Chromosomal Microarray (CMA) Information

- A recently published consensus statement by the International Standard Cytogenetic Array (ISCA) consortium recommends CMA should be the first-tier test for individuals with developmental disabilities, autism spectrum disorders, or multiple congenital anomalies.
- The current microarray abnormality rate in our lab is approximately 20-25%, which is significantly higher than the rate detected by chromosome analysis alone.
- Individuals with previous normal microarray studies may benefit from the increased resolution of the new 180K platform.

Features of 180K CMA

- High-resolution array containing 180,000 oligonucleotide clones
- Follows ISCA guidelines for chip design
- Clones are spaced ~16 Kb along the backbone
- Increased coverage in disease regions
- Targeted coverage of 500+ disease genes, microdeletion/duplication syndrome regions, and subtelomeres
- Abnormalities detected at a resolution of 100-200 Kb
- Two different software platforms are available for analysis to increase overall accuracy and for quality control.
- Confirmation studies are performed on abnormal cases, as well as parental FISH studies at no additional charge
- All autism referrals are cross-referenced with current autism databases for the most up-to-date copy number associations

Testing at Colorado Genetics Laboratory

Colorado Genetics Laboratory stands apart due to our methodical approach and unique services. All abnormal cases are researched and full interpretations are included in the report. We call to provide information on abnormal findings, referencing the most current published literature. Our genetic counselors and laboratory directors are available to answer any questions and provide assistance with potential testing referrals.

If you have questions regarding the 180K platform or microarray testing, please contact us.