

Review of: "[Perspective] Is There Any Reason to Stay in Human Genetic Societies as Cytogeneticists?"

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The history of medicine (and medical diagnostics constitutes a part of it) proves that many practices have been progressively replaced by others, more effective, easier, cheaper, less subjective in their interpretation. I believe that now the turn of cytogenetics has (partially) come. Even though my professional history was born together with cytogenetics and even I partly continue to practice it, I must say that from a clinical point of view its importance is becoming increasingly reduced. As an example, prenatal diagnosis is now something different from a classic cytogenetic approach and maybe cytogenetics can only support it in defining balanced translocations in parents and assessing their reproductive risk. Even post-natal diagnostics has been challenged by genome-wide molecular techniques, marginalizing the cytogenetics approach.

It remains the hematological field, where cytogenetics is still important, as a real genome-wide and non-targeted analysis, albeit at low resolution.

Thomas Liehr's letter complains about a progressive exclusion/marginalization of cytogenetics and cytogeneticists as compared to a recent past. He is certainly right, but the current situation must be placed in a context (even cultural) where genetic diagnostics has progressively moved towards very large sets of data, automation and result management and interpretation. It would therefore essential to evaluate and list the clinical conditions in which cytogenetics (the old manual technique, which requires never-ending, labor-intensive training and experienced labs) can constitute a valid and irreplaceable alternative to the most recent molecular techniques. Of course I'm not sure to be right, but my first impression on Thomas Liehr's letter seems a lament for the good old days.