

Embryology Of The Ovary And Testis

A comprehensive guide for trainee embryologists and medical students in the specialized techniques and technology of assisted reproduction.

Embryology—the study of embryos—is the branch of biological science that examines the formation and early development of an individual organism from fertilization of the egg (ovum) to birth. This collection of articles by embryology experts discusses research on some of the most important topics in embryology today. Topics include the cryopreservation of human embryos, in vitro generation of neurons from embryonic stem cells, embryonic transfer, transcriptional profiling, and more.

Recently developed new embryology theory may greatly improve the success of assisted reproductive technology (ART) in the treatment of human infertility and animal well-being. This book updates and reviews newly developed theories and technologies in human in vitro fertilization and focuses mainly on discussing its clinical practice. Areas covered include ovarian stimulation medicine and final ART outcomes, involving oocyte in vitro maturation, oocyte fertilization and failure treatment, blastocyst formation and implantation, as well as regulation of neuroendocrine embryo implantation. Thus, this book will add new knowledge for readers to improve their appreciation of ART.

A fully updated and illustrated handbook providing comprehensive coverage of all curriculum areas covered by the MRCOG Part 1 examination.

This volume includes the latest diagnostic criteria for PCOS and comprises the most up-to-date information about the genetic features and pathogenesis of PCOS. It critically reviews the methodological approaches and the evidence for various PCOS susceptibility genes. The book also discusses additional familial phenotypes of PCOS and their potential genetic basis. All four editors of this title are extremely prominent in the field of PCOS.

The Ovary, Third Edition, includes more than 60% new material that highlights the clinical aspects of human ovarian functions. It covers advances in the areas of genomics, assisted reproductive technology, and cancer diagnosis and treatment. This updated edition synthesizes new information at the molecular, cellular and organismal levels, while also presenting modern ovarian physiology in a more understandable and comparative context. The book looks at ovarian function from a detailed molecular and cellular level that examines all phases of the ovarian lifecycle that places special emphasis on the pathophysiology of the human ovary, including ovarian carcinogenesis. Represents an unparalleled compilation of chapters that are relevant to contemporary ovarian physiology Provides basic and clinical research on ovarian function, abnormalities, assisted reproductive technology, and cancer Highlights contemporary strategies and treatment paradigms in female factor infertility

Developmental Anatomy

Polycystic Ovary Syndrome

Molecular Biology of the Cell

Contemporary Gynecologic Practice

Encyclopedia of Endocrine Diseases

With Emphasis on Economic Species

(First-third Series)

Molecular and Cellular Mechanisms in Reproduction and Early Development

Callithrix jacchus

Special Tumors of Ovary and Testis and Related Extragenadal Lesions

a history of embryology

Animal individual life begins as combination of sperm and oocyte, which results in the embryogenesis from ovum fertilization to fetal stage. Embryology has become one central discipline for many modern biotechnologies. Although this subject has been studied for more than a century, new discoveries appear continuously. This book contains some new discoveries and updates some theories and technologies in animal and human embryology. Major content include new findings in gamete biology, new theories and discoveries in embryo implantation by three-dimensional imaging technology and new concept and actual application of embryology. Thus, this book will greatly update knowledge in embryology field and provide some basic theories and technologies for animal scientists and breeders as well as embryologists and anthropologists.

This book provides in-depth practical advice on how to manage children with endocrine conditions that may benefit from surgery. It is more detailed than general pediatric surgery texts and more surgically oriented than endocrinology texts. The first section is devoted to the thyroid and parathyroid, with detailed discussion of thyroid nodules, thyroid cancer, hyperthyroidism, hyperparathyroidism, and multiple endocrine neoplasia. The second section on the pancreas focuses on nesidioblastosis, islet cell transplantation, the surgical treatment of diabetes, and surgical complications of diabetes. Adrenal disorders are then discussed, followed by a section on the evaluation and management of ovarian and testicular torsion and tumors. The closing section addresses miscellaneous topics such as gynecomastia in boys and growth restriction surgery. This book will serve as an invaluable reference for all practitioners and trainees who care for children with endocrine problems for which surgery is considered.

Offers guidance on the use of ultrasonography in a clinical setting, covering benign and malignant gynecological disease and infertility. This work has been selected by scholars as being culturally important and is part of the knowledge base of civilization as we know it. This work is in the public domain in the United States of America, and possibly other nations. Within the United States, you may freely copy and distribute this work, as no entity (individual or corporate) has a copyright in the body of the work. Scholars believe, and we concur, that this work is important enough to be preserved, reproduced, and made generally available to the public. To ensure a quality reading experience, this work has been proofread and republished using a format that seamlessly blends the original graphical elements with text in an easy-to-read typeface. We appreciate your support of the preservation process, and thank you for being an important part of keeping this knowledge alive and relevant.

The Encyclopedia of Endocrine Diseases is an authoritative reference developed by 16 international experts who recruited the world's top scientists for contributions. This stellar reference work focuses on nearly 500 endocrine diseases addressing everything from acromegly, diabetes, hypertension, osteoporosis, thyroid disease, Von Hippel-Lindau Disease, unexplained weight loss, to androgen related disorders. This encyclopedia is an essential addition to any library collection written to be accessible for both the clinical and non-clinical reader. Associate Editors include: Eli Y. Adashi, John P. Bilezikian, George P. Chrousos, Junichi Fukata, Julianne Imperato-McGinley, Hiroo Imura, Antonio Luzzii, Frank L. Moore, Daniel Porte, Jens F. Rehfeld, Ellis Samolis, Gustav Schonfelder, Pierre C. Sizonenko, Wilmar M. Wiersinga. Also available online via ScienceDirect featuring extensive browsing, searching, and internal cross-referencing between articles in the work, plus dynamic linking to journal articles and abstract databases, making navigation flexible and easy. For more information, pricing options and availability visit www.info.sciencedirect.com. * Includes nearly 500 entries addressing all aspects of endocrine diseases * More than 800 eminent researchers contributed from 25 different countries around the world * More than 900 figures and 450 tables displayed * Comprehensive glossary comprising 1500 definitions * The Editor-in-Chief is former editor of the journal Frontiers in Neuroendocrinology and has contributed to over 40 books in the field of endocrinology.

The success of Assisted Reproductive Technology is critically dependent upon the use of well optimized protocols, based upon sound scientific reasoning, empirical observations and evidence of clinical efficacy. Recently, the treatment of infertility has experienced a revolution, with the routine adoption of increasingly specialized molecular biological techniques and advanced methods for the manipulation of gametes and embryos. This textbook – inspired by the postgraduate degree program at the University of Oxford – guides students through the multidisciplinary syllabus essential to ART laboratory practice, from basic culture techniques and micromanipulation to laboratory management and quality assurance, and from endocrinology to molecular biology and research methods. Written for all levels of IVF practitioners, reproductive biologists and technologists involved in human reproductive science, it can be used as a reference manual for all IVF labs and as a textbook by undergraduates, advanced students, scientists and professionals involved in gamete, embryo or stem cell biology.

Does Sex Matter?

Cytokine Effector Functions in Tissues

Endocrine Surgery in Children

Biology of the Ovary

Embryology of the Ovary and Testis

A Textbook of Clinical Embryology

Ultrastructure of the Ovary

The Early Embryology of the Chick

Ultrasonography in Gynecology

Origin, Development and Fate of the Gubernaculum Hunteri, Processus Vaginalis Peritonei, and Gonadal Ligaments

Comparative Pathology and Histological Identification

It's obvious why only men develop prostate cancer and why only women get ovarian cancer. But it is not obvious why women are more likely to recover language ability after a stroke than men or why women are more apt to develop autoimmune diseases such as lupus. Sex differences in health throughout the lifespan have been documented. Exploring the Biological Contributions to Human Health begins to snap the pieces of the puzzle into place so that this knowledge can be used to improve health for both sexes. From behavior and cognition to metabolism and response to chemicals and infectious organisms, this book explores the health impact of sex (being male or female, according to reproductive organs and chromosomes) and gender (one's sense of self as male or female in society). Exploring the Biological Contributions to Human Health discusses basic biochemical differences in the cells of males and females and health variability between the sexes from conception throughout life. The book identifies key research needs and opportunities and addresses barriers to research. Exploring the Biological Contributions to Human Health will be important to health policy makers, basic, applied, and clinical researchers, educators, providers, and journalists-while being very accessible to interested lay readers.

Many reproductive and developmental health problems are caused by exposure to chemicals that are widely dispersed in our environment. These problems include infertility, miscarriage, poor pregnancy outcomes, abnormal fetal development, early puberty, endometriosis, and diseases and cancers of reproductive organs. The compelling nature of the collective science has resulted in recognition of a new field of environmental reproductive health. Focusing on exposures to environmental contaminants, particularly during critical periods of embryonic development, the book addresses the potential effects on all aspects of future reproductive life-course; this book provides the first comprehensive source of information bringing together the arguments that are spread out among various scientific disciplines in environmental health, clinical and public health fields. It provides a review of the science in key areas of the relationship between environmental contaminants and reproductive health outcomes, and recommendations on efforts toward prevention in clinical care and public policy.

The primates represent a diverse group with the phylogenetic relationships of the various species reflected in their early embryonic development. The members of the Tupaiidae, Lemuridae and Loristidae show great similarities to the lower mammals and even birds. The Tarsiidae represent an intermediate step and the Platyrrhini and Catarrhini exhibit the greatest similarities to man. During the period of embryogenesis, the dimensions of an embryo are insufficient due to its age and much more reliable information can be derived from a study of its external form and internal structure. Examination of relationships between a variety of simian species dates back to the early 1900's but much of this material was collected in a haphazard way from animals shot in the wild. Heuser and Streeter (1941) depicted a series of embryos of the rhesus monkey (Macaca mulatta) and correlated their gestational age with external form and size. Streeter (1951) arranged human embryos, between 24 ± 1 and 47 ± 1 days of post-ovulation age, into age groups or developmental horizons based on their external form and internal structure. Each horizon was two days apart and numbered XI to XXIII. The transition from embryo to fetus occurred at the end of horizon XXIII and was arbitrarily termed as the point where bone marrow invaded the cartilaginous precursor in the humerus. The earlier stages I-X have been termed subsequently, (Heuser and Corner, 1957; O'Rahilly, 1973).

The testicular descent (descensus testis) is described in a complete series of human material from stage 14 CC to the adult state by using own phases. Central points of interest in this work are answers to questions which have been discussed controversially by generations of scientists and which are wrong or inadequately documented in most textbooks of embryology: Does an inner gonadal descent exist? What about origin, role and fate of gubernaculum H., processus vaginalis peritonei and gonadal ligaments? How do the annexes of testis come into their final position? The results are based on serial sections, scanning electron microscopy, three-dimensional reconstructions, microdissection and immunohistochemistry.

This book highlights the similarities and differences in the pathology of the genital and urinary tracts in males and females.

This series extracts the most important information on each topic and presents it in a concise, uncluttered fashion to prepare students for the USMLE. High-Yield means exactly that! High-Yield Embryology, Fifth Edition provides a concentrated, efficient review of embryology material tested on the USMLE Step 1. Concepts are presented in a streamlined outline format with tables, diagrams, photos, and radiographs to clarify important material. In response to student feedback, the Fifth Edition features: New and updated figures

Additional USMLE-style case studies at the end of each chapter An expanded section on early development

Ovarian Morphology and Early Embryology of the Pediculate Fishes Antennarius and Histrio

Your Essential Revision Guide

Exploring the Biological Contributions to Human Health

MRCOG Part One

Comparative Embryology of the Vertebrates

With 2057 Drawings and Photos. Grouped as 380 Illus

Current Controversies, from the Ovary to the Pancreas

How to Prepare the Egg and Embryo to Maximize IVF Success

The Embryology of the Common Marmoset

The Testicular Descent in Human

Researches in Embryology

Gynecology is frequently changing due to extensive implementation of high technology in both, the diagnosis and management of gynecologic problems. General gynecologists, gynecologic endocrinologists, infertility specialists, gynecologic endoscopists, and gynecologic oncologists will find attractive, new information in this book.

Drawing from a lifetime of teaching botany, Dr. Nels Lersten presents the study of the structures and processes involved in the reproduction of plants in his text Flowering Plant Embryology. This richly illustrated reference text, with more than 350 figures and illustrations, presents general angiosperm embryology as it applies to economically important plants. The unique focus on economically important species increases the relevance of this book to today's students and researchers in the plant sciences. Lersten emphasizes the plant species that affect human livelihood, including weeds and other cultivated plants that are used for commercial products. Selected from the thousands of economically important plants, the examples chosen for illustration and discussion are familiar, especially to students from North America, Northern Europe, and Japan. Although the emphasis of this book is economically important plants, the information within applies to almost all flowering plants. Extremely readable and well-written, this book is neither dense nor academic in tone. Lersten treats topics with a uniformity of style and organization that enhances comprehension. Terms are well-defined and the derivation of each is explained to further facilitate student learning. The book presents research results, hypotheses, and speculations about why things are as they are, with supporting facts and specific examples that provide a firm foundation for students' understanding of embryological diversity among economic plants.

This comprehensive review of the factors that affect the harvesting and preparation of oocytes and the management of embryos will allow practitioners to make evidence-based decisions for successful IVF. The book reviews and re-considers the value of strategies and outcomes in the management of fertility and conception rates, control on the production of oocytes, and successful development of the embryo. Authored by leading experts in the field, chapters engage with treatments and strategies that affect the production of oocytes and embryos, optimizing outcomes in the management of female fertility, conception rates, and live births.

This vital guide covers controlled ovarian hyperstimulation, the role of AMH in determining ovarian reserve, and primary stimulation agents and the use of adjuncts. Integral for all clinicians and embryologists working in reproductive medicine units, readers are provided with evidence-based, comprehensive advice and review of all factors affecting the management of oocytes and the embryo that are vital for successful IVF cycles.

The response to the First Edition of this text confirmed our belief that there was a need for a book of this kind. The multi-authored approach has been retained, ensuring that authoritative, current information is incorporated into each chapter and that references are up-to-date. The section on diseases of the vagina has been enhanced by a greater emphasis on the clinical aspects. The chapter on DES induced lesions has been updated with the data of the DeSAD study and the section on adenocarcinoma of the cervix has been enlarged by the description of the undifferentiated lesions including "glassy cell and signet cell" carcinoma. A departure from the traditional chapter approach has been made in the discussion of endometrial hyperplasia and carcinoma in order to present a conceptual view of these diseases. A similar presentation of diseases of the myometrium has been made. The subjects of lymphomas and mesenchymal tumors of the ovary have been enlarged upon and presented in a separate chapter. Fine needle aspiration in the diagnosis of ovarian tumors and of non malignant disorders of the ovary has become an increasingly useful technique. Two new chapters have been added to cover this subject. Many of the changes made in the second edition were in response to reviewers of the First Edition. It is hoped that their constructive suggestions have been addressed. Annel Blaustein, M.D.

A Scientific Book Club selection, this comprehensive account of the nature and function of the hormones in the processes of sex and reproduction. Originally published in 1942. The Princeton Legacy Library uses the latest print-on-demand technology to again make available previously out-of-print books from the distinguished backlist of Princeton University Press. These editions preserve the original texts of these important books while presenting them in durable paperback and hardcover editions. The goal of the Princeton Legacy Library is to vastly increase access to the rich scholarly heritage found in the thousands of books published by Princeton University Press since its founding in 1905.

Extensive reviews have been published on the mor aspects, anatomy, ultrastructure, physiology, bio phology, anatomy, and physiology of the mam chemistry, endocrinology, pharmacology, and physiopathology of the mammalian ovary. The mallan ovary. However, little attention has been given to the gaps between the physiological, endo contributors, who prepared their chapters metic alously, are recognized experts in their respective crine and histochemical parameters of the ovary as disciplines and their writings reflect extensive per it relates to clinical aspects. There is a wealth of sonal experience and unpublished data of both publications concerning the biology of the ovary: basic and clinical sciences. Without the assistance of this volume is to integrate this information with emphasis on modern concepts in good friends and permission to draw extensively microanatomy, physiology, methodology, clinical from investigations, this volume would not have complications, and therapeutic approaches. An been possible. attempt is made to place fundamental research in Thanks are due to G. F. Franchitto, F. Barberini, clear perspectives. P. Stoops. Lori Rust and J. Squiers for their editorial It is hoped that this volume will fulfil a long skills and for checking the references to the original standing need and serve as an important source for sources. Thanks are particularly due to I. K. Smith investigators and clinicians concerned with the of Martinus Nijhoff Publishers BV for his excellent physiopathology of the ovaries for years to come. It cooperation during the production of the book.

Environmental Impacts on Reproductive Health and Fertility

Review of Medical Embryology

Gynecologic and Urologic Pathology

A Text-book and Laboratory Manual of Embryology

Hormones in Human Reproduction

Theory and Practice

The Embryonic Development of the Ovary and Testis of the Mammals ...

Embryology

Homo Sapiens and Macaca Mulatta

Web Microanalysis of Big Image Data

Pathology of the Female Genital Tract

The Research Topic aims to support progress towards understanding the different sets of developmental processes that are absolutely required to complete all the steps essential for successful embryonic development, under physiological conditions. We sought contributions that dealt with single cells, interaction between cells as well as intra- and extracellular signal transduction. The Research Topic presents original studies covering experimental and theoretical approaches, descriptions of new methodologies, reviews and opinions.

Cytokine Effector Functions in Tissues discusses the cytokines networks in the context of the specific-tissue environment. It is an up-to-date collection of articles that addresses the specific issue of how the cytokines are able to condition tissue specific homeostasis. The book helps the reader understand how cytokines network inside the tissues and highlights whether tissue-protection or exacerbation will be finally controlled. It describes the cytokines detected and regulated in different tissues, such as the brain, lungs, spleen, liver, pancreas and intestine, also addressing the issue of timing in specific cell types. Categorizes the cytokines based primarily on tissue and target cells Emphasizes different roles and outcomes observed during innate and adaptive response Represents a rapid guide to cytokines in health and disease in tissue and organ context Presents a different view on how known mediators may work if analyzed in a different perspective, determining the final outcome on tissue-specific target cells

This book looks at the increasing interest in running microscopy processing algorithms on big image data by presenting the theoretical and architectural underpinnings of a web image processing pipeline (WIPP). Software-based methods and infrastructure components for processing big data microscopy experiments are presented to demonstrate how information processing of repetitive, laborious and tedious analysis can be automated with a user-friendly system. Interactions of web system components and their impact on computational scalability, provenance information gathering, interactive display, and computing are explained in a top-down presentation of technical details. Web Microanalysis of Big Image Data includes descriptions of WIPP functionalities, use cases, and components of the web software system (web server and client architecture, algorithms, and hardware-software dependencies). The book comes with test image collections and a web software system to increase the reader's understanding and to provide practical tools for conducting big image experiments. By providing educational materials and software tools at the intersection of microscopy image analyses and computational science, graduate students, postdoctoral students, and scientists will benefit from the practical experiences, as well as theoretical insights. Furthermore, the book provides software and test data, empowering students and scientists with tools to make discoveries with higher statistical significance. Once they become familiar with the web image processing components, they can extend and re-purpose the existing software to new types of analyses. Each chapter follows a top-down presentation, starting with a short introduction and a classification of related methods. Next, a description of the specific method used in accompanying software is presented. For several topics, examples of how the specific method is applied to a dataset (parameters, RAM requirements, CPU efficiency) are shown. Some tips are provided as practical suggestions to improve accuracy or computational performance.

Textbook of Clinical Embryology

Current Research in Embryology

High-Yield Embryology

New Discoveries in Embryology

Flowering Plant Embryology

Manual of Human Embryology

The Ovary