

SHOULD CYTOGENETICS BE REPLACED BY MOLECULAR TECHNOLOGIES?

A debate titled “Cytogenetics is a Dinosaur and Should Be Replaced by Molecular Technologies” was held at the 28th International Conference on Prenatal Diagnosis and Fetal Therapy, organized by the International Society for Prenatal Diagnosis (ISPD). It took place in Boston, Massachusetts, in July 2024, and featured a lively exchange between Michael Talkowski and Yasmine Akkari, moderated by Amy Breman.

The debate was summarized in *Prenatal Diagnosis* (1).

One of the most compelling arguments, in support of cytogenetic, was that cytogenetics is not merely a technique but a science—the science of chromosome organization and behavior. Without this knowledge, new technologies risk remaining sterile tools.

Yasmine Akkari recalled a cartoon in which, in 1997, a renowned scientist stands at a podium declaring “cytogenetics is dead.” The same scientist repeats the statement in 2007 and again in 2017. In the final frame, however, it is the scientist who is dead.

1. <https://obgyn.onlinelibrary.wiley.com/doi/10.1002/pd.6847>