

## Cell Biology Tracing meiotic errors in live oocytes

Chromosome segregation errors in oocytes lead to aneuploidy in eggs, a major cause of miscarriage and congenital disease. Errors are more likely to occur with age, especially with smaller chromosomes, but the reasons for this pattern are poorly understood. Takenouchi *et al.* (1) established a method to identify and track targeted chromosomes throughout meiosis in live mouse oocytes. This method revealed that smaller chromosomes actively move toward the inner region of the spindle equator, creating a chromosome size–based spatial arrangement on the metaphase plate. Inner positioning of smaller chromosomes increases the risk of their premature separation, a hallmark of aging-associated errors in oocytes.

1. <https://www.science.org/doi/10.1126/science.adn5529>