
Foreword

I am convinced that embryology is the greatest scientific story ever told. It is truly a life and death odyssey that involves crafty, often unexpected interactions that require precise timing and coordination, with potential peril and dire consequences at every turn. It is the scientific story of our creation. In an ideal world, the story would contrast with most stories in beginning with the romance; unfortunately, much too often this is not the case. It invokes ethical considerations that evoke emotions that can divide nations. We are shocked when the story does not have a perfect ending, but the most amazing thing is that, in spite of its great complexity and immense opportunity for imperfect outcomes or failure, it turns out with amazing perfection most of the time. It is a story that links us to and places us in the context of all of animal life, revealing surprising commonalities. Human anatomy reveals how we are structured; embryology reveals a great many explanations about why we are structured that way. Although once hidden entirely from observation, through centuries of work by millions of curious and insightful investigators, it has been revealed to us in a remarkable variety of means that continue to evolve. This real-life adventure can be told in incredible detail thanks to the collaborative genius of giants upon whose shoulders we have the privilege to stand and observe with remarkable clarity. It is a saga we all experienced and survived, generally without our awareness. It is a story that must be told in 4-D (three spatial dimensions with the added dimension of time), requiring a clear narrative paired with understandable, thought-provoking, concept-conveying, didactic illustrations.

It is almost unbelievable that this story occurs in only 9 months. It is a great challenge to introduce the essential details of the overall story between the covers of a single book, doing so in a way that captures students' interest without overwhelming them, helping them to understand and learn this multidimensional sequence of events in an appealing manner that will enable them to utilize that

knowledge in examinations, further studies, and in practice.

The authors have developed a solid approach to convey this complex, important subject. Each chapter begins with a summary providing an overview of the chapter's content, followed by a statement of the key principles that will be introduced. The highly organized presentation utilizes a combination of clear narrative explanations and efficient hierarchical bullet points supported by illustrations of uniform quality Thieme is known for, along with new and effective summarizing tables and graphs. It provides a comprehensive presentation of descriptive embryology within the context of the mature human as observed in gross anatomy. The authoritative presentation is well documented with lists of up-to-date references at the end of each chapter for first-hand reading and further information.

The authors offer a logical organizational approach: Initial chapters lay the foundation with prefertilization gametogenesis, conception, and development in the embryonic period. The second group of chapters describe the development of systems that are shared by all regions of the body (vascular, nervous, skeletal, and muscular). Chapters of the third section focus on development unique to a specific body region (head/neck, thorax, abdominopelvic, and upper and lower limbs).

Embryology: An Essential Textbook, the newest addition to the Thieme "Essentials" collection, is a masterful accomplishment by the authors, Michelle Lazarus and Anna Campbell. It offers an efficient and well-crafted exposure to the greatest story ever told.

*Arthur F. Dalley, II, PhD, FAAA
Professor Emeritus*

*Department of Cell & Developmental Biology
Vanderbilt University School of Medicine
Nashville, Tennessee, USA*