

# **SAINT FRANCIS HEALTH SYSTEM LABORATORY UPDATE**

**DATE:** September 14, 2009

**TO:** Medical Staff

**FROM:** Nancy J. Carpenter, Ph.D., Center for Genetic Testing at Saint Francis

**SUBJECT:** Chromosomal Microarray Analysis for Developmental Delay/Mental Retardation, Autism, Dysmorphic Features, and/or Congenital Anomalies

The Center for Genetic Testing at Saint Francis has begun Chromosomal Microarray Analysis (also known as Oligonucleotide Array CGH or Array-based Comparative Genomic Hybridization). Chromosomal microarray analysis is a new technology that evaluates all chromosomes for aneuploidy, deletions, and duplications in one assay. It is a screening test for patients with unexplained developmental delay/mental retardation, autism spectrum disorders, dysmorphic features, and/or multiple congenital anomalies. The test is performed on DNA extracted from peripheral blood specimens. Turnaround time is 14 to 28 days, depending on the complexity of the results.

Chromosomal Microarray Analysis does not detect balanced chromosome rearrangements or DNA sequence alterations. Therefore it does not replace chromosome karyotyping or DNA sequencing which remain important tools in clinical diagnosis.

For further information contact Dr. Carpenter at 918-502-1726 or Dr. Michael Kayser at 918-502-2280.