Cytogenetics is concerned with the study of the structure, function, and abnormalities of chromosomes (Genetics Home Reference, 2012). Analysis includes G-banded chromosomes or other banding techniques, as well as fluorescence in situ hybridization (FISH) and comparative genomic hybridization (CGH) (Genetics Home Reference, 2012) (see Table 1). Chromosomes in the nucleus of cells contain genetic material. Each chromosomal gene codes for a specific protein (National Human Genome Research Institute, 2011a, 2011b). Proteins are essential to the structure and function of the body’s tissues and perform most of the body’s work. Scientists have estimated that each individual