WHY MENDEL WAS WRONG

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Historically, genetic disorders have been categorized as having inheritance through Mendelian or polygenic/multifactorial patterns or chromosomal disorders. Increasingly over the past several years, a number of genetic conditions have been seen which do not follow this dogmatic patterns and . Disorders such as Huntington's Disease, Fragile X, and Myotonic Dystrophy follow tri-nucleotide expansion patterns. Angleman's and Prader-Willi Syndrome classic examples of imprinting effects, and several disorders follow mitochondrial maternal inheritance. Likewise, Uniparental Disomy defines a situation in which both copies of a gene came from one parent and none from the other. Appreciation of these mechanisms is important in the counseling of patients with a number of increasingly recognized conditions.