

The erythrocyte is perhaps the world's single best known cell, an opinion affirmed by its inseparable linkage with the French expression "*Le sang c'est la vie*" (i.e., Blood is life). The red cell made its debut in a few invertebrates and thereupon conducted a conceptual phylogenetic odyssey through the Classes of poikilothermic vertebrates, onward to the first homeotherms the avians, and thereafter to the mammals including man. The erythrocyte presents morphologic, cytochemical and quantitative adaptations as it progresses through its evolutionary continuum. The specific objective of this text is to explore in depth the cytology of the erythrocyte in birds. It is intended to derive an understanding of the red cell's diverse aspects as presented among Orders, Families and Genera of avians. Illustrative of the subjects that are explored are the light microscopy and ultrastructure of the maturational sequence of the erythrocyte from proerythroblast to the mature cell, the quantitative representation of the erythroid progenitors in hemopoietic bone marrow, and the relationship of erythropoiesis with the vascular sinuses in the bone marrow. Sections are devoted to the quail-chick chimera and the insight it offers, erythroleukemia, embryologic considerations, primitive and definitive generation erythrocytes, rbc life span, the impact of sporozoan parasitization upon the erythrocytic profile and the morphology associated with pathologic agents and conditions. A major segment of the monograph is a taxonomically organized Table of Erythrographic Data (primary source-cited, and when derived, indicators of significant differences between sexes, physiologic and experimental conditions).



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