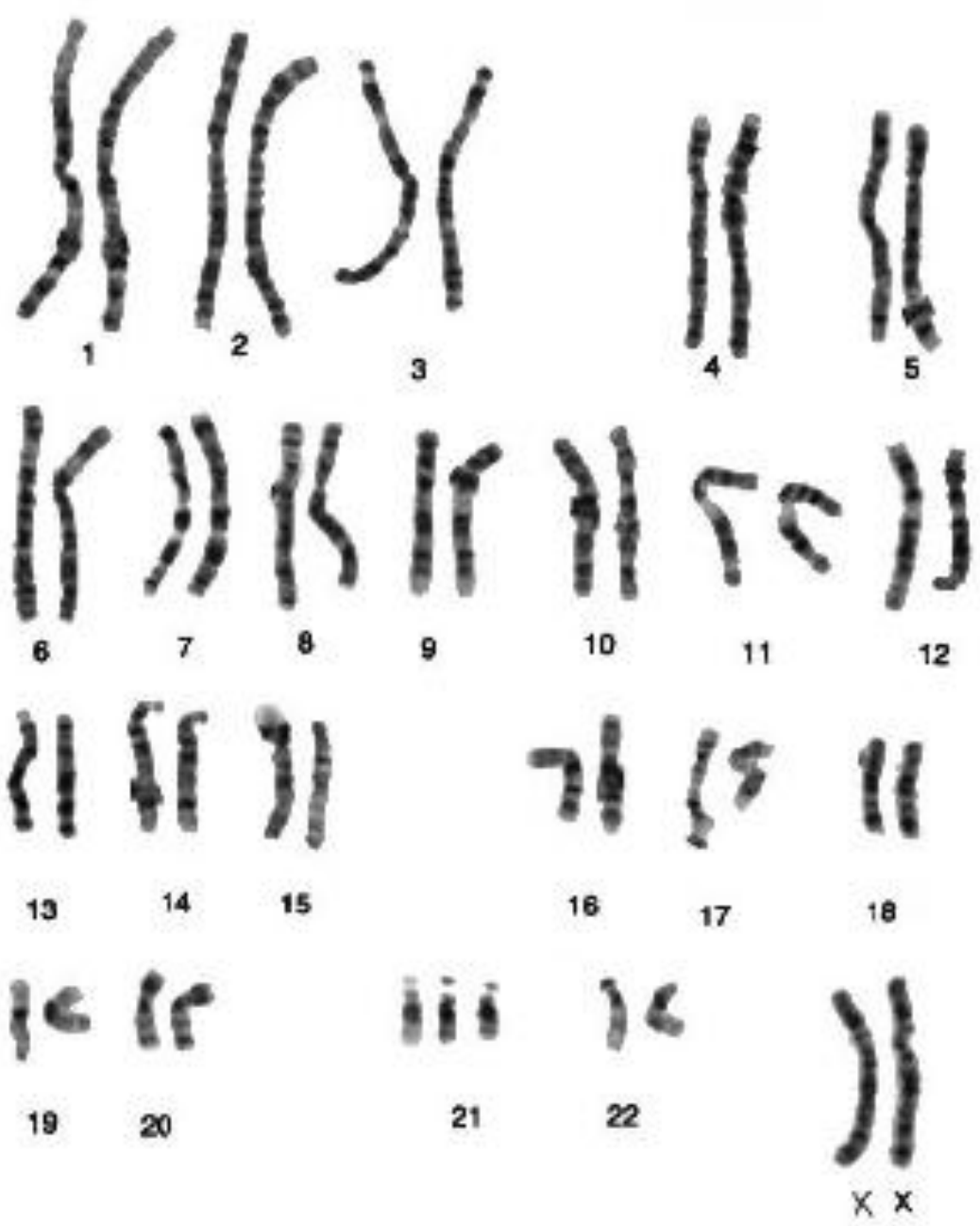
Nondisjunction

- Sister chromatids don't separate properly during meiosis
- Extra copy = trisomy
- Short a copy = monosomy
- Profound effects (even death)



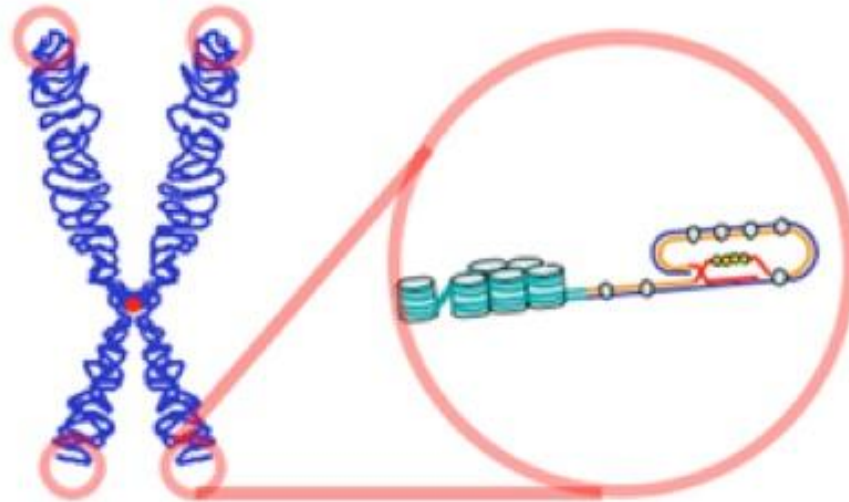


Trisomy 21
47,XX,+21



Telomeres

- Protective caps of DNA and protein on the ends of the chromosomes
- Wearing down with age could contribute to cancers and signs of aging



Fetal testing

- Can check for genetic issues
 - Amniocentesis: takes some of fluid that surrounds the fetus
 - CVS: takes a sample of tissue from the sac that surrounds the fetus
 - Fetal blood sampling: later in pregnancy (umbilical cord)

