

PREFACE

Evolution is the GUT (GRAND UNIFYING THEORY) of biology. It is the bedrock principle of our scientific understanding of the natural laws that govern life. Furthermore, it is logically necessary for life's survival in a changing world environment. To deny this scientific principle is analogous to believing that the earth is the center of the universe!

Dr. J. William Schopf, paleobiologist and director of UCLA's Center for the Study of Evolution and the Origin of Life (Mader 1998; page 5)

The current book entitled "**Chordate: Origin, Evolution and Affinity**" is structured into 8 chapters starting from introductory chapters throwing light on basic evolutionary principles to sensitize readers about different aspects of chordate evolution. Book is written keeping in mind to accommodate the needs of diverse readers that range from undergraduate, postgraduate to research scholars. This book spans diverse but related disciplines that range from Morphology, Anatomy, Taxonomy, Physiology, Evolution and Diversity and has updates from latest of the chordate's research.

First time Evolution of Chordates is discussed on comparative basis to better the understanding related to chordate origin, affinity and evolution. Emphasis is given on the so far neglected but important topics like Archaeopteryx as a connecting link between reptiles and birds and another topic like bird migration. A separate chapter on Archaeopteryx is added in exhaustive detail (earlier this was used to embed with bird or reptile chapter). Similarly, separate chapter on Bird's migration covering all relevant details is also added instead of clubbing it as a small sub-section in chapter on Class Aves. Mammals, being the climax class is given special emphasis with a separate chapter devoted to their origin and evolution leading to primates and finally to humans and another one on their diversity.

It was an endeavor to present the book in simple, lucid and comprehensible language. Concepts related to chordate's origin and evolution is explained in easy to understand manner for readers from non-science background. Present work is fruition of sincere and honest efforts invested to present the literature in holistic and comprehensible manner but science is a collective activity and readers are welcome with their constructive and creative inputs to synergize this endeavor into a grand reality.

Lastly, a privileged opportunity to thanks all who directly or indirectly were the part and parcel of the long gestation period before the concept 'Chordates: Origin, Affinity and Evolution' becomes a reality. A reality that has well justified the long periods of seclusion and isolation gone into verbal depiction of the chordates climaxing to Humans.

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