The DNA molecule is made up of very long chains of the four bases: A, C, G, and T. In 1950 Erwin Chargaff published a paper stating that in DNA of any given species, the ratio of adenine to thymine is equal as is the ratio of cytosine to guanine. This is known as Chargaff’s ratios, and it was a crucial clue that helped solve the structure of DNA. Chargaff’s ratios are universal. All forms of life obey this rule. Only the balance of A-T pairs and C-G pairs varies between species.