Fetal development in the mouse is routinely and increasingly utilized for advancing translational research and medical innovation for human obstetrical care. This is the first and only manual to provide necessary content on how this should be handled for accurate and effective data collection. Detailed descriptions and examples demonstrate how researchers and clinicians can use murine fetal and obstetrical data to improve future human applications in diseases such as infertility, recurrent pregnancy loss, intrauterine fetal growth restriction, placental insufficiency, and intrauterine fetal demise, as well as organ-specific developmental disease. The new edition of this infertility manual has been fully revised to provide clinicians with the latest advances in the diagnosis and management of infertility. Divided into seven sections, the book provides step by step guidance on each stage of the process, from initial examination and identifying the causes of infertility in both females and males, to ovarian stimulation and assisted reproduction techniques. The final section is dedicated to laboratory management covering topics such as follicular fluid screening and oocyte assessment, culture systems, and cryopreservation. The fourth edition includes new chapters on molecular mechanisms such as endometrial receptivity, and implantation; and current trends such as the embryoscope and assisted hatching. The comprehensive text is further
enhanced by case studies, clinical photographs, diagrams, flowcharts and tables. Key points
Fully revised, new edition providing latest advances in diagnosis and management of infertility
Fourth edition features new chapters on molecular mechanisms and current trends
Highly illustrated with clinical images, flowcharts and tables
Previous edition (9788184486179) published in 2009
This multi-authored volume presents a detailed review of the evaluation and management of the infertile couple. Covering male and female infertility, medical and surgical strategies for improving reproductive success, techniques of assisted reproductive technology, and future possibilities in this fast-moving field, this extensive text is essential. A comprehensive guide for trainee embryologists and medical students in the specialized techniques and technology of assisted reproduction. Part of a new series on reproductive medicine, this book is a complete guide to assisted reproductive technology (ART). Divided into 39 chapters, the book covers all aspects of ART, providing clinicians with a step-by-step guide through the processes. The text covers ovarian stimulation, embryo transfer, imaging, hormone analysis, endometrial receptivity, surgical procedures, and much more. Many different causes of infertility and their management through ART are described in detail. The book presents the latest advances in the field and each chapter includes key points and references for further reading. Clinical photographs, diagrams, and tables further enhance the comprehensive text. Other titles in the series include: Practical Guide in Infertility, Practical Guide in Reproductive Surgery and Practical Guide in Andrology and Embryology. Key points
Comprehensive guide to assisted reproductive technology
Part of new series on reproductive medicine
Covers numerous ART procedures for management of infertility
Chapters include key points and detailed references for further reading
Updated and expanded, Textbook of Assisted Reproductive Techniques, Second Edition, Laboratory and Clinical Perspectives provides a authoritative manual for the entire IVF team. There are many books on IVF procedure, but none have combined the laboratory and clinical aspects to cover the subject so comprehensively. The book brings together leading medical and scientific experts to describe, in a clear and concise manner, the hows, whys, and reasoning behind ART. The laboratory procedures section provides step-by-step how-tos for setting up the ART laboratory, covering everything that has to do with surroundings, equipment, conditions, quality control, and accreditation for the laboratory. The clinical techniques section discusses patient care from investigation to management to complications. New chapters cover: stem cells, genetic analysis, the role of the nurse, stress and outcomes, management of hydrosalpinx, prognostic assessment of ovarian reserve, quality management, setting up a national registry, health economic aspects, fertility preservation strategies, vitrification of oocytes, and more. One of the things that makes this book so special is its contributors, all of whom are world leaders in the field and experts in their specific topic. The information is presented in a highly visual manner, making methods and protocols easy to find and understand. The book gives research fellows insight into technical developments, provides clinical and scientific teams with the A to Zs of setting up an embryology laboratory, and supplies seasoned professionals with a review of the newest techniques and advances. Textbook of Assisted Reproductive Techniques has become a classic comprehensive reference for the whole team at the IVF clinic. The fourth edition comes more conveniently as a set of two separate volumes, one for laboratory aspects and the other for clinical applications. The text has been extensively revised, with the addition of several important new contributions on laboratory aspects including developing techniques such as
PICSI, IMSI, and time-lapse imaging. The second volume focuses on clinical applications and includes new chapters on lifestyle factors, tailored ovarian stimulation, frozen-thawed embryo transfer, viral disease, and religious perspectives. As before, methods, protocols, and techniques of choice are presented by eminent international experts. The two volume set includes: ? Volume One - Laboratory Perspectives ? Volume Two - Clinical Perspectives

Groundbreaking, comprehensive, and developed by a panel of leading international experts in the field, Textbook of Assisted Reproduction provides a multidisciplinary overview of the diagnosis and management of infertility, which affects 15% of all couples around the world. The book aims to cover all aspects of assisted reproduction. Particular attention is given to topics such as the assessment of infertile couples; assisted reproductive techniques (ARTs) including ovulation induction, intrauterine insemination (IUI), in vitro fertilization (IVF) and intracytoplasmic sperm injection (clinical and laboratory aspects); reproductive genetics; and obstetric and perinatal outcomes.

Textbook of Assisted Reproductive Technologies has become a classic comprehensive reference for the whole team at the IVF clinic. The fourth edition comes more conveniently as a set of two separate volumes, one for laboratory aspects and the other for clinical applications. The text has been extensively revised, with the addition of several important new contributions on clinical applications, including new chapters on lifestyle factors, tailored ovarian stimulation, frozen-thawed embryo transfer, viral disease, and religious perspectives. As before, methods, protocols, and techniques of choice are presented by eminent international experts. Also available - Textbook of Assisted Reproductive Technologies, Volume One - Laboratory Perspectives

Textbook of Assisted Reproductive Technologies, Two Volume Set

There is a unique set of circumstances affecting treatment for every patient involved in assisted reproduction, and those with pre-existing medical conditions, or those receiving medical therapies that may impact on the safety and success of their IVF treatment, are particularly challenging. Providing a concise but authoritative source of information to aid clinicians in this important field, this book covers management options for patients with a range of pre-existing diseases and conditions that can impact on the risk and outcomes of IVF treatment. Readily accessible and easy to use, the book also concludes with a helpful chapter on counselling patients who consistently fail to conceive. With expert contributions from leaders in the field, this is a much-needed, innovative resource for clinicians working in IVF and Infertility Units, and for physicians managing patients with systemic disease who are undergoing IVF.

Already established as a classic comprehensive reference for the whole team at the IVF clinic, this new edition has been extensively revised, with the addition of several important new contributions on laboratory (including advanced sperm selection techniques for ICSI, human embryo biopsy procedures, oocyte activation, managing an oocyte bank, artificial gametes, and epigenetics) as well as on clinical topics (including GnRH agonist triggering, segmentation of IVF treatment, uterus transplantation, and risk and safety management). As previously, methods, protocols, and techniques of choice are presented by eminent contributors internationally.

Textbook of Assisted Reproductive Technologies has become a classic comprehensive reference for the whole team at the IVF clinic. The fourth edition comes more conveniently as a set of two separate volumes, one for laboratory aspects and the other for clinical applications. The text has been extensively revised, with the addition of several important new contributions on clinical applications, including new chapters on lifestyle factors, tailored ovarian stimulation, frozen-thawed embryo transfer, viral disease, and religious perspectives.
embryo transfer, viral disease, and religious perspectives. As before, methods, protocols, and techniques of choice are presented by eminent international experts. Also available – Textbook of Assisted Reproductive Technologies, Volume One – Laboratory Perspectives Textbook of Assisted Reproductive Technologies, Two Volume Set

Whilst assisted reproduction techniques (ART) have become increasingly successful and largely standardized, there is still only a partial understanding of what constitutes a 'true' embryo environment. Replicating the varying physiological conditions of the in-vivo environment that the embryo travels through in the in-vitro culture is still a major challenge in ART. This practical volume details how to organize and operate an IVF laboratory in order to mimic these conditions for successful embryo culture. Environments and equipment that are essential for running safe and efficient facilities such as maintaining good air quality and hygiene protocols, and utilizing an effective layout are covered in detail. Other chapters discuss the different consumables needed, optimal handling techniques and parameter monitoring systems, as well as recent advances in the area including artificial intelligence and automation. This is an indispensable guide to understanding the background science of culturing embryos, crucial to successful outcomes in ART. Textbook of Assisted Reproductive Techniques has become a classic comprehensive reference for the whole team at the IVF clinic. The fourth edition comes more conveniently as a set of two separate volumes, one for laboratory aspects and the other for clinical applications. The text has been extensively revised, with the addition of several important new contributions on laboratory aspects including developing techniques such as PICSI, IMSI, and time-lapse imaging. The second volume focuses on clinical applications and includes new chapters on lifestyle factors, tailored ovarian stimulation, frozen-thawed embryo transfer, viral disease, and religious perspectives. As before, methods, protocols, and techniques of choice are presented by eminent international experts. The two volume set includes: ? Volume One – Laboratory Perspectives ? Volume Two – Clinical Perspectives

Based on the gold standard procedures and protocols developed at Boston IVF, this new edition of a bestselling text continues to provide a structured approach to treating the infertile couple that can be of benefit to the gynecologist, reproductive endocrinologist, and reproductive medicine nurse alike. Both clinical and laboratory techniques are included, with material on preconception care. New to this edition are chapters on fertility care for the LGBT community, endometriosis, elective egg freezing, and effective nursing. Reproductive Technologies in Animals provides the most updated and comprehensive knowledge on the various aspects and applications of reproductive technologies in production animals as well as companion, wild, exotic, and laboratory animals and birds. The text synthesizes historical information and recent discoveries, while dealing with economical and geographical issues related to the implementation of the same technologies. It also presents the effects of reproductive technology implementation on animal welfare and the possible threat of pathogen transmission. Reproductive Technologies in Animals is an important resource for academics, researchers, professionals in public and private animal business, and students at the undergraduate and graduate levels, as it gives a full and detailed first-hand analysis of all species subjected to the use of reproductive technologies. Provides research from a team of scientists and researchers whose expertise spans all aspects of animal reproductive technologies Addresses the use of reproductive technologies in a wide range of animal species Offers a complete description and historical background for each species described Discusses successes and failure as well as future
challenges in reproductive technologies

Textbook of Assisted Reproductive Technologies is a truly comprehensive manual for the whole team at the IVF clinic. Information is presented in a highly visual manner, allowing both methods and protocols to be consulted easily. The text provides clinical and scientific teams with the A to Zs of setting up an embryology laboratory, giving research fellows insight into technical developments, and supplies seasoned professionals with a review of the latest techniques and advances. New to the Third Edition: fully revised and expanded chapters, with new information on:

- single embryo transfer
- artificial gametes
- pharmacogenetics

Assisted reproductive technology (ART) is available to two-thirds of the world's population, and world-class experts, representing research from 18 different countries, have contributed to this groundbreaking textbook, detailing the techniques and philosophies behind medical procedures of infertility and assisted reproduction. This is one of the most rapidly changing and hotly debated fields in medicine. Different countries have different restrictions on the research techniques that can be applied to this field, and, therefore, experts from around the world bring varied and unique authorities to different subjects in reproductive technology. Encompassing the latest research into the physiology of reproduction, infertility evaluation and treatment, and assisted reproduction, it concludes with perspectives on the ethical dilemmas faced by clinicians and professionals. This book will be the definitive resource for those working in the areas of reproductive medicine worldwide.

This three volume set is a comprehensive guide to Assisted Reproductive Technology (ART) for clinicians. Volume one begins with an introduction to infertility, describing physiology, endocrinology and infertility in both men and women. The following sections provide in depth discussion on ART, from ovulation induction and intrauterine insemination, to complications, outcomes and ethical issues. The second volume is dedicated to In Vitro Fertilisation (IVF) and related procedures, whilst volume three is an atlas of embryology. This practical manual is an invaluable reference for clinicians specialising in infertility management and includes nearly 1000 full colour photographs, each with a brief description to enhance understanding. Key points:

- Three volume set – complete guide to ART
- Each volume dedicated to specific topic – Infertility, IVF & Related Procedures, and Atlas of Embryology
- Includes nearly 1000 photographs with descriptions
- Invaluable reference for practising clinicians

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. A complete guide to sperm retrieval methods performed for men with azoospermia, aimed at andrologists and male fertility specialists. A new subspeciality is growing at the interface of reproductive medicine and perinatology: infertility. Textbook of Periconceptional Medicine provides an authoritative and comprehensive reference resource for those providing medical care to women trying to conceive a healthy pregnancy. A revolutionary first edition, this text brings together a number of difficult and usually separate topics and provides the busy clinician with one authoritative and methodical reference. Reflecting the breadth of modern clinical practice in this emerging therapy area, this integrated text incorporates aspects of all the relevant existing expertise, including: Preconceptional counseling Fertility investigation Therapy and management of preconception through the first trimester of pregnancy Textbook of Assisted Reproductive Techniques has become a classic comprehensive reference for the whole team at the IVF clinic. The fourth edition comes more conveniently as a set of two separate volumes, one for laboratory aspects and the other for clinical applications. The text has been extensively revised, with the addition of several important new contributions on laboratory aspects including developing techniques such as PICSI, IMSI, and time-lapse imaging. The second volume focuses on clinical applications and includes new chapters on lifestyle factors, tailored ovarian stimulation, frozen-thawed embryo transfer, viral disease, and religious perspectives. As before, methods, protocols, and techniques of choice are presented by eminent international experts. The two volume set includes: ? Volume One – Laboratory Perspectives ? Volume Two – Clinical Perspectives This is an enlarged, updated, color-illustrated new edition of the definitive clinical reference on in vitro fertilization and assisted reproduction. It contains 37 chapters by top-ranked specialists from around the world covering every aspect of investigation and therapeutic options as taught and practiced at the world-famous Bourn Hall Clinic. Large format, double-column pages. Includes bibliographic references, procedures, protocols and information sheets, and index. Established as a definitive reference for the IVF clinic, the fifth edition has been extensively revised, with the addition of several important new contributions on clinical topics, including GnRH agonist triggering, segmentation of IVF treatment, uterus transplantation, and risk and safety management. As previously, methods, protocols, and techniques of choice are presented by IVF pioneers and eminent international experts. Textbook of Assisted Reproductive Technologies has become a classic comprehensive reference for the whole team at the IVF clinic. The fourth edition comes more conveniently as a set of two separate volumes, one for laboratory aspects and the other for clinical applications. The text has been extensively revised, with the addition of several important new contributions on clinical applications, including new chapters on lifestyle factors, tailored ovarian stimulation, frozen-thawed embryo transfer, viral disease, and religious perspectives. As before, methods, protocols, and techniques of choice are presented by eminent international experts. Also available – Textbook of Assisted Reproductive Technologies, Volume One – Laboratory Perspectives Textbook of Assisted Reproductive Technologies, Two Volume Set This book is a synopsis of the key facts and concepts of human development. It is intended for students who are taking a human embryology course. The book includes the underlying mechanisms involved in clinically important congenital anomalies that will prove useful to medical and nursing. Assisted reproduction techniques have led to the birth of 4 million babies worldwide Assisted reproduction techniques (ART), in particular in-vitro fertilization and intra-cytoplasmic
sperm injection, are the most advanced forms of infertility treatment. They involve numerous counseling, medical, surgical and laboratory-based steps. At each step various problems and complications could be encountered that challenge even the most experienced ART practitioners. Moreover, patients with complex medical disorders may require ART, presenting further challenges. Assisted Reproduction Techniques will stimulate resourceful thinking in the ART practitioner when faced with these challenges. It outlines various management options, the reasoning behind them, and the evidence on which they are based to enable the practitioner to choose the most suitable solution for the needs of each patient. Written by 122 internationally renowned experts, Assisted Reproduction Techniques follows the patient's journey throughout the whole ART process, with chapters on: Counseling and preparation Ovarian stimulation Oocyte retrieval Embryo transfer The luteal phase The ART laboratory The male patient The ART pregnancy Each of the 100 concise chapters includes clinical cases, background, evidence-based practical management options, preventive measures and key-point summaries of the important details. Assisted Reproduction Techniques gives a wide-ranging practical guide to all those wishing to support couples who cannot conceive naturally. This fully updated new edition of a successful and popular practical guide is an indispensable account of modern in-vitro fertilization practice. Initial chapters cover theoretical aspects of gametogenesis and embryo development at the cellular and molecular level, while the latter half of the book describes the requisites for a successful IVF laboratory and the basic technologies in ART. Advanced techniques, including pre-implantation genetic diagnosis, vitrification and stem-cell technology, are comprehensively covered, providing up-to-date analyses of these groundbreaking technologies. This edition includes: • New practical techniques, including preservation of fertility for cancer patients, stem-cell biology/technology, vitrification and in-vitro maturation • A 'refresher' study review of fundamental principles of cell and molecular biology • The latest information available from animal and human research in reproductive biology Packed with a wealth of practical and scientific detail, this is a must for all IVF practitioners. The field of infertility research and practice is one of continuous innovation and change, but alongside the increasing sophistication of assisted reproductive techniques there is as strong a need as ever for clinical experience and expertise and common practical sense to inform diagnosis and clinical decision making. Now in its fourth edition, InfThe second edition of this three-volume set brings practitioners and trainees fully up to date with the latest advances in Assisted Reproductive Technology (ART). Volume One begins with an introduction to infertility, describing physiology, endocrinology and infertility in both men and women. The following sections provide in depth discussion on ART, from ovulation induction, intrauterine insemination, and ART techniques, to third party reproduction, complications, outcomes and future clinical applications. The second volume is dedicated to laboratory aspects of In Vitro Fertilisation (IVF) andrology, and ethical and legal issues, whilst Volume Three is an atlas of human embryology. This practical manual is an invaluable reference for clinicians specialising in infertility management and includes more than 1300 full colour photographs, diagrams and tables to enhance understanding. Key points Fully revised, second edition of three-volume set presenting latest advances in ART Each volume dedicated to specific topic - Infertility, IVF & Andrology, and Atlas of Embryology Includes more than 1300 clinical photographs, diagrams and tables Previous edition (9789350907368) published in 2013 This book brings together genetics,
reproductive biology and medicine for an integrative view of the emerging specialization of reproductive genetics. A collection of specialists presenting the state of the art of Assisted Reproductive Technology and the ethical and legal considerations encountered as we push the cutting edge. The comprehensive and authoritative guide to clinical reproductive science. The field of clinical reproductive science continues to evolve; this important resource offers the basics of reproductive biology as well as the most recent advance in clinical embryology. The author—a noted expert in the field—focuses on the discipline and covers all aspects of this field. The text explores causes of male and female infertility and includes information on patient consultation and assessment, gamete retrieval and preparation, embryo culture, embryo transfer and cryopreservation. Comprehensive in scope, the text contains an introduction to the field of clinical reproductive science and a review of assisted reproductive technology. The author includes information on a wide range of topics such as gonadal development, the regulation of meiotic cell cycle, the biology of sperm and spermatogenesis, in vitro culture, embryo transfer techniques, fundamentals of fertilisation, oocyte activation and much more. This important resource: Offers an accessible guide to the most current research and techniques to the science of clinical reproduction Covers the fundamental elements of reproductive science Includes information on male and the female reproductive basics—everything from sexual differentiation to foetal development and parturition Explores the long-term health of children conceived through IVF Contains the newest developments in assisted reproductive technology. Clinical Reproductive Science is a valuable reference written for professionals in academia, research and clinical professionals working in the field of reproductive science, clinical embryology and reproductive medicine. Now in its revised and expanded second edition—including over 20 new chapters—this comprehensive textbook remains a unique and accessible description of the current and developing diagnostic and treatment techniques and technologies comprising in vitro fertilization (IVF). Arranged thematically in sections, each chapter covers a key topic in IVF in a sensible presentation. Parts one and two describe the planning, design and organization of an ART unit and IVF laboratory and equipment and systems, respectively. The sections that follow provide detailed descriptions of IVF techniques, embryo culture methods, sperm processing and selection, insemination procedures, micromanipulation, embryo evaluation, cryopreservation, and embryo transfer. Concluding sections address issues of management and regulation of ART labs across the globe, as well as special topics and emerging techniques and devices. Chapter authors, all experts in the field, contribute their expertise from around the world. With the addition of learning key points and review questions at the beginning and end of each chapter, this new edition of In Vitro Fertilization is a readily accessible, high quality instructional resource for reproductive medicine trainees at all levels. Practicing reproductive endocrinologists, urologists, and embryologists also will find value in the book, as will infertility researchers. The new edition of this text admirably fills the need for a primer on the central topics involved in Human In Vitro Fertilization (IVF). Supplying a comprehensive and hands-on approach to IVF, this source presents established state-of-the-art procedures and techniques, as well as the most current research in the field. Expert contributors also discuss the history of IVF and the potential of future research. Offering essential information for reproductive endocrinologists, IVF practitioners and embryologists, this book guides readers though every step of human assisted conception, from patient pre-treatment to monitoring of outcomes.