**SEARCH FOR THE GENETC MATERIAL**

All living organisms reproduce only offsprings like themselves. Cow, elephant, mango, human being, for example, will only can give birth cow, elephant, mango and human being respectively. The offsprings of all the organisms resemble their parents in several respects. This phenomenon of transmission of characteristics from their parents to their offsprings is known as **heredity.** Heredity refers to the sum total of biological processes by which this transmission occurs. The offsprings and parents differ from each in several respects which is known as **variation**. Study of heredity and variation in biological science is termed as **Genetics** (Gk. to generate), the term was first proposed by **William Bateson** in 1902. **Friederich Meischer**, a 22 year old Swiss physician and chemist, in 1869 isolated a previously unknown substance from the nucleus of pus cell. He named it ‘**nuclein’. Zacharias**, in the year 1881, identified the nuclein with chromatin. **Hertwig**, for the first time, in the year 1884, made it highly probable that nuclein was the biochemical compound responsible for the transmission of genetic information. The nuclein was found to be acidic in nature and Altmann in the year 1899 termed as nucleic acid. Later on from the works of F. Griffith (1928), Casperson and Brachel; Avery, Macleod, and McCarty (1944); Hershey and Chase (1952); Fraenkel and Conrat (1955) etc proved nucleic as the genetic material.