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THE DEVELOPMENTAL BIOLOGY

UNDERSTANDING THE EMBRYOLOGICAL ORIGINS

A scientific approach to explaining development of the embryo started with Hippocrates in Greece in the 5th century BC. Using the ideas current at that time, he tried to explain development in terms of heat, wetness and solidification. The developmental biology has great surprises. In order to keep away from uncertainty with regard to the approach utilized, the present book entitled "The Developmental Biology-Understanding the Embryological Origin" is the updated literature on embryological studies.

The book has elaborated for:

- Developmental Biology: Anatomical Tradition
- Standard Techniques of Experimental Embryology
- Role of Nucleus, Cytoplasm and Yolk
- Development of Multicellular Organisms
- Fertilization and Cleavage

Additional feature of this book includes boxed material with in depth explanation of several pertinent topics to extend the scope and coverage area beyond the primary topics. Developmental biologists find themselves within traditions of inquiry that extend back to the beginnings of human inquisitiveness. We are discovering the mechanisms by which male and female are distinguished, by which left and right are separated, by which caterpillars become butterflies and by which organs are formed. This book will extensively assist students, teachers and academicians to further extend their knowledge beyond the course work and related subject matter but onto the practical application to gain insights of what happening new in the present era of applied science.

CHAPTER 1. DEVELOPMENTAL BIOLOGY - ANATOMICAL TRADITION

- 1.1 Introduction
- 1.2 Embryological History
- 1.3 History of Developmental Biology
- 1.4 Chronological Developments in Biological Study
- 1.5 Environmental Developmental Biology
- 1.6 Embryological Origins of Gene Theory
- 1.7 Anatomical Approaches to Developmental Biology
- 1.8 Comparative Embryology
- 1.9 Fate Mapping of Embryo
- 1.10. Embryonic Homologies
- 1.11 Medical Embryology and Teratology
- 1.12 Mathematical Modeling of Development
- 1.13 Principles of Development: Developmental Anatomy

CHAPTER 2 STANDARD TECHNIQUES OF EXPERIMENTAL EMBRYOLOGY

- 2.1 Introduction
- 2.2 Principles of Developmental Embryology
- 2.3 Fate Mapping Techniques
- 2.4 Vital Dying
- 2.5 Radioactive Labeling and Fluorescent dyes
- 2.6 Genetic Marking
- 2.7 Extirpation
- 2.8 Isolation
- 2.9 Transplantation
- 2.10 Grafting
- 2.11 Cardiovascular Tissue Engineering
- 2.12 Connective Tissue Engineering

CHAPTER 3 NUCLEUS, CYTOPLASM AND THE YOLK

- 3.1 Introduction
- 3.2 Role of Nucleus
- 3.3 Role of Cytoplasm
- 3.4 Role of Yolk

CHAPTER 4 DEVELOPMENT OF MULTICELLULAR ORGANISMS

- 4.1 Multicellularity
- 4.2 Development of Multicellular Organisms
- 4.3 Cell Aggregation
- 4.4 Cell Differentiation
- 4.5 Cell Movement
- 4.6 Morphogenesis
- 4.7 Contact Inhibition
- 4.8 Cell Adhesion and Cell Adhesives
- 4.9 Cell Communication
- 4.10 Programmed Cell Death

CHAPTER 5 FERTILIZATION AND CLEAVAGE

- 5.1 Introduction
- 5.2 Fertilization
- 5.3 Structure of Gametes before Fertilization
- 5.4 Gamete Transport
- 5.5 Cleavage
- 5.6 Blastulation
- 5.7 Gastrulation
- 5.8 Organogenesis

- 5.9 Polarity
- 5.10. Organizer and its Activities
- 5.11 Embryonic Induction
- 5.12 Organogenesis and Histogenesis
- 5.13 Larval phase and Metamorphosis
- 5.14 Nucleation
- 5.15 Hormonal Reactivation of Development
- 5.16 Cytodifferentiation
- 5.17 Cytodifferentiation of Eye and Limb

